XLIBRIS METHODOLOGY

SMART ICT 3.0 LIBRARIES SERVICES

to Address on Future Skills and Competencies – Learning Space 2025

Xlibris Project Team
2014/2016

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Chapter 1
Introduction

Understanding Xlibris Project

Xlibris project is not about explaining what smart ICT is, but to create awareness for how it has developed new ways for service design and how it has changed the ways library services offered. The Xlibris project addresses changes in needs and expectations of users by using ICT in innovative ways in library settings.

X-libris project puts in place a series of Open Educational Resources (OER), methodologies, training models and MOOC defining how innovative new services can be co-created with the involvement of users. This approach brings users into the service design and creates a shift from user-centered service design to service co-design with users. Xlibris approach (methodology) enables any interested individual (locals, prosumers, visitors, librarians, library users, potential users) to contribute in new service design with his/her expectations, needs, likes and preferences. Xlibris Project develops its own approach to service co-design for libraries by using methodologies such as Lego Serious Play, Business Model You and Crowdsourcing for service definition, design, prototyping and fine-tuning.

Following the brief introduction of Xlibris Project in this introductory section, a state of the art report which addresses the paradigm shift in libraries and related concepts (such as holistic view, creative crowds, prosumers, visibility and flexibility), issues and developments as well as a need for user involvement in service creation will be presented. Following chapters cover the library service co-creation journey of each partner instutition. Each journey (in other words experiment with different user groups) is a milestone in the development of the Xlibris Methodology which is presented in the final chapter. Chapters (3-6) reporing results of partners' experiments and lesons learned constitutes country based OER (Open Educational Resources). Current state of partner institutions is also covered within these chapters. Final chapter includes the MOOC content which compiles eleven common OER created within the project and translated in to project languages. In this book only the English version is included. All the rest are accessible either project website or Udemy MOOC platform.

Xlibris

- Under Erasmus+ Program

- Strategic Partnership for Adult Education project

- Funded by European Commission - Turkish National Agency

- September 2014 – Agust 2016

The aims

- Involving users in the service design

- Uncovering users' needs, desires, wants, likes, dislikes

- Developing methodology for service co-design

- Developing training and in-service training programs

Partners

Hacettepe University, Turkey (Coordinator)

Pencho Slaveykov Regional Library (Varna Public Library), Bulgaria

Radviliškis District Municipality Educational and Sport Service Centre, Lithuania

Wisamar Bildungsgesellschaft, Germany

Gemeinde Kabelsketal, Germany

ISES (Innovacion Social Emprendedores Sociales), Spain

Outputs

- State-of-the-Art Report
- OERs
- MOOC
- Xlibris Methodology
- 20 new services
- Xlibris multilingual platform
- Dissemination products

Xlibris with Figures

- Transnational meetings (6)
- Workshops (19)
- Multiplier event (1)
- International conferences (2)
- Competitions (1)
- Exhibitions (3)
- Xlibris Community (513)
- Videos (366)

Workshops & Seminars

- Ankara (5-6 February 2015)
- Radviliskis (3-6 March 2015)
- Leipzig (10-11 June 2015)
- Paris (27 May 2015) – QQML
- Istanbul (29-30 June 2015)
- Varna (28-30 July 2015)
- Paris (14-15 October 2015)
- Tallinn (22 October 2015) - ECIL
- Radviliskis (26 October 2015)
- Radviliskis (28-29 October 2015)

- Varna (11 November 2015)
- Varna (1 December, 2015)
- Varna (9 December 2015)
- Warsaw (18-19 January 2016)
- Varna (10 February 2016)
- Ankara (29 April 2016)
- Ankara (9 May 2016)
- Ankara (15 June 2016)
- Ankara (27 June 2016)

Exhibitions & Book
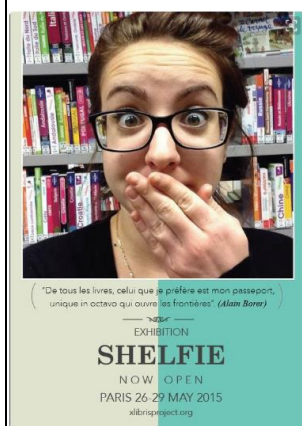
Xlibris Community

- 187 librarian
- 174 LIS student
- 65 teacher / professor
- 78 user
- **504 TOTAL**

Xlibris Community - 23 Country

Project Website - http://www.xlibrisproject.org/

Social Media

- Facebook: https://www.facebook.com/Xlibris

- Twitter: https://twitter.com/xlibrisproject

- Smore: https://www.smore.com/u/xlibrisproject

- Pinterest: https://www.pinterest.com/xlibrisproject/

- Instagram: https://instagram.com/xlibrisproject

- Iconosquare (#xlibrishelfie): http://iconosquare.com/tag/xlibrishelfie

- Vimeo: https://vimeo.com/channels/dissemination

Chapter 2
State of the Art Report

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CHAPTER 2

STATE of the ART REPORT

2.1. Understanding the Essentials

Library consumption is a knowledge based activity: cultural, social and educational products and services are viable, only if they possess widely recognised values. The role of the librarian is to become designer who takes into consideration the widest possible stakeholder map that looks into touchpoints between the supplier(library) and the demand side (user). Libraries today are facing with new opportunities, new behaviours, new consumers and a paradigm shift as well as a dramatic change in technology (smart ICT and social media) and instructional methodologies.

2.1.1. The Holistic Shift

The shift is now more than ever demonstrated in the sector of libraries: experienced consumers process with strong environmental conscience and respect for local cultures, enter the phase of the self-designing the consumption process, wishing to discover what is unique about the experience, putting pressure upon the libraries towards the development of new products, services and integrative, holistic experiences.

The holistic shift requires the implementation of praxis validated with a constantly improving and profoundly interconnected network of people, tools and services and new library entrepreneurial models, fully capable to provide opportunities for structural changes in various working areas. Improving the way assets, infrastructure, and people work, with the least possible waste and cost, is just as important as the push for reform and innovation.

Holistic shift includes:
- Prosumer Market
- From the notion of "product" to the notion of "service"
- Self-designing the consumption process
- Integrative, holistic experiences
- Intangible aspects (ideas, information, relationships) intensely interlinked
- Integrative experiences.
- Tools for viral dissemination
- Multi-screen device as the uprising market for mobile and connected consumers
- People sharing their experiences in the social networks
- QR Codes connected to the smart place consumption
- Social media assisting library entrepreneurship
- Mobile pervasive media are challenging current consumption models and old style products.

2.1.2. New Trends, New Behaviours, New Consumers

Libraries are facing with the challenge of designing and developing new services (or revising the traditional services) according to the new generation of users' demands. Values of tangible-intangible, movable-immovable, virtual and real become catalysts for redesign and development. Given the diversity and complexity of new library services, the use of new tools for accessing and delivering new generation of services is feasible, only if multilateral interactions are understood and reflected in policy and delivery. Required is a multivalent and flexible nexus at local-global level to mitigate the impact of this change.

Libraries are operating in a new environment and community that forces them to advocate their own relevancy with competitors such as Google. The need for reinvention developing relationships with users is imperative if libraries are to meet the needs of the next generation of users, namely the millennial generation. Millennials are those born between 1977 and 1994 and are the second largest population group after the Baby Boomers (Zou 2008). This group is the primary group of library users today and library services have to meet their expectations, as they are accustomed to being courted.

According to Walker there are seven key traits that characterize this generation: "special, sheltered, confident, team-oriented, conventional, pressured, and achieving." Special, pressured, achieving, and team-oriented are traits that have implications for libraries. Since this group is more team oriented, focusing on collaborative learning, libraries will need more group study space to accommodate this need and new services which encourage team work. Library users have demanded extended services to fit their busy non-traditional schedules and libraries have responded, albeit slowly, to these demands by expanding services with technology. Chat reference and instant messaging, blogs, federated searching, and Google Scholar are examples of this (Konata, 2009).

Two additional important concepts that characterize this generation is tech savy and prosumer. A "prosumer" is a person who consumes and produces media. It is derived from "prosumption", a dot-com era business term meaning "production by consumers". These terms were coined by American futurist Alvin Toffler, and were widely used by many technology writers of the time (Wikipedia, 2015). Today, vast majority of library users are prosumers. They create, organize and share content. Their expectations from libraries when they consume information and information services is close to their experience with production. Not only their expectation but also their behaviours (searching and use) are changed. These should be closely followed by libraries for timely adaptation of their services.

Librarians are also engaged in other "social software" such as wikis that allow users to add and delete information as desired, and Facebook which allows users to add or "make friends" with the library by adding the library to their circle of friends. Social media has the potential to facilitate much closer relationships between libraries and their patrons. Current usage of social media by the library community generally remains ad hoc and somewhat experimental, but the uptake of these tools is accelerating, and they will likely play an increasingly important role in library service provision and outreach in the future. All of these efforts are a result of libraries applying the business/ economic principle of "supply and demand." Libraries are reinventing themselves by going where the users are. This is also evidenced with federated searching, Google Scholar, and digitization projects such as repositories. Libraries have taken this adage to heart and are taking a page out of Google's online book to provide similar services. Users like the ease of use and how quickly the results are displayed. Metasearch technology (federated searching) provides this same ease of use, allowing users to conduct one search and receive results from several databases. Google Scholar is another example where libraries have joined forces with Google to provide higher quality content and in some cases link to their subscription databases (Konata, 2009).

Libraries have not always followed "the customer is always right" principle because it was not necessary to do so. Resources found in libraries were so unique that there was no other place to find them. The age of the internet changed that and libraries must now compete against other online sources available on the internet. One way to compete is with customer satisfaction and loyalty, and how we resolve customer complaints. Customer complaints should be valued, welcomed and used to improve services and customer relations. One important point is that unhappy customers share their experiences with others far more than do happy customers. Consecuences are not good for libraries (Konata, 2009).

What libraries can do and what many have done is to become more open to receiving complaints and creating new opportunities to hear about them (not only complaints but also about needs, demands, likes and dislikes). Branding could be also a good approach to encourage users to share their good experiences and satisfaction with others.

2.1.3. Increased Need for In-service Training

Training is bringing a person to a desired state of efficiency by instruction and practice (Concise Oxford Dictionary). All libraries aim to have efficient staff in order to provide good services to the community they serve. Training is the utmost importance in the library field because the field changes fast. Libraries must continually strive to- improve usage and this does not happen when staff unaware of recent developments, disinterested or uninformed. Well-trained staff serve to enhance the reputation of the library service. Training, therefore, must be an integral part of the library management's plans and should be a continual process and include new ideas and practices (Castelyn, 2016).

One should not assume that staff will automatically know everything about new developments, recent trends, technology, pedagogy and new user demands. They won't and they will need training in an efficient and effective way. In these days of highly complex and diverse services it becomes more essential than ever to ensure that staff are well trained to provide a more than competent service to the public. Training of staff must be accepted as part and parcel of the library routine. Training is a service-enhancing necessity. Its benefits must be made obvious and training must be valued by the organization. Therefore training courses themselves must be viable, important and relevant to the organization (Castelyn, 2016).

Identifying training requirements is also needed. There are two ways of looking at the problem. These are the needs of the organization (based on the needs on users) and the related needs of the individual. While identifying training needs one must take into account the various human differences of age, ability, experience, educational background. There are different levels of training to suit different abilities and the trainer has a responsibility to assess the level of training required by each individual or group of individuals. It is important to make the content and the delivery method of in-service training services interesting and atractive. Co-designing in-service training with target groups helps to achieve the best results.

In-service training for librarians today should provide information and experience with new tools and methodologies with which librarians can develop new services that are demanded by the SMART users. Online training for librarians becomes a good alternative with its 24/7 availability, as a result there will be an increase in the number of MOOC created for this purpose.

2.1.4. Creative Crowds

The creative crowds (library users) are not well organized. Local actors (creative crowds) they are active looking for new services, but there is a lack of coordination that disables the producer-consumer interaction.

The growth of Internet, and mobile Internet and other informalised, internet-based apps facilitates contacts and interactions and interact with creative actors in libraries spaces and places in a completely new way, with hosts in the role of the library service and user in the role of the creative consumer. New ways of interaction with creative crowds is needed. This project aims to develop a methodology for this.

Crowdsourcing is one of the tools to collect some ideas and insights from users and peers. This provides different perspectives from wide range of individuals (from potential users to experts), for instance for a newly proposed service, before it is actually implemented.

Crowdsourcing is the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call (Howe, 2009). Crowdsourcing can be used for many different purposes (Grier, 2013):

- getting a work done such as translating, logo design, mobile app testing, data verification, brand creation;
- stimulating action such as crowdfunding, political activism, citizen participation, civic innovation, community improvements;
- obtaining input such as idea generation, product feedback, collective brainstorming, problem solving, Beta Testing.

When it is used crowd should be defined: Is it a specific group or everyone, where can you find your crowd, how can you best reach this crowd? Message to the crowd should be clear. The crowd must understand what you are asking. It should not be interpreted differently. Process should be described. All steps in the process such as contribution, selection, voting should be defined. A deadline should be given. The reward system should be explained. Questions of the crowd should be answered. Feedback should be provided to contributors. There should be a minimal barrier to entry (Grier, 2013).

2.1.5. Developing Creative Opportunities

Developing creative opportunities for libraries requires visibility, permeability and flexibility.

Visibility: Attracting attention requires a keen understanding of the dynamics of the contemporary network society.

Permeability: Plug and play into communities via connectivity maps.

Flexibility: The development of new services needs to take place through a process of negotiation in which the embedded knowledge of creative locals and libraries matches the creative skills of the educational seekers and consumers. In other words, each service prototype is tested by the creative user, the prosumer, who will tell if there is a need to modify or not the vision. When a negotiation process starts between libray and users (producers and prosumers), best results are in sight.

2.2. Paradigm Shift in Libraries

The shift in libraries mainly based on the changes the new millennium witnessing in economy, technology, education and society including attitudes, behaviours, perceptions and habits of individuals. It is important to be aware of these changes to be able to design services which will address the rapidly changing needs. This report will address some of the most important changes.

New Librarianship is mainly based on participatory culture. The library of this century is not only a place to watch, read, and listen (in other words consume) passively but a place where new social relationships are forged and knowledge is created, explored, and shared. It is a beta space for real-time knowledge creation, design for experimentation and community-driven innovation (Hill & Goldenson, 2013)

Librarianship is about knowledge and facilitating knowledge creation. (Lankes, 2011, p. 43). In addition to knowledge consumption libraries should adapt to changing student needs and start supporting knowledge creation. For instance bringing makerspaces into libraries serves this purpose (Fisher, 2012).

The notion of the library in the past, is the library waits for people to come inside of its doors, to discover what they have, to take it home, to consume it in the privacy of their own home, whereas the notion at present changes and libraries begin to redesign their services and even their physical space. (Roberts, 2012).

Traditionally, libraries have invested mostly in the collection, preservation, and provision of access to certain types of information and certain types of cultural objects (i.e., literature) all for the purposes of self-directed learning and/or enculturation. But, in the future, libraries will need to invest more heavily in providing their communities with the tools needed to create technologically-mediated cultural objects and information. It's not that creation and consumption are opposed to one another, rather, the balance is simply shifting away from collecting information and shifting towards collecting the tools required to process information (Wilkinson, 2013).

Academic libraries have been steadily migrating from warehousing artifacts to being more directly integrated into the educational missions of colleges and universities. This can be seen in the push of services to the desktop of students and faculty. This began with a massive increase in the expenditures on full-text databases. This made the artifacts of the library more accessible outside of the physical facility. This was later matched by the wide availability of digital reference services to make the librarians also accessible from the academies' desktops (and laptops and increasingly mobile phones). Academic libraries are also working hard to retask their physical spaces. They are moving collections offsite in favor of more meeting and commons space (Lankes, 2011, p. 197).

There has long been a debate about the future of libraries. Some believe that there will be no libraries in the future because some of the functions that the library performs are scattered and some are no longer required. With the emergence and integration of information technology, many predicted that the library would become obsolete. Once people had the option of using their computers anywhere and reach information from where they are why would they need to go to the library? (Bell & Shank, 2004; Bennett, et al, 2005).

There is growing ambiguity about the professional role of librarians and where the future lies for libraries in this period of change. As the wants and needs of the end users transform, librarians have sought to redefine what the library services and library building mean to users. There has been experiments on restructuring the ways of capturing, organizing and delivering the information. All of this change is happening in a new, increasingly competitive information environment in which the library no longer is the de facto resource of first choice for those it exists to serve (Bell & Shank, 2004).

Within the current global climate, an experimental mindset may be the only way for libraries to compete effectively. Successfully justifying investment and funding for libraries has become a serious challenge. In a changing landscape, often the services libraries offer do not go far enough to meet user needs. This situation reflects a fundamental shift. For centuries, the great strength of libraries has been consistency— reliably collecting, describing, storing and preserving materials. However, in today's dynamic world, fueled by rapidly evolving digital technologies coupled with increasingly limited institutional resources, this is no longer enough. In order to flourish, libraries must be agile enough to experiment with new services, retaining what proves valuable, and refashioning what does not. This dual role—both providing today's core services and experimenting with anticipatory development for tomorrow—is often the subject of organizational distress (Luce & Weinryb, 2012).

There is a call for a new vision for libraries. The question is: what a library is supposed to be to continue its existence in the future? This is time for a transformation and a pradigm shift. External sources have an impact on this shift. Some of these developments are listed below by Bell and Shank (2004)

- Ubiquitous courseware systems allow faculty to create information silos that serve as gateways to all course related information, including research sources that may or may not include the campus library,
- Textbook publishers are moving to incorporate traditional library database content into Web sites that are companion tools for students as they use the text,
- Google is the first place people refer when they need information and it provides some search features libraries cannot

- Radical transformation in scholarly publishing is creating new avenues by which scholars make their research available,
- Personalized subscription databases are being marketed to individuals as an alternative to existing libraries,
- Amazon and Google "book searching," despite their inadequacies, become immensely popular almost immediately, receive tremendous media adulation, and make libraries, despite our technology, seem old and shopworn,
- The "Googlelization" phenomena, in which librarians and database producers are driving a movement to make their systems emulate Google, proves that days of librarians teaching end users to develop efficient research skills are over,
- Microsoft is pursuing and creating partnerships with all of traditional information vendors of libraries for direct linkages from their ubiquitous Office software to fulltext database content that will allow endusers to bypass our libraries with the click of a mouse button.

Reinventing the role of the libraries leeds librarians to invest on integrating their services and practices into the teaching and learning process and become a "blended librarian" who combines the traditional skill set of librarianship with the information technologist's hardware/software skills, and the instructional or educational designer's ability to apply technology appropriately in the teaching-learning process (Bell & Shank, 2004). Pradigm shift is also increases the importance of the library as a physical space where new and emerging information technologies can be combined with traditional knowledge resources in a user-focused, service-rich environment that supports today's social and educational patterns of learning, teaching, and research. It becomes a place for community where people come together on levels and in ways that they might not in the other places. Upon entering the library, users become part of a larger community. In the past, expanding collections reduced user space; now, it is the opposite. Technology has enriched user space, and people need the space for social interaction. Libraries are also to remain dynamic, the services they offer must continually stimulate users, they should be engaging, attractive and innovative (Dunn, 2011; Bennett, et al, 2005).

In recent years, it has become increasingly clear that libraries cannot simply scale their old services and expect them to address emerging user needs. Recognizing this conundrum, librarians have begun to explore departures from older models of simply collecting materials and providing access. Libraries now seek to anticipate the needs of their users, building services that support transformations in the society (Luce & Weinryb, 2012).

Finding the balance between supporting users' stated needs, and providing services they do not yet know they want is necessary. Exploring what users want and need (consciously and unconsciously) requires use of new methodologies. Inviting users to co-curate collections, physical as well as virtual workspace and to create new services (or new ways) seems to be the best solution.

2.3. User-based (User-centered) Design Paradigm

In the user-based approach, the user's needs and habits needed to be well understood and then reflected in the systems created. However, today, we see a further evolution to truly user systems. In today's spate of social Internet tools, the systems only provide a sparse framework of functionality for users to populate and direct. Wikis, blogs, video-sharing sites, and the like have shown that when users construct the system around themselves, they gain greater ownership and utility. We call these participatory systems. Participatory systems and participatory librarians do not seek to construct a system of functions and information and then bring the users to them, but rather seek to support users as they construct their own systems and information spaces. After all, from reference to collection development to cataloging (in the concept of literary warrant), we claim the users direct our services. Yet look at the systems we use to instantiate these ideals. The catalogs we provide only accept queries from users not actual documents. In reference, we have a conversation between librarian and patron,

not patron and patron. It is time to take our ideals and make systems that reflect that the library is an agent of the community not simply a service to it (Lankes, 2011, p. 183).

User centred approach is mainly focuses on the user perspectives and needs in design of information systems and services. Implementation of information systems according to user behaviours is essential for user centred approach as well as universal rules (Fidel, 2000). Users' expectations, searching behaviours and needs should be discovered before the creation of information systems and services.

There are many libraries faced with some difficulties as a result of the lack of interest and low user interaction. In this regard, the necessity of a strategic action based on the understanding user needs is recommended for libraries (Harbo & Hansen, 2012). Furthermore, it is also claimed that expectations, needs and behaviours of today's users are generally different than users of the past (Morris, 1994). Following questions are taken into account for user centred approaches in libraries (Somerville and Brar, 2009):

•   How do people interact?
•   How do people meet their information needs via library or library systems?
•   How do people interpret the outputs?
•   What are the users' strengths and weaknesses?

User expectations and needs also change according to previous experiences and systems interacted. Google is shown as one of the systems that influence user behaviours and expectations. Geisleine and Vine (2014) describe that users prefer long and natural language search queries and they think all knowledge is stored in search engines and information systems. In this context, importance of user need analysis and user personas in system design is pointed out.

Users and their information behaviours are essential for every kind of library including digital libraries. It is seen that user behaviours influence design, implementation and evaluation of library services and systems (Marchionini, Plaisant, and Komlodi, 2003). On the other hand, without user centred approach or analysis, scope of the systems or services delivered could be easily insufficient and easy to fail (Dervin and Nilan, 1986). In the light of advancements in technology, user centred approach is also important for digital library services. Log analysis and usage patterns are generally taken into account in digital services offered by libraries. As is in every information system structure, user centred approaches in digital services can be carried out by analysing user interaction with the interfaces, finding required information easily and the effectiveness of the information presented by services for users (Xie, 2008).

Explained as user centred places, libraries are also learning environments and studies reflect that libraries are in the fifth place after residence halls, dining halls, student unions and outdoor spaces. Additional to the systems and services they develop, libraries should also carry user centred building facilities that provide positive ambiance for users who see libraries as learning environments (Dunn, 2011; Faerman, 1993). As learning environments and places, user centred approaches are not only important for information systems they are also important for creation of positive ambience for physical use of libraries. We can conclude that libraries have a mission that create physical and digital experience for users by providing user centric services. Libraries also should encourage active user participation in system, service and physical space design.

2.4. Games, Gaming & Gamification
Games and gaming encompasses many forms of structured play—board and card games, computer games, video and console games, role-playing games, war and combat-focused games, and even alternate reality games. Since librarians support a variety of user interests and age ranges, they also

support all types of games that are appropriate for the needs of the specific group of users. Games, like movies, music, and even fiction, are a form of popular media that the librarian supports. As the role of gaming in society has grown, the role of gaming in libraries has also grown (Dyson, 2008).

Over the years, the library has changed to reflect the changing recreational interests of the public that it supports. Currently, at least for electronic games, "the average game player is 35 years old and has been playing games for 12 years" and majority of population (about 70%) play computer and video games (Entertainment Software Association, 2009). Therefore, it makes sense that librarians support games for a growing portion of their user population. There are two primary ways through which a librarian supports games and gaming—through collections and services. Many librarians have created collections of games, and in this way the game is treated just like any other artifact in the library. Games are selected according to a selection policy to develop a collection that meets a specific need and audience. School and academic librarians build collections of games to support the curriculum either through games that teach other subjects or games that are used to teach courses about gaming. A growing number of special collections of games and game related materials are in libraries. These games can be accessed by users in the same way that other forms of media are accessed (Nicholson, 2009).

Supporting games as collections falls in line with a more traditional view of librarianships and can neatly fall underneath policies that dictate other collections. In line with new librarianship is the support of gaming as a service. With these gaming services, patrons are able to play games in the library. There are several ways that gaming goes in libraries. Most librarians allow patrons to use computers for whatever they would like for a certain period of time. This means that while patrons can use the computers for database searching and web browsing, they can also use them for personal e-mail, social networking, and gaming. Another common implementation of gaming in libraries is as part of a summer reading program or other program for children. One traditional sight in many libraries is public domain games, such as chess or checkers. The growing area of gaming as a service is a formal gaming program. These programs could be focused on one game, such as a Scrabble tournament, or one type of game, like the Nintendo Wii, or a variety of board, card, and video games in a mixed session. These gaming programs may be an open play event, where players come and engage in games with each other with no other structure, or a tournament, where players play within a structure with the goal of providing competitive play and recognition. These programs could be focused on one age group, such as teens or seniors; could be explicitly intergenerational, such as a family game day; or could be open to all. Programs could be one-time or ongoing, and they vary in size from a Pokemon regional tournament that draws hundreds or an ongoing Dungeons and Dragons game that brings six players per week. Surveys done by the Library Game Lab of Syracuse have unearthed three common reasons for gaming programs. The most common reason is to provide a service for those who are not served as well as other groups by the libraries; typically, these are teen-focused programs designed to draw teens into the library. Another common reason is to create an activity that allows members of the community to engage with each other in a participatory manner (compared with more passive programs where the audience comes together to watch something but not engage). The third common reason for gaming programs is to extend existing library programs; summer reading gaming is a good example of this. Because games engage and motivate, gaming programs can create new dimensions to book talks and other traditional library programs (Nicholson, 2009). One of the problems that librarians can have in starting gaming programs is making decisions about which games to use based on personal gaming interests. The games selected should be justifiable as the most appropriate choice for the patron group and the librarians' missions. The programs can then be assessed to demonstrate how they fulfill the librarians' goals. These assessments are then valuable for those needing to answer the critics of gaming programs. When used with the librarians' goals and missions in mind, gaming programs can be motivating ways to bring people to the library on a regular basis to engage with each other through shared activities. They easily fit into the model of new librarianship as interactive and exciting activities that fit the interests of a growing group of the population.

Additionally, gamifying library services, such as user education services, becomes a common practice. The term *gamification* was coined by Nick Pelling in 2002 and became popular in the second half of 2010. Gamification is transferring some of the positive characteristics of a game to something that is not a game. Those positive characteristics of a game are often described as "fun" and they have the effect of engaging game players in the activity.

Gamification is applying game design to non-game applications to make them more fun and engaging. Gamification is integrating game dynamics into a site, service, content in order to drive participation or awareness. Research has shown that gamification increases attention, participation, teamwork, problem solving skills, user experiences. Well designed games and game like implementations are a good resource of motivation (Bozkurt & Kumtepe, 2014).

Recently, gamification, which has multiple applications in different fields, attracted the attention of both educators and researchers. Gameful design has become a popular trend to create more engagement in the area of education and learning environments. Using games mechanics and game principles from both digital and non-digital games can also be incorporated into library services (Knautz, et al, 2014).

Gamification aims to utilize peoples' desire to play and aims to evoke a similar degree of motivation and dedication by using game mechanics to make otherwise mundane or difficult tasks more appealing. Besides addressing a general desire to play, the various game mechanics also satisfy a broad range of human (core) desires like reward and status, achievement and self-expression or competition and altruism (Bunchball).

In recent years, gamification has become increasingly popular with implementations ranging from simple point systems on websites to tools like jogging apps, in which users have to run through a zombie apocalypse. At the same time teamwork, competitiveness, and especially information literacy, have become key skills in today's society. However, as the new generation of learners demands a more interactive and motivating learning environment, gamification seems to be a promising approach to mediate these skills. "Games and game-like elements have begun to invade the real world" (Lee & Hammer, 2011, p. 1) and researchers are starting to recognize the worth of games for education and other purposes. Games mechanics and game principles from both digital and non-digital games can also be incorporated into library services such as user education (McDevitt, 2011; Smale, 2011).

Traditional library services are designed to solve information scarcity by mediation. But now information is abundant, and what is precious and scarce is not information, it is people's time and attention. Most critical in the times of abundant information is how to engage people. Gaming is a proven tool for engagement. This is why gamification is an important trend in libraries

For instance, Librarygame (http://librarygame.co.uk/index.html) is a web application running on a server that is either remote or local to a library management system. Librarygame links into the LMS to collect participating user activity. When a Librarygame user borrows or returns an item (and other types of activities) the LMS sends this information to Librarygame, where it is processed. No manual input of information is required by the user. Certain activities will earn users' points and occasionally award them achievements and badges. All other activities, such as commenting, rating, sharing, recommending, competing and creating friend lists takes place on the Librarygame app with no required interaction with the LMS.

Some examples for digital and non-digital games designed for (by) libraries:
- Muder in the Library (https://suzannahbridge.wordpress.com/2015/05/05/murder-in-the-library-a-library-induction-game/),

- Gaming Against Plagiarism (http://digitalworlds.ufl.edu/gap/game2/),
- Citation Game (http://www.lib.jmu.edu/tictactoe/),
- Magnetic Keyword (http://www.lib.jmu.edu/games/MagneticKeyword/)

Although it is proved that gamification increases engagement, it alone does not guarantee user engagement or learning. A clear goal, careful planning, and skillful execution are necessary for the success of a gamification project.

2.5. Chance in Pedagogical Approach

In education, the last few decades have witnessed a progressive change from teacher-centered pedagogies and practices towards student-centered and more personalized learning. This means that students' needs, interests, backgrounds and learning styles are placed at the center and students start to become more actively and flexibly involved in the learning process (Wanner & Palmer, 2015). Advances in Information and Communication Technology (ICT), especially in the areas of online educational programs and video content creation and delivery, have enabled the implementation of flexible and personalized learning spaces (Brown & Green, 2015; Gordon, 2014).

Research findings suggest that, in order to be effective and engaging for the millennial generation, learning and teaching approaches should go beyond traditional lecture instruction (Ferreri & O'Connor, 2013). Millennials, raised with information technology and 24/7 connection to information, have a preference for environments that support multi-tasking, group work, and engagement with the social aspects of learning (Obradovich, Canuel & Duffy, 2015). In response to the expectations of Millennials, education institutions have recognized that in order to promote learning, maintain student engagement and increase student satisfaction, the utilization of technology (O'Flaherty & Phillips, 2015) and innovative pedagogies were essential. Consequently, pedagogies became geared towards Millennial learning preferences, and started to combine the traditional face-to-face classroom instruction with activities facilitated through a range of technological resources outside of the class. As a result, blended learning, flipped classroom model, online instruction, video based instruction and MOOC have emerged and became increasingly popular.

2.5.1. Blended Learning

Although the literature revealed several definitions, blended learning is commonly defined as a combination of the traditional face-to-face and technology-based instruction delivery methods (Porter et al, 2016). In other words, blended learning is a form of education that takes place both online and in a physical classroom. Rather than replacing face-to-face lecture delivery with online delivery, in blended learning the online component is usually used as a complement of the in-class lesson. By combining the delivery modes of teaching, blended learning is assumed also to combine the advantages of both methods, and therefore to be more useful to students (Rahman, Hussein & Aluwi, 2015). Blended learning is often also referred to as a hybrid model. The ultimate goal of which is to promote active and self-directed learning opportunities for students by joining the best features of face-to-face in-class instruction with the best features of online instruction.

Blending has become a common delivery mode in education (Olitsky & Cosgrove, 2016). An increasing number of institutions are adopting blended learning and it is in the mainstream of higher education as well as K-12 education. Almost half of the higher education institutions had blended learning offerings (Allen, Seaman & Garrett, 2007).

Blended learning today is a well-known technology-based approach used in education. Tools and technologies often used in blended learning are content management systems, such as Blackboard and Moodle along with podcasts, lecture capture, online chat, and discussion boards (Lyons & Evans, 2013). MOOC are also used to support online content delivery.

A blended learning strategy, by incorporating in-person instruction with online instruction (typically Web-based), can increase student engagement, improve learning outcomes and student retention (Olitsky & Cosgrove, 2016). Online components of blended learning provide flexibility to complete coursework at the student's convenience. By reduced classroom contact hours and the online delivery of study materials, assessment and coaching, blended learning makes academic education attainable and convenient for students who have other commitments that are time-and place-bound (such as work, family care, disabilities, or living in a remote location) (Deschacht, & Goeman, 2015).

2.5.2. Flipped Learning

The flipped classroom is a blended learning approach which integrates face-to-face and online delivery methods. It retains the advantages of blended learning such as optimizing in-class interaction between students and the instructor, and the flexibility and variety of the online lecture content (Becker, 2013). It is a fundamental redesign that transforms the structure of teaching and learning where a student is first exposed to new material outside of class, usually in the form of a video presentation available online; then the class time is used to apply the knowledge acquired from instruction material in the form of problem-solving and discussion. Flipped learning provides flexible environments where students can choose when, where, what and how to study and learn (Wanner & Palmer, 2015). The flip is causing a shift in the responsibilities and roles of both the instructor and the student. While the instructor acts as a facilitator, assisting students where needed and offering additional clarification as required (Obradovich, Canuel & Duffy, 2015) students become active learners who take on the responsibility of learning.

The flipped classroom refers to a teaching method (a pedagogical model), that delivers the lecture content (interactive videos or tutorials) to students before the class for them to study on their own time and uses class time for practical application activities where students review and apply what they have previously learned. The objective of the flipped classroom is to engage students in active learning by having them apply core concepts to a variety of contexts in order to more effectively build concepts into their knowledge base (Obradovich, Canuel, & Duffy, 2015). In other words, the flipped classroom reverses the traditional educational model by delivering the lecture outside of class, and spending class time on practical application assignments, formerly called homework.

The flipped classroom, also known as "inverting the classroom", and sometimes "peer instruction", is becoming more prevalent. It is not unusual to see it referred to simply as "the flip". The flip evolved out of experimentation with blended learning and problem based learning, along with the utilization of active learning techniques and new technologies for enhanced learning opportunities to students (Arnold-Garza, 2014). The asynchronous approach of recording lectures for students to view out of class at their own pace frees up in-class time for student centered synchronous learning (O'Flaherty & Phillips, 2015). Focus is on "just-in-time" instruction (Fawley, 2013). The lecture content is provided mainly through electronic means such as videos, podcasts or online tutorials which may incorporate animations, screen captures, and other multimedia content (Arnold-Garza, 2014).

Although it has gained popularity and attention especially during the last decades, instructors have been experimenting with the flipped classroom for a longer period in different forms. Especially in higher education, it has been and still is quite common to ask students complete assigned readings (nowadays also videos) and devote class time to discussions (Wilcox Brooks, 2014). Well-known online resources providing access to recorded lectures (MOOC) and instructional videos such as Khan Academy, Coursera and TED talks are also often used for this purpose and therefore associated with the flipped classroom. Instructors implementing the flip sometimes use these resources to support the lecture content (Bull, Ferster, & Kjellstrom, 2012). This could be particularly enriching when an outside perspective is needed (Arnold-Garza, 2014).

The flipped classroom is no longer a new concept and is increasingly becoming popular as more instructors (teachers, professors and librarians) are testing this new learning strategy and creating new ways to improve current methods. Many authors examined the benefits of this pedagogical model over the traditional model. This pedagogical model is beneficial for a number of reasons (O'Flaherty & Phillips, 2015): Supports diversity in students' learning pace; provides efficient use of class time and just-in-time, point-of-need assistance: provides more active learning opportunities for students; promotes development of higher order thinking skills; promotes better student-instructor one-on-one interaction; increases student responsibility for learning; addresses multiple learning styles; provides Improvement on lecture material; mitigates inequity caused by the involvement and education level of parents; promotes better student engagement and confidence through student-centered learning and collaboration; provides easy access to the lesson content.

Use of the Flip in Libraries

"The flipped model works best for those who want to strengthen their students' skills rather than transmit content" **(**Benjes-Small & Tucker*,* 2013). All instruction librarians want is that, students understand information problem solving concept (search, evaluate, use and communicate information) well enough to apply it in their own study and work (Arnold-Garza, 2014). Information literacy instruction includes teaching and learning concepts as well as skills. The flip model can help using limited instruction time in one-shot sessions in an efficient way by teaching skills in-class while teaching concepts online.

Having students come to class prepared to employ what they've learned from a video lecture is useful for dedicating entire class-time to simulations of real world activities (Cole & Kritzer, 2009). It seems like the flip model can help implementing an ideal information literacy session which provides more active learning opportunities and allows students to practice information problem solving, in other words information literacy, skills in the classroom while the librarian is present to assist with difficulties encountered (Arnold-Garza, 2014). According to Smale (2012), with such a limited time for instruction anything that helps students get more out of a single session is worth a try. There seems to be a consensus on the appropriateness of flipping for information literacy instruction (Gibes & James, 2015; Obradovich, Canuel, & Duffy, 2015).

Students often come to a library session with a range of knowledge; librarians cannot always determine what level of instruction is the best. The advantage noted by Stebbins (2012) of the flipped classroom model is to meet each student at his/her level and gradually bring all students to a shared level of understanding; this is especially important to one-shot library instruction (Arnold-Garza, 2014).

There has been a proliferation of literature on classroom flipping in library literature. Due to its frequently seen one-shot nature, challenges of using the flip in information literacy instruction might be more complex than challenges faced in semester-long instruction. As Arnold-Garza (2014) notes, these challenges are primarily logistical.

2.5.3. MOOC

The term MOOC was firstly used to describe a free, online course taught at the University of Manitoba in 2008 (Educause, 2011). It is the abbreviation of Massive Open Online Courses. MOOC is defined as an online course aimed at large-scale interactive participation and open access via the web (Habre, 2016). It is a system that generally allows free enrolment (some could be fee-based) for the users who wish to attend to courses structured by a web based platform such as learning management systems. MOOC has become new information resources in learning environments based on information and knowledge sharing with the emerging technologies and tools like Coursera, edX, FutureLearn.

MOOCs have the following features (Kazakoff-Lane, 2014; Habre, 2016):
• a systematic structure.

- content mostly delivered by faculty
- video based instruction
- no registration limits

The structure of the MOOCs is similar with the structure of OER (Open Educational Resroucres) (Kazakoff-Lane, 2014). OER movement described as a vital and essential movement for libraries, as the main supporter of educational activities at universities with their informational resources (Çakmak, Özel and Yılmaz, 2012).

Today, there are many organizations (including libraries) offering MOOCs. Coursera, Khan Academy, Udemy are some examples. MOOCs provide user friendly and responsive platforms for individuals with the aim of supporting lifelong learning. Libraries and librarians play an important role in MOOC development. They can facilitate implementation, support content creation, support student engagement, provide resources that can be used to support MOOCs content, provide permissions about copyright and usage rights of the materials and find solutions related to fair use, preserve MOOC content and support sustainability and effectiveness of the provided content (Schwartz, 2013; Kazakoff-Lane, 2014; Butler, 2002). In other words, library and information science professionals are learners, connectors and collaborators in MOOCs (Stephans, 2013). Librarians, as members of a rapidly changing profession can participate into the courses offered in MOOC platforms for keeping up with new development (as part of their in-service training and lifelong learning). They can also analyse MOOC curriculum and describe required information literacy skills for the use of the platform by students and instructors (Shumaker, 2013).

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2.7. Current State of Partner Institutions

2.7.1. Hacettepe University

Hacettepe University (https://www.hacettepe.edu.tr/english/) was founded in 1967 as a state university in Ankara. Hacettepe University continues its activities with 14 faculties, 14 institutes, 2 applied schools, 1 conservatory, 6 vocational schools, and 45 research and application centers which are located in 5 campuses. Hacettepe University has an international and interdisciplinary philosophy of education with over 500 bilateral agreements with numerous universities abroad and numerous international students and faculty. About 30,000 undergraduate and 7,000 graduate students enrolled in 115 programs offered by academic units. There are about 3,500 faculty. Hacettepe University is aware of the necessity to bridge education with practice and provides a wide range of opportunities such as workshops, internship programs and projects in cooperation with the state and private sector. Hacettepe University, as one of the leading universities in the country, keeps contributing to social development and universal values in the fields of science, technology and art. According to URAP (University Ranking by Academic Performance), based on 2013 data, it has ranked first place among Turkish universities.

Department of Information Management
The Department of Information Management of Hacettepe University (http://www.bby.hacettepe.edu.tr/english/) was founded in 1972 to offer a graduate program in Library Science. The Department accepted its first undergraduate students in October 1974. The Department differs from other similar programs in that students complete a year-long English language courses before they start their program and one third of the courses are taught in English. The Department celebrated its 40th anniversary in 2012. The Department of Information Management is one of the 16 departments organized under the Faculy of Letters. The Department recently became an iSchool member (http://ischools.org). It is the first and only iSchool in Turkey.

The Department of Information Management strives to be the first choice of students who wish to work as information professionals; contribute to science on a national and international level by carrying out research; create its own resources; and have a respectful image in society. The Department aims to educate creative and self-confident information professionals who can organize and manage all kinds of information and information centers; design and implement user centered information systems and services; and conduct research to produce new knowledge.

Degree Programs

Hacettepe University Department of Information Management is number one among other LIS departments in Turkey. Since its foundation, the Department accepts the students with the best scores in the same category at the national university entrance exams. Additionally, the alumni of the Department are in high demand and preferred by LIS institutions. The unemployement rate of alumni is very low.

Department offers degrees in three cycles (bachelor, masters and doctorate) and revises and renews its programs regularly. The undergraduate program lasts 4 years. It consists of both compulsory and elective courses. The curriculum of the undergraduate program was last revised in 2010/2011 academic year. About 90 students start undergraduate program every year. Currently, some 400 students enrolled in the Department (61 are masters and 31 are doctoral students). The Department has graduated about 2,000 alumni (between 1972 and 2013) who currently work in crucial positions in the LIS institutions and lead professional developments in the country.

Faculty

Faculty consists of 6 tenured full-professors; one visiting professor from University of South Florida, USA; 4 tenured associate professors; and 3 tenured lecturers along with 9 research assistants. Background of the staff varies from Mathematics, Statistics, Computer and Education Science to Library and Information Science. There is faculty collaboration within university (mainly with Statistics, Computer Science, Education, Philosophy, History, Political Science and Public Administration departments) and outside the university (such as the Ministry of Economics) in terms of teaching specific courses.

Research and Projects

One of the main functions of the Department is research. Main research areas of faculty are as follows: Information Retrieval, Bibliometrics, Information Literacy, Information Behavior, and Electronic Publishing.

Research projects funded by both national and international bodies are carried out by the faculty. International projects mainly funded by the European Commission while national projects mostly funded by TÜBİTAK (The Scientific and Technological Research Council of Turkey) and Hacettepe University. Faculty have been quite successful in securing research funding from the European Commission and National Research Council (TÜBİTAK) through competitive evaluation.

InterPARES TRUST (The International Research on Permanent Authentic Records in Electronic Systems: Trust and Digital Records in an Increasingly Networked Society), PASTEUR4OA (Open Access Policy Alignment Strategies for European Union Research) / 611742, Copyright Policies of Libraries and Other Cultural Institutions / DFNI-K01/0002-21.11.2012, LoCloud (Local Content in a Europeana Cloud) / CIP – ICT-PSP-2012-6, MedOANet (Mediterranean Open Access Network) / 288945, EMPATIC (EMPowering Autonomous Learning through Information Competencies) / 505657-LLP-2009-UK-K4-K4MP, AccessIT (Accelerate the Circulation of Culture Through Exchange of Skills in Information Technology) / 2009-0766-001-001-CU7-COOP7, InterPARES 3 (The International Research on Permanent Authentic Records in Electronic Systems) are among the international projects carried out by the faculty.

Faculty is quite productive in publishing both nationally and internationally. Journal of Informetrics, Journal of the American Society for Information Science & Technology, Scientometrics, and Journal of Documentation are some examples of the international journals in which faculty publish their research results. In Turkey, publications are highly concentrated in two major LIS journals: Türk Kütüphaneciliği (Journal of Turkish Librarianship) and Bilgi Dünyası (Information World). Both are publications of professional associations. First one is published by TKD (Turkish Library Association) since 1952 and the second is published by ÜNAK (University and Research Librarians' Association) since 2000. Both journals are indexed by LISA and national (ULAKBIM) databases and therefore periodically reviewed for their peer review process and academic integrity. Additional to publishing articles in professional journals, faculty also publish books, book chapters and conference papers. Proceedings of the Department's regular conferences are published under CCIS series of Springer and indexed in WoS. Apart from editing proceedings books of the conferences organized by the Department, faculty are also heavily involved in making contributions to, on different levels (keynoter, invited speaker, regular speaker, moderator, committee member, etc.), professional conferences (both on national and international level).

Organization of Events

Starting with a conference in 1997, to commemorate its 25th anniversary, Hacettepe University Department of Information Management has developed a strong tradition of organizing conferences both on national and international levels. Currently there are two international conferences regularly organized by the Department. *International Symposium on Information Management in a Changing World* (IMCW) aims of the to bring together researchers, information scientists, information professionals, computers scientists, librarians, data curators, educators, social scientists, policy makers, museologists and archivists to discuss the most recent developments and issues regarding Information Management. The second regular international conference organized annually is *European Conference on Information Literacy* (ECIL) which mainly focuses on information literacy and lifelong learning concepts and issues. It is organized, under the patronage of UNESCO and IFLA, in collaboration with Zagreb University.

The Department is also keen on hosting other international conferences. *The 10th International Conference on Knowledge Management* (ICKM 2014), the *6th International Conference on Qualitative and Quantitative Methods in Libraries* (QQML 2014), the *21st International LIS Students' Symposium* (BOBCATSSS 2013), and the *15th International Conference on Electronic Publishing* (ELPUB 2011) are among the international conferences hosted by the Department. Apart from international conferences, the Department organizes other international events such as workshops and seminars. *International Workshop on Research Data Management* (co-organized by Goethe Institut in 2014), *Higher Education Linkages to Education For All* (co-organized by International Association of Universities in 2014), and *UNESCO "Training the Trainers in Information Literacy" Regional Workshop* (co-organized by UNESCO in 2008) are some examples to show not only the range of subject coverage but also the variety of organizations the Department has been cooperating. Additional to international events, the Department also organizes some national events. Workshops on *Open Access* in 2013, 2012 and *Web 2.0* in 2009 are among them. Since 2011, in every Spring Term, a *Career Day* has been organized. This event aims to bring together representatives of different career paths, potential employers and career planning experts with the students. Starting from 2010, a regular colloquium series, called *Wendesday Talks, are organized.* Students on all levels are strongly encouraged to attend these events to meet experts from LIS and related fields and to learn on subjects which might be of interest to them. Followings are titles of some of these talks: *Cognition, Emotion and Information Science: Some Aspects of a Relationship*, *Towards the Internet of Things to Big Data: Why We Should be Concerned?*, *Entrepreneurhip and Innovation*, *Youth Branches of Professional LIS Assocations*, *Sicence, Technology and Industry Policies of Turkey*, *Children's Literature in Turkey*, *Insights from*

Software World, Best Practices from Public Libraries in Turkey, Innovative Information Literacy Services in Ireland.

Other Activities

According to their research interest faculty attend and participate in scientific conferences on regular basis. iConference, Annual Meetings of Association for Information Science & Technology (ASIS&T), International Conference on International Society for Scientometrics and Informetrics (ISSI), International Federation of Library Associations and Institutions (IFLA) World Library and Information Congress, European Conference on Information Literacy (ECIL), and Digital Humanities are the most frequently attended international conferences. Public Librarianship Symposium, InetTR (Internet in Turkey), Academic Informatics, Library Week Annual Conference, ÜNAK (University and Research Librarians' Association) Annual Conference are the national conferences that faculty attend and participate.

Editorship of the two leading LIS journals published in Turkey, namely *Journal of Turkish Librarianship* and *Information World,* has been carried out by the faculty of the Department. *Information Development, LIBER Quarterly* and *Journal of Hacettepe University Faculty of Letters* are other journals that some faculty sit in their Editorial Boards. Faculty also serve as reviewers to numerous scientific journals.

Faculty also hold positions in Professional Institutions and Associations such as EUCLID (European Association for Library and Information Education and Research), Turkish Librarians' Association, University and Research Librarians' Association. Standing Committees of IFLA, UNESCO Turkish National Commission.

Although it is a small Department, Faculty actively involved with University's committees such as Commission for Academic Promotional Criteria, Education Commission of Faculty of Letters, Awards Committee, Publications Committee, Conference Support Committee.

Partnership and Collaboration

The Department of Information Management is in collaboration with several institutions. On one hand, many institutions support the program as well as the practica and activities of the Department. Various departments within the University contribute to the program and the University Library provides venue for applied courses. Professional associations and other LIS departments in the country and abroad are also among the partners. On the other hand, the Department supports other institutions in many ways. National Library's automation project was carried out by the Department. Abdullah Gül Presidential Library, first of its kind in Turkey, is being organized by the Department. Within the scope of Library e-Turkey Project the Department collaborates with Hacettepe University Technology Transfer Centre, Republic of Turkey Ministry of Culture, Republic of Turkey Ministry of Development, and Bill & Melinda Gates Foundation. Google Turkey, Turkcell (one of the main telecommunication organizations in Turkey), Adobe INC are among organizations faculty collaborate. Faculty provides consultancy services to firms in University's Techopolis.

The Department is quite active in student and teaching staff exchange especially with European countries. Following is a list of LIS schools/departments the Department has Bilateral Agreements within *Erasmus+* framework: University of Zagreb, Croatia; Charles University in Prague, Czech Republic; Masaryk University, Czech Republic; Tallinn University, Estonia; Alexander Technological Educational Institute of Thessaloniki, Greece; The Hague University, the Netherlands; University of Szeged, Hungary; Eötvös Lorand University (Elte), Hungary; Universite delgi Studi di Parma, Italy; Jagiellonian University, Poland; Universidade de Porto, Portugal; University of Ljubljana, Slovenia; State University of Library Studies and Information Technologies, Bulgaria; Sofia University St Kliment

Ohridski, Bulgaria; Limerick Institute of Technology, Ireland; Vilnius University, Lithuania; Transilvania University of Brasov, Romania; University of Boras, Sweden

Project Related Features
In the Department, there is a good expertise regarding ICT, social media (web 2.0), web 3.0, library services, marketing, user education, information literacy and in-service training (continuing education) for librarians. However because of the limited number of faculty (teaching staff) and limited time the Department cannot fulfil some of its responsibilities especially in the area of developing continues education (in-service training) programs for librarians. This is quite curicial when we consider the speed of chance in technology and in the field. To be able to fulfil this responsibility the Department has been considering to start e-learning opportunities and platforms for librarians who do not have time to go for classroom education/training.

Although social media, user-centered approach, smart ICT and library services are in the core of the Department's curricula, there is no specific course which brings all these conceps together and teach students innovative methodologies which can be used in creating user centered services and motivate them creating new services by the use of smart ICT.

2.7.2. Radviliškis District Municipality Educational and Sport Service Centre
Radviliškis District Municipality Educational and Sport Service Centre consists of five departments:

- Day centre department for the people with mental disabilities,
- Pedagogical and Psychological service department,
- Sport department,
- Accountancy department for educational institutions in the district,
- Non-formal training department for adults and young people in the district.

All departments of the centre work for educational business in the district. Nonformal training department for adults and youths organizes a wide range of nonformal and informal educational activities for adults and young people in the district.

The department is responsible for creating, organizing and implementing lifelong learning (LLL) programmes including in-service training programmes for pre-school, primary, secondary and vocational school teachers and the staff of educational institutions in the district. The teachers in Lithuania have to develop their competences and skills continuously and to prove if they satisfy their degree of qualification every five year. So, almost every town in Lithuania has its educational institution which is responsible for development of the teachers' qualification. The institution follows the priorities of the educational policy in Lithuania, Programmes of in-service training are written and delivered to teachers in various subjects.

Training programmes aim to develop teachers' personal, cultural, professional competences. The main directions of teachers' in-service training are:

- Dealing with special educational problems,
- Creative learning,
- School leadership development,
- Development of educational quality assurance system,
- Development of students' achievement assessment system,
- Implementation of the new technologies into the educational system,
- Educational process and content modernization,
- Development of methods and ways to make lessons more effective,
- Analysis and prevention of students' drop outs and effective schoolmanagement.

Besides following the priorities on the national level every year the institution performs the survey in the schools to learn the teaching gaps that the respondents identify. Under the received feedback in-service training programmes are prepared and implemented. In addition, the organization coordinates teachers' methodological groups (each group represents a different teaching subject). Those groups are responsible for developing and improving teaching quality and achieving better students' results in district schools. Moreover, the institution receives many initiatives for training programmes from the methodigical groups.

In-service training programmes consists of six, eight, sixteen, eighteen hours or even longer, If a programme is longer than eighteen hours it is usually presented to be accredited. To implement these training programmes teachers from universities and colleges under their teaching subjects are invited to deliver the programme.

There are many teachers who have considerable expertise in dealing with problems of teaching their subjects. This type of trainings is considered as a good practice training programme. What is more, there are training programmes which are initiated by school communities in which the whole community develops their competences, for example, leadership, management of lessons, ICT application in classes, etc. After a programme has been completed the participants are issued with certificates or references which depend on the amount of hours of a programme.

The Centre has an agreement with Šiauliai University which has pedagogical programmes for teachers' in-service training and provides internship opportunities for students. Thus, Radviliškis District Municipality Educational and Sport Service Centre cooperates with the university for implementation of in-service training activities in non-formal training department in the district. The students from the university carry out research for the needs of teachers or other educational issues.

Additionally, the centre provides district's residents with a variety of educational activities and programmes which encourage them to participate in LLL. Most popular LLL programmes are languages, English, German and French, different programmes on the use of information technologies and arts. The courses and programmes are advertised every year in August and September using traditional and social media. Every academic year we have several level language courses, different programmes on the use of information technologies and permanent groups of arts for women. The art works such as painting, decoupage, embroidery, needlework, knitting and etc. are exhibited in different places, for example, the cultural centre and public library every year.

The centre is also accredited for testing European Computer Driving Licence (ECDL) and the level of the English language under European frameworks of languages. The department provides non-formal education and assessment of the above mentioned testing to different professional staff such as public institution officers, service officers. The other target group of the institution is the youth in the district. The institution works in two main fields with this target group. One target group is smart pupils and it is related closely to formal education which includes the implementation of activities devoted to the encouragement of pupils' academic development. The institution together with methodical teachers' groups discuss and organize olympiads and competitions in which smart pupils of different ages and from different school compete for the best academic results. In addition some
olympiads and competitions are initiated at the national level and it is almost compulsory to organize them at the local level to find who is the best pupil in a specific subject with this pupil is being sent to represent the district at national level.

The other group of youth is totally different and which requires different very professional work. They are 'drop outs', juvenile offenders and other young people facing social problems. There is a special

team, of youth workers in the institution who are responsible for working with this target group. They organize active free time activities, individual and group coaching and career consultations.

Seniors are another target group which are active clients in LLL training activities in the institution. They participate in lectures such as:

- Positive attitude to aging problems,
- Social care,
- Law,
- Healthy lifestyle and others.

There is a managing board which discuss with the members and look for lecturers for their learning. They have long courses in which they learn languages, computer-literacy and learn different handicrafts. Delivering training activities for this group of learners is a voluntary job. Seniors receive a very small amount of finances for their trainings, so most lecturers and trainers deliver trainings voluntarily. Most training except for projects are chargable, so learners have to pay a nominal amount for training activities which might differ, but there are some limits ordered by the municipality. It might be exceptions for the learners who represent disadvantaged groups of the district such as people living in remote places, seniors, unemployed and disabled people.

The centre is very active in international projects which help to expand training activities to different target groups, develop the quality of non-formal education, improve and solve management issues, share a good practice and of course, offer a wider range of learning subjects. International, national and local projects contribute in the field of evaluation and findings of learners' needs.

The institution has been participating in international projects since 2005. The project devoted to developing adults from disadvanged groups' IT and social competenes was implemented in 2005-2009 under Grundtvig programme, secondary school teachers developed their IT competences learning how to apply IT tools in classes (Grundtvig) in 2009-2011. Adult teachers participated in NordPlus programme and improved their teaching competences and skills for working with adult learners (2012-2014).

The institution has had several projects for young people. During project activities young people developed social skills, active democratic participation, learnt cultural issues, etc. The projects were implemented under the programmes of Youth in Action and Europe for citizens. A lot of youth and senior people's activities were implemented supported by municipality funds and the Ministry of Social Care and Health. During these activities both groups learnt to follow healthy lifestyle and have active free time activities. The seniors gained knowledge of coping with aging problems, youth participated in camps which were dedicated to active free time activities. The youth workers participate actively in international programmes which support them with useful knowledge of working with disadvantaged youth groups. They had a lot of activities devoted to reducing youth harmful habits such as abusing alcohols, drugs and smoking.

The non-formal department for adults and young people implement lifelong learning programmes in the district including different age target groups from school children to seniors aiming to meet the requirements necessary for a 21st century individual.

Current State of School Libraries in Radviliškis
Every school in Lithuania has got its library. However the type of the library usually depends on the type of the school. If the school is a gymnasium (students 14-19 years olds) the library funds are different from the funds in a library of a basic school where 6-14 years old children study.

The general task of school libraries is to provide educational resources for students and teachers mostly in the form of printed resources and rarely in other forms such as e-books, audiobooks, professional websites, etc. In addition this institution in the school is responsible for the organization of course books. All course books arrive to school libraries, they are registered and delivered to class groups. Teachers are responsible for course books of a teaching subject. Naturally, teachers take course books at the beginning of the school year and return to the libraries at the end.

Most libraries own an extra room where school children can read, study or work on a computer. Nowadays all libraries have computers.

Even though, school libraries have been connected to the system of MOBIS which are supposed to be a close system among school libraries in Lithuania however the system MOBIS does not work properly as the school libraries are not connected to each other and they cannot follow each other's funds. In addition there are still some libraries in the district which haven't been connected to MOBIS yet. So these libraries still continue to work with paper registrations while delivering and receiving books from clients, describing and registering books. Nevertheless, MOBIS is starting to operate, school libraries continue their service in old fashion different from big public libraries. Each book delivered to a client is written to a client's register and when it is returned the librarian signs on the register which means the return of a book.

The library is also the place where teachers and their students have literature afternoons to commemorate writers, poets or historic personalities for their birth or death dates, or other important events related to famous personalities.

Moreover school libraries have a room or a part of the room which is devoted to the secondary school students' career. Librarians and teachers plan consultations and information of students' career.

School libraries try to increase children's confidence and enjoyment of reading, open up reading choices, offer opportunities for the school community to share reading experience. The library also raises the status of reading as a creative activity.

The school library's working hours are very convenient for school community. It opens a little earlier than the first class starts. Schoolchildren can come to the library and prepare for classes especially those who are in the village schools as a school bus brings students early to school. In addition the service of the library is free. The clients do not pay for the use of literature and information. Some school libraries provide the service of making copies and for them clients have to pay

School libraries still lack money for buying printed or e-books which are very necessary for school communities (students and teachers). For example, schoolchildren have some literature which is compulsory to read, but libraries do not have enough books for each student so that all
students could have one in the literature class. What is more, not all books can be found in the digital format.

Nowadays school libraries have fewer possibilities for subscribing magazines, journals and newspapers, which could be very useful for different subjects such as literature classes, physics, history and etc.

Even though libraries try to be attractive and using different methods try to encourage schoolchildren to read more, interests in literature and reading are decreasing. It is obvious that printed documents are losing their purposes and school librarians have noticed that young people are interested in sleazy and cheap information on the Internet. So school libraries have the task to find methods and approaches to attract young people to more valuable information than they are interested at present.

It is obvious that the traditional library is competing with the Internet as the latter is more convenient but school library is not going to disappear as it provides more functions at school. Thus the challenge is to find right approaches how to modernize it, attract clients and involve in reading, and other lifelong learning contents.

The Role of School Librarians in Lithuanian Schools

The librarian performs and integral role in promoting an effective education at school. They have to collaborate closely with all teachers across different grade levels and subjects. They also work with all students considering literature and course books. Librarians have to book course books after they discuss with the teachers and decide on the content of the course. The librarian should follow the curriculum and information related to the subjects taught at school to be competent to learn about compulsory and optional literature students should read for their literature classes.

They promote literacy development and foster lifelong reading habits among schoolchildren helping them to select books, magazines and other printed literature. Organizing literature afternoons librarians together with literature teachers try to engage schoolchildren in reading. Different occasions organized in the library help students learn more about writers, poets and historic figures, moreover some students participate in organizing these events, which encourage them learn more in such subjects.

Librarians also have learnt a lot of about the didactics, methodology, psychology and educology in general. They should know which pedagogical literature is useful and necessary for a modern teacher. School libraries receive a lot of pedagogical literature from country's educational institutions as a result of different projects and programmes. Next, they have to order the other special literature from publishers' catalogues so it requires competences and knowledge to select good ones. Usually, they work with school administration and teachers' teams to make the right selection.

The librarians are very busy at the beginning of school year and at the end the delivering and receiving course books. This work takes a lot of time because they have to count them, check how many are missing, look through each to evaluate the state of each course book. Before the beginning of the school year librarians receive the students' list and they have to check if there are enough course books for all subjects necessary for each course taught at school.

Librarians gather information related to students' career. Some of the librarians in the district are responsible for consultations of student's career. Together with class teachers they organize career classes for a group of students, organize trips to different institutions, inform and consult on future studies. They also organize questionnaires for establishing the most suitable career for each student depending on his/her personality.

Librarians keep the library organized and tidy for example, clients will not put the book back where they found it, organize library catalogues and try to make them easy to use. They also try to maintain quiet environment even though it is very difficult to do it during breaks at school.

The librarian's function as an educator is one of the most important. It is obvious that this role is frequently unrecognized. There has been too little attention paid to the research role that should be played by the librarian. With the development of new methods of information storage and dissemination, it is imperative that the persons primarily responsible for this function should be actively engaged in research. Librarians lack trainings for working with various media, how to select the right information for their clients what to suggest reading for necessary knowledge. School librarians should find the solution how to survive in the world of electronic information.

School librarians participate in different in-service-training programmes such as how to provide information attractively, motivate students to read. They also share good practice examples how to reach successful reading results. In addition, they learn how to create and make advertisements which encourage reading, how to advertise literature, how to create an attractive list of literature items. They have had seminars and courses for developing their IT skills.

School librarians understand that school libraries are becoming more and more important but there is a need to change. What is more, the library as an institution is becoming an information provider with IT skilled specialist who is ready to function in an electronic environment. 21st century librarian should be able to select, organize, service not only printed documents but also other digital media, to assist users in searching necessary information sources, cooperate with other libraries, train schoolchildren and teachers on Internet use such as Internet tools, engines, platforms, online database and catalogues, electronic journals and etc.

Areas of Improvement

The challenge is to develop librarians' IT competences and skills, to use Information technologies for servicing clients and gaining more knowledge in the use of Internet sources. Lack of competences to manage digital information, social media, use different platforms are some of the problems.

First of all the librarians should develop their IT skills to be more qualified. Nowadays all librarians have basic skills of computing however it is not enough to use and work on the platforms organized for the libraries. Information technologies have been developing very fast so it is very important not to tarry. For example, only few school libraries in the district use MOBIS, the system which is devoted to modernize the service of school libraries because librarians lack IT skills. This system would help them organize funds better, as they would know which client has a necessary book, journal or newspaper. They could inform clients about the time when the item is returned and when another client can take it from the library. They wouldn't need to have paper index card system and folders. They also lack daring for being active on the social media and supporting their clients with the necessary information because of lacking necessary IT skills.

Librarians lack competences which could help them organize their school library's work. First of all they have to improve ICT skills even though they all have basic ones. The information technologies are developing very fast so they need to develop their IT skills constantly, for example, communication skills tightly linked to IT, the use of social media and their tools, how to use social media tools for accumulating digital material, advertising various library and school's events, establishing and organizing on-line events, using mobile tools for accessing digital information and modernizing library's services. In addition the librarians in the district haven't had much trainings and school communities have been changing and they require different age communication especially children, who are a new generation. The librarians need to develop their teamwork skills to be better at building teams of the library members. Critical-thinking and leadership are other important skills which help humans be active and motivate them to change long ago established attitudes. In addition librarians claim that psychological competences are very necessary to avoid misunderstanding communicating with modern generation and learning their needs. School librarians should organize their work attractively to have more clients in their libraries so they need to develop entrepreneurial skills.

The task of the educational centre is to prepare a training course programme for librarians and teachers in which they could develop their IT competences to be able to use the system MOBIS and manage digital information. The librarians and the teachers stated they would like to have a platform in which all district school libraries could share the information about books, e-book, Internet websites and course books when they lack them in their schools.

The librarians would like to service their clients more professionally, helping them in searching necessary digital information. Mostly the school library is used for schoolchildren and teachers, but sometimes students from universities and colleges visit the library because they need some pedagogical or psychological literature, which not all public libraries can have, so librarians should be very knowledgeable to help their clients. They should learn a lot to accumulate necessary funds (printed and digital). Their skills would help them select the right Internet data related to academic knowledge. The information about school libraries, their activities and news are published on school websites, so the librarians stated they would like to be more skilled to prepare this information more attractively as now they usually ask IT teachers to help. They would like to learn more about social media, social networks and be active on them.

There is a need for training to change a traditional library into a sophisticated one with a professional librarian, who is skillful to manage digital data and online service such as informing clients about the status of a necessary item, supporting with necessary information and etc. Moreover, this modern library is supposed to create an effective service with online catalogues and the information of delivering/receiving documents, which can be very useful for clients who need them.

2.7.3. Wisamar Bildungsgesellschaft

Wisamar Bildungsgesellschaft is a non-profit educational institute in Leipzig, Germany, acting in vocational, cultural and adult education. Our fields of activity are:

- Competence and Dialogue Centre: consulting and supporting labor market integration
- Professional and personal development
- European Project Management and Information on European topics (e.g. ECVET)
- EU mobility

Wisamar is accredited by the German Institute for Adult Education as competence and dialogue center for ProfilPASS consultancies. In addition we are a certified training provider for measures by the Federal Employment Office. We carry out competence analysis, consultancy, job application training as well as different further education modules, in cooperation with local partners.

Together with partners from the Leipzig-Halle region as well as from all over Europe we are committed to common European activities in education as well as regional development. Therefore we carry out activities in vocational and adult education, in formal as well as non-formal and informal fields. In our language and mobility center we offer young people as well as teachers, trainers and human ressources staff the possibility to take the broader view, gain practical experiences in another country or exchange with colleagues about teaching methodologies and contents as well as its organisation. We were awareded already with "Good Practice Awards" for high quality management of mobility projects as sending and receiving partner.

2.7.4. Gemeinde Kabelsketal/ Municipality Kabelsketal

The Municipality Kabelsketal is situated in the Central German Metropolitan region around the cities Leipzig and Halle and is part of the Saalekreis District in the federal state of Saxony-Anhalt. The municipality Kabelsketal was founded in 2004 and incorporated the former municipalities Dieskau, Dölbau, Gröbers and Großkugel. The number of inhabitants is about 8.800.

Kabelsketal is situated in a rural and disadvantaged region in Germany with an unemployment rate over 20 percent, which leads to social problems. The economy and purchasing power is low. This is why Kabelsketal has been engaging itself in European projects since 2007 in order to contribute to the development of the municipality as a part of Europe. Kabelsketal aims to enhance the sense of belonging and strengthen citizens' commitment to their community.

Library Kabelsketal

The library is situated in the secondary school in Gröbers and has several rooms with approximately 50 qm² in total for disposal. The municipality is renting those rooms from the administrative district Saalekreis, which is responsible for the school. It is a public library open to all residents, so not only to the pupils of the school, and it is free of charge. Mrs. Angela Hirsch runs the library. She is the only person working there, 16 hours a week.

Because the library is situated in a school, the opening hours of the library depend on the opening hours of the school. The library is open on 3 days during the week – Monday, Tuesday and Thursday from 10:30 a.m. until 3:30 p.m. Because Gröbers is not the only locality in Kabelsketal several years ago the municipality Kabelsketal established a mobile book service. Once a month books, films etc. - also after consulting the users - are brought by Angela Hirsch with a car to users in the districts Kleinkugel, Großkugel and Zwintschöna. The dates are published before in the official gazette of the municipality. In this way also older residents have the possibility to borrow books and other media without much effort.

The number of visits to the library lies between 350 and 450 each year. At the moment the library has around 80 active users. The age of the users ranges from 6 years up to 70+. Pupils from the primary and secondary school are the main users of the library. After consultations with the teachers, a general introduction into the library is organized for different grades, especially for the younger pupils. Here the focus is to explain to the pupils what kinds of media the library offers, how it works to borrow something and when it is open. While having a look through the small library the pupils often find something, which they are interested in and so they become regular users of the library.

In the library it is possible to borrow novels, children's books and nonfiction books. Furthermore, the library offers CD's, videos and DVD's. At the moment the library has around 8.420 different media – ca. 3.000 novels, ca. 2.300 children's books and ca. 1.480 nonfiction books. Every year around 1.300 media are borrowed from the library. The municipality had to close the second small library in Kabelsketal in May 2015, which was situated in Großkugel. All media from the library in Großkugel have been moved to the library in Gröbers. Unfortunately the library in Großkugel did not have an updated list of the inventory, so the inventory of those media has now a high priority.

The library is still administered on paper, for example the user information and which books they borrow is kept on index cards. The data of the users are already also stored on the computer. The library is also still working with a card index. Mrs. Hirsch started to do the inventory of the library with the computer.

Until March 2015 the library had no internet connection and therefore it was not possible for users to reach the library over the internet, for example via e-mail. This point has now been addressed due to the X-libris project. The library has an internet connection since April 2015 and an official e-mail address, so the users can reach Mrs. Hirsch via e-mail. Also the new established Facebook site of the library provides information on the X-libris project as well as new from the library, for example when the library is closed or which new books have been bought.

Every year the library gets a budget to make new acquisitions. In this way over the last years new media could be added to the inventory of the library. The library tries to react on the wishes of the users which new media to buy. In addition, book donations are very welcome and are integrated into the inventory.

An extensive asset to the library is the librarian, Angela Hirsch, with her positive attitude and her friendly and open-minded personality, which is very important in the everyday personal face-to-face contact with the users. She brings her creative ideas, energy, motivation and experience to the library.

The location of the library will change in 2016, since the secondary school where the library is situated at the moment will be renovated. For now it is planned to move the library to a primary school in Dieskau, another part of Kabelsketal and about 6 km from Gröbers where the library is now. This will offer new opportunities to work together with this primary school. But there is no information yet about the new space of the library and the details such as room size, internet connection etc.

Areas for Improvement

Since the library is a voluntary service by the municipality, the existence of the library is never certain. Every year the local council has to decide upon the future of the library. A sustainable concept to secure the existence of the library is needed.

The library is not administered by computer yet. Therefore it is necessary to digitize the whole inventory of the library.
The accessibility of the library is very limited due to the opening hours. People who are working during the day do not have the possibility to come to the library.

In general the library has to be more visible to the public so that more people consider using the library.

Innovative Ideas

To improve the accessibility of the library without having to extend the opening hours the library catalogue should be available online. To get to this point the first step is to digitize the inventory and ask the users and volunteers for help to finish this process faster. In this way the users get involved in the whole transformation of the library from the beginning. After programming the database and the website all users will be able to look through the holdings of the library in the internet. A further step could be to program the website in a way that the user can also order the book or DVD online. This would also improve the mobile service and make it easier for the users to get what they request. The work of the librarian becomes much easier as well, when she can add new media directly into the online database and administer the inventory on the computer. The launching of the website will be made public not only in newspapers and on the website of the municipality, but also through social media channels, which will be linked to the website.

The library opened social media sites (facebook, twitter, pinterest, Instagram, vimeo) to inform about the Xlibris project, but also about the innovations and new services within the library itself and the users can comment on that. The social media sites make it possible for example to ask the users which new books or films should be bought or to present their favorite book from the library.
In this way the library will be more accessible and attractive for the community, the number of users grows and in addition it stimulates social contacts and communication among the residents.

People at Risk of Exclusion

The municipality Kabelsketal is a rural area in a disadvantaged region of Germany with an unemployment rate over 20%. Therefore, the access to cultural activities is very limited, especially for children and elderly people, since for them it is not as easy to get to the nearby cities of Halle and Leipzig as for the working population often working in one of those cities. Thus, the risk of social exclusion is primarily high for unemployed people, children and elderly people within the municipality Kabelsketal.

The library of Kabelsketal is an important place for those people at risk of exclusion. It is not only a place of books and knowledge for the inhabitants to continue their learning, but also a meeting place. For elderly people, who do not have their family nearby and who come to the library, the librarian is an important interlocutor. Through the mobile service to different towns in the municipality, the library offers its services to all parts of the municipality. The users do not only use the date when the

librarian is coming to their town to borrow books, but also to meet each other and get into exchange with the librarian about news within the municipality.

In order to make the library more accessible, to improve the mobile service and to foster the learning in terms of digital competences of elderly people, the development of an easy to use online catalogue for the library of Kabelsketal is a very important step. The users will be able to search for books in advance and order them via e-mail, so the librarian can bring them the next time she will come to the town. In addition, the users will be regularly informed about news from the library (e.g. new books, events, closing times, dates of the mobile service etc.) through Facebook. Facebook could also help to form a community of library users and to foster a regular exchange among them.

2.7.5. Varna Public Library

Pencho Slaveykov Public Library in Varna was founded in 1883. It is a public institution supported by the municipality and the government. The library has been depository of the Bulgarian national literature since 1945. It is a regional library and centre for consulting other libraries in the North-East part of the country.

Latest statistic have shown that library collections number over 860 000 volumes of books, periodicals and other materials. 30% of our users are under 18 years old. Library collects and offers books and periodicals, manuscripts and archival documents, albums, cartographic publications, official documents, standards, written music, records, audio and video cassettes, CDs and DVDs. In its Regional History Dept. there is a unique and full collection of periodicals printed in Varna after 1880.

The Library is a member of the Bulgarian Library Association and a partner in a number of European non-governmental cultural programs and international projects.

The Library is situated in a city of 400 000 inhabitants, with regional responsibilities in an area of significant change. An increase in the number of adults with only a lower-level education highlights the risks of social exclusion and lost local traditions and is of deep concern for the library.

Current training activities for adults include cooperation with community groups serving seniors, maintaining collections and services of special interest to adults and workshops/one-to-one training on how to use new technologies. The last few years Public Library - Varna uses a method of active-learning for adults' trainings. The library has strong partnership with Centers for Rehabilitation and Social Integration and Senior Day Care.

The Library is one of the leading organizations in Bulgaria in the field of digitization. It started to digitize its rare and unique collections of serials, post-cards, photos, maps etc. several years ago. In 2008 Pencho Slaveykov Regional Library set up the *Varna Digital Library* – a virtual service which provides access to library's and its partner-museums' digitized materials.

Pencho Slaveykov Regional Library was the Bulgarian content provider in EuropeanaLocal project, where an OAI-PMH repository was set up for aggregating the Bulgarian libraries and museums content. The Library still remains the biggest Bulgarian content data provider for Europeana and also operates as an Aggregator since 2011.

The library participates in a variety of international projects, such as LoCloud, Europeana Awareness, NTVIS, Digital Literacy 2.0, EuropeanaLocal, LL4S Partnership. After the official end of the project the ICT workshops for seniors become sustainable service and took part in the Library's seasonal calendar with 8 - 10 workshops per year.

In 2015 the Library possessed 870 000 volumes of books, periodicals and other non-book materials in its storage facilities. The library is the most democratic institution on the territory of Varna which is accessible to everyone. There are about 130 000 visits at the library registered per the year and more

250 000 volumes in circulation. Fifty-five specialists of high qualification in different fields of science - bibliography and library science humanities, computer engineers work in the library.

The technological library processing of the books and documents and all of the users services have been computerized since 1990. The library provides both traditional and computer catalogue of:

- books and non-books materials;
- periodicals publications;
- reference information;
- information about Varna and its region;
- rare books and books of true merit;

Free Internet access has been provided to the users since 1993.

The library has produced and published over 200 bibliographies and references.

Currently Library provides training services for adult users, for librarians and for other professionals.

Services for Adults

Started in 2008 with a project called 'Lifelong Learning for Senior Citizens – LL4S' the service became sustainable over the next years. Current training activities for adults include cooperation with community groups serving seniors, maintaining collections and services of special interest to adults and workshops/one-to-one training on how to use new technologies. The last few years Public Library - Varna uses a method of active-learning for adults' trainings. The library has strong partnership with Centres for Rehabilitation and Social Integration and Senior Day Care. The library has strong partnership with VET schools and training centres.

More than 39 training courses for adults have been run since 2008. More than 400 people were trained How to use ICT in the everyday life. Adults are scared of using computers and feel trouble about their ability to understand the way of communication in Internet and social networks. On the other hand they have joy to share their thoughts, pictures and videos in Internet and social networks.

Trainings for Librarians

The modern library develops in different aspects with the main aim to satisfy user's requirements. One of them is in the sphere of informal vocational education and training of the audience that needs library and bibliographic information and in highly qualifying library experts. The Public Library has got a leading role in the field because of its regional methodological functions for the particular region to optimize the activities at its municipal and community libraries. As an educational center with rich experience, Pencho Slaveykov Public Library in Varna meets the necessity to improve the qualifications of library experts aiming enhancement of their skills and competencies as tutors in professional field 'Librarian'.

Library focuses on developing skills for construction and implementation of innovative practices into the educational process and teaching. The activities are concentrated on the improvement of the functionality of the used teaching methods developed as users' oriented services.

As a result of participation in several European projects focused on non- and informal learning, Public Library Varna analyses librarians' and professionals' needs. This analysis formulates the difficulties of systematic usage of ICT and Web 2.0 faced by the librarians in their routine. In the analysis the training need is clearly pointed, as well as the librarians' intention of developing new smart user-centered services. The lack of knowledge and skills is the bottleneck for development and implementation of such services.

In the few projects run last two years Public Library uses the method of Service Design and reveals the construction of intuitive interface.

That method supports the development of effective analytical and creative approaches in service design.

The educated end user in the project realizes as a Tutor - Provider of vocational educational services and his potential learner - User.

Trainings for Professionals
In all projects Public Library Varna follows an ICT based train-the-trainer and qualify-the-users approach. It sets out to develop and implement training programmes for staff in non- and informal learning settings such as Public Libraries, community and care centres to enable them to use Web 2.0, and to offer provision of ICT based non-formal learning. Once the people are trained, it was intended that these staff members would enable new users of the Internet to develop the skills and knowledge needed to make full and safe use of the World Wide Web, improving their motivation to learn.

2.7.5. ISES (Innovacion Social Emprendedores Sociales)

ISES is an NGO which works in the field of Social Innovation Social Entrepreneurship. It develops training programs for Leo VETPRO Mobilities and now for KA1 Mobilities to train staff in social media, and service design. ISES has worked for libraries as external expert in using the city as educational model. ISES has hosted a Leonardo VETPRO mobility organised by Varna Library, the purpose of which was to give in-service training to the library staff. ISES runs programs on coaching and empowerment applied to education. ISES's expertise is in the design of new services for the social good and art of hosting methodologies involving all kind of profiles.It runs a series of training in different field. ISES has expertise in working with youth and citizens. It cooperates with different cultural and social centres running social media training, coaching and mentoring activities.

Chapter 3

Turkish Smart ICT 3.0
New Libraries Services
OER

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CHAPTER 3

TURKISH SMART ICT 3.0 NEW LIBRARIES SERVICES - OER

3.1. Current State of Hacettepe University[1]

Hacettepe University (https://www.hacettepe.edu.tr/english/) was founded in 1967 as a state university in Ankara. Hacettepe University continues its activities with 14 faculties, 14 institutes, 2 applied schools, 1 conservatory, 6 vocational schools, and 45 research and application centers which are located in 5 campuses. Hacettepe University has an international and interdisciplinary philosophy of education with over 500 bilateral agreements with numerous universities abroad and numerous international students and faculty. About 30,000 undergraduate and 7,000 graduate students enrolled in 115 programs offered by academic units. There are about 3,500 faculty. Hacettepe University is aware of the necessity to bridge education with practice and provides a wide range of opportunities such as workshops, internship programs and projects in cooperation with the state and private sector. Hacettepe University, as one of the leading universities in the country, keeps contributing to social development and universal values in the fields of science, technology and art. According to URAP (University Ranking by Academic Performance), based on 2013 data, it has ranked first place among Turkish universities.

3.1.1. Department of Information Management

The Department of Information Management of Hacettepe University (http://www.bby.hacettepe.edu.tr/english/) was founded in 1972 to offer a graduate program in Library Science. The Department accepted its first undergraduate students in October 1974. The Department differs from other similar programs in that students complete a year-long English language courses before they start their program and one third of the courses are taught in English. The Department celebrated its 40th anniversary in 2012. The Department of Information Management is one of the 16 departments organized under the Faculy of Letters. The Department recently became an iSchool member (http://ischools.org). It is the first and only iSchool in Turkey.

The Department of Information Management strives to be the first choice of students who wish to work as information professionals; contribute to science on a national and international level by carrying out research; create its own resources; and have a respectful image in society. The Department aims to educate creative and self-confident information professionals who can organize and manage all kinds of information and information centers; design and implement user centered information systems and services; and conduct research to produce new knowledge.

Degree Programs

Hacettepe University Department of Information Management is number one among other LIS departments in Turkey. Since its foundation, the Department accepts the students with the best scores in the same category at the national university entrance exams. Additionally, the alumni of the Department are in high demand and preferred by LIS institutions. The unemployement rate of alumni is very low.

Department offers degrees in three cycles (bachelor, masters and doctorate) and revises and renews its programs regularly. The undergraduate program lasts 4 years. It consists of both compulsory and elective courses. The curriculum of the undergraduate program was last revised in 2010/2011 academic year. About 90 students start undergraduate program every year. Currently, some 400 students enrolled in the Department (61 are masters and 31 are doctoral students). The Department has graduated about 2,000 alumni (between 1972 and 2013) who currently work in crucial positions in the LIS institutions and lead professional developments in the country.

Faculty

Faculty consists of 6 tenured full-professors; one visiting professor from University of South Florida, USA; 4 tenured associate professors; and 3 tenured lecturers along with 9 research assistants.

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[1] This part of the text is copied from Chapter 2 (IO1) in order to keep the integrity of the content.

Background of the staff varies from Mathematics, Statistics, Computer and Education Science to Library and Information Science. There is faculty collaboration within university (mainly with Statistics, Computer Science, Education, Philosophy, History, Political Science and Public Administration departments) and outside the university (such as the Ministry of Economics) in terms of teaching specific courses.

Research and Projects

One of the main functions of the Department is research. Main research areas of faculty are as follows: Information Retrieval, Bibliometrics, Information Literacy, Information Behavior, and Electronic Publishing.

Research projects funded by both national and international bodies are carried out by the faculty. International projects mainly funded by the European Commission while national projects mostly funded by TÜBİTAK (The Scientific and Technological Research Council of Turkey) and Hacettepe University. Faculty have been quite successful in securing research funding from the European Commission and National Research Council (TÜBİTAK) through competitive evaluation.

InterPARES TRUST (The International Research on Permanent Authentic Records in Electronic Systems: Trust and Digital Records in an Increasingly Networked Society), PASTEUR4OA (Open Access Policy Alignment Strategies for European Union Research) / 611742, Copyright Policies of Libraries and Other Cultural Institutions / DFNI-K01/0002-21.11.2012, LoCloud (Local Content in a Europeana Cloud) / CIP – ICT-PSP-2012-6, MedOANet (Mediterranean Open Access Network) / 288945, EMPATIC (EMPowering Autonomous Learning through Information Competencies) / 505657-LLP-2009-UK-K4-K4MP, AccessIT (Accelerate the Circulation of Culture Through Exchange of Skills in Information Technology) / 2009-0766-001-001-CU7-COOP7, InterPARES 3 (The International Research on Permanent Authentic Records in Electronic Systems) are among the international projects carried out by the faculty.

Publications

Faculty is quite productive in publishing both nationally and internationally. Journal of Informetrics, Journal of the American Society for Information Science & Technology, Scientometrics, and Journal of Documentation are some examples of the international journals in which faculty publish their research results. In Turkey, publications are highly concentrated in two major LIS journals: Türk Kütüphaneciliği (Journal of Turkish Librarianship) and Bilgi Dünyası (Information World). Both are publications of professional associations. First one is published by TKD (Turkish Library Association) since 1952 and the second is published by ÜNAK (University and Research Librarians' Association) since 2000. Both journals are indexed by LISA and national (ULAKBIM) databases and therefore periodically reviewed for their peer review process and academic integrity. Additional to publishing articles in professional journals, faculty also publish books, book chapters and conference papers. Proceedings of the Department's regular conferences are published under CCIS series of Springer and indexed in WoS. Apart from editing proceedings books of the conferences organized by the Department, faculty are also heavily involved in making contributions to, on different levels (keynoter, invited speaker, regular speaker, moderator, committee member, etc.), professional conferences (both on national and international level).

Organization of Events

Starting with a conference in 1997, to commemorate its 25th anniversary, Hacettepe University Department of Information Management has developed a strong tradition of organizing conferences both on national and international levels. Currently there are two international conferences regularly organized by the Department. *International Symposium on Information Management in a Changing World* (IMCW) aims of the to bring together researchers, information scientists, information professionals, computers scientists, librarians, data curators, educators, social scientists, policy

makers, museologists and archivists to discuss the most recent developments and issues regarding Information Management. The second regular international conference organized annually is *European Conference on Information Literacy* (ECIL) which mainly focuses on information literacy and lifelong learning concepts and issues. It is organized, under the patronage of UNESCO and IFLA, in collaboration with Zagreb University.

The Department is also keen on hosting other international conferences. *The 10th International Conference on Knowledge Management* (ICKM 2014), the *6th International Conference on Qualitative and Quantitative Methods in Libraries* (QQML 2014), the *21st International LIS Students' Symposium* (BOBCATSSS 2013), and the *15th International Conference on Electronic Publishing* (ELPUB 2011) are among the international conferences hosted by the Department. Apart from international conferences, the Department organizes other international events such as workshops and seminars. *International Workshop on Research Data Management* (co-organized by Goethe Institut in 2014), *Higher Education Linkages to Education For All* (co-organized by International Association of Universities in 2014), and *UNESCO "Training the Trainers in Information Literacy" Regional Workshop* (co-organized by UNESCO in 2008) are some examples to show not only the range of subject coverage but also the variety of organizations the Department has been cooperating. Additional to international events, the Department also organizes some national events. Workshops on *Open Access* in 2013, 2012 and *Web 2.0* in 2009 are among them. Since 2011, in every Spring Term, a *Career Day* has been organized. This event aims to bring together representatives of different career paths, potential employers and career planning experts with the students. Starting from 2010, a regular colloquium series, called *Wendesday Talks, are organized.* Students on all levels are strongly encouraged to attend these events to meet experts from LIS and related fields and to learn on subjects which might be of interest to them. Followings are titles of some of these talks: *Cognition, Emotion and Information Science: Some Aspects of a Relationship*, *Towards the Internet of Things to Big Data: Why We Should be Concerned?*, *Entrepreneurhip and Innovation*, *Youth Branches of Professional LIS Assocations, Sicence, Technology and Industry Policies of Turkey*, *Children's Literature in Turkey, Insights from Software World*, *Best Practices from Public Libraries in Turkey,* *Innovative Information Literacy Services in Ireland*.

Other Activities
According to their research interest faculty attend and participate in scientific conferences on regular basis. iConference, Annual Meetings of Association for Information Science & Technology (ASIS&T), International Conference on International Society for Scientometrics and Informetrics (ISSI), International Federation of Library Associations and Institutions (IFLA) World Library and Information Congress, European Conference on Information Literacy (ECIL), and Digital Humanities are the most frequently attended international conferences. Public Librarianship Symposium, InetTR (Internet in Turkey), Academic Informatics, Library Week Annual Conference, ÜNAK (University and Research Librarians' Association) Annual Conference are the national conferences that faculty attend and participate.

Editorship of the two leading LIS journals published in Turkey, namely *Journal of Turkish Librarianship* and *Information World,* has been carried out by the faculty of the Department. *Information Development, LIBER Quarterly* and *Journal of Hacettepe University Faculty of Letters* are other journals that some faculty sit in their Editorial Boards. Faculty also serve as reviewers to numerous scientific journals.

Faculty also hold positions in Professional Institutions and Associations such as EUCLID (European Association for Library and Information Education and Research), Turkish Librarians' Association, University and Research Librarians' Association. Standing Committees of IFLA, UNESCO Turkish National Commission.

Although it is a small Department, Faculty actively involved with University's committees such as Commission for Academic Promotional Criteria, Education Commission of Faculty of Letters, Awards Committee, Publications Committee, Conference Support Committee.

Partnership and Collaboration

The Department of Information Management is in collaboration with several institutions. On one hand, many institutions support the program as well as the practica and activities of the Department. Various departments within the University contribute to the program and the University Library provides venue for applied courses. Professional associations and other LIS departments in the country and abroad are also among the partners. On the other hand, the Department supports other institutions in many ways. National Library's automation project was carried out by the Department. Abdullah Gül Presidential Library, first of its kind in Turkey, is being organized by the Department. Within the scope of Library e-Turkey Project the Department collaborates with Hacettepe University Technology Transfer Centre, Republic of Turkey Ministry of Culture, Republic of Turkey Ministry of Development, and Bill & Melinda Gates Foundation. Google Turkey, Turkcell (one of the main telecommunication organizations in Turkey), Adobe INC are among organizations faculty collaborate. Faculty provides consultancy services to firms in University's Techopolis.

The Department is quite active in student and teaching staff exchange especially with European countries. Following is a list of LIS schools/departments the Department has Bilateral Agreements within *Erasmus+* framework: University of Zagreb, Croatia; Charles University in Prague, Czech Republic; Masaryk University, Czech Republic; Tallinn University, Estonia; Alexander Technological Educational Institute of Thessaloniki, Greece; The Hague University, the Netherlands; University of Szeged, Hungary; Eötvös Lorand University (Elte), Hungary; Universite delgi Studi di Parma, Italy; Jagiellonian University, Poland; Universidade de Porto, Portugal; University of Ljubljana, Slovenia; State University of Library Studies and Information Technologies, Bulgaria; Sofia University St Kliment Ohridski, Bulgaria; Limerick Institute of Technology, Ireland; Vilnius University, Lithuania; Transilvania University of Brasov, Romania; University of Boras, Sweden

Project Related Features

In the Department, there is a good expertise regarding ICT, social media (web 2.0), web 3.0, library services, marketing, user education, information literacy and in-service training (continuing education) for librarians. However because of the limited number of faculty (teaching staff) and limited time the Department cannot fulfil some of its responsibilities especially in the area of developing continues education (in-service training) programs for librarians. This is quite curicial when we consider the speed of chance in technology and in the field. To be able to fulfil this responsibility the Department has been considering to start e-learning opportunities and platforms for librarians who do not have time to go for classroom education/training.

Although social media, user-centered approach, smart ICT and library services are in the core of the Department's curricula, there is no specific course which brings all these conceps together and teach students innovative methodologies which can be used in creating user centered services and motivate them creating new services by the use of smart ICT.

This project helped reaching both goals.

Instruction Programs

UNDERGRADUATE PROGRAM	
FALL	**SPRING**
SEMESTER 1*	**SEMESTER 2***
Required Courses	**Required Courses**

BBY 151: Introduction to Information and Record Management	BBY 152: Organization of Information
BBY 153: Information Sources	BBY 154: Information Services
BBY 155: Information Literacy	BBY 156: Information Retrieval
TKD 103: Turkish Language I	TKD 104: Turkish Language II
ING 111: Integrated Skills I	ING 112: Integrated Skills II
	BEB 650: Basic Information and Communication Technologies
Elective Courses	**Elective Courses**
BBY 161: Computer Software	BBY 162: Programming and Algorithms
BBY 163: Concept of Information Management	BBY 164: Children and Youth Publications
BBY 165: Communication and the Society	BBY 166: Scholarly Communication
BBY 167: Information Management and Mathematics	
SEMESTER 3*	**SEMESTER 4 ***
Required Courses	**Required Courses**
BBY 251: System Analysis	BBY 252: Research Methods
BBY 253: Information Usage	BBY 254: Information Seeking Behaviors
BBY 255: Records Management	BBY 256: Information Architecture
AİT 203: Ataturk's Principles and History of Turkish Revolution I	AİT 204: Ataturk's Principles and History of Turkish Revolution II
ING 211: Academic Writing Skills I	ING 212: Academic Writing Skills II
Elective Courses	**Elective Courses**
BBY 261: Advanced Programming	BBY 262: Web Design
BBY 263: Identifying Information Sources	BBY 264: Indexing and Classifying
BBY 265: Electronic Publishing	BBY 266: Archieve Management
BBY 267: School Libraries	BBY 268: Public and Children Libraries
SEMESTER 5*	**SEMESTER 6 ***
Required Courses	**Required Courses**
BBY 351: Management of Information Centers	BBY 352: Content Management
Elective Courses	**Elective Courses**
BBY 361: Database Management Systems	BBY 362: Information Systems Design
BBY 363: Information Brokerage	BBY 364: Collection Management
BBY 365: Setting Up and Managing Institutional Libs / Archives	BBY 366: Institutional Content Management
BBY 367: Information Management in Medicine	BBY 368: Scientific and Technical Information Management
BBY 369: Information Retrieval in Law	BBY 370: Information Management in Museums
BBY 371: Reference Services	BBY 372: Information Management in Media
BBY 373: Human Resource Management	BBY 374: Total Quality Management
BBY 375: Information Visualization and Presentation	BBY 376: Management Information Systems
BBY 377: Rare Books and Manuscripts	BBY 378: Research Libraries
SEMESTER 7 *	**SEMESTER 8 ***
Required Courses	**Required Courses**
BBY 451 Professional Ethics	BBY 452 Practicum
	BBY 454 Research Report
Elective Courses	**Elective Courses**
BBY 461 Project Management	BBY 462 Innovation Management
BBY 463 Academic Writing Skills	BBY 464 Semantic Information Management
BBY 465 Marketing of Information Services	BBY 466 Document Engineering
BBY 467 Digitization of Scientific and Cultural Heritage	
BBY 469 Learning Management Systems	
BBY 471 Information Literacy Education	
BBY 473 Geographical Information Systems	
BBY 475 User Interface Design	

BBY 477 Information Law

GRADUATE COURSES – MASTERS LEVEL

Course Code and Title

BBY 501 Information and Record Management

BBY 502 Information Services

BBY 503 Organization of Information

BBY 504 Information Technologies

BBY 600 Special Topics

BBY 601 Seminar

BBY 602 Curriculum Development for Information Literacy

BBY 603 Project Management

BBY 604 Evaluation of Information Systems and Services

BBY 605 Developments in Information Management

BBY 606 Research Methods

BBY 607 Information Architecture

BBY 608 Electronic Information Services

BBY 609 Management of Information Technology

BBY 610 Information Centers in the History of Civilization

BBY 611 Reading Habits

BBY 612 Developments in Public Librarianship

BBY 613 Developments in School Librarianship

BBY 614 Developments in Research Librarianship

BBY 615 Children's Literature

BBY 616 Cooperation in Information Management

BBY 617 Standards in Information Management

BBY 618 Reference Services

BBY 619 User Studies

BBY 620 Conservation and Preservation of Records

BBY 621 Archival Systems and Archival Studies

BBY 622 Management of Information Centers

BBY 623 Comparative Studies

BBY 624 Historical Developments of Information Centers in Turkey

BBY 625 Electronic Archiving and Records Management

BBY 626 Organization and Analysis of Information

BBY 627 Bibliographic and Biographic Information

BBY 628 Quality System Documentation

GRADUATE COURSES – DOCTORAL LEVEL

Course Code and Title

BBY 701 Intellectual Freedom and Information Services

BBY 702 Scholarly Communication

BBY 703 Information Retrieval and Theory

BBY 704 Bibliometrics

BBY 705 Ecenomics of Information

BBY 706 Information Policy

BBY 707 Intellectual Property Rights

BBY 708 Libraries and Archives in the History of Anatolia

BBY 709 Information and Society I

BBY 710 Information and Society II

BBY 711 Information Seeking Behaviours

BBY 712 Information Centers and Services in

BBY 712 Information Centers and Services in Education

BBY 713 Issues in Information and Records Management I

BBY 714 Issues in Information and Records Management II
BBY 716 Issues in Information Organization
BBY 720 Document Engineering
BBY 700 Special Subjects (Thesis)
BBY 800 Preparation to Doctoral Profeciency

3.2. Service Co-design and Methodology Development through Workshops

Workshops organized for co-designing and defining services with users and experimenting with different innovative methodologies to develop Xlibris Methodology tool set as well as finding the best possible way to benefit from each methodology with the purpose of service co-design. A two days workhop was organized at Hacettepe University in Ankara, Turkey between 5-6 February 2015.

Workshop Related Links
Information: http://www.xlibrisproject.org/workshop-ankara-turkey-february-5-6-2015/
Poster: http://www.xlibrisproject.org/wp-content/uploads/2015/01/xlibris-TR-workshop.pdf
Flyer: https://www.smore.com/f33u7-xlibris-projesi-t-rkiye
Photos: https://tr.pinterest.com/xlibrisproject/in-service-training-ankara/
Videos: https://vimeo.com/channels/xlibristr/page:1 (all videos starting with D SC codes)
Program:
http://www.xlibrisproject.org/wp-content/uploads/2015/01/workshop_program_feburary_2015.pdf

3.2.1. Participants

Librarians mainly from academic institutions and Library and Information Sceinece (LIS) students participated in co-creation workshops. Workshops organized in Ankara were the first workshops within the Project.

Moderator
Daniel Weiss (ISES, Spain)

Faculty
Serap Kurbanoğlu (Hacettepe University Department of Information Management, Ankara)
Orçun Madran (Hacettepe University Department of Information Management, Ankara)
Tolga Çakmak (Hacettepe University Department of Information Management, Ankara)

Librarians
Serap Özyurt (Kadir Has University Library, Istanbul)
Sina Mater (Koç University Library, Istanbul)
Tuna Can (Ankara University Library, Ankara)
Vedat Gültekin (Ankara University Library, Ankara)
Cihan Doğan (Hacettepe University Library, Ankara)
Eda Köse Uysal (Hacettepe University Library, Ankara)

Students
Elçin Keleş (Hacettepe University Department of Information Management, Ankara)
Görkem İşçi (Hacettepe University Department of Information Management, Ankara)
Enes Çelik (Hacettepe University Department of Information Management, Ankara)
Ramazan Aytürk (Hacettepe University Department of Information Management, Ankara)
Ezgi Gamze Tekbaş (Hacettepe University Department of Information Management, Ankara)
Mervenaz Topçuoğlu (Hacettepe University Department of Information Management, Ankara)
Ebru Gönültürk (Hacettepe University Department of Information Management, Ankara)

3.2.2. Aims and Goals

One of the main goals of this workshop was to find out what librarians (both current and future) need to learn and which skills they need to develop (besides what they already know and the skills they already posses) to be able to create user centered and smart ICT based services. How they like to learn as being the subject of training programs was also explored. Second goal was to provide librarians with first hand experience on how to explore users' needs (by the use of innovative methodologies such Lego Serious Play®, Hero's Journey, Gamification, Business Model YOU®, Storytelling, Crowdfunding and Design Thinking) to enable them to design user-centered services. Third goal was to give them the opportunity to co-design 5 new smart ICT based/related services (with special focus on training and educational services). These prototypes and the skills and training they need to realize/materalize these services have been analysed by Hacettepe University (Department of Information Management) to design/developed 5 new training services to implement as one of the outcomes of the X-Libris Project (IO2). The last goal was experimenting with innovative methodologies in order to identify the most appropriate ones to incluse in Xlibris Methodology set. This includes exploring the best possible way to benefit from each methodology as well as discovering the best possible combination of methodologies to use together.

3.2.3. Preparations

Since it was the first project worskshop, preperations took relatively long time and started well in advance. A workshop flyer which explains the aim of the project and goals of the workshop was prepared. Since the main target groups of the Department's training activities are future librarians (students) and librarians, workshop participants were carefully selected from these two groups. Participation was by invitation and special attention paid to invite young and active librarians and students who have good level of ICT competencies and at least certain degree of interest towards social media, smart technologies and innovation. Special attention also paid in keeping a balance between librarians and students as well as between genders (3 out of 6 librarians and 4 out of seven students were female). Librarians were from well developed and leading university libraries both public and private universities (university libraries are always pioneers for new services in Turkey), and students were from different grades (second, third and final year).

All participants were provided with information about the project and about the goals of the workshop. They were send the program in advance. Workshop Room was prepared one day before (a projector, modular tables, chairs, big size paper (80x80), post-its, colorful pens, etc were provided).

3.2.4. Tools and Methodologies

A collection of tools and methodologies were used to test and construct the Xlibris Methodology set.
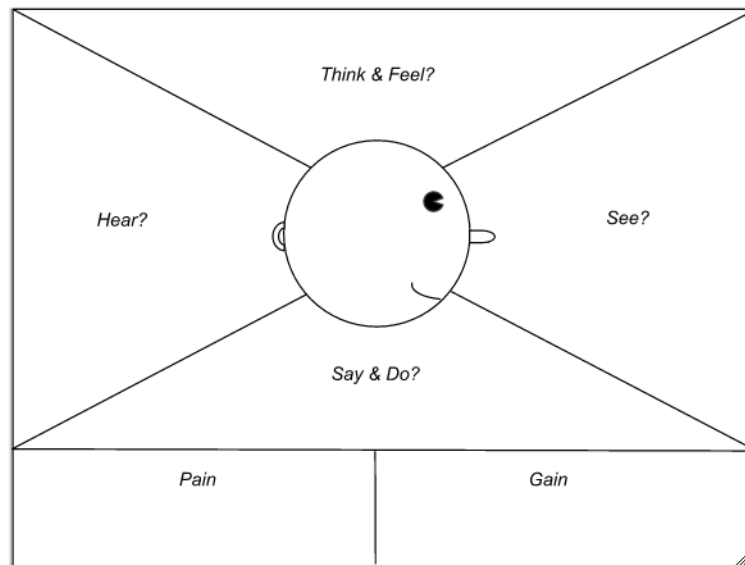
Photo Wall

Photo Wall is paper version of Facebook where participants create their profile and connect it with other participants' profiles. The construction of the Photo Wall (like a Facebook on paper) is an exercise for understanding the common touchpoints between people. It helps to understand who is connected with who, that has a critical relevance to understand the concept of local stakeholder map. This can be combined with Empathy Map which explores what participants are were willing to give/take in the workshop. It helps creating identity, supports team building and contributes to alignment.

Empathy Map

An empathy map is a collaborative tool teams can use to gain a deeper insight into their customers. Much like a user persona, an empathy map can represent a group of users, such as a customer segment and helps to develop a better understanding of the person for whom the product/service is going to be developed.

Empathy Map is used to help in the discussion about the needs a user has. Using it allows to focus on what was observed, and what can be inferred about different user groups' beliefs and emotions. Designing products/services with the Empathy Map helps to synthesize observations and draw out unexpected insights.

Lego® Serious Play®

Lego® Serious Play® (LSP) methodology enables participants to understand the dynamic, interlaced systems with many feedback loops on the personal side with four steps: Challenging with questions, constructing, sharing through methaptors and reflecting.

Posing the Question: The challenge, which should have no obvious or correct solution, is presented to the participants. The framing of the challenge is clear and concise for participants to connect.

Construct: Participants make sense of what they know and what they can imagine by constructing a model using the LEGO® materials, and develop a story covering the meaning in the model. Through this process, participants construct new knowledge in their mind.

Sharing: The stories are shared among the participants.

Reflect: As a way of internalizing and grounding the story, participants are encouraged to reflect on what was heard or seen in the model.

Innovation requires engagement that goes well beyond crowdsourcing: it requires a user centric approach, and it demands for collaborative and constructive processes where participants build ideas and concepts, negotiate meaning and engage in creative activities together to create mutual value – value for the system and for the learners. Values that go into the design and development of a better user experience that target needs and values that are latent, subconscious and that LEGO® Serious Play® can surface. In such a perspective, LSP is the beating, engaging and revealing heart of a co-creation experience, helping organisations and users to engage in constructive conversations to build together, iteratively, the next user experience, innovating services and products together.

Hero's Journey

The hero's journey, is the common template of a broad category of tales that involve a hero who goes on an adventure, and in a decisive crisis wins a victory, and then comes home changed or transformed.

This tool is used to understand the participants' visions on struggling with where to steer the ship of transformation of in-service training an new-smart services. Participants were going on this journey together (they and the customer) each with their own areas of resistance, so they need to know what they should expect to encounter so they can be empowered instead of delusional.

Business Model You®

A personal business model is the logic by which an individual creates and delivers something valuable to customers. The Business Model You® methodology applies principles of entrepreneurship to the work we do as individuals. Traditionally these principles were applied only to organisations. It helps to describe, clarify, improve or reinvent the sevice model. Combining the power of Lego® Serious Play® and BMYOU helps to extract in a meaningful way what the value proposition is.

3.2.5. Implementation and Lessons Learned

1st Day (5 February 2015)

1. Workshops started with the Photo-Wall activity. Participants were invited in to the room. Their poloraid pictures were taken. They were asked to write down their expectations (by keywords) from this workshop (what to take and what to give) and their emotions (what they like and dislike about their jobs) on post-its and create a corner on the photo-wall for themselves (with their photo and post-its). After everybody had a place on Photo-Wall, participants were asked to make links with people they already know and talk about themselves and their connections. This was for a quick get to know each other and discover connections among participants excercise to start with.

   Notes and lessons learned: It took longer than planned and expected. Participants had some difficulties to understand what to write on the post-its. It helps alot to put one-two example on the wall (of organizers) before the workshop starts. When they see an example they understand faster what to do.

2. Empathy Map: Participants were asked to move post-its about emotions and expectations from the photo wall and create a user/customer profile on the Empahy Map.

   Notes and lessons learned: Although they carried out this task, the role of Empathy Map was not clear for participants. More explanation is needed. There was a difficulty to connect it with the other activities. It was not taken into account (enough) during following activities. More guidance is necessary.

3. Lego Serious Play: Participants were asked to build a model of themselves with lego and talk about it. When they talked about themselves based on the model they created they provided some new information which was not mentioned before.

   Notes and lessons learned: It is always good to indicate duration when it starts. It might take more time than expected. Some participants have no experience with lego, some have. Those who has no experience with lego it takes longer to get familiar and put pieces together. This is a good start to get familiar with Lego Serious Play methodology and brings more information about each participant they do not think to mention earlier during their oral presentations.

4. Presentations: Several ppts and videos were presented and games played among other activities such as right-left brain video, observation skills video (Whodunnit !); perception excercise (FLIP-FLOP and Rabit-Duck); attention exercise: Giraffe story; alignment game.

   Notes and lessons learned: These are all very good exercises (fun also) to take a break and make participants to start thinking from a different angle and improve (at least pay more attention) to their observation, communication, collaboration and critical thinking skills. Although ppt presentations and vidoes were very interesting a directly "smart ICT and social media in libraries" focused presentation would be more benefitial keeping in mind that there might be a big diversity among participants' knowledge and expertise on it. This would also help them to keep in mind that the services they develop will be smart ICT based.

5. Lego Serious Play: Participants were asked to answer following questions by creating a lego model.
   • What would be the aspirational role of librarians in the next decade (with a special focus on user training)?
   • How librarians can fulfil this role?
   • What librarians think about the changing role of the library as an institution?
   • Why the library has to become something different?

   Notes and lessons learned: Questions were translated into Turkish. This helped very much. This exercise took long time then expected. Because participants had to create a model first and then

make a presentation of their models (15x4=60 presentations). Some participants' limited English language skills required translations and that also caused spending more time than expected. One of the obstacles here was that, participants' answers and models for all four questions were similar. And sometimes they answered the next question in their first model. We concluded that all these could be formulated as one single question.

These were the activities to complete first day in the morning. However, they took the whole day. We could not proceed further. Reducing the number of questions and asking one crucial general question about the core issue is enough. Participants need time for their reflections. This is more important. While they are reflecting on the core question they generally refer related sub-issues (no need to formulate more questions around the same core subject/issue. They keep repeating themselves. Waste of valuable time for both sides). Lego models and presentations were used to extract the Statement of Significance (what is important, why it is important, and how important it is) and help to move on to Design Thinking). First day planned program could not be completed, however good progress achieved.

2nd Day (6 February 2015)

1. Day started with a wrap up

   Notes and lessons learned: A lot of time pressure because of the delay in the program. This was a very busy day and both participants and organizers were exhausted in the end. Creativity requires fresh minds and energy, so re-scheduling or extended workshop days are necessary.

2. Lego Serous Play: Participants asked to create lego model for two main questions. Based on 1st day's experience related questions asked together to answer together (one model was required).

   - How social media is impacting librarians' work connected to users (especially user education)? What kind of new user services (education services) could be developed by the use smart ICT?
   - What would be in-service training needs for librarians in this ever changing environment? How you like to be trained?

   Notes and lessons learned: Combining questions worked well. Participants started to think, develop ideas and reflect about new services and their training needs. Lego Serious Play works very well to uncover ideas, thoughts, needs and feelings. We should invest on this methodology and keep using it in the future workshops. Lego Serious Play should become one of the main components of X-Libris Methodology.

3. Statement of Signifcance was extracted from each presentation and used to create an Affinity Map (similar ideas and perceptions were grouped).

   Notes and lessons learned: This is also a useful excercise to move forward to the actual outcome (new services). We should continue using this methodology.

4. Participants were put in 5 groups (3 participant in each group. Special attention paid in creating mixed groups (students, faculty, librarians). Each group asked to design a service keeping in mind the user and user's needs (Empathy Map created on the first day).

   Notes and lessons learned: It is recommended to keep all the documents/materails created in the room and display them in a visible way. Because they will be needed during the entire workshop and also afterwards during the evaluation and reporting.

Although this is a very good idea for user centered service design, the way Empathy Map created did not help much. We can focus (for future workshops) to find a way to create a better (more realistic) Empathy Map. This needs improvement. Because the user profile created in the Empathy Map was very fuzzy in Ankara case. And each service developed later on was for a different user in mind of the participants. This part of the methodology needs improvement.

5. Following methodologies were used to fine-tune the service idea and extracting the Statement of Significance: Lego Serious Play, Stakeholder Map, Hero's Journey, and BMYOU.

    Notes and lessons learned: Using so many methodologies together exhaust participants. Because to a certain degree they kept repeating themselves. However, there were also with almost each new methodology something new (something not mentioned earlier, not even thought). Among all, Lego Serious Play and BMYOU were the methodologies which provided the best results. Lego with its modelling feature and BMYOU with its structure to force participants to answer crucial questions such as what you do (key activities), who you help (customers), how you help (value provided), how they know you and how you deliver (channels), how you interact (customer relationships), what you get (revenue/benefits), who help you (key partners), what you give (costs), who you are and what you have (key resources) about the service they design to materliaze the service. BMYOU can be adapted to libraries (in wording and the jargon used) to get more benefit out of it. Because participants in some cases had difficulties to undersatnd the business jargon. It is also recommended for future workshops to find a BMYOU version in the language of the participants. That would also help to progress faster. BMYOU should also become an important part of X-Libris methodogy set.

    Stakeholder Map was another tool which bring new ideas and view-points. However, students especially had difficulties to address stakeholders (probably because they are not aware of all potential stake holders of a library, since they do not have the work experience in a library). Partners can also disscuss about how to improve the way we use the Stake Holder Map. One more suggestion could be making a link between Stake Holder Map and Empathy Map.

    Participants had difficulties to understand how to utilize Hero's Journey. If we are going to continue using it, we should try to simplify the language (business jargon). More experience is needed to make a final decision.

6. After all these exercises, participants asked to fine tune their services and make the final presentation. Original plan was to ask them to upload the prototype in a Crowdfunding Platform, however this task could not be completed due to time limits. Eventhough participants were introduced the Crowdfunding Platform.

7. Workshop was closed with participant's evaluations. They were, in general quite satistied with the new methodologies they have learnt. Librarians were inspired to realize some of the services mentioned. They reflect about their training needs. Because they realized that they did not have the expertise to develop some of the services they proposed. This was a very vaulable outcome for us to develop/design training services based on their actual needs.

3.3. Services Defined by Participants

3.3.1. Library Tale

Organizing a Flipagram competition about library services and facilities among library users to increase awareness regarding the library and what it provides. This is planned as a marketing service. During two days discussions one of the points participants focused very much was the need for new marketing

strategies and channels (in the changing environment) as well as branding for libraries. Group had some wague ideas about how to design the competition and the marketing strategy. They had no experince at all on branding. This pointed out a need for training on marketing strategies especially on branding and also how to use social media for it.

3.3.2. Cite or Bailed Game

The idea was cerating web based educational material for users. It was in the end fine-tuned to creating a game for user training on plagirism (especially important for students and young academics) and to do it in a fun way for the new generation users. User education (information literacy instruction) especially web-based education, e-learning and using gamification in teaching were in the core of discussions. However, participants admitted that they do not have expertise neither on instructional technologies nor on gamification. So that indicated a clear need for training on these two subjects: instructional technologies and platforms and gamification.

3.3.3. Library App

Developing an App (mobile application) for the library. Group was not able to specify the service. Some of the suggestions such as accessing the library catalog were already in practice. They end up with the idea of developing an app for user education service or at least making web-based user education accessible through mobile technologies. There was a lack of expertise on instructional technologies and platforms (including mobile access) which again indicated a need for training.

3.3.4. In-service Training on Pinterest

Developing a web based information literacy instruction and using Kahoot as a tool for its evaluation. There was a confusion within the group based on diversity on their level of knowledge regarding web-based instruction and evaluation tools. Based on this experience they realized that there was a need to introduce these tools to librarians. They changed their service into a Tools/Programs/Applications Instruction service for librarians. Pinterest was chosen as the platfrom.

3.3.5. Living Shelf

The idea was using QR Codes for library shelves which could provide instant statistical information about the collection. Discussions bring participants into a conclusion that technically it was more complicated then it seems.

3.4. Services Defined Based on Users' Needs and Reflections

Since Department of Information management of Hacettepe University is an educational instutition providing training and education for students and librarians, the whole workshop and reflections of participants and services they designed needed to be evaluated from their education/training needs point of view. This evaluation guided us to the new training services which can be developed, implemented and provided as an outcome of this Project.

Based on participants' work and reflections following 5 new services were developed. These are mainly based on the ideas participants developed and also their training needs (gaps in knowledge, skills, and expertise) discovered through their service design. In other words the following services are defined truely based on the genuine needs of actual users (target group) of Hacettepe University Department of Information Management in order to enable them to develop/materialize/realize the services they design.

3.4.1. Training on Pinterest: Innovative Tools

This service is an educational service to help librarians to follow up and learn about new applications, tools and programs which are freely available and can be used for different library services such as Kahoot to create tests for instructional services; Smore and Canva to design and create atractive flyers,

posters, presentations; Instagram and Flipagram to create short videos for educational activities and marketing; Brickme for crowdfunding. During co-design workshops a need for training on innovative tools was observed. This is mainly because of rapid developments and chance in the market and almost impossible to include in formal curricula. Training material is planned to be published on Pinterest through creating seperate boards for each application/tool/program. Information will include short introduction and description of the tool, short explanation on what it can be used for and links to the actual sites, videos (if available) which show how to use these tools, best practices (when available).

3.4.2. Gamification for Libraries

Gamification is applying game design to non-game applications. Gaming is a proven tool for engagement. This is why gamification is an important trend in libraries, especially to engage new users (who are raised with computer games) with training services. During co-design workshops a need for training on gamification was determined. A training service decided to be developed on the concept and the best practices in libraries. It was also planned to use gamification approach within project activities (such as BookFace and Shelfie). This service is planned to be an educational service for librarians and students to teach them game design in social media so that they can use social media tools/channels and gamification concept together to create games in social media for different services such as user education, orientation, marketing, etc. It is planned to be a face-to-face training which can be improved after iterative trainings.

3.4.3. Branding for Libraries

This service is an educational service for librarians and students to teach them branding and marketing tools and strategies. During the co-design workshops with the main target groups of the Department of Information Management of Hacettepe University (LIS students and the librarians) a need for training on this theme was identified. Although *marketing* is a part of curriculum *branding* has been a subject neglected in the curricula. To close the gap and stisfy the need of users a training service which addresses branding strategies and approaches for libraries and how to use ICT and social media tools for branding campaigns decided to be developed. It is planned as a face-to-face training which can be improved through iterative seminars, workshops and lectures. Some branding campaigns for libraries such as a Shelfie Competition and exhibitions are also planned as part of this service in order to provide solid examples.

3.4.4. Instructional Technologies for Librarians

This service is an educational service which aims to teach librarians and LIS students how to develop video-based instruction materials. During the workshop participants claimed a need for training, because they like to develop web based training and e-learning materials for their users. A face to face training on each an every aspect of the video tutorial preparation process including platforms and applications to use for this purpose was planned. Teaching how to use a freely available software such as Snagit was decided to be included in the training so that everyone could benefit without an obligation to purchase a software.

3.4.5. Green Libraries

This is another training program to make learners aware of the impact of libraries on the environment and teach them how to make libraries green and environmentally more friendly. This service is developed because there are no courses available in LIS curricula in any of the LIS departments in Turkey. And it was observed during the "services co-design" workshops with librarians and LIS sudents that when they create library models they always put green elements (such as trees and plants) and claim it as a green library. This was also a proof which indicated a gap in knowledge and a need for education on the subject. Iterative face to face trainings (seminars, lectures, workshops) are planned to be included in this service.

3.5. Providing Insights through Crowdsourcing

After defining the services and completing service design crowdsourcing is used get some inputs and reflections from users and peers. This provided different perspectives from wide range of individuals (from potential users to experts) before the services are actually implemented.

Within Xlibris a special crowdsourcing platform Brick-me, which is developed by Daniel Weiss, one of the members of the project team, was used (http://platform.brickme.org/index.php?page=ex). Brickme platform helped to share new service ideas and obtain insights from peers across the country.

This platform allows to create a Business Model YOU Canvas for presenting different aspects of the project based on canvas segments. It also allows to add Lego Serious Play videos.

Brick-me interface was translated in to Turkish. An account was created for Hacettepe University. Within this account a board was created for each service in Turkish (to ease the undersatnding of local stake holders and actual target groups) which includes the following:

- The title
- Short description
- Detailed description
- Short video presentation
- Business Model building blocks
- Business Model Canvas
- Lego Serious Play model building videos
- Photos

A deadline was set for each «service project». Contributors were invited through various channels to give feedback and provide inputs about the services by choosing predefined categories along with personal inputs. These inputs were used for fine-tuning the service design.

Brick-me service boards can be seen in the following links:

Training on Pinterest: Innovative Tools: http://platform.brickme.org/index.php?page=cp&id=16
Gamification for Libraries: http://platform.brickme.org/index.php?page=cp&id=19
Branding for Libraries: http://platform.brickme.org/index.php?page=cp&id=20
Instructional Technologies for Librarians: http://platform.brickme.org/index.php?page=cp&id=21
Green Libraries: http://platform.brickme.org/index.php?page=cp&id=18

3.6. Matrix

A matrix which is developed for the Xlibris was used for further fine-tuning as well as determining infrastructural and training needs. Xlibris Matrix includes everal components additional to a short description. Components of the matrix are:
- Description of the service
- ICT to use
- Nature of the service
- Target group
- Infrastructure
- Support
- Knowledge & competences needed by the service provider
- In-service training needs for service provider
- Knowledge & competences needed by users

- User training needs

These information is partly derived from the Canvas completed during the previous phase. New elements were carefully filled. Infrastructural requirements such as Internet connection, broadband, features and the quantity of devices to utilize and support needed (if any) from other professionals such as graphical designer, innovation designer, programmer, teacher, app developer, certified Lego Serios Play expert, are determined. Knowledge and competences required to deliver these services are defined. In-service training needs are determined based on the comparison between knowledge and skills required to create the service and the actual case. Training needs for users are determined based on the comparison between knowledge and skills required to use the designed service and their actual competencies.

Turkish services matrix can be seen under Resources/Matrixes/Matrix-TR on project's website: http://www.xlibrisproject.org/resources/

3.7. Service Development and Implementation

Infrastructure, support and in-service trainings are provided if/when necessary and the process continued with the actual service development and implementation.

3.7.1. Training on Pinterest: Innovative Tools

Background Information: In-service training is becoming part of every successful information center's policy because capacity building of workforce brings competitive advantage. Training helps libraries to better develop the skills of their workforce. The changing scenario of management and leadership styles, communication media, the rapid growth of new knowledge; social needs of highly educated population; expectations of new generation of users; introduction of new technology in libraries; outreach programs to attract new groups of library users; and changing trends in library services (Chaudhary, 2001) have promoted the discussion of continuing education for librarianship.

It is inavitable to carry on with lifelong learning process. It's also evident from research that learning agility is becoming the critical factor for information workers. Rapid advancement in Information Technology is another fact of posing so many challenges to LIS professionals in and around the world. LIS professionals do have a critical need of professional trainings which has been met through different methods and platforms. Face-to-face training leaves its place to web-based training due to 24/7 availability and learning on self-pace feature (Khan & Rafiq, 2013).

Additional to increasing use of e-learning platforms social media platforms are also being used for content development and management for educational purposes. Pinterest is one of the social media platforms which became popular for sharing educational content due to its user friendly interface and ease of content publishing, update and management features.

An increasing array of computing and telecommunications technologies are emerging to create new opportunities for the development of information storage, retrieval, and delivery systems/services. The traditional information access and management roles played by the information professions are expanding, particularly in the design and development of new information products and services and of tools to support information seeking and selection, the analysis and synthesis of information content on behalf of users, and information user instruction (Griffiths, 1995). Therefore it is becoming curial for information professionals to be aware of new technologies, platforms, and tools they can use to perform their professional activities.

References

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Chaudhary, M. Y. (2001). Continuing professional education of librarians working in the university libraries. *Inspel*, 35, 67-73.

Griffiths, J. M. (1995). The changing role of librarians: Managing new technologies in libraries. Vistas in Astronomy, 39(2), 127-135.

Service Description: This is a training service on innovative tools which can be used in libraries for different purposes.

Aim: The main aim of this service is to provide educational content for information professionals on innovative tools and platforms such as Kahoot, Tellegami, Powtoon, AdobeVoice, Flipagram, Instagram, Smore and Canva, which can be used in different library services namely user education, evaluation, marketing, branding, etc. and providing links to useful sites and good practices.

Target Group: Librarians (from all trypes of libraries such as university, school, public, research) and students of LIS (Library and Information Science) Departments from all levels (undergraduate and postgraduate).

Importance: Today, as a result of rapid technological developments, the number of products (platforms, tools and applications) proliferates. It is important for information professionals to keep up with these developments and to know which of these producs could be used and in what ways to be used in libraries and library services. Developing content and presenting it in popular and an easy to use and follow social media platform such as Pinterest seems to have curial importance. This service aims to sum up information about innovative tools, provides practical information as well as links to other platforms/sources and examples of different best practices.

Rationale: Rationale behind developing this service is that it is not possible to cover such an ever changing content in the formal LIS curricula. There are courses which covers some technological developments however they focus on profession specific technological tools (online catalogues, library automation systems, digitization, preservation etc.). No courses available which focuse on innovative technologies which are not developed for libraries but can also be used in libraries for creating innovative services (or providing an existing service in an innovative way). Although observations during the "library services co-design" workshops with librarians and LIS sudents has shown that they are well aware of technological developments and some new tools, it also proved that they are not (possibly cannot) aware of many new tools/plattforms/apps which could be very useful for their day to day work. These observations indicated a need for development of an easy to use, frequently updated training content preferably in a popular platform such as Pinterest.

Scope: Tools/apps such as Kahoot, Tellegami, Powtoon, AdobeVoice, Flipagram, Instagram, Smore, iStopMotion, PicCollage and Canva, which can be used in different library services namely user education, evaluation, marketing, branding, etc. are introduced with some examples about how to use in libraries. Links provided to useful sites and good practices.

Smart ICT Used: Pinterest is used. An account was open and boards were created for each tool.

Learning Outcomes: Individuals who complete this training can
- become aware of different innovative tools/platforms/applications

- to be able to use these innovative tools/platforms/applications
- to be informed on which library services they can be used for
- to be able to use these tools to develop new services
- to be able to use these tools to present existing services in an innovative way

Development Process: As soon as the need for training on innovative tools/platforms/apps is recognized, a research is conducted on the topic to decide which tools to include in the package. A web search was conducted afterwards to find out about the content on the topic as well as best practices. What is available was evaluated carefully before included in the content. In total ten boards were created (one board for each tool). On each board pins were used for information to be shared. This account will be maintained by Hacettepe University Department of Information Mangement with the help of interested LIS students and professionals.

Implementation of the Service: First of all, the account was created, tools/platforms/applications to be included were decided and boards and pins were created for content publishing. Following the content development two workshops were organized for introduction of the training content on Pinterest: https://tr.pinterest.com/smartlibrary/. There are followers on Pinterest and 183 individulas in total were trained during two workshops mentioned below.

1. A two hours training workshop was organized by Hacettepe University for the first year students at the Department of Information Management on 9 May 2016. Both the Pinterest account itself and tools were introduced to students. Sixtytwo students participated in the workshop.

   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/05/may-2016-ankara-list.pdf
   Photos:
   http://www.xlibrisproject.org/workshop-organized-in-may-9-2016-ankara-turkey/#more-571

2. A half an hour presentation on one of the tools (Kahoot) was made during the Project Final Event which took place in Ankara on 27th June 2016. 121 individuals (librarians, LIS students and researchers) participated in this event.

   Program of Final Event:
   http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-program.pdf
   Presentation:
   http://www.xlibrisproject.org/wp-content/uploads/2016/08/innovative-tools-for-libraries.pdf
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-participants-list.pdf
   Photos:
   http://www.xlibrisproject.org/project-final-event-organized-in-june-27-2016-ankara-turkey/#more-693

3.7.2. Gamification for Libraries

Background Information: The term *gamification* was coined by Nick Pelling in 2002 and became popular in the second half of 2010. Gamification is transferring some of the positive characteristics of a game to something that is not a game. Those positive characteristics of a game are often described as "fun" and they have the effect of engaging game players in the activity.

Gamification is applying game design to non-game applications to make them more fun and engaging. Gamification is integrating game dynamics into a site, service, content in order to drive participation or awareness

Research has shown that gamification increases attention, participation, teamwork, problem solving skills, user experiences. Well designed games and game like implementations are a good resource of motivation (Bozkurt & Kumtepe, 2014).

Recently, gamification, which has multiple applications in different fields, attracted the attention of both educators and researchers. Gameful design has become a popular trend to create more engagement in the area of education and learning environments. Using games mechanics and game principles from both digital and non-digital games can also be incorporated into library services (Knautz, et al, 2014).

Gamification aims to utilize peoples' desire to play and aims to evoke a similar degree of motivation and dedication by using game mechanics to make otherwise mundane or difficult tasks more appealing. Besides addressing a general desire to play, the various game mechanics also satisfy a broad range of human (core) desires like reward and status, achievement and self-expression or competition and altruism (Bunchball).

In recent years, gamification has become increasingly popular with implementations ranging from simple point systems on websites to tools like jogging apps, in which users have to run through a zombie apocalypse. At the same time teamwork, competitiveness, and especially information literacy, have become key skills in today's society. However, as the new generation of learners demands a more interactive and motivating learning environment, gamification seems to be a promising approach to mediate these skills. "Games and game-like elements have begun to invade the real world" (Lee & Hammer, 2011, p. 1) and researchers are starting to recognize the worth of games for education and other purposes. Games mechanics and game principles from both digital and non-digital games can also be incorporated into library services such as user education (McDevitt, 2011; Smale, 2011).

Traditional library services are designed to solve information scarcity by mediation. But now information is abundant, and what is precious and scarce is not information, it is people's time and attention. Most critical in the times of abundant information is how to engage people. Gaming is a proven tool for engagement. This is why gamification is an important trend in libraries

For instance, Librarygame (http://librarygame.co.uk/index.html) is a web application running on a server that is either remote or local to a library management system. Librarygame links into the LMS to collect participating user activity. When a Librarygame user borrows or returns an item (and other types of activities) the LMS sends this information to Librarygame, where it is processed. No manual input of information is required by the user. Certain activities will earn users' points and occasionally award them achievements and badges. All other activities, such as commenting, rating, sharing, recommending, competing and creating friend lists takes place on the Librarygame app with no required interaction with the LMS.

Muder in the Library (https://suzannahbridge.wordpress.com/2015/05/05/murder-in-the-library-a-library-induction-game/), Gaming Against Plagiarism (http://digitalworlds.ufl.edu/gap/game2/), Citation Game (http://www.lib.jmu.edu/tictactoe/), Magnetic Keyword (http://www.lib.jmu.edu/games/MagneticKeyword/) are some examples for digital and non-digital games designed for (by) libraries.

Although it is proved that gamification increases engagement, it alone does not guarantee user engagement or learning. A clear goal, careful planning, and skillful execution are necessary for the success of a gamification project.

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Service Description: This is a training service on gamification for libraries.

Aim: The aim of this service is to develop a training program to make learners aware of the importance of gamification in libraries and teach them how to gamify library services.

Target Group: Librarians (from all trypes of libraries such as university, school, public, research) and students of LIS (Library and Information Science) Departments from all levels (undergraduate and postgraduate).

Importance: Gaming is a proven tool for engagement. This is why gamification is an important trend in libraries, especially to engage new users (who are raised with computer games) with training services. In an era where libraries lose their users and even come across with the danger of closing it is very crucial to attract users and engage them with library services.

Rationale: Rationale behind developing this service is that there are no courses available in LIS curricula in any of the LIS departments in Turkey on gamification. It is a new, however very popular subject, especially in education. There is no publication in Turkish on gamification in libraries. Considering the importance of user engagement in libraries, there is a need to provide training programs on the subject. Additionally, it was observed during the "library services co-design" workshops with librarians and LIS sudents that they like to develop games however they do not know how to do it in a library setting for library services. This was a proof which indicated a gap in knowledge and a need for education on the subject.

Scope: The concept of gamification, its benefits, elements of gamification (dynamics, mechanics, components), how it is used in library services (both video games and non-video games) with examples as well as limitations of gamification are covered in this training program.

Smart ICT Used: Facebook and Instagram used to gamify some library related activities created within the scope of the project such as BookFace activities.

Learning Outcomes: Individuals who complete this training program can
- define gamification concept, benefits and elements of gamification
- become aware of the gamification as an approach for user engagement

- become aware of the role of libraries/librarians in the society for increasing environmental awareness
- define how to use gamification within library services
- use gamification in user education

Development Process: As soon as the need for training on gamification is recognized, a research is conducted on the topic. Scientific databases were searched and literature was accessed. Related literature was studied. Best practices were searched and examined. Training material is developed and tested. Several trainings were conducted with different target groups. After each implementation, training material is further developed. Within the project gamification philosophy applied in to several activities to set concrete examples.

Implementation of the Service: Several training workshops were organized for the implementation of this training service. As a result of these trainings total 214 individuals (LIS students, librarians, 8 professors) were trained. Two bookface companies and one exhibition were organized as part of gamifying some activities.

1. Bookface activity and exhibition were organized at Kadir Has University Information Center in Istanbul between 29-30 June 2015. Another similar activity was organized by Lithuanian partners in Radviliskis.

   BookFace flyer: https://www.smore.com/asf68-which-bookface-is-your-face?ref=my
   Photos of exhibition: http://www.xlibrisproject.org/bookface-exhibition-june-29-30-2015-istanbul-turkey/
   Video of BookFace activity - Istanbul: https://www.youtube.com/watch?v=G-KdEAVjOi4
   Bookface Competition and video - Lithuania: http://www.xlibrisproject.org/bookface-competition-at-radviliskis-grazinas-primary-school-lithuania/

2. A one day workshop was organized at Kadir Has University Information Centre in Istanbul on 30 June 2015. Fourteen librarians participated in this workshop.

   Info & photos: http://www.xlibrisproject.org/workshop-june-29-30-2015-istanbul-turkey-2/
   List of participants. http://www.xlibrisproject.org/wp-content/uploads/2015/06/Participant-list-Istanbul-workshop.pdf
   Video for the workshop marketing (EN): https://vimeo.com/channels/xlibristr/127392675
   Video for the workshop marketing (TR): https://vimeo.com/channels/xlibristr/128176301
   Flyer: https://www.smore.com/mkzw1-branding-gamification?ref=my

3. Workshops were organized for the students of Information and Communication Sciences at Paris Descartes University, Paris, France between 14-15 October 2015. Seventeeen out of 93 students participated in gamification workshop.

   Info and photos: http://www.xlibrisproject.org/workshops-organized-in-october-14-15-2015-paris-france/
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2015/11/paris-october-participants-list.pdf
   Flyer: https://www.smore.com/81aeb-innovative-service-design?ref=my
   Photos: https://tr.pinterest.com/xlibrisproject/paris-descartes-university-workshop/

4. A two hours training workshop was organized at Hacettepe University for the first year students at the Department of Information Management on 9 May 2016. Sixtytwo students participated in the workshop.

   Photos:
   http://www.xlibrisproject.org/workshop-organized-in-may-9-2016-ankara-turkey/#more-571
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/05/may-2016-ankara-list.pdf
   Presentation:
   http://www.xlibrisproject.org/wp-content/uploads/2016/08/gamification-for-libraries.pdf

5. A Summer Seminar was organized as an in-service training for librarians at Hacettepe University on 15th June 2016. Twentynine librarians participated.

   Information & Photos: http://www.xlibrisproject.org/summer-seminar-organized-in-june-15-2016-ankara-turkey/#more-589
   Presentation:
   http://www.xlibrisproject.org/wp-content/uploads/2016/08/gamification-for-libraries.pdf
   Participants list: http://www.xlibrisproject.org/wp-content/uploads/2016/06/participants-list_summer-school_2016.pdf

6. A half an hour presentation was made during the Project Final Event which took place in Ankara on 27th June 2016. 121 individuals (librarians, LIS students and researchers) participated in this event.

   Programme :
   http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-program.pdf
   Presentation:
   http://www.xlibrisproject.org/wp-content/uploads/2016/08/gamification-for-libraries.pdf
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-participants-list.pdf
   Poster: http://www.xlibrisproject.org/wp-content/uploads/2014/12/Final_event-EN-2.jpg
   Photos: http://www.xlibrisproject.org/project-final-event-organized-in-june-27-2016-ankaraturkey/#more-693

3.7.3. Branding for Libraries

Backgound Information: Libraries are organizations providing information services to meet information needs of the community and maintain its cultural values. Libraries are also known as the organizations which are trying to achieve the highest efficiency in their services. The efficiency level a service is directly affected by the perceptions and awareness levels of its audience. As in many other fields, eligibility of the designed services for user expectations is important for the organizations providing information services.

Technically defined as a sign or a logo, brand is generally a mark representing a story or a message for all users (including potential users) of an organization (Doucett, 2008). As a term that is conceptually related with management field, branding is one of the most strategic issues of organizations. Branding is also defined as a set of tangible processes carried out with the aim of creating a perception in user's mind about the organization (Adomson, 2007). Similarly, branding is also seen as processes related to creation of a unique name or an image in audience's mind (Business Dictionary, 2016).

Branding activities of organizations provide many advantages about addressing to designated community and creating long term awareness about the product or the service (Çeliktel, 2008).

Branding is a vital concept for organizations to provide effective services and develop desirable products. There are three essential reasons that reflect the necessity of a branding strategy in organizations. These reasons are as follows:

- Users have too much options and too little time.
- Most offerings have similar quality and functions.
- Preferences and experiences of the users are mostly based on the trust and other experiences that are recently easy to learn via web 2.0 technologies (Ayers, 2008; Keller, 2008).

In line with the above-mentioned factors it is possible to claim that branding is a process for the acceptability of a service or a product by designated community. Clear and open interaction, sustainability and consistency are important components in branding processes of a product or a service. Branding is also related to whole structure of an organization and it is one of the marketing strategy (Doucett, 2008; Çeliktel, 2008). Because it is mainly based on the perceptions of users about a product or a service, ceation of a physical and digital user experience is important for branding of the service and product (Westerman, 2015).

Branding is important for libraries. Doucett (2008, p.3) it is basically about "the process of defining a library's story, distilling that into one short, appealing sentence that tells the whole story, and then visually conveying the story via the library's logo and other branding elements".

According to sociological framework, the value of the library is related to perceptions of the community. In general, branding activities in libraries create user experience about the library and its main functions. Branding activities are important for libraries for the following reasons:

- Creating user interest and perception and awareness,
- Providing competitive advantage in information marketplace,
- Creation of community perception (Ayers, 2008).

Libraries should make SWOT and GAP analysis for their branding activities and strategies. These studies reflect the current situation, needs and requirements for creation of an effective branding strategy. Additionally, libraries should determine the platforms that will be used for branding activities. This can also be possible with user analysis (Keller, 2008). It is know that user-centred branding activities are very effective for the creation of library brands.

It is also recommended that libraries should create a unique story and a logo and other components (such as colours, spellings, messages) which represent organizational identity and culture (Doucett, 2008).

In the creation of branding strategies, the following questions are taken into consideration by organizations (Ayers, 2008):

- How this service or product differentiate you?
- Is it unique and relevant to your audience?
- How will you deliver this service according to your promise or characteristics of your library?

Management of the library branding strategy affects substantially service design. In this regard, logos, fonts, announcements and other interaction channels should be determined based on user studies.

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Service Description: This is a training service on branding for libraries.

Aim: The aim of this service is to develop a training program to make learners aware of the importance of branding and teach them how to use branding for libraries.

Target Group: Librarians (from all trypes of libraries such as university, school, public, research) and students of LIS (Library and Information Science) Departments from all levels (undergraduate and postgraduate)

Importance: Branding is an important part of marketing and management of organizations. It is important for libraries to invest on branding, in other words investing on the perception in user's mind about the library. User perception is the key issue behind library use. Branding is the key for awareness. This increases the importance of training librarians and future librarians (LIS students) in this topic. However, branding for libraries is quite a new subject and the research and publications produced in this field are scarce. Moreover, branding is not covered in LIS curricula. In an era where competition is high among organizations (and where libraries are not the only options for information provision), there is a need to develop training programs on branding. This service aims to address this gap.

Rationale: Rationale behind developing this service is that there are no courses available in LIS curricula in any of the LIS departments in Turkey on this subject. During the "library services co-design" workshops partiicpants claimed the importance of marketing and proposed some ideas for marketing. However, branding was a totally new subject and they were willing to learn more. This service is designed to address this need.

Scope: The concept of branding as a perception and awareness development tool, strategies to use, and best practices for libraries are included in this training service.

Smart ICT Used: Social media platforms and tools such as Instagram are used for branding campaigns.

Learning Outcomes: Individuals who complete this training program can
- define branding and branding strategies
- understand the connection between marketing and branding
- become aware of the role of libraries/librarians in the society for increasing environmental awareness
- explain its importance for libraries define
- select appropriate branding strategies for libraries
- knows which tools and technologies to use

Development Process: As soon as the need for training on branding theme is recognized, a research is conducted on the topic. Scientific databases were searched and literature was accessed. Related literature was studied and best practices were examined. Training material is developed and tested. Several trainings were conducted with different target groups. After each implementation, training material is further developed. A shelfie competition was developed as a concreate example.

Implementation of the service: Several training workshops were organized for the implementation of this training service. As a result of these trainings total 234 individuals (LIS students, librarians, professors) were trained. Additionally, a branding campaign (shelfie competition and exhibitions) was organized.

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1. A shelfie competition was organized in April 2015 as a concrete example of branding campaign for libraries. As a result two exhibitions were organized. First one at Paris Descartes University, France between 26-29 May 2015 and the second one in Istanbul on 29-30 June 2015 at Kadir Has University Information Center). An e-book was published.

   Information about competition: http://www.xlibrisproject.org/shelfie-instagram-competition/
   Shelfie competition book:
   http://www.xlibrisproject.org/wp-content/uploads/2015/09/ShelfieBook.pdf
   Shelfie competition flyer: https://www.smore.com/aa2yb-shelfie-instagram-yar-mas
   Shelfie competition promotion video: https://vimeo.com/channels/dissemination/119741267
   Shelfie İstanbul exhibition poster:
   http://www.xlibrisproject.org/wp-content/uploads/2014/12/Istanbul-Poster.pdf
   Shelfie Paris exhibition poster:
   http://www.xlibrisproject.org/wp-content/uploads/2014/12/Paris-Poster.pdf
   Shelfie Paris exhibition video: https://vimeo.com/channels/xlibristr/129300663
   Shelfie exhibition photos: http://www.xlibrisproject.org/shelfie-exhibition-june-29-30-2015-istanbul-turkey/
   Photos: https://tr.pinterest.com/xlibrisproject/shelfie-competition/

2. A two hours workshop was organized during QQML2015 Conference on 26-29 May 2015, in Paris, France. 11 librarians and 4 faculty (total 15 people) particiapted in this workshop from different countries.

   Info and Photos: http://www.xlibrisproject.org/workshop-on-branding-for-libraries-organized-in-may-27-paris-france/
   List of participants: http://www.xlibrisproject.org/wp-content/uploads/2015/05/Participant-list-Paris-workshop.pdf
   Flyer: https://www.smore.com/vgany
   Promotional video: https://vimeo.com/channels/dissemination/125032399
   Promotional video of the project: https://vimeo.com/channels/xlibristr/115336208
   Promotional video of the project: https://vimeo.com/channels/xlibristr/115807764

3. A two days workshop was organized at Kadir Has University Information Centre in Istanbul between 29-30 June 2015. First day (29th June) was on Branding for Libraries and 13 librarians from several libraries in Istanbul participated in this workshop.

   Info & photos: http://www.xlibrisproject.org/workshop-june-29-30-2015-istanbul-turkey-2/
   List of participants. http://www.xlibrisproject.org/wp-content/uploads/2015/06/Participant-list-Istanbul-workshop.pdf
   Video for the workshop marketing (EN): https://vimeo.com/channels/xlibristr/127392675
   Video for the workshop marketing (TR): https://vimeo.com/channels/xlibristr/128176301
   Flyer: https://www.smore.com/mkzw1-branding-gamification?ref=my

4. Workshops were organized for the students of Information and Communication Sciences at Paris Descartes University, Paris, France between 14-15 October 2015. Twentyfour out of 93 students participated in branding workshop.

Info and photos:
http://www.xlibrisproject.org/workshops-organized-in-october-14-15-2015-paris-france/
Participants list:
http://www.xlibrisproject.org/wp-content/uploads/2015/11/paris-october-participants-list.pdf
Flyer: https://www.smore.com/81aeb-innovative-service-design?ref=my
Photos: https://tr.pinterest.com/xlibrisproject/paris-descartes-university-workshop/

5. A two hours training workshop was organized at Hacettepe University for the second year students at the Department of Information Management on 29 April 2016. Thirty students participated in the workshop. *Green Libraries* and *Branding for Libraries* were the main themes of the workshop.

   Info and photos: http://www.xlibrisproject.org/workshop-organized-in-april-29-2016-ankara-turkey/#more-541
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/04/hacettepe_workshop-participants-list.pdf

6. A Summer Seminar was organized as an in-service training for librarians at Hacettepe University on 15th June 2016. Twentynine librarians participated.

   Information & Photos: http://www.xlibrisproject.org/summer-seminar-organized-in-june-15-2016-ankara-turkey/#more-589
   Presentation:
   http://www.xlibrisproject.org/wp-content/uploads/2016/08/branding-for-libraries.pdf
   Participants list: http://www.xlibrisproject.org/wp-content/uploads/2016/06/participants-list_summer-school_2016.pdf

7. A half an hour presentation was made during the Project Final Event which took place in Ankara on 27th June 2016. 121 individuals (librarians, LIS students and researchers) participated.

   Programme : http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-program.pdf
   Presentation:
   http://www.xlibrisproject.org/wp-content/uploads/2016/08/branding-for-libraries.pdf
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-participants-list.pdf
   Poster: http://www.xlibrisproject.org/wp-content/uploads/2014/12/Final_event-EN-2.jpg
   Photos: http://www.xlibrisproject.org/project-final-event-organized-in-june-27-2016-ankaraturkey/#more-693

3.7.4. Instructional Technologies for Librarians

Background Information:

"Instructional Technology is the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning." (Seels & Richey, 1994).

Instructional Technology is a field concerned with improving the efficiency and effectiveness of instruction involving (Wayne State University, 2016):
• designing instruction (from needs assessment to evaluation)
• applying learning theory to instructional design
• selecting delivery systems and designing techniques for a given delivery system

- assessing human characteristics
- conducting process and product evaluation
- managing change and adopting innovations
- implementing delivery to reach learners when they need it
- using technology in support of the development and delivery of instruction

Instructional Design seeks to teach how to plan, develop, evaluate and manage the instructional process effectively to ensure improved performance by learners. Instructional Technology's goal is to understand how people learn and how to best design instructional systems and instructional materials to facilitate that learning (Reiser & Dempsey, 2002).

The Instructional design approach considers instruction from the perspective of the learner not from the perspective of the content." (Wayne State University, 2016). This approach is very much in line with the user-centered service design of libraries. Additionally instrcution becomes a core activity for librarians. This requires librarians to master instructional design and instructional technologies. Today there are librarians who define themselves as instruction librarians, emerging technology librarians, online/distance education librarians and blended librarians. Blended librarians combine the traditional aspects of librarianship with the technology skills of an information technologist, furthermore adds the instructional or educational technologist's skills for curriculum design, and the application of technology for student-centered learning (Bell & Shank, 2004).

Today, the state of librarianship and libraries are at a critical professional juncture. There is growing debate and ambiguity about where the future lies for libraries. Courseware systems allow faculty to create information silos that serve as gateways to all courserelated information, including research sources that may or may not include the campus library. Textbook publishers are moving to incorporate traditional library database content into Web sites that are companion tools for students as they use the text. Google! Need more be said? Radical transformation in scholarly publishing is creating new avenues by which scholars make their research available, potentially heralding the demise of traditional journals upon which our collections are based, and throwing into question whether libraries will continue to serve as the primary conduit for scholarly literature. Personalized subscription databases are being marketed to individuals as an alternative to existing libraries. Amazon and Google "book searching," despite their inadequacies, become immensely popular almost immediately, receive tremendous media adulation, and make libraries, despite our technology, seem old and shopworn. The "Googlelization" phenomena, in which librarians and database producers are driving a movement to make our systems emulate Google, makes us look desperate and fearful that our days of teaching end users to develop efficient research skills are over. Microsoft is pursuing and creating partnerships with all of traditional information vendors of lbraries for direct linkages from their ubiquitous Office software to fulltext database content that will allow endusers to bypass libraries with the click of a mouse button (Bell & Shank, 2004).

The profession is struggling with ways to harness and apply new technologies into the existing information service delivery. As the wants and needs of the end users transform, librarians have sought to redefine what the library building and library services mean to user communities. Information profession has experimented with new ideas for its capture, organization, and delivery. All of this change is happening in a new, increasingly competitive information environment in which the library no longer is the de facto resource of first choice for those it exists to serve. This is the perfect time for this profession to transform the library and the role of the librarian (Bell & Shank, 2004). That leeds us to blended librarian who is well equipped with the knowledge and skills of instructional technologist not only to design instructional materials for users but also become facilitators for those (academics, teachers, instructors) who like to use instructional technologies.

References

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Seels, B.A., & Richey, R.C. (1994). *Instructional technology: the definitions and domains of the field*. Washington D.C.: Association for Educational Communication & Technology.

Wayne State University (2016). About learning design and technology. Retrieved from http://coe.wayne.edu/aos/ldt/about.php

Service Description: This is a training service on instructional technologiith a special focus on video-based instruction material.

Aim: This service is an educational service which aims to teach librarians and LIS students how to develop video-based instruction materials.

Target Group: Librarians (from all trypes of libraries such as university, school, public, research) and students of LIS (Library and Information Science) Departments from all levels (undergraduate and postgraduate).

Importance: In the light of developments which provide easy remote access to information, the role of librarians as information professionals is changing. There is an important shift towards user training, since users do not seem to need intermediaters anymore. Therefore, there has been a trend towards focusing on the development of instructional sessions and materials. Keeping in mind the characteristics of new generation librarians started to develop web-based and video-based instruction materials. Knowledge and experience on instructional design becomes a necessary ingredient of every information professionals. However, LIS curricula do not cover pegagogical aspects and instructional technologies.

Rationale: Rationale behind developing this service is that LIS curricula does not cover pegagogical aspects and instructional technologies, however information professionls' role as instructor is becoming a common practice. Information professionals need to be equipped with new set of skills and knowledge to be able to develop well designed instructional materials and packages. During co-design workshops it was emphasized by partipants (librarians and LIS students) that they see a gap in their skills regarding pegadocical themes and instructional technologies and they are willing very much to close this gap.

Scope: Introduction to instructional technologies, video tutorial preparation process including platforms and applications to use for this purpose are included.

Smart ICT Used: Several platforms and tools are used. Camtasia and Snagit are amont them.

Learning Outcomes: Individuals who complete this training program can
- define instructional technogies
- become aware of platform and tools for video tutorial preperation
- use video preperation tools and platforms to develop instructional material
- select an appropriate tool
- develop video tutorials

Development Process: As soon as the need for training on instructional technologies is recognized, a research is conducted for selection of the tools to teach. A study was carried on the

tools/systems/platforms available. Speciall attention was paid for focusing on free software and applications. Most appropriate ones were selected. Training material is developed and tested. Several trainings were conducted with different target groups. After each implementation, training material is further developed.

Implementation of the Service: Several training workshops were organized for the implementation of this training service. As a result of these trainings total 160 individuals (LIS students, librarians, professors) were trained.

1. A traning on video creation tools to facilitate the production of next the project output (MOOC) was provided to partners on 25 February 2016 during the fifth transnational meeting in A Coruña, Spain. 10 individual from partner institutions were trained.

   Info and photos:
   http://www.xlibrisproject.org/workshop-organized-in-february-25-26-2016-a-coruna-spain/
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/04/spain-workshop-list-of-participants.pdf

2. A Summer Seminar was organized as an in-service training for librarians at Hacettepe University on 15th June 2016. Twentynine librarians participated.

   Information & Photos: http://www.xlibrisproject.org/summer-seminar-organized-in-june-15-2016-ankara-turkey/#more-589
   Presentation: http://www.xlibrisproject.org/wp-content/uploads/2016/08/educational-technologies-for-libraries.pdf
   Participants   list: http://www.xlibrisproject.org/wp-content/uploads/2016/06/participants-list_summer-school_2016.pdf

3. A half an hour presentation was made during the Project Final Event which took place in Ankara on 27th June 2016. More than hundred librarians, LIS students and researchers participated.

   Programme :
   http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-program.pdf
   Presentation: http://www.xlibrisproject.org/wp-content/uploads/2016/08/educational-technologies-for-libraries.pdf
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-participants-list.pdf
   Poster: http://www.xlibrisproject.org/wp-content/uploads/2014/12/Final_event-EN-2.jpg
   Photos: http://www.xlibrisproject.org/project-final-event-organized-in-june-27-2016-ankaraturkey/#more-693

3.7.5. Green Libraries

Backgound Information: Scientists agree that our planet is in jeopardy because of the threat of environmental challenges such as air and water pollution; destruction and depletion of the ozone layer, forests, soil, oil fields, energy and water; accumulation and distribution of toxic wastes; and emission of *greenhouse gases* which altogether can change our lifestyle drastically. Environmental changes and challenges are mainly caused by human activities, however, impact the survival of all living species, the integrity of the earth, the security of nations, and the heritage of future generations. Consequently, there is a need for urgent action to address these problems by changing people's and institutions' behaviors to reverse the trend and repair the damage. Environmental issues have become

a major area of research and also concern in twenty-first century (ULSF, 2001; Antonelli, 2008; Chowdhury, 2012).

Today, as awareness and interest have increased towards environmental problems, the discussion of environmental sustainability has become widespread in many governments and organizations. Organizations including libraries (Stark, 2011). are taking measures to reduce their damage on the environment. As a result of libraries' involvement with environmental issues, the *Green Library Movement* main concern of which is reducing libraries' environmental impact, emerged in the early 1990s (Antonelli, 2008).

The Green Library Movement, greening libraries and reducing their environmental impact, emerged in the early 1990s and gained popularity in the beginning of this century (Antonelli, 2008). Talloires Declaration, the first official statement for a commitment to environmental sustainability in higher education - composed in 1990 and signed by over 40 countries - had an important impact on this movement. As an action plan for educating for environmentally responsible citizenship, fostering environmental literacy for all and incorporating sustainability and environmental literacy in the operations of universities (ULSF, 2001) this Declaration forced academic libraries to start going green (Smith, 2010-2011).

Greening of the libraries is now pervasive, as evidenced by the many publications on the subject. Libraries of all sorts, today are finding ways to incorporate green thinking into action (Stark, 2011) by working on reducing the waste -ecological/carbon footprints- resulting from library operations and adding more environmentally responsible practices in their daily operations and services (Jankowska, 2010-2011).

Libraries today are taking a more proactive role in *green* practices (Jankowska, 2010-2011).by helping communities they serve to become green and sustainable. They lead, set example to and act as role models for sustainability. Green library is a multi-faceted concept which has several components such as green buildings, green operations and practices, green programs and services, green information systems and green collections.

Green library building is, generally, the first thing comes to minds when talking about green libraries. A green or sustainable building is "a structure that is designed, built, renovated, operated, or reused in an ecological and resource efficient manner" (CalRecycle, 2014). Green buildings not only help using finite energy resources prudently but also reduce the carbon footprints of these buildings. Buildings are known as one of the heaviest consumers of natural resources and produce a significant portion of the greenhouse gas emissions. Sustainable aspects of library buildings include features such as lighting, ventilation, heating and cooling; the interior fittings; installing solar or geothermal energy systems; use of water-harvesting systems; using double-panel windows; use of low-flush and dual-flush; all for electricity and water efficiency. The use of sustainable materials and resources, utilizing building materials, furnishings, and fixtures with recycled content; use of refurbished materials and products; using products (building materials, furniture and consumables) made from natural materials help the preservation of natural resources and less depletion of resources that require a long time to renew themselves (Mulford & Himmel, 2010; Christinsen, 2010-2011).

Green operations and practices in libraries include but not limited with the following: reusing or donating the items instead of disposing; separating the waste and providing onsite-recycling collection; reducing or reusing of paper; eliminating use of plastics and instead providing and encouraging use of real plates/mugs/utensils; using recycled, chlorine-free, FSC certified paper; setting copier/printer default to duplex; minimizing printing; routing print materials rather than making multiple copies; using shared network and public e-mail folders as searchable repositories for information and content; using electronically completed/submitted forms; using electronic/digital communication; using

products/consumables with recyclable content; procuring refurbished items when possible; purchasing locally; using environmentally friendly cleaning products instead of toxic chemical cleaners; using stairs rather than elevators; having every-other light off where possible; re-filling toner cartridges rather than buying new; installing energy-efficient lighting, using motion sensors; shutting down computers when the library is closed to the public, using LCD monitors; using natural lighting and ventilation; choosing and using Energy Star compliant computer components; consolidating servers in large institutions; using virtualization so that multiple patrons can share a single machine's computing power; managing equipment replacement cycles mindfully and having older computers repaired; finding reputable recyclers of e-waste; recycling toner cartridges and choosing "green" inks (Antonelli, 2008; Mulford & Himmel, 2010; Christinsen, 2010-2011; Smith, 2010-2011; Time for Change, 2007; The Role, 2009; Milliot, 2008)

Green Library Movement pushed libraries to offer new services. In addition to the efforts of creating sustainable libraries, librarians have started to offer creative and unusual green programs to their communities for broadening awareness not only by providing resources and information on green living and environmental issues but also organizing educational outreach programs and workshops on adopting green practices such as recycling and food security to help others achieve greening of their own lives, facilities, and operations (Antonelli, 2008; (Mulford & Himmel, 2010; Time for Change, 2007).

Libraries, especially public libraries, started to become known as the center for *green education* (Mulford & Himmel, 2010). Librarians today, provide information about growing food and alternative medicines (Antonelli, 2008). Some libraries have created community gardens to educate patrons about successful gardening practices, some even have maintained a tool-lending (for gardening), some became archival depositories for genetic material like seeds and started to serve as depository for local seeds (Antonelli, 2008; Time for Change, 2007)

Lending *watt meters* at a library is another good example for creative and unusual green services. The Pennsylvania State University Libraries provide watt meters to be checked out by users to measure at home or office how much electricity an electronic appliance consumes (in use and not in use). Main aim of this green service is to help individuals to be aware of their consumption and reduce their electric footprint as well as save money and become energy smart (PennState, 2014)

Information systems are important parts of libraries and library services. Information systems and services make extensive use of ICT (information and communication technologies) and increased use of ICT has a significant impact on energy consumption and greenhouse gas emission. Research shows that appropriate use of ICT can reduce the overall greenhouse gas emissions of these systems and services. Use of cloud computing (mainly based on reduced server energy consumption) and Green IT is one example (Chowdhury, 2013). Chowdhurry (2012) proposes four key enablers of green information retrieval: standardization in processes and practices; sharing resources; reusing content and tools; and green user behavior with regard to energy usage, business practices, and lifestyle.

Connell (2010) presents three facets of green collection development: selection of materials whose content informs and assesses green practices; de-selection processes that emphasize reusing and recycling materials; and selection of a material format (print or electronic) which generates less CO2 emission. Selection is about building up green collections by selecting green resources on issues such as environment, green computing, organic gardening, energy conservation, etc. to add to the library's collection, including reference works, serials, books, DVDs, and websites (Connell, 2010). It is all about facilitating access to green information. Collection development includes de-selection/weeding of outdated or worn library materials. Green de-selection is about recycling and reusing weeded materials. Instead of throwing them away, selling, giving-away or recycling weeded and unneeded printed resources became a standard green practice. While it is easy to recycle printed material, it is

more difficult to recycle multi-media waste products such as CDs, DVDs, audiobooks -all come with plastic cases- (Connell, 2010). Sustainability of library collections is generally addressed with regard to environmental impact of print resources versus electronic resources. There are numerous studies which compare the two formats by listing the benefits each type brings with the cost, accessibility, archiving, and processing. From environmental impact point of view, carbon footprint of resource formats is the main focus.

There has long been a debate on print versus electronic, however it still is not fully resolved in regard to their environmental impacts. The popular opinions that delivering information electronically is greener and paperless libraries are more environmentally friendly are not fully proven (Nardozza & Stern, 2006). Print and electronic media both have positive and negative impacts on the environment (Carli, 2010). There is no doubt that the amount of databases, electronic journals, eBooks, digital repositories, archives, and digitally borne collections will continue to grow. Both print and e-resources will remain as significant portion of most libraries' collections. As Carli (2010) notes both can be sustainable, but both will need to become far more eco-efficient over the next years.

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Service Description: This is a training service on Green Libraries theme.

Aim: The aim of this service is to develop a training program to make learners aware of the impact of libraries on the environment and teach them how to make libraries green and environmentally more friendly.

Target Group: Librarians (from all trypes of libraries such as university, school, public, research) and students of LIS (Library and Information Science) Departments from all levels (undergraduate and postgraduate)

Importance: Libraries have an impact on environment like all other organizations. It is important to be aware of this impact and which services and practices are actually causing it the most, as well as what to do for reducing the damage caused. On the other hand, unlike many other organizations, libraries can play an important role on increasing awareness in the society in regard to environmental issues. This increases the importance of training librarians and future librarians (LIS students) in this topic. However, green library is quite a new subject and the research and publications produced in this field are scarce. Moreover green libraries topic is neither covered yet in LIS curricula nor in in-service training programs. In an era where environmental threats are increasing, there is an urgent need to develop training programs on green libraries. This service aims to address this need.

Rationale: Rationale behind developing this service is that there are no courses available in LIS curricula in any of the LIS departments in Turkey. It is a new subject. No publications in Turkish. There is an urgent need to provide training programs on the subject. Additionally, it was observed during the "library services co-design" workshops with librarians and LIS sudents that when they create library models they always put green elements (such as trees and plants) and claim it as a green library. Certainly plants by themselves cannot make a library green. This was also a proof which indicated a gap in knowledge and a need for education on the subject.

Scope: Enviromental issues in general, environmental sustainability, green library movement, green library buildings, green services, green practices, green policies, green collection development and green information systems are covered in this training program.

Smart ICT Used: Stop Motion is used for practical work during the green workshops to create some videos for increasing awareness regarding green issues (see greenhero video: https://www.youtube.com/watch?v=tfBzmoCuzKg)

Learning Outcomes: Individuals who complete this training program can
• define environmental changes and challenges
• become aware of the libraries' impact on environment
• become aware of the role of libraries/librarians in the society for increasing environmental awareness
• define green library services, programs, and practices
• develop green green library services, programs, and practices

Development Process: As soon as the need for training on green library theme is recognized, a research is conducted on the topic. Scientific databases were searched and literature was accessed. Related literature was studied and best practices were examined. Training material is developed and tested. Several trainings were conducted with different target groups. After each implementation, training material is further developed.

Implementation of the Service: Several training workshops were organized for the implementation of this training service. As a result of these trainings total 222 individuals (LIS students, librarians, and academics) were trained. Following activities and trainings were organized within the life span of the project:

1. To include green libraries training permenantly in the curricula of Hacettepe University Department of Information Management, in October 2015 a course for doctoral level (titled: Environmental Sustainability and Libraries) was proposed to university authorities. This course is approved by University Senate and will be available for doctoral students starting from 2016-2017 academic year.

   Course description in Course Catalog:
   http://akts.hacettepe.edu.tr/ders_detay.php?ders_ref=410c626453af0ef80153f4d72dce0408&ders_kod=BBY721&zs_link=2&prg_kod=21122&submenuheader=2

2. On 14 October 2015 the first training launched. A workshop was organized for the students of information and communication sciences at Paris Descartes University, Paris. Twentyseven students participated (for more information, participants list and photos see:

   Info and photos: http://www.xlibrisproject.org/workshops-organized-in-october-14-15-2015-paris-france/
   Participants list:
   http://www.xlibrisproject.org/wp-content/uploads/2015/11/paris-october-participants-list.pdf
   Flyer: https://www.smore.com/81aeb-innovative-service-design?ref=my
   Photos: https://tr.pinterest.com/xlibrisproject/paris-descartes-university-workshop/

3. A workshop titled *Go Green and Keep the Earth Clean* was organized on the green libraries theme at the ECIL2015 Conference. ECIL2015 held between 19-22 October 2015, at Tallinn University in Tallinn, Estonia. The workshop was organized on 22nd October (http://ecil2015.ilconf.org/documents/ecil2015_final_programme.pdf). More than 300 participants from more than 50 countries participated in the conference. In this two hours workshop participants trained about green library services and how to design new green services. They prototyped green services. At the workshop X-Libris Methodology further tested and

developed. Fifteen participants (librarians and library science professors) from 14 different countries (Bulgaria, China, Czech Republic, Estonia, Lithuania, Norway, Poland, Romania, Scotland, Turkey, United Arab Emirates, USA, and UK) participated in the workshop.

Abstracts published: http://ecil2015.ilconf.org/documents/ecil2015_abstracts.pdf
Info and photos:
http://www.xlibrisproject.org/workshop-organized-in-october-22-2015-tallinn-estonia/#more-397
Participants list : http://www.xlibrisproject.org/wp-content/uploads/2015/11/tallinn-october-participants-list.pdf
Flyer : https://www.smore.com/dy9xb-go-green-and-keep-the-earth-clean?ref=my
Photos : https://tr.pinterest.com/xlibrisproject/tallin-greening-workshop/

4. A lecture was given at Hacettepe University for the second year students at the Department of Information Management in Ankara on 29 April 2016. Thirty students participated in the workshop. *Green Libraries* and *Branding for Libraries* were the main themes of the workshop (for more information, partiicpants list and photos:

Info and photos: http://www.xlibrisproject.org/workshop-organized-in-april-29-2016-ankara-turkey/#more-541
Participants list:
http://www.xlibrisproject.org/wp-content/uploads/2016/04/hacettepe_workshop-participants-list.pdf

7. A Summer Seminar was organized as an in-service training for librarians at Hacettepe University on 15th June 2016. Twentynine librarians participated.

Information & Photos: http://www.xlibrisproject.org/summer-seminar-organized-in-june-15-2016-ankara-turkey/#more-589
Presentation: http://www.xlibrisproject.org/wp-content/uploads/2016/08/green-libraries.pdf
Participants list: http://www.xlibrisproject.org/wp-content/uploads/2016/06/participants-list_summer-school_2016.pdf

8. A half an hour presentation was made during the Project Final Event which took place in Ankara on 27th June 2016. 121 individuals (librarians, LIS students and researchers) participated in this event.

Programme :
http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-program.pdf
Presentation: http://www.xlibrisproject.org/wp-content/uploads/2016/08/green-libraries.pdf
Participants list:
http://www.xlibrisproject.org/wp-content/uploads/2016/06/final-event-participants-list.pdf
Poster: http://www.xlibrisproject.org/wp-content/uploads/2014/12/Final_event-EN-2.jpg
Photos: http://www.xlibrisproject.org/project-final-event-organized-in-june-27-2016-ankaraturkey/#more-693

3.8. Statistics

During the lifespan of the project in total 417 individuals took part and get trained on different subjects in workhsops organized by Hacettepe University. Some participants were trained on more than one subject.

Workshops & Seminars (Training Activities)

	Librarians	LIS Students	Academics	Others	Total
5-6 February 2015, Ankara, Turkey	6	7			13
29 June 2015, Istanbul, Turkey	13				13
30 June 2015, Istanbul, Turkey	14				14
27 May 2015, Paris, France	11		4		15
14-15 October 2015, Paris, France		93			93
22 October 2015, Tallin, Estonia	7		8		15
25 February 2016, A Coruna, Spain	2		1	7	10
29 April 2016, Ankara, Turkey		32			32
9 May 2016, Ankara, Turkey		62			62
15 June 2016, Ankara, Turkey	29				29
27 June 2016, Ankara, Turkey	60	31	28	2	121
Total	**142**	**225**	**41**	**9**	**417**

3.9. Dissemination

Dissemination was carried out mainly through project website and both general social media accounts of the project and social media accounts of partners.

Project website: http://xlibrisproject.org

3.9.1. Social Media Channels: Turkey

- Facebook: https://www.facebook.com/xlibrisprojesiturkiye
- Twitter: https://twitter.com/xlibris_tr
- Smore: https://www.smore.com/u/xlibrisprojesi
- Pinterest: https://www.pinterest.com/xlibris_turkey/
- Instagram: https://instagram.com/xlibrisprojectturkey/
- Vimeo: https://vimeo.com/channels/xlibristr

Chapter 4

Lithuanian Smart ICT 3.0 New Libraries Services OER

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CHAPTER 4

LITHUANIAN SMART ICT 3.0 NEW LIBRARIES SERVICES - OER

4.1. Current State of Radviliškis District Municipality Educational and Sport Service Centre[2]

Radviliškis District Municipality Educational and Sport Service Centre consists of five departments:

- Day centre department for the people with mental disabilities,
- Pedagogical and Psychological service department,
- Sport department,
- Accountancy department for educational institutions in the district,
- Non-formal training department for adults and young people in the district.

All departments of the centre work for educational business in the district. Nonformal training department for adults and youths organizes a wide range of nonformal and informal educational activities for adults and young people in the district.

The department is responsible for creating, organizing and implementing lifelong learning (LLL) programmes including in-service training programmes for pre-school, primary, secondary and vocational school teachers and the staff of educational institutions in the district. The teachers in Lithuania have to develop their competences and skills continuously and to prove if they satisfy their degree of qualification every five year. So, almost every town in Lithuania has its educational institution which is responsible for development of the teachers' qualification. The institution follows the priorities of the educational policy in Lithuania, Programmes of in-service training are written and delivered to teachers in various subjects.

Training programmes aim to develop teachers' personal, cultural, professional competences. The main directions of teachers' in-service training are:

- Dealing with special educational problems,
- Creative learning,
- School leadership development,
- Development of educational quality assurance system,
- Development of students' achievement assessment system,
- Implementation of the new technologies into the educational system,
- Educational process and content modernization,
- Development of methods and ways to make lessons more effective,
- Analysis and prevention of students' drop outs and effective schoolmanagement.

Besides following the priorities on the national level every year the institution performs the survey in the schools to learn the teaching gaps that the respondents identify. Under the received feedback in-service training programmes are prepared and implemented. In addition, the organization coordinates teachers' methodological groups (each group represents a different teaching subject). Those groups are responsible for developing and improving teaching quality and achieving better students' results in district schools. Moreover, the institution receives many initiatives for training programmes from the methodigical groups.

In-service training programmes consists of six, eight, sixteen, eighteen hours or even longer, If a programme is longer than eighteen hours it is usually presented to be accredited. To implement these training programmes teachers from universities and colleges under their teaching subjects are invited to deliver the programme.

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[2] This part of the text is copied from Chapter 2 (IO1), in order to keep the integrity of the content.

There are many teachers who have considerable expertise in dealing with problems of teaching their subjects. This type of trainings is considered as a good practice training programme. What is more, there are training programmes which are initiated by school communities in which the whole community develops their competences, for example, leadership, management of lessons, ICT application in classes, etc. After a programme has been completed the participants are issued with certificates or references which depend on the amount of hours of a programme.

The Centre has an agreement with Šiauliai University which has pedagogical programmes for teachers' in-service training and provides internship opportunities for students. Thus, Radviliškis District Municipality Educational and Sport Service Centre cooperates with the university for implementation of in-service training activities in non-formal training department in the district. The students from the university carry out research for the needs of teachers or other educational issues.

Additionally, the centre provides district's residents with a variety of educational activities and programmes which encourage them to participate in LLL. Most popular LLL programmes are languages, English, German and French, different programmes on the use of information technologies and arts. The courses and programmes are advertised every year in August and September using traditional and social media. Every academic year we have several level language courses, different programmes on the use of information technologies and permanent groups of arts for women. The art works such as painting, decoupage, embroidery, needlework, knitting and etc. are exhibited in different places, for example, the cultural centre and public library every year.

The centre is also accredited for testing European Computer Driving Licence (ECDL) and the level of the English language under European frameworks of languages. The department provides non-formal education and assessment of the above mentioned testing to different professional staff such as public institution officers, service officers. The other target group of the institution is the youth in the district. The institution works in two main fields with this target group. One target group is smart pupils and it is related closely to formal education which includes the implementation of activities devoted to the encouragement of pupils' academic development. The institution together with methodical teachers' groups discuss and organize olympiads and competitions in which smart pupils of different ages and from different school compete for the best academic results. In addition some
olympiads and competitions are initiated at the national level and it is almost compulsory to organize them at the local level to find who is the best pupil in a specific subject with this pupil is being sent to represent the district at national level.

The other group of youth is totally different and which requires different very professional work. They are 'drop outs', juvenile offenders and other young people facing social problems. There is a special team, of youth workers in the institution who are responsible for working with this target group. They organize active free time activities, individual and group coaching and career consultations.

Seniors are another target group which are active clients in LLL training activities in the institution. They participate in lectures such as:

• Positive attitude to aging problems,
• Social care,
• Law,
• Healthy lifestyle and others.

There is a managing board which discuss with the members and look for lecturers for their learning. They have long courses in which they learn languages, computer-literacy and learn different handicrafts. Delivering training activities for this group of learners is a voluntary job. Seniors receive a very small amount of finances for their trainings, so most lecturers and trainers deliver trainings

voluntarily. Most training except for projects are chargeable, so learners have to pay a nominal amount for training activities which might differ, but there are some limits ordered by the municipality. It might be exceptions for the learners who represent disadvantaged groups of the district such as people living in remote places, seniors, unemployed and disabled people.

The centre is very active in international projects which help to expand training activities to different target groups, develop the quality of non-formal education, improve and solve management issues, share a good practice and of course, offer a wider range of learning subjects. International, national and local projects contribute in the field of evaluation and findings of learners' needs.

The institution has been participating in international projects since 2005. The project devoted to developing adults from disadvanged groups' IT and social competenes was implemented in 2005-2009 under Grundtvig programme, secondary school teachers developed their IT competences learning how to apply IT tools in classes (Grundtvig) in 2009-2011. Adult teachers participated in NordPlus programme and improved their teaching competences and skills for working with adult learners (2012-2014).

The institution has had several projects for young people. During project activities young people developed social skills, active democratic participation, learnt cultural issues, etc. The projects were implemented under the programmes of Youth in Action and Europe for citizens. A lot of youth and senior people's activities were implemented supported by municipality funds and the Ministry of Social Care and Health. During these activities both groups learnt to follow healthy lifestyle and have active free time activities. The seniors gained knowledge of coping with aging problems, youth participated in camps which were dedicated to active free time activities. The youth workers participate actively in international programmes which support them with useful knowledge of working with disadvantaged youth groups. They had a lot of activities devoted to reducing youth harmful habits such as abusing alcohols, drugs and smoking.

The non-formal department for adults and young people implement lifelong learning programmes in the district including different age target groups from school children to seniors aiming to meet the requirements necessary for a 21st century individual.

4.2. Current State of School Libraries in Radviliškis

Every school in Lithuania has got its library. However the type of the library usually depends on the type of the school. If the school is a gymnasium (students 14-19 years olds) the library funds are different from the funds in a library of a basic school where 6-14 years old children study.

The general task of school libraries is to provide educational resources for students and teachers mostly in the form of printed resources and rarely in other forms such as e-books, audiobooks, professional websites, etc. In addition this institution in the school is responsible for the organization of course books. All course books arrive to school libraries, they are registered and delivered to class groups. Teachers are responsible for course books of a teaching subject. Naturally, teachers take course books at the beginning of the school year and return to the libraries at the end.

Most libraries own an extra room where school children can read, study or work on a computer. Nowadays all libraries have computers.

Even though, school libraries have been connected to the system of MOBIS which are supposed to be a close system among school libraries in Lithuania however the system MOBIS does not work properly as the school libraries are not connected to each other and they cannot follow each other's funds. In addition there are still some libraries in the district which haven't been connected to MOBIS yet. So

these libraries still continue to work with paper registrations while delivering and receiving books from clients, describing and registering books. Nevertheless, MOBIS is starting to operate, school libraries continue their service in old fashion different from big public libraries. Each book delivered to a client is written to a client's register and when it is returned the librarian signs on the register which means the return of a book.

The library is also the place where teachers and their students have literature afternoons to commemorate writers, poets or historic personalities for their birth or death dates, or other important events related to famous personalities.

Moreover school libraries have a room or a part of the room which is devoted to the secondary school students' career. Librarians and teachers plan consultations and information of students' career.

School libraries try to increase children's confidence and enjoyment of reading, open up reading choices, offer opportunities for the school community to share reading experience. The library also raises the status of reading as a creative activity.

The school library's working hours are very convenient for school community. It opens a little earlier than the first class starts. Schoolchildren can come to the library and prepare for classes especially those who are in the village schools as a school bus brings students early to school. In addition the service of the library is free. The clients do not pay for the use of literature and information. Some school libraries provide the service of making copies and for them clients have to pay

School libraries still lack money for buying printed or e-books which are very necessary for school communities (students and teachers). For example, schoolchildren have some literature which is compulsory to read, but libraries do not have enough books for each student so that all students could have one in the literature class. What is more, not all books can be found in the digital format.

Nowadays school libraries have fewer possibilities for subscribing magazines, journals and newspapers, which could be very useful for different subjects such as literature classes, physics, history and etc.

Even though libraries try to be attractive and using different methods try to encourage schoolchildren to read more, interests in literature and reading are decreasing. It is obvious that printed documents are losing their purposes and school librarians have noticed that young people are interested in sleazy and cheap information on the Internet. So school libraries have the task to find methods and approaches to attract young people to more valuable information than they are interested at present.

It is obvious that the traditional library is competing with the Internet as the latter is more convenient but school library is not going to disappear as it provides more functions at school. Thus the challenge is to find right approaches how to modernize it, attract clients and involve in reading, and other lifelong learning contents.

4.2.1. The Role of School Librarians in Lithuanian Schools

The librarian performs and integral role in promoting an effective education at school. They have to collaborate closely with all teachers across different grade levels and subjects. They also work with all students considering literature and course books. Librarians have to book course books after they discuss with the teachers and decide on the content of the course. The librarian should follow the curriculum and information related to the subjects taught at school to be competent to learn about compulsory and optional literature students should read for their literature classes.

They promote literacy development and foster lifelong reading habits among schoolchildren helping them to select books, magazines and other printed literature. Organizing literature afternoons librarians together with literature teachers try to engage schoolchildren in reading. Different occasions organized in the library help students learn more about writers, poets and historic figures, moreover some students participate in organizing these events, which encourage them learn more in such subjects.

The Librarian's role

- Collaborate with teachers
- Analyze the school community needs
- Follow the curriculum
- Encourage the use of ICT for searching information
- Organizing the procedure of course books
- Select and book literature and course books
- Consult pupils considering literature and coursebooks

Librarians also have learnt a lot of about the didactics, methodology, psychology and educology in general. They should know which pedagogical literature is useful and necessary for a modern teacher. School libraries receive a lot of pedagogical literature from country's educational institutions as a result of different projects and programmes. Next, they have to order the other special literature from publishers' catalogues so it requires competences and knowledge to select good ones. Usually, they work with school administration and teachers' teams to make the right selection.

The librarians are very busy at the beginning of school year and at the end the delivering and receiving course books. This work takes a lot of time because they have to count them, check how many are missing, look through each to evaluate the state of each course book. Before the beginning of the school year librarians receive the students' list and they have to check if there are enough course books for all subjects necessary for each course taught at school.

Librarians gather information related to students' career. Some of the librarians in the district are responsible for consultations of student's career. Together with class teachers they organize career classes for a group of students, organize trips to different institutions, inform and consult on future

studies. They also organize questionnaires for establishing the most suitable career for each student depending on his/her personality.

Librarians keep the library organized and tidy for example, clients will not put the book back where they found it, organize library catalogues and try to make them easy to use. They also try to maintain quiet environment even though it is very difficult to do it during breaks at school.

The librarian's function as an educator is one of the most important. It is obvious that this role is frequently unrecognized. There has been too little attention paid to the research role that should be played by the librarian. With the development of new methods of information storage and dissemination, it is imperative that the persons primarily responsible for this function should be actively engaged in research. Librarians lack trainings for working with various media, how to select the right information for their clients what to suggest reading for necessary knowledge. School librarians should find the solution how to survive in the world of electronic information.

School librarians participate in different in-service-training programmes such as how to provide information attractively, motivate students to read. They also share good practice examples how to reach successful reading results. In addition they learn how to create and make advertisements which encourage reading, how to advertise literature, how to create an attractive list of literature items. They have had seminars and courses for developing their IT skills.

School librarians understand that school libraries are becoming more and more important but there is a need to change. What is more, the library as an institution is becoming an information provider with IT skilled specialist who is ready to function in an electronic environment. 21st century librarian should be able to select, organize, service not only printed documents but also other digital media, to assist users in searching necessary information sources, cooperate with other libraries, train schoolchildren and teachers on Internet use such as Internet tools, engines, platforms, online database and catalogues, electronic journals and etc.

4.2.2. Areas of Improvement

The challenge is to develop librarians' IT competences and skills, to use Information technologies for servicing clients and gaining more knowledge in the use of Internet sources. Lack of competences to manage digital information, social media, use different platforms are some of the problems.

First of all the librarians should develop their IT skills to be more qualified. Nowadays all librarians have basic skills of computing however it is not enough to use and work on the platforms organized for the libraries. Information technologies have been developing very fast so it is very important not to tarry. For example, only few school libraries in the district use MOBIS, the system which is devoted to modernize the service of school libraries because librarians lack IT skills. This system would help them organize funds better, as they would know which client has a necessary book, journal or newspaper. They could inform clients about the time when the item is returned and when another client can take it from the library. They wouldn't need to have paper index card system and folders. They also lack daring for being active on the social media and supporting their clients with the necessary information because of lacking necessary IT skills.

Librarians lack competences which could help them organize their school library's work. First of all they have to improve ICT skills even though they all have basic ones. The information technologies are developing very fast so they need to develop their IT skills constantly, for example, communication skills tightly linked to IT, the use of social media and their tools, how to use social media tools for accumulating digital material, advertising various library and school's events, establishing and organizing on-line events, using mobile tools for accessing digital information and modernizing library's services. In addition the librarians in the district haven't had much trainings and school communities

have been changing and they require different age communication especially children, who are a new generation. The librarians need to develop their teamwork skills to be better at building teams of the library members. Critical-thinking and leadership are other important skills which help humans be active and motivate them to change long ago established attitudes. In addition librarians claim that psychological competences are very necessary to avoid misunderstanding communicating with modern generation and learning their needs. School librarians should organize their work attractively to have more clients in their libraries so they need to develop entrepreneurial skills.

The task of the educational centre is to prepare a training course programme for librarians and teachers in which they could develop their IT competences to be able to use the system MOBIS and manage digital information. The librarians and the teachers stated they would like to have a platform in which all district school libraries could share the information about books, e-book, Internet websites and course books when they lack them in their schools.

The librarians would like to service their clients more professionally, helping them in searching necessary digital information. Mostly the school library is used for schoolchildren and teachers, but sometimes students from universities and colleges visit the library because they need some pedagogical or psychological literature, which not all public libraries can have, so librarians should be very knowledgeable to help their clients. They should learn a lot to accumulate necessary funds (printed and digital). Their skills would help them select the right Internet data related to academic knowledge. The information about school libraries, their activities and news are published on school websites, so the librarians stated they would like to be more skilled to prepare this information more attractively as now they usually ask IT teachers to help. They would like to learn more about social media, social networks and be active on them.

There is a need for training to change a traditional library into a sophisticated one with a professional librarian, who is skillful to manage digital data and online service such as informing clients about the status of a necessary item, supporting with necessary information and etc. Moreover, this modern library is supposed to create an effective service with online catalogues and the information of delivering/receiving documents, which can be very useful for clients who need them.

4.3. Service Co-design and Methodology Development through Workshops

Workshops organized for co-designing and defining services with school librarians and their users (students and teachers) and experimenting with different innovative methodologies to develop Xlibris Methodology tool set as well as finding the best possible way to benefit from each methodology with the purpose of service co-design. A two days workhop was organized with school librarians (3-4 March 2015) and another two days workshop was organized with library users (5-6 March 2015) at Radviliškis Educational Centre, Lithuania.

4.3.1. Participants – Librarian Workshop

Librarians from school libraries in the district participated in co-creation workshops.

Moderator
Daniel Weiss (ISES, Spain)

Partners
Temenuga Kalcheva (Pencho Slaveykov Regional Library, Bulgaria)
Kristiana Dimcheva (Pencho Slaveykov Regional Library, Bulgaria)
Daniel Weiss (ISES, Spain)
Vaida Apsegiene (Radviliskis SSPC, Lithuvania)
Skirmante Petraitiene (Radviliskis SSPC, Lithuvania)

Carola Dierich (Wisamar, Germany)
Angela Hirsch (Gemeinde Kabelsketal, Germany)
Serap Kurbanoğlu (Hacettepe University, Turkey)

Librarians
Indrė Grigaliūnaitė (Radviliškis Vaižgantas' Progymnasium)
Ona Jankūnienė (Radviliškis Gražina's Basic School)
Kęstutė Šivickienė (Radviliškis Gražina's Basic School)
Valia Kondratenko (Radviliškis Lizdeika's Gymnasium)
Vladislava Šiaudykienė (Radviliškis V.Kudirka's Basic School)
Jolanta Mockaitienė (Radviliškis Music School)
Gražina Ivanauskienė (Radviliškis Lizdeika's Gymnasium)
Vida Pužaitienė (Radviliškis District Šaukota's Basic School)
Nijolė Valatkienė (Radviliškis District Šiaulėnai M. Šikšnys' Gymnasium)
Laimutė Smailienė (Radviliškis District Pociūnėliai Basic School)
Laimutė Petrauskienė (Radviliškis Youth School)
Aušra Staškūnienė (Radviliškis District Sidabravas' Gymnasium)
Zita Škleinikienė (Radviliškis District Alksniupiai Basic School)
Vita Kasarauskienė (Radviliškis District Šeduva's Gymnasium)
Alma Pranevičienė (Radviliškis Vaižgabta's Gymnasium)

Background
The stakeholders of Xlibris project are schools and particularly school libraries in the district. School libraries still deliver a traditional service and lack the understanding of the importance of their role in lifelong learning at present. School librarians still lack the perception of the necessity to modernize the service and their work. The target group of the learners consists of the Radviliškis district school librarians and their clients who are teachers and schoolchildren.

Expectations
Under the research on the target group's competences and skills, however the participants' competences and skills were rather different, they expected to learn about the modern library's role in the 21st century: how using smart ICT skills and social media there could be created professional library's service, built new opportunities in their service and the library could become more appealing for its clients. While participating in the workshops the librarians hoped to ascertain their problems, find out solutions and create models for their modernized libraries. The teachers and students expected to improve smart ICT competences and gain skills to use social media, in addition some participants expected to practice their English. The clients to participate in the workshops were chosen by school communities under their interests and participation in school libraries' work. Most students were frequent library's clients and active readers. They didn't expect they would be creating a model for a 2025 library's service.

4.3.2. Aims and Goals
The main goal of the workshops was to learn which skill the librarians need to gain or develop to be able to establish new smart ICT services in their libraries. The other goal was to make them think about the skills and competences they need and want to gain to be able to establish smart services in the library. The third goal was to inspire librarians to be active in changing an old fashion library into a new 2025 century library. The last goal was to encourage them to design a new service using smart ICT in their libraries.

4.3.3. Preparations
Before the workshops with international trainers, two seminars were organized (first in December after the workshop in Ankara and the other – in January) with the librarians. The first seminar was devoted to present the goals and activities of the project, to learn librarians' expectations for the

project activities and in the second seminar we discussed their attitudes towards developing smart ICT, found out about the skills and competences of ICT they gained. The librarians were asked to talk to their school communities about the participation in the workshop allocated to the library users (teachers and students). The librarians were presented the goals of the workshops. The school librarians of the district were really interested in the workshops (15 librarians of 18 participated in the workshops, there are 18 in total in school libraries in the district).

4.3.4. Tools and Methodologies

A collection of tools and methodologies were used to test and construct the Xlibris Methodology set.

Photo Wall

Photo Wall is paper version of Facebook where participants create their profile and connect it with other participants' profiles. The construction of the Photo Wall (like a Facebook on paper) is an exercise for understanding the common touchpoints between people. It helps to understand who is connected with who, that has a critical relevance to understand the concept of local stakeholder map. This can be combined with Empathy Map which explores what participants are were willing to give/take in the workshop. It helps creating identity, supports team building and contributes to alignment.

Lego® Serious Play®

Lego® Serious Play® (LSP) methodology enables participants to understand the dynamic, interlaced systems with many feedback loops on the personal side with four steps: Challenging with questions, constructing, sharing through methaptors and reflecting.

Posing the Question: The challenge, which should have no obvious or correct solution, is presented to the participants. The framing of the challenge is clear and concise for participants to connect.

Construct: Participants make sense of what they know and what they can imagine by constructing a model using the LEGO® materials, and develop a story covering the meaning in the model. Through this process, participants construct new knowledge in their mind.

Sharing: The stories are shared among the participants.

Reflect: As a way of internalizing and grounding the story, participants are encouraged to reflect on what was heard or seen in the model.

Innovation requires engagement that goes well beyond crowdsourcing: it requires a user centric approach, and it demands for collaborative and constructive processes where participants build ideas and concepts, negotiate meaning and engage in creative activities together to create mutual value – value for the system and for the learners. Values that go into the design and development of a better user experience that target needs and values that are latent, subconscious and that LEGO® Serious Play® can surface. In such a perspective, LSP is the beating, engaging and revealing heart of a co-creation experience, helping organisations and users to engage in constructive conversations to build together, iteratively, the next user experience, innovating services and products together.

Empathy Map

An empathy map is a collaborative tool teams can use to gain a deeper insight into their customers. Much like a user persona, an empathy map can represent a group of users, such as a customer segment and helps to develop a better understanding of the person for whom the product/service is going to be developed.

Empathy Map is used to help in the discussion about the needs a user has. Using it allows to focus on what was observed, and what can be inferred about different user groups' beliefs and emotions.

Designing products/services with the Empathy Map helps to synthesize observations and draw out unexpected insights.

Business Model You®

A personal business model is the logic by which an individual creates and delivers something valuable to customers. The Business Model You® methodology applies principles of entrepreneurship to the work we do as individuals. Traditionally these principles were applied only to organisations. It helps to describe, clarify, improve or reinvent the sevice model.

Combining the power of Lego® Serious Play® and BMYOU helps to extract in a meaningful way what the value proposition is.

4.3.5. Implementation and Lessons Learned – Librarian Workshop

1st Day (3 March 2015)

1. The trainers prepared the room and the tables for 5 groups.

2. The first activity of the workshop started with the photo-wall. Each participant was taken by poloraid camera and had her poloraid picture, which was sticked to the wall, then they were asked to write on the stickers their expectation (what to give and to take from the workshop) and what they like and dislike about the job and also to stick on the wall near their photos. The participants were asked to present themselves in front of the photo wall, what they expect to take and give and what they like and dislike about their job. They also told what is their relationships with other participants.

   Notes and lessons learned: It was too long, people get bored and instead of listening they start talking to each other. Better to make personal introductions short.

3. The participants made an Empathy Map. They wrote the ideas on sticky notes and put on the map.

   Notes and lessons learned: It was difficult to relate to the emotions from previous presentations. Empathy Map (second time it is used after Ankara workshop) did not provide a good result. Participants had difficulties to understand its role and in the end it did not serve to its purpose.

4. The next activity was Lego Serious Play. Participants expected to design the lego model of in-service training they need to fulfil their changing role as a school librarian. The participants described their models. Almost all of them focused on competences of cooperation, communication and leadership even though they couldn't explain why they need them, they mentioned about improving the library's room (place) conditions and didn't consider much to think about smart ICT using skills for establishing new smart services.

   Notes and lessons learned: The establishment of new smart ICT services is very new so the librarians couldn't accept they needed to develop ICT competences to improve library services reflecting modern clients' needs.

5. Then the team building activity (Allignment Game) followed. The participants were given twelve rules each for a participant and they had to follow the rule and build a model using Lego pieces. Nevertheless, the rules were explained the participants had a lot of problems to build it correctly. They managed to do it only by a second try.

   Notes and lessons learned: This activity showed that participants need to develop team work competences and proved that Allignment Game is a very good activity to realize the importance of the issue.

6. The other activity using Lego Serious Play was to design the lego model in which the librarians had to show how they imagine themselves in their libraries and they had to describe their models.

   Notes and lessons learned: The librarians described themselves as the queens (this was unexpected), psychologists, teachers, listeners, helpers and they presented themselves more as owners of the room but not as a library service provider. Lego Serious Play worked well to find out about the actual situation.

7. Another activity was using Lego Serious Play to build a model of someone in the group.

   Notes and lessons learned: This was another activity to get acquinted with Lego. However it did not serve to the main purpose very much.

8. Participants were given some perception exercices. FLOP or FLIP and Rabit-Duck slides were shown, which proved how differently it might be understood. The participants were told the story of a giraffe and asked 4 questions.

   Notes and lessons learned: The participants saw different words: FLIP and FLOP and different animals and presented different ideas for the questions. It was a useful exercise to show that people might see things differently.

9. The participants were shown the observation video with the murder case (Whodunnit!) and they had to explain if they had noticed the changes in the room where the crime had been committed.

   Notes and lessons learned: Only few participants noticed some changes. Only after it was explained that there were some changes they were more attentive and managed to notice some. This task is found interesting by participants. The activity focused on the improvement of participants' observation skills

10. Two videos about the difference of right-left brains were shown.

    Notes and lessons learned: These videos were inspiring as the librarians started to examine themselves if they are representatives of left or right brain. These several last presentations focused on making the librarians think how different they are and what contrasting knowledge they gain. This is another activity which woks well to make audience appreciate individual differences and understand how people complete each other in teams.

11. Two videos about social media and story of nativity were shown.

    Notes and lessons learned: These two videos made them consider the power of the social media. The participants liked the story of nativity.

2nd Day (4 March 2015)

1. The workshop started with the song and the participants asked to sing and dance along.

   Notes and lessons learned: Singing made the participants more energetic and brought some good and positive spirit. Then the participants were explained the programme of the secondday's workshops. This is an activity to use when there is a need for appositive start.

2. The workshop started with the presentation of the social media channels and their tools: A video and powerpoint presented about branding, how to tell stories in the social media and how powerful they are. How we are convinced by these stories on social media, billboards and posters.

   Notes and lessons learned: The participants agreed on the power of marketing especially on social media. Because on the first day it was realized that participants were not very familiar with social media, it was a good idea to include this presentation. It provided some background information. Although most of the participants have accounts on Facebook they are very passive users. Most of the participants don't have experience on using social media channels and the tools at all.

3. The librarians were mentioned about shown Smore flyer about Shelfie competition. The librarians were invited to take part in this competition. They were also given some information about Iconosquare and about getting metrics for Instagram accounts.

4. Next activity was to build a lego model of a new user service by applying smart ICT. There were five groups which created 5 library services. The groups were asked to present their models.

Notes and lessons learned: The librarians were working and creating their new services but it was difficult for them to focus on smart ICT while creating their services they preferred to consider more about the improvement of the room, furniture and other physical things rather than considering the establishment of smart ICT services. But with the help of the trainers they discussed about Facebook account on which they could create awareness about the library by the use of social media, branding competition for students by the use of social media, Skype meeting and video conferences on Skype with authors/writers, mobile app to access to the library catalog, assembling funds of free e-books and making them available on a created platform, discussion forums, virtual school library on created website, virtual exhibition of the events organized by the library.

5. In the afternoon the participants were asked to work on Business Model You Canvas. They were asked to project the ideas of creating a new service they designed in the previous activity. They had to put colourful sticky notes with the ideas on the canvas and after that present to the whole group. The questions they had to discuss: who helps for establishing a smart service, how are the librarians helped, what do they do, what competences they have and which ones they need to develop, how are they going to interact, and to whom do they help, what do they give for this service and what do they get from it.

Notes and lessons learned: The groups were working hard. The task was very difficult and the librarians needed extra explanation. They were confused when they needed to think about the cooperation with their helpers, decide how they are going to interact, who can be their helpers in creating the service, what they can personally give and get from this service, which competences they need to develop. While presenting their models they were not very precise to the question on Business model. This activity was very new for the participants so they needed more training to understand the matter. More explanations on the canvas and building block could be useful.

4.3.6. Participants – User Workshop
Teachers and students from schools in the district participated in co-creation workshops.

Moderator
Daniel Weiss (ISES, Spain)

Partners
Temenuga Kalcheva (Pencho Slaveykov Regional Library, Bulgaria)
Kristiana Dimcheva (Pencho Slaveykov Regional Library, Bulgaria)
Daniel Weiss (ISES, Spain)
Vaida Apsegiene (Radviliskis SSPC, Lithuania)
Skirmante Petraitiene (Radviliskis SSPC, Lithuania)
Carola Dierich (Wisamar, Germany)
Angela Hirsch (Gemeinde Kabelsketal, Germany)
Serap Kurbanoğlu (Hacettepe University, Turkey)

Users (Teachers and Students)
Jūratė Kanišauskienė (Geography teacher - Radviliškis V.Kudirka's Basic School)
Giedra Urbonienė (English teacher - Radviliškis Lizdeika's Gymnasium)
Daiva Sondienė (Social pedagogist – Radviliškis District Grinkiškis J.Poderis' Gymnasium)
Laima Stumbrienė Pprimary school teacher – Radviliškis district Alksniupiai Basic School)
Agnė Samulienė (Ethics teacher – Radviliškis Lizdeika's Gymnasium)
Liutauras Rumbavičius (Student - Radviliškis Lizdeika's Gymnasium)
Faustas Norvaiša (Student - Radviliškis Lizdeika's Gymnasium)
Auksė Krivickaitė (Student - Radviliškis Lizdeika's Gymnasium)

Vaiga Aleksandravičiūtė (Student - Radviliškis Lizdeika's Gymnasium)
Deimantė Kaltanaitė (Student - Radviliškis Lizdeika's Gymnasium)
Greta Bžuzauskaitė (Student - Radviliškis Lizdeika's Gymnasium)
Matas Budreckas (Student - Radviliškis V.Kudirka's Basic School)
Ūla Grigaliauskaitė (Student - Radviliškis V.Kudirka's Basic School)
Žemyna Jagėlaitė (Student - Radviliškis V.Kudirka's Basic School)
Ieva Navikaitė (Student - Radviliškis V.Kudirka's Basic School)
Povilas Laiševcevas (Student - Radviliškis V.Kudirka's Basic School)
Nedas Mackevičius (Student - Radviliškis V.Kudirka's Basic School)

4.3.7. Aims and Goals

The main goal of the workshops was to learn the needs of school library users (mainly teachers and students). Second goal was to encourage them to help designing new library services using smart ICT in their libraries.

4.3.8. Preparations

Preparations were the same with librarians' workshop. Same room and facilities were used. Participants were presented the goals of the workshops. Five teachers and twelve students participated.

4.3.9. Tools and Methodologies

The same set of tools and methodologies were used as librarians' workshop.

Photo Wall

Photo Wall is paper version of Facebook where participants create their profile and connect it with other participants' profiles. The construction of the Photo Wall (like a Facebook on paper) is an exercise for understanding the common touchpoints between people. It helps to understand who is connected with who, that has a critical relevance to understand the concept of local stakeholder map. This can be combined with Empathy Map which explores what participants are were willing to give/take in the workshop. It helps creating identity, supports team building and contributes to alignment.

Lego® Serious Play®

Lego® Serious Play® (LSP) methodology enables participants to understand the dynamic, interlaced systems with many feedback loops on the personal side with four steps: Challenging with questions, constructing, sharing through methaptors and reflecting.

Posing the Question: The challenge, which should have no obvious or correct solution, is presented to the participants. The framing of the challenge is clear and concise for participants to connect.

Construct: Participants make sense of what they know and what they can imagine by constructing a model using the LEGO® materials, and develop a story covering the meaning in the model. Through this process, participants construct new knowledge in their mind.

Sharing: The stories are shared among the participants.

Reflect: As a way of internalizing and grounding the story, participants are encouraged to reflect on what was heard or seen in the model.

Innovation requires engagement that goes well beyond crowdsourcing: it requires a user centric approach, and it demands for collaborative and constructive processes where participants build ideas and concepts, negotiate meaning and engage in creative activities together to create mutual value – value for the system and for the learners. Values that go into the design and development of a better

user experience that target needs and values that are latent, subconscious and that LEGO® Serious Play® can surface. In such a perspective, LSP is the beating, engaging and revealing heart of a co-creation experience, helping organisations and users to engage in constructive conversations to build together, iteratively, the next user experience, innovating services and products together.

Business Model You®
A personal business model is the logic by which an individual creates and delivers something valuable to customers. The Business Model You® methodology applies principles of entrepreneurship to the work we do as individuals. Traditionally these principles were applied only to organisations. It helps to describe, clarify, improve or reinvent the sevice model.

4.3.10. Implementation and Lessons Learned – User Workshop

1st Day (5 March 2015)

1. The workshop started with the music to break the ice. The participants were asked to dance together with the trainers.

   Notes and lessons learned: The participants did not expect such a start so they were a little surprised. Music and dance works well with young age groups. However, not always with all age groups in all cultures.

2. The first activity of the workshop started with the photo-wall. Each participant was taken poloraid a poloraid picture, which was sticked to the wall, then they were asked to write on the sticky notes their expectation (what to give and to take from the workshop) and also to stick them on the wall near their photos (their corner). The participants were asked to present themselves in front of the photo wall, what they expect to take and give and what they like and dislike about their library. They were asked to draw lines between profiles to show connections with other participants.

   Notes and lessons learned: The participants completed this task fast, some of them could speak English and it saved some time for translations.

3. Participants were asked to create a model of themsleves and explain it. Each of them presented who they are.

   Notes and lessons learned: This activity helped to learn more about participants. They always mention something they have not mentioned before in traditional way of self-introduction.

4. They were shown perception excercises (FLOP or FLIP and Rabit-Duck slides), which proved how differently it might be perceived. The participants were told the story of a giraffe and asked four questions to answer.

   Notes and lessons learned: The participants saw different words: FLIP and FLOP and different animals. They also had various answers for the questions. This was a good exercise to display individual differences and stress the value of team work.

5. The participants were shown the observation video with the murder case (Whodunnit!) and they had to explain if they had noticed the changes in the room where the crime had been committed.

   Notes and lessons learned: Only few participants noticed some changes in the first run. However in the second run (after explanations about changes) they managed to indicate more of them. The

activity focused on the participants' observation skills and was useful to show how complementary they would be.

6. Team building activity (Allignment Game) followed. The participants were given twelve rules each for a participant and they had to follow the rules without talking to eachother and construct a building by using lego pieces. They managed to fulfil the task on the second run.

   Notes and lessons learned: This is an activity works very well to show how important communication within a team. Because everyone has a task to accomplish however it might sometimes cause a conflict with the tasks of others.

7. The other activity Lego Serious Play was to design the lego model to answer the following question: *What is the role your school library plays in your life?* Teachers and students had to answer with models they create.

   Notes and lessons learned: The participants designed various models with very different ideas for the library's role in their life: some of them presented very positive ideas (can talk to the librarians, receive some help, ask some advice), the others had only negative emotions (angry librarian, small room, dark environment). This activity was useful to understand how they see the school library.

8. Two videos about the difference of right-left brain people were shown.

   Notes and lessons learned: Teachers were more inspired with the testing of right-left brain than students. This was again a useful exercise to show the differences among people and how valuable it is in teams.

9. Participants were presented the power of social media and they watched the story of nativity. They also were presented some other examples of social media and how influential and effective it is, how we are occupied by social media.

   Notes and lessons learned: The students liked the story of nativity. They agreed on the power of social media. They were shown and invited to take part in Shelfie competition.

10. The second question was *How would you use social media in your library?* The participants had to create a model in a group to answer the question, then they presented their ideas.

   Notes and lessons learned: Their ideas were to create a library blog to discuss about books They also suggested organizing some fun activities to make library more interesting as a place (bunjee jumping example), digitally born material (homework, projects) can be organized and made available in the library, teens teach elderly how to use social media. They also considered to provide audio books (podcasts), they thought about creating their own podcasts about local history and new dissemination channels for announcements of new arrivals/books (Facebook or Pinterest).

2nd Day (6 March 2015)

1. The second day started with the task to create Business Model on the Canvas for establishing new services in their school libraries. They were asked to project the ideas of creating a new service they designed in the previous day. They had to put colourful sticky notes with the ideas on the canvas and after that present to the whole group. The questions they had to discuss were to answer who helps for establishing a smart service, how participants are helped, what they do, what competences they have and which ones they need to develop for the new service, how they are

going to interact, and to whom they help, what they give for this service and what they get from it. Then the groups presented their work and ideas.

Notes and lessons learned: The groups were working hard. The task was very difficult. It was difficult from the beginning to understand what Business model is. While they were creating they were consulted and given extra information. It was very unusual for the participants to understand that their decision could be accepted or they could do something to innovate the library. The participants focused more on material innovations and only after extra explanation they were turned to the idea of smart ICT.

2. The last task was to evaluate the group work using Lego Serious Play and presenting the ideas.

Notes and lessons learned: The groups presented the evaluation models, the ideas were positive, the groups presented what was difficult but explained that difficult tasks helped to understand and consider new smart ICT possibilities and define/design new, modern attractive library services.

4.4. Services Defined by Workshop Participants

1. Using Skype telecommunication application, the library provides the service to contact writers, poets, artists, journalists and other cultural personalities for interactive literature, history, language and even science classes. The librarian using social media (for example Smore) advertises interactive classes.

2. Using Facebook social network, the library operates the literature discussion corner on Facebook. The readers review the literature they read, discuss, express their ideas and learn new things from each other. The librarian initiates and coordinates different literature competitions on Facebook, create digital document of best works on Joomag social media.

3. Using School's website, Facebook and Pinterest social media tools, the librarian creates a place on social media where she delivers and informs about new received printed and digital documents in the library.

4. School libraries service all school community, not only teachers and schoolchildren, but parents and grandparents who come to the school library to learn how to use Smart ICT 3.0. Schoolchildren cooperate with the librarian and involve elder generations in lifelong learning linked to use Facebook and Instagram social media. The librarian coordinates this service and schoolchildren are teachers for their parents and grandparents. The elder generation learns how to usesocial media, how to create Blogs, find and join the social groups they are interested, write comments, discuss and express their opinions on current affairs.

5. Using School's website, and social media accounts such as Facebook and Instagram the library organizes virtual exhibitions, initiates competitions and using Smore all events taking place in the school library, are advertised.
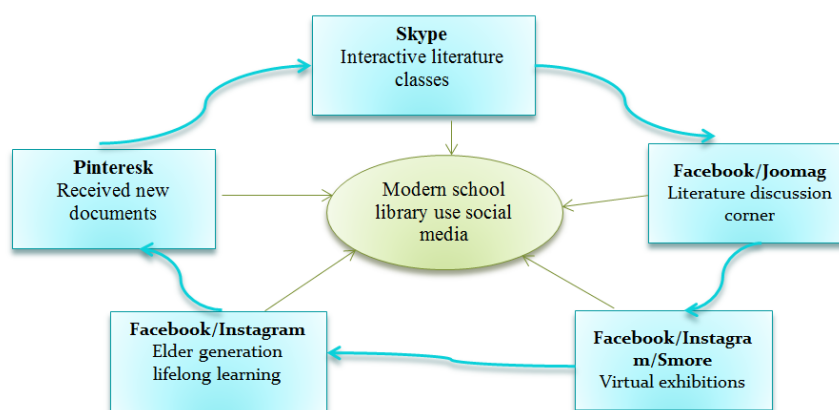
4.5. Satisfaction after Workshops

4.5.1. Librarians
• Inspiring approaches in the workshops: interactive participation, applied Lego serious games methods, informative videos, learning how to build a team and working in a team, practicing English
• The participants could discover their strength and weakness
• They are encouraged to create an innovative school library which will provide smart new services and develop new lifelong learning practice
• They are cheered up to use social media tools which will make the school library services more appealing and contribute to learning practices in the library
• They are motivated to participate in-service training programmes and develop their competences and skills in the use of social media, to improve their cooperative and communicative competences, to broaden their outlook and break stereotypes for inability to change the school library's services.

4.5.2. Users (Students and Teachers)
• Inspiring approaches in the workshops: interactive participation, applied Lego serious games methods, practicing English
• They are stimulated to be involved in creating smart library services for their school libraries
• Learning more about the power and possibilities of social media tools
• Finding out the school library is able to change and to provide smart services, which will attract more users
• Knowing the librarians will change their attitude towards the library's users.

4.5.3. General Feedbacks
The officers and adult teachers of Radviliškis in-service training centre received a very useful feedback of how to improve their courses, in-service training programmes or other non-formal training activities which could enhance teachers, librarians and other stakeholders' qualification. The centre should perform:
• to reorganize the way the institution deliver the in-service training;
• to develop a curricula of new social media training (another e-service) for teachers and libraries;
• to implement trans-generational projects and create non-formal training programmes for social good bringing kid's library users and librarians to work together in learning on social media strategies and services;
• to coordinate the redefining of the school library space and services;
• to operate on programmes linked to smart ICT 3.0 social media and deliver to pedagogical community in the district;
• to encourage teachers to use social media for virtual library books.

The workshops proved that librarians lack some competences which are necessary for a 21st century person. In addition these weaknesses discourage librarians to think or start any changes in their libraries. The shortage of smart ICT knowledge impedes their possibilities to innovate the service in a school library. In the beginning of the workshops most participants found it difficult to see the modernization of the libraries applying only smart technologies. They pictured the physical modernization of the room in the library but after several tasks they conceived the importance of new services with social media.

Librarians have to participate in in-service training actively as they should:
• develop general competences such as learning to learn, cooperation and communication, being proactive and creative;
• improve their Smart ICT competences and learn new things linked to Social Media;
• participate in trainings devoted to discovering issues of generation gap;
• be active in modernizing the school library's service and applying Smart ICT 3.0 social media in the library's services.

The teachers and students also learnt lots of new things linked to social media and how they can participate in modernization of the school library's services with application of smart ICT social media. They discovered new things and the workshops resulted in positive cooperation for making a smart school library which will create opportunities for innovative learning spaces.

The teachers should:
• participate in service training activities linked to developing competences of smart ITC and the use of social media;
• be encourage to take part in progression of school libraries using social media.

The students should:
• be encouraged to participate in competitions organized on social media;
• initiate competitions on social media cooperating with the school librarian and teachers;
• participate in progression of school libraries applying smart ICT.

The participants of the workshops expressed only positive emotions and feelings for Xlibris trainings, therefore this result projects a smooth performance of future Xlibris work.

After workshops in Lithuania, the institution, the educational centre, will prepare and deliver the in-service training course of 60 hours based on smart ICT: social media and tools The learners will gain the competences which will help them organize services of using social media and their tools in libraries so that they could satisfy a 21st century user and attract their clients by smart technologies and useful service such as received new documents, Interactive literature classes, literature discussion corner, virtual exhibitions, smart ICT workshops for elder generation of school community and other smart services.

4.6. Providing Insights through Crowdsourcing

After defining the services and completing service design crowdsourcing is used get some inputs and reflections from users and peers. This provided different perspectives from wide range of individuals (from potential users to experts) before the services are actually implemented.

Within Xlibris a special crowdsourcing platform Brick-me, which is developed by Daniel Weiss, one of the members of the project team, was used (http://platform.brickme.org/index.php?page=ex). Brickme platform helped to share new service ideas and obtain insights from peers across the country.

This platform allows to create a Business Model YOU Canvas for presenting different aspects of the project based on canvas segments. It also allows to add Lego Serious Play videos.

Brick-me interface was translated in to Turkish. An account was created for Hacettepe University. Within this account a board was created for each service in Turkish (to ease the undersatnding of local stake holders and actual target groups) which includes the following:

- The title
- Short description
- Detailed description
- Short video presentation
- Business Model building blocks
- Business Model Canvas
- Lego Serious Play model building videos
- Photos

A deadline was set for each «service project». Contributors were invited through various channels to give feedback and provide inputs about the services by choosing predefined categories along with personal inputs. These inputs were used for fine-tuning the service design.

Brick-me service boards can be seen in the following links:

Interactice Classes: http://platform.brickme.org/index.php?page=cp&id=22
Literature Discussion Corner: http://platform.brickme.org/index.php?page=cp&id=27
Advertising New Acquisitions: http://platform.brickme.org/index.php?page=cp&id=28
Virtual Exhibitions: http://platform.brickme.org/index.php?page=cp&id=29
In-service Training on Social Media: http://platform.brickme.org/index.php?page=cp&id=17

4.7. Matrix

A matrix which is developed for the Xlibris was used for further fine-tuning as well as determining infrastructural and training needs. Xlibris Matrix includes everal components additional to a short description. Components of the matrix are:
- Description of the service
- ICT to use
- Nature of the service
- Target group
- Infrastructure
- Support
- Knowledge & competences needed by the service provider
- In-service training needs for service provider
- Knowledge & competences needed by users
- User training needs

These information is partly derived from the Canvas completed during the previous phase. New elements were carefully filled. Infrastructural requirements such as Internet connection, broadband, features and the quantity of devices to utilize and support needed (if any) from other professionals such as graphical designer, innovation designer, programmer, teacher, app developer, certified Lego Serios Play expert, are determined. Knowledge and competences required to deliver these services are defined. In-service training needs are determined based on the comparison between knowledge and skills required to create the service and the actual case. Training needs for users are determined based

on the comparison between knowledge and skills required to use the designed service and their actual competencies.

Lithuanian services matrix can be seen in the following link:
http://www.ugdcentras.lt/xlibris/matrix.pdf

4.8. Service Development and Implementation

Infrastructure, support and in-service trainings are provided if/when necessary and the process continued with the actual service development and implementation.

4.8.1. In-service Training on Social Media

Backgound Information: In the twenty first century, learners need skills, which enable them to face the challenges posed by new technologies. We cannot ignore the effect of social media on personal and professional lives. Thus, it is very important to integrate social media based learning tools in teaching/learning. Social media can help teachers to organize teaching/learning according to the learners' changing needs.

The use of social media helps to organize classes outside a classroom and answer the learners' needs. SocMed provides teachers with abundant material so as to assess student learning, this material can be accumulated in school libraries. Use of social networks provides enough opportunities to transform the passive and teacher centred teaching/learning an active and student- centered teaching/learning communication. Teachers can share links to a number of learning resources, can post homework assignments, and share news with the student community. Social media also helps to involve students, who don't feel comfortable speaking in a classroom of more than 20-30 students, they may post their opinion to contribute to class discussion.

The use of social media as a learning tool encourages collaboration. The basic nature of social media stimulates collaboration among learners, teachers and librarians. It allows teachers and librarians to form a learning community and boost student interaction on the social media platform. Social media provides a platform to students to give feedback on each other's assignments, work in groups to create content, to ask questions, and to start a discussion. As a result, students learn by interacting with their peers. In this way Social Media increases students' engagement. The familiar environment and informality of the environment makes the learning process more interesting and enjoyable. They are automatically more receptive to material presented on social networking sites. The use of social media tools provides teachers with an opportunity to reach students who are hesitant to be an active member of the teaching/learning process.

References
https://www.researchgate.net/...Social_Media...Educational.../55f3eff
www.edudemic.com
www.edutopia.org/social-media-education-examples-facebook

Service Description: This is an in-service training programme based on the use of smart ICT and social media.

Aim: The aim of this service is to develop competences and skills for the use of smart ICT and social media for educational purposes.

Target Group: Librarians (from school and public libraries) and teachers from pre-school, secondary and vocational schools

Importance: It is obvious a traditional library does not exist with the same function as it has been for many years since humanity invented the letter. Paper books are becoming less and less popular especially among present generations. Young children start to use a computer and Internet tools earlier than they learn the first letter. So, there is a necessity to find new approaches to be attractive libraries for today's generation. The problem is that we have elderly librarians who are not as good at smart technologies and social media tools as schoolchildren. Librarians and teachers who create teaching/learning environment should develop their smart IT and the use of social media skills to establish new services, organize more attractive events for students encouraging their curiosity and learning motivation. Introducing smart technologies and social media to a school and applying smart IT 3.0 and social media tools in the educational field is a very new subject and it requires developing pedagogical community's skills of IT and the use of social media for educational purposes as well as designing their attitude for the importance of the application of new technologies and social media in teaching/learning processes. This in-service training programme of 40 hours focuses on developing librarians' and teachers' skills and competences of smart IT 3.0 and the use of social media, and its tools. This programme aims to address the needs of modern generations.

Rationale: There is not such an in-service training programme in Lithuania as it is a very new subject. Elderly generations lack competences and skills of smart IT and use of social media.as well as forming the attitude towards new approaches such as social media and smart IT use in teaching/learning processes. Gaining these competences and skills the participants (librarians and teachers) will apply their knowledge to educational field and form the attitude of necessity to change, be attractive and organize effective teaching/learning environment.

Scope: the programme consists of 40 hours, social media and its tools, use of smart ICT, establishment in a library, use of new service, social media and its tools application in education:

Smart ICT Used: social media and its tools: Facebook, Skype, Vimeo, Animoto, Pinterest, Instagram, Flickr, mobile equipment

Learning Outcomes: participants who complete this training program can
• understand the importance of applying social media in teaching/learning to satisfy modern generation;
• become aware of the model of modern libraries offering new services based on smart technologies and social media;
• gain the knowledge how to apply smart ICT and social media creating an attractive teaching/learning environment;
• develop and establish new library services and become modern to satisfy young generation.

Development Process: After X-Libris project had started the trainers from non-formal training department for adults and youths of Radviliškis educational and sport service centre studied the situation of the use and application of social media, librarians' and teachers' competences and skills to use smart technologies and social media. After the trainings with X-Libris team it was studied during the first meeting with the programme participants about their opinion and attitudes towards changes of the library, teaching/learning approaches and application of modern smart technologies. The programme was prepared to support learners with the knowledge based on smart technologies and the application of social media tools for educational purposes.

Material for the workshop:
https://prezi.com/8gonu2srdedp/socialines-medijos/?utm_campaign=share&utm_medium=copy

Implementation of the Service: Two training workshops were organized in Radviliškis educational and sport service centre:

1. For school librarians in the district in June 2015, participated 14 school librarians
http://animoto.com/play/0C5r6ygI52K6pYSosWB9zA
https://www.facebook.com/Xlibris.lt/photos/a.857902484261646.1073741828.857887667596461/949735395078354/?type=3&theater

2. For school teachers from gymnasium and basic schools in October 2015, participated 17 learners
https://animoto.com/play/fuqsBnEAqQ20sTcHTLwsyA
https://vimeo.com/152163669

4.8.2. Interactive Classes

Backgound Information: This type of classes is more attractive and effective. The schoolchildren are more interested in the subject as they communicate with famous writers, poets and other well-known people. Teachers also become engaged in organizing non-traditional classes in addition they learn together with their students. At the same time libraries are becoming modern accumulating digital material.

Service Description: Organization of Interactive literature, cultural and arts classes using social media tools.

Aim: The aim of this service is to consult, teach and develop competences and skills to apply smart ICT and social media for organization interactive literature, cultural and arts classes.

Target Group: Librarians (from school, public) and teachers from secondary schools.

Importance: Interactive lectures using social media Skype is a teaching technique that is an efficient method to present the content in classes of any size and it is efficient for sharing information with large numbers of students and may result in students who listen passively. Making lectures interactive by including techniques such as social media, can foster active engagement and enhance the value of the lecture segments. Directly communicating with famous writers, poets actors, actresses, artists, etc. asking and answering questions, receiving the tasks and implementing them make learning more attractive and effective. Using approaches and techniques that allow all students to participate and get interested will promote students' retention and learning of the material presented during lectures. School libraries record and accumulate the material which can be used for other classes and students' groups.

Rationale: There is not such an activity in school libraries. Teachers organize interactive classes but the material has not been accumulated in school libraries and this kind of classes is usually used for one group of students. Elderly generations lack competences and skills of smart IT and use of social media.to organize and later accumulate interactive classes. Gaining these competences and skills the participants (librarians and teachers) will be encouraged to organize more this type of classes as the teaching/learning process is more effective and attractive. In addition the teaching /learning is outside the classroom which makes students be interested in the subject even more.

Scope: The private and individual consultations for librarians and teachers, social media and its tools, use of smart ICT, establishment a new teaching/learning approach in a library, use of social media and application of its tools in education. The library provides the service to contact writers, poets, artists, journalists and other cultural personalities for interactive literature, history, languages and even science classes. It is a training which presents the possibilities of smart ICT and social media. It trains

librarians and teachers to use Skype tools and apply them for educational purposes. The library provides the service to develop students' writing and readings skills, and improve their critical thinking and learning to learn competences

Smart ICT Used: Social media and its tools: Skype, mobile equipment

Learning Outcomes: participants who learn and implement can
- understand the importance of applying social media in teaching/learning to satisfy modern generation;
- become aware of new teaching/learning approaches and techniques which make learning more effective;
- gain the knowledge how to use *Skype* for organizing interactive literature, cultural and arts classes;
- develop and establish new library services; recording and accumulating interactive classes to satisfy modern young generation.

Development Process: During X-Libris team trainings the librarians, teachers and students developed five services and one of which was interactive literature, cultural and arts classes using social media tools. The participants and the trainers decided to use Skype for this activity. The lack of competences encouraged librarians and teachers to learn about the possibilities to use Skype how to record these classes, make them in a digital format and accumulate the material for future use. School librarians are responsible for accumulating the material of the classes and teachers will initiate such classes.

Implementation of the Service: The trainers from Radviliškis educational and sport service centre delivered individual consultations, visited school libraries and helped librarians and teachers to organize this activity from February to May 2016.

Virtual class with children's writer Tomas Dirgėla, the writer becomes a teacher who speaks to children (age 12-13) and gives the task, which they completed and sent to the writer. The writer's task was to imagine they are writers and the children had to create their stories. https://www.flickr.com/photos/vaizgantoprogimnazija/albums/72157668295641326

4.8.3. Literature Discussion Corner

Backgound Information: This type of classes is more attractive and effective. The schoolchildren are more interested in writing reviews on Social Media, Facebook than in their exercise books. Teachers also become engaged in organizing review activities on Social Media. This might spread more widely and become an advertisement to other people. In addition teachers and librarians improve their smart IT use and learn more about Social Media tools.

Service Description: Organizing *Literature discussion corner* using social media tools.

Aim: The aim of this service is to consult, teach and develop competences and skills to apply smart ICT and social media for organization Literature discussion corner.

Target Group: Librarians (from school, public) and teachers from secondary schools.

Importance: young children are less and less interested in reading and have low writing skills. This is because young generations are digital material users but not traditional paper book readers. School libraries have established this new service using Social Media Facebook in this case*.* School librarians coordinate students and teachers for this activity. Teachers encourage students to read books (no matter paper or digital), express their opinion and post on Facebook. This might encourage other students to read and write a short review for the book. It is more effective when the book is reviewed

by their mate than by the teacher. In addition it also helps in involving students, who otherwise don't take part in the teaching learning process. For example, if a student does not feel comfortable speaking in a classroom they may post their opinion to contribute to the discussion of the book. In this way they develop their reading and writing skills, improve critical thinking and learning to learn competences. Librarians are presented several Social Media tools on which this service can be organized. Librarians and teachers had consultations with the trainers in which they discussed the most effective way to establish this activity.

Rationale: There is not such an activity. Teachers encourage students to write book reviews in an traditional way in their exercise books but to organize it on Social Media such as Facebook which is more effective and of course attractive as young students are SocMed generation. Elderly generations lack competences and skills of the use of Social Media for educational purposes. Having gained these competences and skills the participants (librarians and teachers) will be encouraged to organize more similar activities based on Social Media and its tools for teaching/learning process. In addition the teaching /learning can be organized outside the classroom. The teachers can assess their students for the best review or organize the competition of the most popular book.

Scope: the private and individual consultations for librarians and teachers, social media and its tools, use of smart ICT, establishment a new teaching/learning approach in a library, use of social media and application of its tools in education. The library provides the service to develop students' writing and readings skills and improve their critical thinking, and learning to learn competences.

Smart ICT Used: Social media and its tools: Facebook, mobile equipment

Learning Outcomes: Participants who learn and implement can
• find out the best choice for the use of Social Media
• learn about the importance of applying social media in teaching/learning to satisfy modern generation needs
• become aware of new teaching/learning approaches and techniques on Social Media which makes learning more effective
• gain the knowledge how to use Facebook tools for writing book reviews
• develop and establish new library services to satisfy modern young generation.

Development Process: During X-Libris team trainings the librarians, teachers and students developed five services and one of which Literature discussion corner. The participants and the trainers decided to use Facebook for this activity. The lack of competences encouraged librarians and teachers to learn about the possibilities to organize this activity and service for the school library. School librarians are responsible for accumulating the material of the classes and teachers will initiate such classes.

Implementation of the Service: The trainers from Radviliškis educational and sport service centre delivered individual consultations, visited school libraries and helped librarians and teachers to organize this activity from February to May 2016.

https://www.facebook.com/Radvili%C5%A1kio-r-%C5%A0iaul%C4%97n%C5%B3-Marcelino-%C5%A0ik%C5%A1nio-gimnazijos-literat%C5%B3-kampelis-1589919324589394/?fref=ts

https://www.facebook.com/photo.php?fbid=10205743985935428&set=o.857887667596461&type=3&theater

Literature in Radviliškis Lizdeika's gymnasium and Šiaulėnai M.Šikšnis' gymnasium libraries encourage their schoolchildren to read and write book reviews, discuss expressing their opinion, organize literature afternoons for new book discussions.

4.8.4. Virtual Exhibitions

Backgound Information: This type of exhibitions is more beneficial and attractive for modern generation. The schoolchildren are more interested in digital information. Teachers also become engaged in organizing such types of exhibition. Virtual exhibitions might spread widely and give information about the school and they are not only useful for academic information. In addition teachers and librarians improve the use of smart IT and learn more about the use of Social Media.

Service Description: Organizing *Virtual exhibitions* using Social Media tools.

Aim: The aim of this service is to consult, teach and develop competences and skills for applying Social Media for organizing virtual exhibitions.

Target Group: Librarians (from school, public libraries) and teachers from secondary schools

Importance: This major thrust of nowadays is information delivery. In these approaches a stream of information is broadcasted to people via any Social Media. A number of Social Media tools like Facebook, Youtube can provide a platform to publish or share information, or links to a number of resources available online. The importance for school libraries is to increase librarians' and teachers' awareness and competences to read digital information, estimate and analyze it. Librarians should develop their ability to select beneficial and useful information. So, virtual exhibitions are the best way to advertise school's events and deliver academically orientated information as well as   promote the educational institution in the combating community. Moreover students as well as teachers can exchange information related to the content under study. This approach is very beneficial to students belonging to different learning abilities as well. The information provided through Social Media will help the learners to understand content well as well as getting the enriched content related to the concept in hand. In addition the feedback of virtual exhibitions given on these posts will also provide the information in the teaching/learning process. What is more, digital exhibitions cost less material expenses than traditional ones. The trainers will support teachers and school librarians with the necessary knowledge to organize digital exhibitions using Social Media: how to use Social Media tools, how to organize digital material and upload it, the learners are also presented the regulations of copyright law.

Rationale: There is not such an activity. Teachers and librarians are encouraged to organize virtual exhibitions for educational purposes. Elderly generations lack competences and skills of the use of Social Media. Having gained these competences and skills the participants (librarians and teachers) will be more self-confidence for the use of Social Media. The teaching /learning can be organized outside the classroom in a non-traditional way. Virtual exhibition approaches are the best way for delivering information

Scope: the private and individual consultations for librarians and teachers, Social Media and its tools, use of smart ICT, establishment a new teaching/learning approach in a library, use of Social Media and its tools application in education. The library provides the service to broaden students' horizons, improve their critical thinking and learning to learn competences.

Smart ICT Used: Social media and its tools: Facebook, Pinterets, Flickr, mobile equipment.

Learning Outcomes: Participants can
- organize virtual exhibition on Social Media;
- use Social Media in teaching/learning process;

- become aware of new teaching/learning approaches and techniques on Social Media which present knowledge and information more effectively;
- gain the knowledge and use Facebook, Pinterest, Flickr tools for organizing digital exhibitions;
- establish new library services to satisfy modern young generation.

Development Process: During X-Libris team trainings in Lithuania the librarians, teachers and students developed five services and one of which organization Virtual Digital exhibitions. The participants and the trainers decided to use Facebook, Pinterest and Flickr for this activity. The lack of competences encouraged librarians and teachers to learn about the possibilities to organize this activity and service for the school library. School librarians are responsible for organizing the digital material to publish exhibitions on Social Media.

Implementation of the Service: The trainers from Radviliškis educational and sport service centre delivered individual consultations, visited school libraries and helped librarians and teachers to organize this activity from October 2015 to May 2016.

https://www.pinterest.com/vaizgantas/pieva/
https://www.pinterest.com/grazinosmokykla/

Digital exhibitions are most acceptable and attractive, so almost all school libraries in the district (the librarians and teachers who participated and completed the in-service training programme) have established this service. They have chosen different Social Media platforms and tools to organize and publish this material. These two links are examples from two schools' virtual exhibition, however there is the necessity to improve and develop the organization of digital material on Social Media.

4.8.5. Advertising New Acqusitions

Background Information: In the twenty first century, modern generations need to be able to find the information they need fast and not moving from the place. They are used to searching for the information on-line but not searching for it on the shelves. The use of Social Media helps to organize activities outside the school and answer the modern generation's needs. Use of social networks and mobile equipment provide enough opportunities to attract passive learners. In addition teachers and librarians can share links of new material to encourage their students to look at this new material.

Service Description: Advertising new received printed and digital documents in the library using social media tools.

Aim: The aim of this service is to consult, teach and develop librarians' competences and skills to organize and publish new books and other documents on Social Media, learn how to use smart IT for knowing new information.

Target Group: Librarians (from school, public libraries) in Radviliškis district.

Importance: Modern generation is digital information users. Young people are also perfect users of mobile equipment which is considered smart technologies. Thus, teachers and librarians should search for more effective ways to reach a present schoolchild. In addition advertising new material on Social Media and encouraging them to use mobile equipment is very comfortable and beneficial for elderly generation as well. The obstacle for elderly generation is lack of competences of the use of smart IT and Social Media tools. In addition it is necessary to encourage the elderly generation to be aware of the importance for the application of Social Media tools and use of mobile equipment for effective learning and ease in a fast life pace. There is a lack of training which could support librarians and teachers with the necessary knowledge to organize this activity in school libraries.

Rationale: There is not such an activity. Librarians are encouraged to advertise new books, magazines, newspapers for school community and other communities in the district. Elderly generations lack competences and skills of the use of Social Media. Having gained these competences and skills the participants (librarians) will be more self-confident for the use of Social Media and smart IT. The information can be reached outside the library. Advertising new received material in libraries is a convenient approach for all school community (students, teachers, parents and others)

Scope: the private and individual consultations for librarians and teachers, Social Media and its tools, use of smart ICT, establishment a new type of presentations of information in a library, use of Social Media and its tools; reach information using mobile technologies. The library provides the service to present information of new received material on-line.

Smart ICT Used: Social media and its tools: Facebook, Pinterest, Flickr, mobile equipment

Learning Outcomes: participants learn how
- to publish material on Social Media
- it is important to use Social Media for presenting information to satisfy modern generation needs
- to use new approaches and techniques on Social Media which are more effective and convenient
- to gain the knowledge and use Facebook, Pinterest, Flickr tools for the service.

Development Process: During X-Libris team trainings in Lithuania the librarians, teachers and students developed five services and one of which was publishing new received material in the library on-line. The participants and the trainers decided to use Facebook, Pinterest and Flickr for this service. The lack of competences encouraged librarians and teachers to learn about the possibilities to organize this activity. School librarians learn with the trainers' help how to use the Social Media tools and mobile equipment to publish this information.

Implementation of the Service: The trainers from Radviliškis educational and sport service centre delivered individual consultations, visited school libraries and helped librarians to organize this activity from December 2015 to May 2016.

https://tr.pinterest.com/akavaliausk0235/%C5%A1eduvos-gimnazijos-bibliotekos-naujos-knygos/
https://tr.pinterest.com/givanauskien/

The link is for the digital information about new received books at Radviliškis district Šeduva's gymnasium and Radviliškis Lizdeika's gymnasium using Pinterest tools.

4.9. Dissemination

Dissemination was carried out mainly through project website and both general social media accounts of the project and social media accounts of the partners.

Project website: http://xlibrisproject.org

4.9.1. Social Media Channels: Lithuania

- Facebook: https://www.facebook.com/Xlibris.lt
- Twitter: https://twitter.com/xlibris_lt
- Vimeo: https://vimeo.com/channels/xlibrislt
- Smore: https://www.smore.com/u/x-libris

Chapter 5

German Smart ICT 3.0
New Libraries Services
OER

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CHAPTER 5

GERMAN SMART ICT 3.0 NEW LIBRARIES SERVICES - OER

5.1. Current State of Partner Institutions (Germany)[3]

5.1.1. Wisamar Bildungsgesellschaft

Wisamar Bildungsgesellschaft is a non-profit educational institute in Leipzig, Germany, acting in vocational, cultural and adult education. Our fields of activity are:

- Competence and Dialogue Centre: consulting and supporting labor market integration
- Professional and personal development
- European Project Management and Information on European topics (e.g. ECVET)
- EU mobility

Wisamar is accredited by the German Institute for Adult Education as competence and dialogue center for ProfilPASS consultancies. In addition we are a certified training provider for measures by the Federal Employment Office. We carry out competence analysis, consultancy, job application training as well as different further education modules, in cooperation with local partners.

Together with partners from the Leipzig-Halle region as well as from all over Europe we are committed to common European activities in education as well as regional development. Therefore we carry out activities in vocational and adult education, in formal as well as non-formal and informal fields. In our language and mobility center we offer young people as well as teachers, trainers and human ressources staff the possibility to take the broader view, gain practical experiences in another country or exchange with colleagues about teaching methodologies and contents as well as its organisation. We were awareded already with "Good Practice Awards" for high quality management of mobility projects as sending and receiving partner.

5.1.2. Gemeinde Kabelsketal/ Municipality Kabelsketal

The Municipality Kabelsketal is situated in the Central German Metropolitan region around the cities Leipzig and Halle and is part of the Saalekreis District in the federal state of Saxony-Anhalt. The municipality Kabelsketal was founded in 2004 and incorporated the former municipalities Dieskau, Dölbau, Gröbers and Großkugel. The number of inhabitants is about 8.800.

Kabelsketal is situated in a rural and disadvantaged region in Germany with an unemployment rate over 20 percent, which leads to social problems. The economy and purchasing power is low. This is why Kabelsketal has been engaging itself in European projects since 2007 in order to contribute to the development of the municipality as a part of Europe. Kabelsketal aims to enhance the sense of belonging and strengthen citizens' commitment to their community.

5.1.3. Library Kabelsketal

The library is situated in the secondary school in Gröbers and has several rooms with approximately 50 qm² in total for disposal. The municipality is renting those rooms from the administrative district Saalekreis, which is responsible for the school. It is a public library open to all residents, so not only to the pupils of the school, and it is free of charge. Mrs. Angela Hirsch runs the library. She is the only person working there, 16 hours a week.

Because the library is situated in a school, the opening hours of the library depend on the opening hours of the school. The library is open on 3 days during the week – Monday, Tuesday and Thursday from 10:30 a.m. until 3:30 p.m. Because Gröbers is not the only locality in Kabelsketal several years ago the municipality Kabelsketal established a mobile book service. Once a month books, films etc. - also after consulting the users - are brought by Angela Hirsch with a car to users in the districts Kleinkugel, Großkugel and Zwintschöna. The dates are published before in the official gazette of the

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[3] This part of the text is copied from Chapter 2 (IO1), in order to keep the integrity of the content.

municipality. In this way also older residents have the possibility to borrow books and other media without much effort.

The number of visits to the library lies between 350 and 450 each year. At the moment the library has around 80 active users. The age of the users ranges from 6 years up to 70+. Pupils from the primary and secondary school are the main users of the library. After consultations with the teachers, a general introduction into the library is organized for different grades, especially for the younger pupils. Here the focus is to explain to the pupils what kinds of media the library offers, how it works to borrow something and when it is open. While having a look through the small library the pupils often find something, which they are interested in and so they become regular users of the library.

In the library it is possible to borrow novels, children's books and nonfiction books. Furthermore, the library offers CD's, videos and DVD's. At the moment the library has around 8.420 different media – ca. 3.000 novels, ca. 2.300 children's books and ca. 1.480 nonfiction books. Every year around 1.300 media are borrowed from the library. The municipality had to close the second small library in Kabelsketal in May 2015, which was situated in Großkugel. All media from the library in Großkugel have been moved to the library in Gröbers. Unfortunately the library in Großkugel did not have an updated list of the inventory, so the inventory of those media has now a high priority.

The library is still administered on paper, for example the user information and which books they borrow is kept on index cards. The data of the users are already also stored on the computer. The library is also still working with a card index. Mrs. Hirsch started to do the inventory of the library with the computer.

Until March 2015 the library had no internet connection and therefore it was not possible for users to reach the library over the internet, for example via e-mail. This point has now been addressed due to the X-libris project. The library has an internet connection since April 2015 and an official e-mail address, so the users can reach Mrs. Hirsch via e-mail. Also the new established Facebook site of the library provides information on the X-libris project as well as new from the library, for example when the library is closed or which new books have been bought.

Every year the library gets a budget to make new acquisitions. In this way over the last years new media could be added to the inventory of the library. The library tries to react on the wishes of the users which new media to buy. In addition, book donations are very welcome and are integrated into the inventory.

An extensive asset to the library is the librarian, Angela Hirsch, with her positive attitude and her friendly and open-minded personality, which is very important in the everyday personal face-to-face contact with the users. She brings her creative ideas, energy, motivation and experience to the library.

The location of the library will change in 2016, since the secondary school where the library is situated at the moment will be renovated. For now it is planned to move the library to a primary school in Dieskau, another part of Kabelsketal and about 6 km from Gröbers where the library is now. This will offer new opportunities to work together with this primary school. But there is no information yet about the new space of the library and the details such as room size, internet connection etc.

Areas for Improvement

Since the library is a voluntary service by the municipality, the existence of the library is never certain. Every year the local council has to decide upon the future of the library. A sustainable concept to secure the existence of the library is needed.

The library is not administered by computer yet. Therefore it is necessary to digitize the whole inventory of the library.

The accessibility of the library is very limited due to the opening hours. People who are working during the day do not have the possibility to come to the library.

In general the library has to be more visible to the public so that more people consider using the library.

Innovative Ideas

To improve the accessibility of the library without having to extend the opening hours the library catalogue should be available online. To get to this point the first step is to digitize the inventory and ask the users and volunteers for help to finish this process faster. In this way the users get involved in the whole transformation of the library from the beginning. After programming the database and the website all users will be able to look through the holdings of the library in the internet. A further step could be to program the website in a way that the user can also order the book or DVD online. This would also improve the mobile service and make it easier for the users to get what they request. The work of the librarian becomes much easier as well, when she can add new media directly into the online database and administer the inventory on the computer. The launching of the website will be made public not only in newspapers and on the website of the municipality, but also through social media channels, which will be linked to the website.

The library opened social media sites (facebook, twitter, pinterest, Instagram, vimeo) to inform about the Xlibris project, but also about the innovations and new services within the library itself and the users can comment on that. The social media sites make it possible for example to ask the users which new books or films should be bought or to present their favorite book from the library.
In this way the library will be more accessible and attractive for the community, the number of users grows and in addition it stimulates social contacts and communication among the residents.

People at Risk of Exclusion

The municipality Kabelsketal is a rural area in a disadvantaged region of Germany with an unemployment rate over 20%. Therefore, the access to cultural activities is very limited, especially for children and elderly people, since for them it is not as easy to get to the nearby cities of Halle and Leipzig as for the working population often working in one of those cities. Thus, the risk of social exclusion is primarily high for unemployed people, children and elderly people within the municipality Kabelsketal.

The library of Kabelsketal is an important place for those people at risk of exclusion. It is not only a place of books and knowledge for the inhabitants to continue their learning, but also a meeting place. For elderly people, who do not have their family nearby and who come to the library, the librarian is an important interlocutor. Through the mobile service to different towns in the municipality, the library offers its services to all parts of the municipality. The users do not only use the date when the librarian is coming to their town to borrow books, but also to meet each other and get into exchange with the librarian about news within the municipality.

In order to make the library more accessible, to improve the mobile service and to foster the learning in terms of digital competences of elderly people, the development of an easy to use online catalogue for the library of Kabelsketal is a very important step. The users will be able to search for books in advance and order them via e-mail, so the librarian can bring them the next time she will come to the town. In addition, the users will be regularly informed about news from the library (e.g. new books, events, closing times, dates of the mobile service etc.) through Facebook. Facebook could also help to form a community of library users and to foster a regular exchange among them.

5.2. Service Co-design and Methodology Development through Workshops

Workshops organized for co-designing and defining services with users and experimenting with different innovative methodologies to develop Xlibris Methodology tool set as well as finding the best possible way to benefit from each methodology with the purpose of service co-design. A two days workhop was organized at Municipality of Kabelsketal, Germany between 10-11 June 2015.

5.2.1. Participants

Moderators
Daniel Weiss (ISES, Spain)
Mercedes Hoss-Weis

Participants
Angela Hirsch (Library of the municipality Kabelsketal)
Kurt Hambacher (Mayor of the municipality of Kabelsketal)
Carola Dierich (wisamar Bildungsgesellschaft gGmbH)
Gregor Assfalg (wisamar Bildungsgesellschaft gGmbH)
Sabine Röhrig-Mahhou (wisamar Bildungsgesellschaft gGmbH)
Maria Hirsch (Municipality Kabelsketal)
Lilianna Franz (librarian)
Jessica Scherneck (student of library and information science at HTWK Leipzig)
Miriam Grünz (student of library and information science at HTWK Leipzig)

Partners
Serap Kurbanoğlu (Hacettepe University Department of Information Management, Ankara)
Orçun Madran (Hacettepe University Department of Information Management, Ankara)
Tolga Çakmak (Hacettepe University Department of Information Management, Ankara)
Skirma Petraitiene (Radviliškis District Municipality Educational and Sport Service Centre)
Radka Kalcheva (Pencho Slaveykov Regional Library Varna)
Emil Demirev (Pencho Slaveykov Regional Library Varna)
Emiliya Milkova (Pencho Slaveykov Regional Library Varna)

5.2.2. Aims and Goals

The main goal of the workshop was to find out the needs of the library in Kabelsketal and how to address those needs through the designing of new smart ICT related services by using innovative methodologies such as Lego® Serious Play® and Business Model YOU®. Therefore another objective of the workshop was to see which skills the librarian Angela Hirsch needs to develop and implement those services in the library. In this way we want to transform the library of Kabelsketal into a more modern library of the 21st century.

5.2.3. Preparations

The preparations for the workshop started well in advance. To inform about the workshop and to invite participants a workshop flyer has been created. This flyer was disseminated among the social media channels of wisamar, the municipality of Kabelsketal and the library. The flyer was furthermore published on two websites where people can find regional workshop and training offers. The invitation to take part in the workshop was also sent to the faculty of library and information science at HTWK Leipzig and the dean sent it over the mailing list to the students. In addition about 60 libraries in the regions of Leipzig and Halle have been contacted with a personal e-mail invitation. Also an article about the workshop has been printed in the official gazette of the municipality Kabelsketal. The users of the library were invited through personal contacts of the librarian Angela Hirsch and the mayor Kurt Hambacher and flyers in the library itself.

Unfortunately none of the users of the library Kabelsketal was able to attend the workshop. Therefore it became obvious that the library needs to activate its current users to re-design the library together and to attract new users to the library. Students from HTWK Leipzig (Leipzig University of Applied Science) registered for the workshop as well as participants from wisamar and the mayor of Kabelsketal.

The workshop room was prepared one day before the workshop. Projector, flip-chart, pinboard, post-its, pens, etc. were provided and the tables and chairs were arranged – one big table for common discussions and 5 smaller tables for working in smaller groups.

5.2.4. Tools and Methodologies
A collection of tools and methodologies were used to test and construct the Xlibris Methodology set.

Photo Wall
Photo Wall is paper version of Facebook where participants create their profile and connect it with other participants' profiles. The construction of the Photo Wall (like a Facebook on paper) is an exercise for understanding the common touchpoints between people. It helps to understand who is connected with who, that has a critical relevance to understand the concept of local stakeholder map. This can be combined with Empathy Map which explores what participants are were willing to give/take in the workshop. It helps creating identity, supports team building and contributes to alignment.

Empathy Map
An empathy map is a collaborative tool teams can use to gain a deeper insight into their customers. Much like a user persona, an empathy map can represent a group of users, such as a customer segment and helps to develop a better understanding of the person for whom the product/service is going to be developed.

Empathy Map is used to help in the discussion about the needs a user has. Using it allows to focus on what was observed, and what can be inferred about different user groups' beliefs and emotions. Designing products/services with the Empathy Map helps to synthesize observations and draw out unexpected insights.

Consumer Trend Canvas
With the Consumer Trend Canvas the participants analyze new consumer trends by identifying the basic consumer needs and desires to get an understanding of the trend. It is also analyzed how this

trend is applied by other businesses to understand it even better and get inspiration. In a second step the participants have a look how to apply this trend to a library and uncover innovation opportunities.

Trend & Innovation are quite new concepts applied to libraries since most of the library services are very well defined. However there is a shift in the vision of new users who are requesting creative and innovative services. Originally named Consumer Trend Canvas, was turned into Library Branding Canvas, to find out what the library can offer that becomes either a trend or an innovation.

Lego® Serious Play®

Lego® Serious Play® (LSP) methodology enables participants to understand the dynamic, interlaced systems with many feedback loops on the personal side with four steps: Challenging with questions, constructing, sharing through methaptors and reflecting.

Posing the Question: The challenge, which should have no obvious or correct solution, is presented to the participants. The framing of the challenge is clear and concise for participants to connect.

Construct: Participants make sense of what they know and what they can imagine by constructing a model using the LEGO® materials, and develop a story covering the meaning in the model. Through this process, participants construct new knowledge in their mind.

Sharing: The stories are shared among the participants.

Reflect: As a way of internalizing and grounding the story, participants are encouraged to reflect on what was heard or seen in the model.

Innovation requires engagement that goes well beyond crowdsourcing: it requires a user centric approach, and it demands for collaborative and constructive processes where participants build ideas and concepts, negotiate meaning and engage in creative activities together to create mutual value – value for the system and for the learners. Values that go into the design and development of a better user experience that target needs and values that are latent, subconscious and that LEGO® Serious Play® can surface. In such a perspective, LSP is the beating, engaging and revealing heart of a co-

creation experience, helping organisations and users to engage in constructive conversations to build together, iteratively, the next user experience, innovating services and products together.

Business Model You®
A personal business model is the logic by which an individual creates and delivers something valuable to customers. The Business Model You® methodology applies principles of entrepreneurship to the work we do as individuals. Traditionally these principles were applied only to organisations. It helps to describe, clarify, improve or reinvent the sevice model.

Combining the power of Lego® Serious Play® and BMYOU helps to extract in a meaningful way what the value proposition is.

5.2.5. Implementation and Lessons Learned

1st Day (10 June 2015)

6. The workshop started with the Paper Facebook Wall activity. A polaroid picture was taken from every participant and they were asked to write on post-its what they like and dislike about libraries. Every participant created a corner on the wall with their picture, name, likes and dislikes about libraries. Afterwards the task was to create links between the participants. They drew lines from their picture to the pictures of people they already know. In this way the network among the participants became visible.

7. Empathy Map: The following activity was to take the post-its from the Photo-Wall and pin them to the Empathy Map to create a general profile of a library user.

Notes and lessons learned: The Empathy Map is a good tool to imagine the general user and has a great potential for understanding the emotions and needs of the user. But it should be explained in more details and maybe it would be better to start with the Empathy Map from scratch and not to combine it with the post-it's of the Photo (Facebook) Wall.

8. The story of the library Kabelsketal: Angela Hirsch introduces the participants to the library of Kabelsketal. She described the general situation of the library, as well as details about the lending of books and the mobile book service. The participants were also able to ask questions to get a better insight into the library Kabelsketal.

   Notes and lessons learned: The participants were very interested in the situation of the library and asked the right questions to be able to work on solutions for the improvement of the library. It would be good to share pictures of the library or even visit the library so the participants see it with their own eyes, so they can make observations and conclusions about the situation of the library.

9. Business Model Canvas: During the story of the library Mercedes Hoss-Weis took notes and arranged them on the Business Model Canvas. Afterwards she introduced the Canvas to the participants and summarized the state of art of the library Kabelsketal. Through this activity the current problems of the library became obvious to the participants.

   Notes and lessons learned: The summary the story on the Business Model Canvas worked very well. In this way the participants got a first overview how the Canvas works and how to use it.

10. Lego Serious Play: All participants got the same Lego bricks and were asked to build a tower that talks about themselves. Afterwards they introduced their models to the other participants. It was interesting to see that with the same bricks you can build really different models.

    Notes and lessons learned: Although the question was to build a model that talks about themselves the participants explained their models afterwards in relation to libraries. They talked about what a library means to themand how to improve it. Therefore it is necessary to make the question at the start very clear and ask the participants if they understood the question and the task they are supposed to do. This activity should probably come earlier to familiarize the participants with Lego and introduce them to each other.

11. Presentations: Two videos were presented to the participant. The first one tested the awareness of the participants and had the following message: It's easy to miss something you're not looking for. Through this video the participants were stimulated to look from different angles on a problem to find the best solution. The second video introduced the generation of digital natives to the participants. The digital natives, who know how to use a smartphone and to be active on social media from the beginning, will be the future library users and libraries will have to understand this user profile and adapt the library services to their needs.

    Notes and lessons learned: The videos are good to activate the participants after a break and to make them think from a different perspective. Nevertheless the direct link to the previous and following activities of the workshop should be clearly communicated to the participants. Also it would be good to have the videos in the native language of the participants, since they had problems to follow the English.

12. Lego Serious Play/ Consumer Trend Canvas: The participants were gouped into pairs and asked to fill in the Consumer Trend Canvas on the question: 'What could you do to attract users to the library?' and build a Lego model on their ideas and innovations for the library.

Notes and lessons learned: The participants had difficulties to understand the Consumer Trend Canvas and how to fill it in. Some more explanation how to use this tool is necessary. Also it could be useful to define what a trend is and identify the trends together before filling in the Canvas.

13. Business Model Canvas: During the presentations of the Consumer Trend Canvasas with the new ideas and innovations for the library Mercedes Hoss-Weis again took notes and arranged them on the Business Model Canvas. In this way the innovations for the library were summarized and gave a good picture on future perspectives for the library.

     Notes and lessons learned: The summary on the Business Model Canvas worked again very well. Than the participants were able to compare the Business Model Canvas on the state of the art of the library and the one on the future library.

14. To summarize the day action points for the next day were taken from the Business Model Canvas of the future library. It was agreed upon which problems are the most important and which should be addressed as soon as possible.

Action points:
- Developing a concept
- Design new activities to attract more users to the library, increase visits and make the library a social center
- Increase visibility (social media, local media)
- Education services/ training

2nd Day (11 June 2015)

8. The day started with a look on the action points from the previous day.

9. Business Model Canvas: The participants were asked to take one of the listed action points and to describe their idea for this action point with the Business Model Canvas. This Business Model Canvasas were presented afterwards.

     Notes and lessons learned: It would be good to have the Business Model Canvas in the native language of the participants and also adapt the Canvas to the library setting.

10. The participants were asked to think of a concrete service/ activity feasible for the library Kabelsketal that can be implemented in the near future. Therefore the task was also to write down every single step to be taken until the service is implemeted. The participants were asked not only to write down words, but to use all the materials provided – pens for drawing, post-it's, Lego, etc. Afterwards the participants shared their ideas, reflected and gave feedback to each other.

11. The workshop was closed with an evaluation of the participants. In general all participants were satisfied and agreed that the results of the workshop are very valuable ideas for the transformation of the library.

5.3. Services Defined by Workshop Participants

During the workshop it became clear that the library needs a modern, appropriate and sustainable concepts. Therefore a lot of discussion took place on a concept for the library during the workshop. In this context the participants discussed a unique selling point for the library, which could be a regional orientation. In order to be more visible for the public the library needs an effective marketing strategy including the creation of a logo and a motto.

In general the ideas and innovations for the library were not only based on smart ICT and often connected to cooperations with external partners:

Cooperation with the Leipzig University of Applied science
The department of library and information science of the university could be helpful:

- to establish the library catalogue,
- to support a survey in the municipality Kabelsketal to analyze the needs, expectations and wishes of the people towards the library,
- to provide training for the librarian

This activities would make a website with an online catalogue and a user interface possible. The online catalogue would make the library much more accessible, since the users will be able to look through the catalogue and order books from home. Therefore also the mobile service would benefit from the online catalogue. Some users will need training on the online catalogue and how to use it. To be able to train people how to use the catalogue the library would need one or two computer workstations with internet connection.

Cooperation with Local NGO's
Through cooperations with local NGO's in Kabelsketal local activities and events could be organized for example based on topics such as geocaching, digital maps or storytelling. With those events the library would get more visibility and the results of those events can be shared and communicated through social media.

European Projects
The library can benefit a lot from European projects like the X-libris project and should stay engaged in this area.

Own activities
During the workshop also smaller activities were mentioned, that can be organized by the librarian without a big investment of money and time in the near future:

- book readings
- reading competitions
- night of reading
- story-time for children in kindergartens, nursery schools and the library
- a book club (face-to-face or online e.g. on facebook)
- activities on social media like competitions (e.g. Shelfie-competition or Bookface-competition)
- producing stop-motion videos on the stories of books from the library with the users
- reference service
- list of most wanted and newly arrived books with the book cover, a description and user comments

In addition the participants developed ideas how to improve the mobile service. The mobile service should be visible (logo of the library on the car), audible (ringing a bell when the mobile library comes into town) and perceptible (though the books the mobile library brings to the people).

5.4. Services Defined Based on Participants' Reflections
After the workshop wisamar and the librarian of the library Kabelsketal discussed the results of the workshop and tried to identify those services which are based on ICT and are practicable for such a small library in a rural area. Therefore ideas which need a lot of investment of money and time are not possible to be implemented. The following proposed services are planned to be implemented, but

since the workshop was only taking place one week ago those services are not final and might be changed after some more reflections during the next months.

5.4.1. Online Catalogue

First of all the library Kabelsketal needs a digital catalogue where all the media are listed, because the current catalogue is a card index and is not up to date. After the digitalization of the catalogue it is planned to make the catalogue public as an online catalogue. This online-catalogue will provide basic functions to look for media regarding the title, the author or the ISBN-number. Through the online catalogue the users of the library will be able to have a look which media are available in the library and order it from home via e-mail or telephone. This enhances the availability of the library. The online catalogue would also simplify the mobile service in order to take the requested media to the users.

5.4.2. Training on Working with the Catalogue

In order to use the online catalogue efficiently the librarian will need training how to work with it – how to insert new media and delete old media in the back end. Also the users will need to get familiar with the online catalogue. Whereas teenagers and young adults will use the online catalogue intuitively, young children and elderly peope will need some help. Therefore the librarian will offer individual trainings in order to provide additional guidance especially for those target groups and include this training into the general library introduction for young school children.

5.4.3. In-service Training on Basic Marketing

This service is an in-service training for the librarian of the library Kabelsketal and will be carried out by wisamar Bildungsgesellschaft gemeinnützige GmbH. The training will cover the creation of a logo in connection with a slogan as well as the development of easy publicity materials such as poster or flyers for effective public relations work in order to make the library more visible to the inhabitants of Kabelsketal. In addition the librarian will learn about basic marketing tools and how to use them for the public relations work of the library. The training is planned as face-to-face training.

5.4.4. In-service Training on Social Media

In order to be able to activate the users through social media the librarian needs in-service training on how to use social media. Due to the fact that facebook is the most widely used social media in the area, the training will focus on this particular social medium. This training will be provided by wisamar Bildungsgesellschaft gemeinnützige GmbH. The librarian will learn how to work with facebook effectively and how to engage users actively. Furthermore the librarian will gain knowledge on creating services through social media, for example organizing and initiating discussions and competitions using social media. The training is planned as face-to-face training.

5.4.5. Activation of Users through Social Media

The library is going to use social media, in particular Facebook, not only to give information and news about the library, as for example on newly arrived media, but also to get into contact with its users. The Facebook site will be used for discussions on literature, giving book recommendations to each other and a competition on which new books to buy depending on the number of people who would like to have the book and the explanation why the library should have it.

5.5. Providing Insights through Crowdsourcing

After defining the services and completing service design crowdsourcing is used to get some inputs and reflections from users and peers. This provided different perspectives from a wide range of individuals (from potential users to experts) before the services are actually implemented.

Within Xlibris a special crowdsourcing platform Brick-me, which is developed by Daniel Weiss, one of the members of the project team, was used (http://platform.brickme.org/index.php?page=ex). Brickme platform helped to share new service ideas and obtain insights from peers across the country.

This platform allows to create a Business Model YOU Canvas for presenting different aspects of the project based on canvas segments. It also allows to add Lego Serious Play videos.

Brick-me interface was translated into German. An account was created for the library Kabelsketal. Within this account a board was created for each service in German (to ease the undersatnding of local stakeholders and actual target groups) which includes the following:

· The title
· Short description
· Detailed description
· Short video presentation
· Business Model building blocks
· Business Model Canvas
· Lego Serious Play model building videos
· Photos

A deadline was set for each «service project». Contributors were invited through various channels to give feedback and provide inputs about the services by choosing predefined categories along with personal inputs. These inputs were used for fine-tuning the service design.

Brick-me service boards can be seen in the following links:

Online Catalogue: http://platform.brickme.org/index.php?page=cp&id=15
Training on Working with the Catalogue: http://platform.brickme.org/index.php?page=cp&id=23
In-service Training on Basic Marketing: http://platform.brickme.org/index.php?page=cp&id=24
In-service Training on Social Media: http://platform.brickme.org/index.php?page=cp&id=25
Activation of Users through Social Media: http://platform.brickme.org/index.php?page=cp&id=26

5.6. Matrix

A matrix which is developed for the Xlibris was used for further fine-tuning as well as determining infrastructural and training needs. Xlibris Matrix includes several components additional to a short description. Components of the matrix are:
· Description of the service
· ICT to use
· Nature of the service
· Target group
· Infrastructure
· Support
· Knowledge & competences needed by the service provider
· In-service training needs for service provider
· Knowledge & competences needed by users
· User training needs

These information is partly derived from the Canvas completed during the previous phase. New elements were carefully filled. Infrastructural requirements such as Internet connection, broadband, features and the quantity of devices to utilize and support needed (if any) from other professionals such as graphical designer, innovation designer, programmer, teacher, app developer, certified Lego

Serios Play expert, are determined. Knowledge and competences required to deliver these services are defined. In-service training needs are determined based on the comparison between knowledge and skills required to create the service and the actual case. Training needs for users are determined based on the comparison between knowledge and skills required to use the designed service and their actual competencies.

German services matrix can be seen under Resources/Matrixes/Matrix-DE on project's website: http://www.xlibrisproject.org/resources/

5.7. Service Development and Implementation

Infrastructure, support and in-service trainings are provided if/when necessary and the process continued with the actual service development and implementation.

5.7.1. Online Catalogue

Service Description: The service is a basic catalogue of the inventory of the library, which is available online for the library users.

Aim: The aim of this service is to make the catalogue of the library accessible for the users, so that they can look online from home if a book is available in the library or not.

Target Group: users of the library within the municipality Kabelsketal

Importance: Many public libraries in Germany, especially big ones, have an online catalogue at their disposal. The functionality varies from simple catalogues with a search function up to seeing if a book is available or borrowed and ordering or reserving media online. An online-catalogue makes a library available 24 hours 7 days a week despite the opening hours. Therefore, it enhances the accessibility of a library and simplifies the work of the librarians.

Rationale: So far, the library Kabelsketal has been working with a card index, which unfortunately has not been up to date. Therefore, there has been a need to update the catalogue and transferring the card index to the computer. In addition, the library has limited opening hours and the need to enhance the availability of the library has been obvious. From having a simple catalogue on the computer, it is not a big step to make it available online. In order to enhance the accessibility of the library in a way, that users can have a look at home what is available in the library and simplify the work and mobile service for the librarian, an online catalogue has been developed.

Smart ICT Used: The online catalogue is based on an easy-to-use software with a backend for the librarian. The catalogue is available online and therefore users need internet access.

Development Process: In order to develop the online catalogue for the library of the municipality Kabelsketal the following steps have been taken:
- discussion on the functions the online catalogue should have based on a research what other libraries of this size have
- decision on a basic functionality of the catalogue designed according to the target group in the rural area Kabelsketal: search for media regarding the title, the author or the ISBN-number
- digitizing and updating card index into an excel file

- decision to integrate the online catalogue into the website of the municipality Kabelsketal under the subpage dedicated to the library, where users can find general information on the library, place of the library and opening hours
- programming of the online catalogue and importing the excel file
- making the online catalogue public on the website of the municipality Kabelsketal
- disseminating the online-catalogue (e.g. through the facebook page of the library Kabelsketal)

Implementation of the Service: In order to implement the service, the steps described under 'Development process' have been taken. The longest process has been the cataloguing of the library or rather the digitizing and updating of the card index. The programmers started with the programming of the online catalogue in December 2015 and finished it in February 2016.

The online catalogue of the library Kabelsketal can be found under the following link: http://www.kabelsketal.de/de/uebersicht-buecher.html

After the online catalogue went online, it has been made public on the facebook page of the library Kabelsketal on 17th of February 2016.

5.7.2. Training on Working with the Catalogue

Service Description: The service is first of all an in-service training for the librarian, but also a service for the users how to use the catalogue.

Aim: The aim of this service is for the librarian to be able to work with the catalogue adding and deleting media from it, as well as for users where to find the catalogue and how to search media with it.

Target Group: libriarian of the library Kabelsketal; users of the library within the municipality Kabelsketal – especially school children and elderly people who need additional guidance.

Importance: The librarian as well as the users need to get familiar with the functionality of the online catalogue. Not everyone is able to use basic online applications intuitively. Therefore it is important to offer a short training for interested library users how to use the online catalogue. In addition especially the librarian needs training in order to integrate the use of the online catalogue into the daily work routines.

Rationale: Although teenagers and young adults use the new online catalogue of the library Kabelsketal intuitively, young children and elderly people need additional guidance. In order to address this need a video tutorial has been created and the librarian offers trainings on how to work with the catalogue.

Scope: Basic instruction on working with the new online catalogue of the library Kabelsketal are part of this training.

Smart ICT Used: Since the catalogue is online, computers with an internet connection are necessary to use the service.

Learning Outcomes:
The librarian who completes this training will be able to:

- Log-in and navigate through the back end of the online catalogue
- Insert and delete media from the online catalogue in the back end
- Navigate through the catalogue
- Search for media regarding the title, author or ISBN-number
- Explain to the users in a small training how the online catalogue works

Users who complete this short training will be able to:

- Find the online catalogue of the library Kabelsketal in the internet
- Navigate through the catalogue
- Search for media regarding the title, author or ISBN-number
- Order media through e-mail or phone at the library Kabelsketal

Development Process: As soon as the online catalogue has been developed, programmed and published, the librarian got a training how the catalogue works, how to access the back end of the catalogue and in which way it is possible to insert and delete media in the online catalogue. In this way the librarian gained the knowledge needed to explain the online catalogue to the users.

Implementation of the Service: Since February 2016 the online catalogue is public on the website of the municipality Kabelsketal. Therafter a video tutorial how to use the catalogue has been created in German language, which can be found under the following link: https://vimeo.com/169540268

For people who need additional assistance in working with the catalogue, short trainings are offered by the librarian on an individual basis. The librarian explains interested persons where to find the catalogue, how to search for media and what are the ways to order media at the library. Furthermore the librarian integrates a short introduction to the online catalogue into the general introduction to the library for young school children.
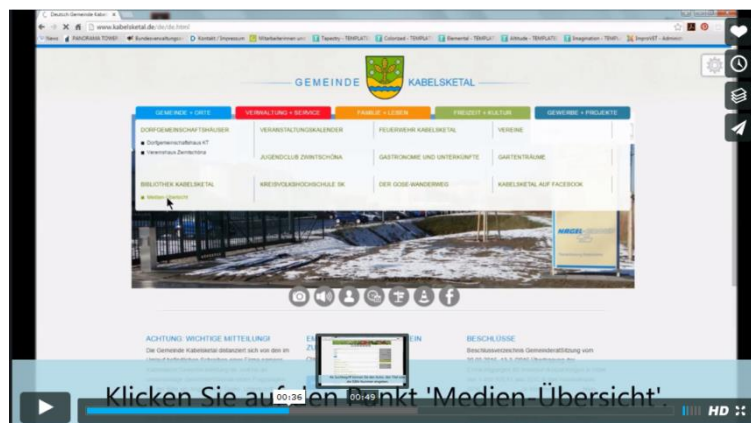
5.7.3. In-service Training on Basic Marketing

Service Description: This service is an in-service training on basic marketing, carried out by wisamar Bildungsgesellschaft gemeinnützige GmbH.

Aim: The aim of this service is to develop and implement a training workshop to make the librarian aware of the importance of marketing also for a small library, create a logo in connection with a slogan and teach her how to develop simple publicity materials such as poster or flyers. In addition, the librarian learns which basic marketing tools are relevant for a small library and how to use them for the public relations work of the library.

Target Group: librarian of the library Kabelsketal

Importance: Nowadays libraries need to have their own visual identity or image to be visible in the public and to be able to carry out successful public relations work. In this way, libraries can be seen as a brand, which has to be marketed. Therefore, librarians need basic knowledge and skills in marketing, especially when working alone or in a small team in a library. In the case of the library Kabelsketal, there is only one librarian employed on a half-time basis. Although trainings on general marketing exist, there is rarely a focus on marketing for libraries and especially not for the particular circumstances of a small library in a rural area with very limited resources.

Rationale: The library Kabelsketal is not very visible within the municipality. This is not only because it is situated in a secondary school, but also because the library does not have a visual identity. In order for inhabitants of the municipality of Kabelsketal to recognize the library, it needs an own image and how to use it through basic marketing. Since the librarian did not have any skills in the field of marketing or logo creation, an in-service training for her was necessary.

Scope: The training covered the creation of a logo in connection with a slogan as well as the development of easy publicity materials such as poster or flyers for effective public relations work.
Smart ICT Used: Computer programs like Adobe Photoshop and Adobe Illustrator have been used to create the logo for the library Kabelsketal. Furthermore, the librarian has been trained to develop simple marketing materials like posters on her own including the use of QR-codes.

Learning Outcomes: The librarian who completes this training program is able to:

- Become aware of the importance of marketing also for a small library
- Define what is important when developing a logo and slogan for a library
- Decide which kind of marketing materials are useful for a small library in a rural area
- Create simple marketing materials like posters on her own
- Decide which marketing tools and channels are useful and promising for a small library

Development Process: During the X-Libris workshop in Germany in June 2016 the need to enhance the visibility of the library within the municipality Kabelsketal. Therefore, within this workshop the idea to create a logo and a slogan had already been established. In order to integrate the ideas, needs and opinions of the librarian, it has been decided to expand the training and cover not only the logo development, but also discuss the use of the logo for marketing materials. Hence, it became obvious that a more general introduction into basic marketing is necessary and the need to link it to the reality of the library within the municipality Kabelsketal with practical examples.

Implementation of the Service: Wisamar Bildungsgesellschaft gemeinnützige GmbH prepared the training for the librarian and the training took place face-to-face on 12th of February 2016. The training covered the following aspects:

- Creating an image for the library – what to consider in developing a logo
- What is important when creating a motto/ slogan
- Basic design of materials (announcements, poster, etc.) with OpenOffice, including the use of QR-codes
- What marketing instruments are important for the library? (local gazette of the municipality of Kabelsketal, posters, social media – Facebook)

The visible results of the training are a logo and a slogan for the library as well as a small poster using the newly developed logo and a QR-code linking to the Facebook page of the library Kabelsketal.

Bibliothek Kabelsketal

Wir versorgen Sie mit Büchern!
(We provide you with books!)

5.7.4. In-service Training on Social Media

Service Description: This service is an in-service training on social media, in particular focusing on facebook, carried out by wisamar Bildungsgesellschaft gemeinnützige GmbH.

Aim: The aim of this service is to develop and implement a training workshop to develop a Facebook strategy for the library Kabelsketal through learning how to work with Facebook effectively and how to engage users actively.

Target Group: Librarian of the library Kabelsketal

Importance: Many German libraries have their own Facebook page mainly in order to reach younger people, make them aware of the services of the library and how they can use them to their advantage. In addition, Facebook pages are used to post news on the library like what is going on in the library, events, closing times, etc. In this way, it is easy for users to be up-to-date on what is happening in their library and are also able to give their opinion and contribute their ideas. In order to provide this service, librarians need in-service training.

Rationale: In order to be able to activate the users in the municipality Kabelsketal through social media the librarian needed in-service training on how to use social media. Due to the fact that Facebook is the most widely used social medium in the area, the training focused on this particular social medium.

Scope: The training covered the effective use of Facebook by developing a strategy for the Facebook page of the library Kabelsketal involving and engaging users on the page.

Smart ICT Used: Social media and its use with a focus on Facebook is the basis for the whole training.

Learning Outcomes: The librarian who completes this training program is able to:

- Use Facebook for the library Kabelsketal though the Facebook page of the library
- Develop a strategy for the Facebook page of the library
- Post interesting and useful information about the library as well as more general news from the world of books
- Engage users on the Facebook page through open questions, discussions or small competitions

Development Process: The Facebook page for the library Kabelsketal has been created in January 2015 within the scope of the X-Libris project. After the first months is became obvious, that the librarian needed additional knowledge on how to use Facebook more effectively and how to engage users actively. Therefore this in-service training has been developed. It is based on a research on the Facebook pages of other German libraries extracting the good practices. Afterwards the findings have been adapted to the circumstances of the library Kabelsketal. Therefore, it was important to keep in mind, that the librarian has very limited resources especially regarding time compared to big German libraries. This is why mainly Facebook pages of smaller libraries have been analysed to see what kind of information they post, in which way they reach the users and how they engage the users.

Implementation of the Service: Wisamar Bildungsgesellschaft gemeinnützige GmbH prepared the training for the librarian and the training took place face-to-face on 18th of February 2016. The training covered discussions on the following questions:

- How can Facebook be used effectively for the library Kabelsketal?
- What is interesting for the users and in which way should it be posted?
- How is it possible to initiate engagement by the users?

Answering these questions the following ideas have been established, which form the strategy for the Facebook page of the library Kabelsketal:

- Regularly informing about:
    - The library Kabelsketal (new books, events, opening/ closing hours e.g. during holidays
    - The X-Libris project
- Posting interesting, exciting and funny things from the world of books and therefore linking it to Facebook pages of other libraries
- Animating users to present and discuss their favourite books or favourite authors
- Organizing competitions e.g. on the name of the new mascot or which books to buy next for the library
- Using the stork of the logo as mascot for the library, who tells stories from the library and posts on Facebook
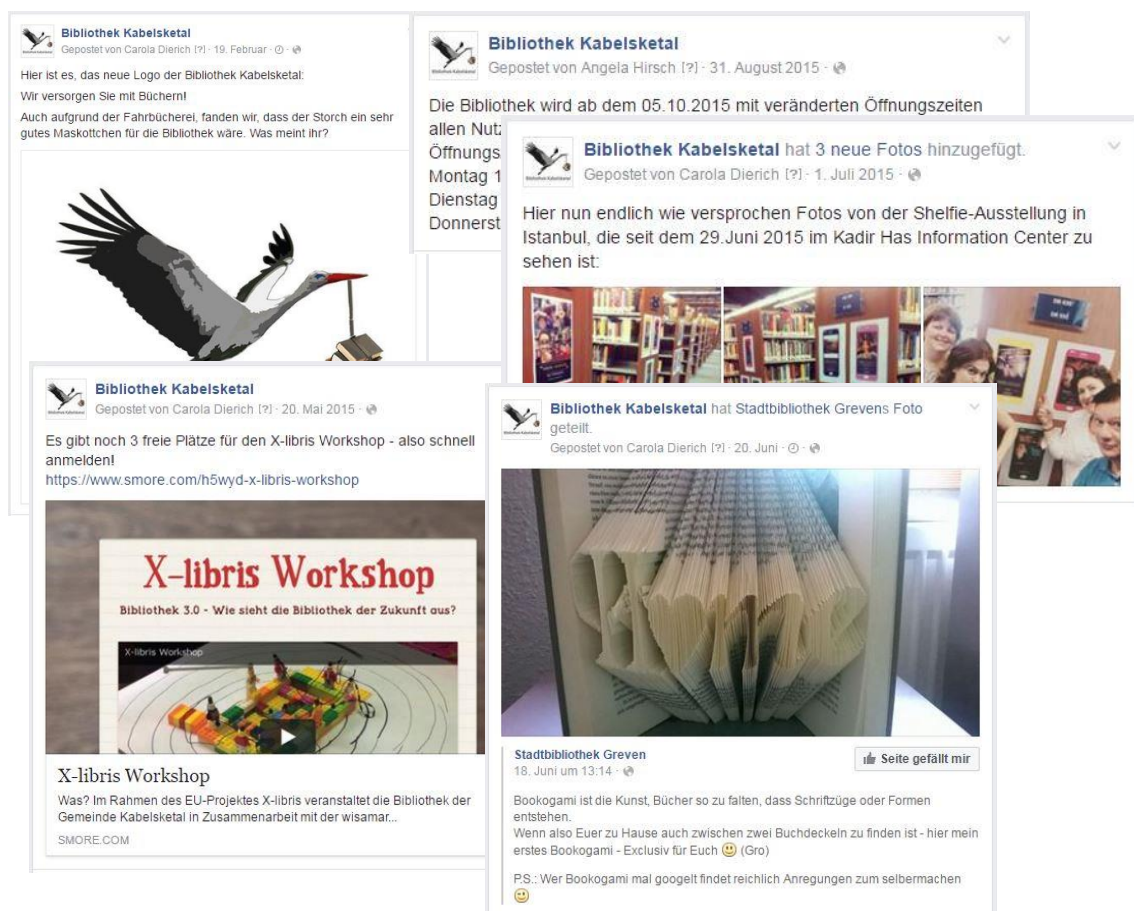
5.7.5. Activation of Users through Social Media

Service Description: This service is an online service provided by the library Kabelsketal using the Facebook page of the library.

Aim: The aim of this service is to activate the users of the library but also in general to reach the inhabitants of the municipality Kabelsketal in order to get new users for the library and make the library also visible online through social media, namely Facebook,

Target Group: inhabitants of the municipality Kabelsketal

Importance: Many German libraries have their own Facebook page mainly in order to reach younger people, make them aware of the services of the library and how they can use them to their advantage. In addition, Facebook pages are used to post news on the library like what is going on in the library, events, closing times, etc. In this way, it is easy for users to be up-to-date on what is happening in their library and are also able to give their opinion and contribute their ideas.

Rationale: First of all the library Kabelsketal is not very visible in the public and due to limited resources also the opening hours are restricted. Therefore, the library does not reach its potential in terms of number of users. In order to reach new target groups like younger people and make library information available 24/7, a Facebook page for the library has been established, which also completes the offer of the online catalogue with constant information. The Facebook page also offers a new channel to get into contact with the users in a different way.

Smart ICT Used: Facebook is used to activate people from the municipality Kabelsketal and enhance their interest in the library Kabelsketal.

Development Process: The first step for developing this service was the establishment of the Facebook page for the library Kabelsketal, which took place in January 2015. Originally, the page had been planned in the framework of the X-Libris project to inform about the project and its development. Since the project is linked to the library Kabelsketal, it has been decided to create the Facebook page not only for the project, but for the library as a whole. During an in-service training, the librarian obtained the knowledge and skills necessary to maintain the Facebook page of the library.

Implementation of the Service: Although the Facebook page for the library has been created in January 2015 and the librarian started to post information about the X-Libris project and the library, the real activation of users started after the in-service training on social media in February 2016. At that time also the logo for the library had been created, the online catalogue had been developed, and therefore relevant news on the development of the library could be posted.

The Facebook page of the library Kabelsketal can be found under the following link: https://www.facebook.com/buechereien

The strategy for the Facebook page includes the following topics:
- Information about:
  - The library Kabelsketal (new books, events, opening/ closing hours e.g. during holidays
  - The X-Libris project
- Interesting, exciting and funny news from the world of books
- Links to interesting developments within other German libraries and their Facebook pages
- Presentations and discussion on favourite books or favourite authors of the users
- Competitions e.g. on the name of the new mascot or which books to buy next for the library and why

5.8. Dissemination

Dissemination was carried out mainly through project website and both general social media accounts of the project and social media accounts of German partners.

Project website: http://xlibrisproject.org

5.8.1. Social Media Channels: Germany

- Facebook: https://www.facebook.com/buechereien
- Twitter: https://twitter.com/BiboKabelsketal
- Pinterest: http://www.pinterest.com/BiboKabelsketal/
- Instagram: https://instagram.com/bibliothek_kabelsketal
- Smore: https://www.smore.com/u/bibokabelsketal
- Vimeo: https://vimeo.com/channels/xlibrisde

Chapter 6

Bulgarian Smart ICT 3.0 New Libraries Services OER

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CHAPTER 6

BULGARIAN SMART ICT 3.0 NEW LIBRARIES SERVICES - OER

6.1. Current State of Varna Public Library[4]

Pencho Slaveykov Public Library in Varna was founded in 1883. It is a public institution supported by the municipality and the government. The library has been depository of the Bulgarian national literature since 1945. It is a regional library and centre for consulting other libraries in the North-East part of the country.

Latest statistic have shown that library collections number over 860 000 volumes of books, periodicals and other materials. 30% of our users are under 18 years old. Library collects and offers books and periodicals, manuscripts and archival documents, albums, cartographic publications, official documents, standards, written music, records, audio and video cassettes, CDs and DVDs. In its Regional History Dept. there is a unique and full collection of periodicals printed in Varna after 1880.

The Library is a member of the Bulgarian Library Association and a partner in a number of European non-governmental cultural programs and international projects.

The Library is situated in a city of 400 000 inhabitants, with regional responsibilities in an area of significant change. An increase in the number of adults with only a lower-level education highlights the risks of social exclusion and lost local traditions and is of deep concern for the library.

Current training activities for adults include cooperation with community groups serving seniors, maintaining collections and services of special interest to adults and workshops/one-to-one training on how to use new technologies. The last few years Public Library - Varna uses a method of active-learning for adults' trainings. The library has strong partnership with Centers for Rehabilitation and Social Integration and Senior Day Care.

The Library is one of the leading organizations in Bulgaria in the field of digitization. It started to digitize its rare and unique collections of serials, post-cards, photos, maps etc. several years ago. In 2008 Pencho Slaveykov Regional Library set up the *Varna Digital Library* – a virtual service which provides access to library's and its partner-museums' digitized materials.

Pencho Slaveykov Regional Library was the Bulgarian content provider in EuropeanaLocal project, where an OAI-PMH repository was set up for aggregating the Bulgarian libraries and museums content. The Library still remains the biggest Bulgarian content data provider for Europeana and also operates as an Aggregator since 2011.

The library participates in a variety of international projects, the main important of which are:

- **LoCloud** - (2013 – 2016) a Best Practice Network co-funded under the CIP ICT-PSP programme of the European Commission which will enrich the Europeana content. LoCloud is supporting **small and medium-sized institutions** in making their content and metadata available to Europeana, by exploring the potential of cloud computing Technologies.

- **Europeana Awareness** project. – (2011-2014) a best Practice Network, led by the Europeana Foundation, designed to publicize Europeana to users, policy makers, politicians and cultural heritage organisations in every Member State so as to encourage the use and contribution of content, raise awareness of cultural heritage as an economic driver and promote knowledge transfer.

- **NTVIS** (2012-2014) – a Grundtvig partnership introduces the concept of New Visual Literacy bringing together Youth and seniors to cooperate in a common framework and thus foster new transgenerational learning contents.

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[4] This part of the text is copied from Chapter 2 (IO1), in order to keep the integrity of the text.

- **Digital Literacy 2.0** project – (2012-2013) a project funded by ICT KA3 programme that aims to help you use Web2.0 applications in your everyday life.

- **EuropeanaLocal project** – (2008-2011) a project funded by *e*Content*plus* programme. EuropeanaLocal is Europeana satellite project, which main goal is to preserve local libraries, museums and archive heritage. Public Library Varna is a regional content provider.

- **LL4S Partnership** – LifeLong Learning for Seniors – (2008-2010) a Grundtvig partnership which main goal is to create new methods for informal and non-formal education especially designed for seniors over 60+.

After the official end of the project the ICT workshops for seniors become sustainable service and took part in the Library's seasonal calendar with 8 - 10 workshops per year.

In 2015 the Library possessed 870 000 volumes of books, periodicals and other non-book materials in its storage facilities. The library is the most democratic institution on the territory of Varna which is accessible to everyone. There are about 130 000 visits at the library registered per the year and more 250 000 volumes in circulation. Fifty-five specialists of high qualification in different fields of science - bibliography and library science humanities, computer engineers work in the library.

The technological library processing of the books and documents and all of the users services have been computerized since 1990. The library provides both traditional and computer catalogue of:

- books and non-books materials;
- periodicals publications;
- reference information;
- information about Varna and its region;
- rare books and books of true merit;

Free Internet access has been provided to the users since 1993.

The library has produced and published over 200 bibliographies and references.

Currently Library provides training services for adult users, for librarians and for other professionals.

6.1.1. Services for Adults

Started in 2008 with a project called 'Lifelong Learning for Senior Citizens – LL4S' the service became sustainable over the next years. Current training activities for adults include cooperation with community groups serving seniors, maintaining collections and services of special interest to adults and workshops/one-to-one training on how to use new technologies. The last few years Public Library - Varna uses a method of active-learning for adults' trainings. The library has strong partnership with Centres for Rehabilitation and Social Integration and Senior Day Care. The library has strong partnership with VET schools and training centres.

More than 39 training courses for adults have been run since 2008. More than 400 people were trained How to use ICT in the everyday life.

BAD & GOOD EXPERIENCE

SENIORS

+
- Nice to share their experience with youngsters
- Feeling like keeping the folk traditions alive
- Having the joy to share their thoughts, pictures and videos in Internet and social networks

-
- Trouble about their ability to explain the activity to youngster
- Trouble about their ability to understand the way of communication in Internet and social networks

YUONGSTERS

+
- Satisfaction of acquiring new practical skills
- Feeling like keeping the folk traditions alive
- Development of creativity
- Having the joy to share knowledge of communication in Internet and social networks with seniors

-
- Difficulties in acquiring new practical skills
- Trouble about their ability to explain the way of communication in Internet and social networks to seniors

Adults are scared of using computers and feel trouble about their ability to understand the way of communication in Internet and social networks. On the other hand they have joy to share their thoughts, pictures and videos in Internet and social networks.

6.1.2. Trainings for Librarians

The modern library develops in different aspects with the main aim to satisfy user's requirements. One of them is in the sphere of informal vocational education and training of the audience that needs library and bibliographic information and in highly qualifying library experts. The Public Library has got a leading role in the field because of its regional methodological functions for the particular region to optimize the activities at its municipal and community libraries. As an educational center with rich experience, Pencho Slaveykov Public Library in Varna meets the necessity to improve the qualifications of library experts aiming enhancement of their skills and competencies as tutors in professional field 'Librarian'.

Library focuses on developing skills for construction and implementation of innovative practices into the educational process and teaching. The activities are concentrated on the improvement of the functionality of the used teaching methods developed as users' oriented services.

As a result of participation in several European projects focused on non- and informal learning, Public Library Varna analyses librarians' and professionals' needs. This analysis formulates the difficulties of systematic usage of ICT and Web 2.0 faced by the librarians in their routine. In the analysis the training need is clearly pointed, as well as the librarians' intention of developing new smart user-centered services. The lack of knowledge and skills is the bottleneck for development and implementation of such services.

In the few projects run last two years Public Library uses the method of Service Design and reveals the construction of intuitive interface.

That method supports the development of effective analytical and creative approaches in service design.

The educated end user in the project realizes as a Tutor - Provider of vocational educational services and his potential learner - User.

6.1.3. Trainings for Professionals

In all projects Public Library Varna follows an ICT based train-the-trainer and qualify-the-users approach. It sets out to develop and implement training programmes for staff in non- and informal learning settings such as Public Libraries, community and care centres to enable them to use Web 2.0, and to offer provision of ICT based non-formal learning. Once the people are trained, it was intended that these staff members would enable new users of the Internet to develop the skills and knowledge needed to make full and safe use of the World Wide Web, improving their motivation to learn.

6.2. Service Co-design and Methodology Development through Workshops

Workshops organized for co-designing and defining services with users and librarians and experimenting with different innovative methodologies to develop Xlibris Methodology tool set as well as finding the best possible way to benefit from each methodology with the purpose of service co-design. A three days workhop was organized at Pencho Slaveykov Regional Library (Varna Public Library) in Varna, Bulgaria between 28-30 July 2015. Workshops organized in Varna were the last co-design workshops within the Project and helped fine-tuning the Xlibris Methodology following all the iterative workshops in partner institutions.

6.2.1. Participants - User Workshop

User with different profiles, professions, backgrounds and from different age groups participated in co-creation workshop on 28th July 2015.

Moderator
Daniel Weiss (ISES, Spain)

Staff from Pencho Slaveykov Regional Library
Radka Kalcheva
Emil Demirev
Temenuga Kalcheva

Project Partners (Observers)
Serap Kurbanoğlu (Hacettepe University, Turkey)
Tolga Çakmak (Hacettepe University, Turkey)
Skirmante Petraitiene (Radviliskis SSPC, Lithuania)
Egidius Dailidonis (Radviliskis SSPC, Lithuania)
Carola Dierich (Wisamar, Germany)
Angela Hirsch (Gemeinde Kabelsketal, Germany)
Kurt Hambacher (Gemeinde Kabelsketal, Germany)

Users
Ana Ivanova (Teacher)
Daniela Schulz (Housewife)
Diana Demireva (University Student)
Ekaterina Schulz (High School Student)
Elena Vladova (Journalist)
Ivan Hristov (Pensioner)
Irena Hristova (Teacher)

Mariya Dimitrova (Teacher)
Mariyana Ruhova (Teacher)
Radostina Nikolova (Psychologist)
Redzheb Shabanov (Photographer)
Stanislav Milkov (University Student)
Stela Kostova (Curator)
Todorka Stoyanova (Naval Museum)
Valentina Panayotova (Pensioner)
Yana Slavova (Teacher)

6.2.2. Aims and Goals – User Workshop

The main goal of this workshop was to identify what kind of new SMART ICT services users need and what they would like to be provided by the library. The new services need to be either user center-oriented and web 2.0 based. During the workshop users were trained to develop a number of services by the use of innovative methodologies such Lego Serious Play®, Business Model YOU®, Prototyping. These methods enabled them to co-design at least 5 new smart ICT-based or ICT-related services.

The models they developed have been analyzed by Pencho Slaveykov Regional Library staff and suggested to the Librarians workshop to be re-designed and re-developed as 5 new ICT services which could be implemented in the Library work as a part of X-LIBRIS outcomes (IO5).

This workshop gave also opportunity to project partners to adjust Xlibris Methodology.

6.2.3. Preparations – User Workshop

Since it was the last project workshop and the only one, which was run in a public library with a significant numbers of visits, the preparation took not so long time but was very carefully planned. At the Leipzig meeting it was discussed and agreed by all partners that two planned workshops in Varna: for librarians and end-users would be switched. The end-user workshop will be run first and based on its results the librarians will capitalize the new services on the next two days. It was also decided that the users' workshop will be fixed to one full-day instead of two full-days.

The workshop participants were selected by the Library staff and all of them are active library users. Participation was by invitation and special attention was paid to invite variety of users with different profiles. Special attention was also paid in keeping a balance among different age groups. We realized that we could not keep the balance between genders (only 3 of 16 participants were male -18%).

All participants were provided with basic information about the project and the goals of the workshop. They were sent a draft program in advance. It is decided that it would be better if they were not so familiar with the methods and tools used in the workshop.

As a part of the preparation a rehearsal workshop was run in the day before. 6 librarians from Pencho Slaveykov Regional Library and 6 partners took part into the rehearsal with a total duration of 3.5 hours. Only the basic elements of the workshop were tested. This activity gave an opportunity to the Convener to adjust timing for every activity; to shift the order of some of the activities and to make some final fine-tunes.

The Room was prepared one day before (a projector, modular tables, chairs, big size paper (80x80), post-its, colourful pens, etc were provided). A professional for video recording was provided by the Library.

6.2.4. Tools and Methodologies – User Workshop

A collection of tools and methodologies were used to test and construct the Xlibris Methodology set.

Lego® Serious Play®

Lego® Serious Play® (LSP) methodology enables participants to understand the dynamic, interlaced systems with many feedback loops on the personal side with four steps: Challenging with questions, constructing, sharing through methaptors and reflecting.

Posing the Question: The challenge, which should have no obvious or correct solution, is presented to the participants. The framing of the challenge is clear and concise for participants to connect.

Construct: Participants make sense of what they know and what they can imagine by constructing a model using the LEGO® materials, and develop a story covering the meaning in the model. Through this process, participants construct new knowledge in their mind.

Sharing: The stories are shared among the participants.

Reflect: As a way of internalizing and grounding the story, participants are encouraged to reflect on what was heard or seen in the model.

Innovation requires engagement that goes well beyond crowdsourcing: it requires a user centric approach, and it demands for collaborative and constructive processes where participants build ideas and concepts, negotiate meaning and engage in creative activities together to create mutual value – value for the system and for the learners. Values that go into the design and development of a better user experience that target needs and values that are latent, subconscious and that LEGO® Serious Play® can surface. In such a perspective, LSP is the beating, engaging and revealing heart of a co-creation experience, helping organisations and users to engage in constructive conversations to build together, iteratively, the next user experience, innovating services and products together.

Prototyping

A prototype is an early sample or model of a product built to test a concept or process or to act as a thing to be replicated or learned from. It is a term used in a variety of contexts. A prototype is designed to test and try a new design to enhance precision by creators. Prototyping serves to provide specifications for a real, working system rather than a theoretical one. Creating a prototype is the step between the formalization and the evaluation of an idea.

Service prototyping is the activity of creating prototypes of a service, in other words creating an an incomplete version of the service. A prototype typically simulates only a few aspects of, and may be completely different from, the final product. Prototyping has several benefits: Getting valuable feedback from the users early in the project is one of these benefits.

Business Model You®

A personal business model is the logic by which an individual creates and delivers something valuable to customers. The Business Model You® methodology applies principles of entrepreneurship to the work we do as individuals. Traditionally these principles were applied only to organisations. It helps to describe, clarify, improve or reinvent the sevice model.

Combining the power of Lego® Serious Play® and BMYOU helps to extract in a meaningful way what the value proposition is.

's Personal Business Model Canvas

Name:

| Who do you work with? Who supports you? *(Key Partners)* | What are your favorite things to do at school? Outside of school? *(Key Activities)* | How do you help others? *(Value Provided)* | How do you communicate with the people you help? *(Customer Relationships)* | Who do you like to help? *(Customers)* |

What kind of person are you? What do you like? What do you know how to do? *(Key Resources)*

How do people find out about you? How do you deliver help to others? *(Channels)*

What do you give up (time, energy, etc.) in order to help? *(Costs)*

What do you get in return for helping others? *(Rewards)*

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6.2.5. Implementation and Lessons Learned - User Workshop

Participants were welcomed by Emiliya Milkova, Director of Pencho Slaveykov Regional Library and Daniel Weiss, the workshop moderator.

The Scenario: It was defined and pre-set that for the workshop purposes the Library would be replaced with a restaurant and all participants would be cooks who had to offer new dishes or to improve the existing ones by adding specific spices. In this metaphor the Restaurant is Pencho Slaveykov Regional Library, the new dish with specific spice is a new or an existing library service, the cook is the workshop participant.

1. The Workshop started with Alignment Game. Duration: 5 min. The main aim of the alignment game is to build a team. 16 people played the game. 12 people were given 12 rules with a specific mission, one per participant. 4 participants were given a mission of observers. They had to follow the rules and design a particular model using Lego pieces. The participants were allowed to communicate but not to speak.

   Notes and lessons learned: The participants did not succeed at first time. Participants were given a second chance to play the game (for 3 min). This time the result was better as it was experienced before. Participants learn their lesson if they are given the second chance.

   The conclusion reached after the game is that this is a very useful activity as proved in previous workshops at partner institutions and should remain as a part of Xlibris Methodology set.

2. Lego® Serious Play® activity: Build a Duck. Duration: 1 min. The aim of this activity is to show diversity between people. Every participant was given a pack containing exactly the same numbers of yellow and red Lego bricks and was asked to build a model of a duck. Everybody knows what a

duck is but everyone interpreted it in a different way and as a result the participants produced 16 different models.

Notes: The participants managed to build a duck very fast. Two models were similar but not the same. Participants have different vision even they are asked to build one and the same object.

The conclusion reached is that this is a very useful activity to point out individula differences and importance of team work (different point of views) as proved in previous workshops at partner institutions and should remain as a part of Xlibris Methodology set.

3. Perception exercise FLIP or FLOP and Rabbit or Duck. Duration: 5 min. The concept of this game is to show that people see things in a different way. They can look at the same image and could have different interpretations. Participants were asked to define what they see. Depending on their angle and perceptions they saw different things.

    Notes and lessons learned: This was also one of the successful activities with the Xlibris tool set. Once more it is proved to be useful to display individual differences and the importance of team work.

4. Observation Video. Duration: 15 min. The participants watched the video presenting a murder (Whodunnit!). The aim of this exercise was pointing out the fact that we might not notice (see) some very obvious things if we are not paying attention. Participants asked how many changes they noticed in the scene in which the crime had been committed. Participants were more successful at the second run. Some participants noticed more changes than the others, however no one could name all 21 changes.

    Notes and lessons learned: This activity was focused on participants' observation skills and its importance. This is also decided to be kept among Xlibris activities.

5. Lego® Serious Play® activity: Build a Model of Your Choice. Duration: 40 min. The participants were told to build whatever they want with Lego bricks under no specific topic. When the models were constructed every participant picked a joker card with a word written on it. The real challenge was to make a connection and explain how his/her model could be connected to the word written on the joker card s/he had picked. Eventually they explained shortly what they had wanted to build initially.

    Notes and lessons learned: Most of the participants enjoyed this activity and managed to make a connection with the word given; only one of them was a little confused and could not make it. Participants were able to create metaphors unconsciously and were quite successful in sotry telling. It was noted that this could be used as a warm up activity forgetting acquinted with Lego® Serious Play® and Story Telling.

6. Lego® Serious Play® activity: Build a model of your vision for Varna Library in 5 year. Duration: 60 min. The participants were asked to build a Lego model of what they wanted to have in their library (15 min for model construction). After completing model construction participants presented their models and workshop moderators extracted the most important elements of the models and created a colour post-it map on a flipchart.

    The essence of the models are as follows:
    *   Library as a physical space – to be open and comfortable place where people could work together; a place suitable for both parents and children; a meeting place for connecting people; and a place for clubs for interests.

- Ideas about meetings and performances.
- Co-operation with schools and museums.
- E-readers with possibility to download e-books.
- Audio books.
- Fiction books accessible online

Notes and lessons learned: The participants designed various models with very interesting ideas for the library. Some services proposed by the participants are already available in Pencho Slaveykov Regional library, but the users don't have enough information about them. This could be considered as an indicator of the lack of information flow between the library and users and lack of marketing.

Every participant created her/his vision of the library services as a reflection of her/his own professional interest and special needs. This proves the importance of user-centered service design as well as service co-design with users. Lego Serious Play proved to be one of the most important methodologies with the Xlibris tools.

7. A presentation video of a BookFace competition in Istanbul. The Convener explained some similar activities run in a project framework and reminded to the users that all library services they have to create during the workshop must be connected with social media/smart ICT.

8. Lego® Serious Play® activity: Build a shared model for Varna Library in 5 year. Duration: 80 min. Participants were divided in to 4 groups (3 people each) based on the personal models they had created in the first part of the workshop. Each group was asked to develop one common model in 20 min. Each group presented the common model. The participants focused mostly on the library building instead of the library services.

Ideas from shared models:
- Group study rooms
- Clubs for interests
- Fairytale hour
- Audio books
- Book delivery service
- Kids reading to kids and kids reading to animals
- Library as a Hub – connections between cultural institutions.

Notes and lessons learned: After the workshop the project partners agreed that it is necessary to re-formulated the question about the vision of the Library and to ask the Librarians not to think about the vision but for services.

9. Workshop feedback and evaluation. Duration: 15 min. Participants asked to fill in the evaluation form and the summary of answers are attached in the workshop report.

The main comments mentioned in evalution forms are:
- Better marketing and communication with users about the services. More advertising is needed.
- Promotion of the library services
- Closer look at particular applications and programs, which are used at the moment
- Detailed information about the new and upcoming services in the library
- Inspiring approaches in the workshop
- Glad to be involved in developing SMART library services

- They will be glad to find in their library not only books but audio books, e-books, clubs for interests, place for reading with kids and other attractive activities.

General Conclusions

1. The workshop rehearsal did give the Convener the opportunity to optimize the training model and the methodology.
2. There were no language problems. Some of the participants have some English knowledge and managed to present their ideas without any help for translation.
3. Few of services developed by users were similar to those developed by the Librarians.

6.2.6. Participants - Librarian Workshop

Sixteen librarians both from Pencho Slaveykov Regional Library, Varna and other public libraries in the region participated in co-creation workshops between 29-30 July 2015.

Moderator
Daniel Weiss (ISES, Spain)

Pencho Slaveykov Regional Library Staff
Radka Kalcheva
Emil Demirev
Temenuga Kalcheva

Project Partners (Facilitators)
Serap Kurbanoğlu (Hacettepe University, Turkey)
Tolga Çakmak (Hacettepe University, Turkey)
Skirmante Petraitiene (Radviliskis SSPC, Lithuania)
Egidius Dailidonis (Radviliskis SSPC, Lithuania)
Carola Dierich (Wisamar, Germany)
Angela Hirsch (Gemeinde Kabelsketal, Germany)
Kurt Hambacher (Gemeinde Kabelsketal, Germany)

Librarians
Daniela Ilieva (Pencho Slaveykov Regional Library, Varna)
Denitsa Cholakova (Pencho Slaveykov Regional Library, Varna)
Galina Dzheranova (Chitalishte Library Vasil Levski, Galata)
Galina Nikolova (Chitalishte Library Otets Paisiy 1934, Varna)
Iveta Dimitrova (Pencho Slaveykov Regional Library, Varna)
Katya Todorova (Chitalishte Library Svetlina 1904, village of Belogradets)
Kristiana Dimcheva (Pencho Slaveykov Regional Library, Varna)
Liliya Tranova (Chitalishte Library Probuda 1922, village of Staro Oryahovo)
Mirena Ivanova (Chitalishte Library Prosveta 1900, town of Devnya)
Nadya Georgieva (Chitalishte Library Probuda 1930, village of Strashimirovo)
Petya Hristova (Pencho Slaveykov Regional Library, Varna)
Sevinch Ismailova (Chitalishte Library Saznanie 1926, town of Beloslav)
Stanislava Dimitrova (Pencho Slaveykov Regional Library, Varna)
Stoyanka Balgaranova (Iskra Chitalishte Library, village of Ezerovo)
Vanya Trandova (Pencho Slaveykov Regional Library, Varna)
Yanka Zhelyazkova (Chitalishte Library Probuda 1905, village of Venelin)

6.2.7. Aims and Goals – Librarian Workshop

The main goal of this workshop was to identify what exact new SMART ICT services users need. The new services need to be both user oriented and web 2.0/smart ICT based. The innovative methodologies included Lego Serious Play®, Business Model YOU®, Storytelling and Prototyping were used. These methods enabled Librarians to design 5 new smart ICT based/related services.

The services they developed will be analyzed by Pencho Slaveykov Regional Library staff and suggested to the Library management for implementing into the Library. They will be also a part of the outcomes of the Xlibris Project (IO5).

This workshop gave also opportunity to Xlibris project partners to further adjust and fine-tune Xlibris Methodology.

6.2.8. Preparations – Librarian Workshop

Half of the participants selected from small villages in Varna region working for Chitalishte libraries. Chitalishte is a typical Bulgarian public institution and building which fulfills several functions at once, such as a community centre, library and a theatre. Half of them were from Pencho Slaveykov Regional Library.

Participation was by invitation and special attention was paid to invite librarians who desire to turn their libraries into modern institutions by providing innovative ICT services. It was not possible to keep a balance among different age groups and between genders because it is a female dominant sector and 99% of the staff is women.

A special SMORE flyer was produced in advance. It provided specific information about the workshop but not in details. The librarians were sent a draft program in advance. It was considered to be better if they are not so familiar with the methods and tools which will be used during the workshop.

The BMYOU Canvas was adapted and translated in Bulgarian Language in order to help the Librarians in developing their services (there was no English language requirements).

The Room was prepared one day before (a projector, modular tables, chairs, big size paper (80x80), post-its, colourful pens, etc were provided). A professional for video recording was provided by the Library.

6.2.9. Tools and Methodologies – Librarian Workshop

A collection of tools and methodologies were used to test and construct the Xlibris Methodology set.

Lego® Serious Play®

Lego® Serious Play® (LSP) methodology enables participants to understand the dynamic, interlaced systems with many feedback loops on the personal side with four steps: Challenging with questions, constructing, sharing through methaptors and reflecting.

Posing the Question: The challenge, which should have no obvious or correct solution, is presented to the participants. The framing of the challenge is clear and concise for participants to connect.

Construct: Participants make sense of what they know and what they can imagine by constructing a model using the LEGO® materials, and develop a story covering the meaning in the model. Through this process, participants construct new knowledge in their mind.

Sharing: The stories are shared among the participants.

Reflect: As a way of internalizing and grounding the story, participants are encouraged to reflect on what was heard or seen in the model.

Innovation requires engagement that goes well beyond crowdsourcing: it requires a user centric approach, and it demands for collaborative and constructive processes where participants build ideas and concepts, negotiate meaning and engage in creative activities together to create mutual value – value for the system and for the learners. Values that go into the design and development of a better user experience that target needs and values that are latent, subconscious and that LEGO® Serious Play® can surface. In such a perspective, LSP is the beating, engaging and revealing heart of a co-creation experience, helping organisations and users to engage in constructive conversations to build together, iteratively, the next user experience, innovating services and products together.

Business Model You®
A personal business model is the logic by which an individual creates and delivers something valuable to customers. The Business Model You® methodology applies principles of entrepreneurship to the work we do as individuals. Traditionally these principles were applied only to organisations. It helps to describe, clarify, improve or reinvent the sevice model.

Combining the power of Lego® Serious Play® and BMYOU helps to extract in a meaningful way what the value proposition is.

Prototyping
A prototype is an early sample or model of a product built to test a concept or process or to act as a thing to be replicated or learned from. It is a term used in a variety of contexts. A prototype is designed to test and try a new design to enhance precision by creators. Prototyping serves to provide specifications for a real, working system rather than a theoretical one. Creating a prototype is the step between the formalization and the evaluation of an idea.

Service prototyping is the activity of creating prototypes of a service, in other words creating an an incomplete version of the service. A prototype typically simulates only a few aspects of, and may be completely different from, the final product. Prototyping has several benefits: Getting valuable feedback from the users early in the project is one of these benefits.

6.2.10. Implementation and Lessons Learned - Librarian Workshop
Librarians' workshop lasted for two days.

Day 1 – 29th July 2015
Participants were welcomed by Emiliya Milkova, Director of Pencho Slaveykov Regional Library and Daniel Weiss the workshop moderator.

The Scenario: The same restaurant scenario was used. Library would be replaced with a restaurant concept and all participants would be cooks who had to offer new dishes or to improve the existing ones by adding specific spices. In this metaphor the Restaurant is Pencho Slaveykov Regional Library, the new dish with specific spice is a new or an existing library service, the cook is the workshop participant.

1. Workshop started with Alignment Game. Duration: 5 min. Only 13 people played the game. The rest 3 participants have already played the game before and were familiar with the rules. 12 people were given 12 rules with a specific mission, 1 participant was given a mission of observer. They had to follow the rules and construct a building with Lego pieces. The participants were allowed to communicate but not to speak.

Notes and lessons learned: It was decided the participants to be given a second chance to play the game (for 3 min). This time they communicated very actively and managed to build the model. The librarians succeeded in building a team due to good communication skills they had. This team building game requires to be played twice.

2. Lego® Serious Play® activity: Build a Duck. Duration: 1 min. Every participant was given a pack with one and the same pack containing yellow and red Lego bricks and was asked to build a model of a duck. All models were different. Everybody knows what a duck is but everyone interpreted it in a different way.

   Notes and lessons learned: The participants managed to build a duck very fast. All models were different. This is a very useful activity to show that everyone could have a different point of view and all are equaly important and valuable.

3. Lego® Serious Play® activity: Build a Model of Your Dream. Duration: 10 min. The participants were told to build with Lego bricks the model of their dreams. When the models were constructed every participant picked a joker card with a word written on it. It was said that everybody had to make a connection and explain how her model could be connected to the word written on the joker card she picked. Eventually they explained shortly what they had wanted to build initially.

   Notes and lessons learned: Most of the participants enjoyed this activity and managed to make a connection with the word they picked. All participants managed to create metaphors for their models. They demonstrated good skills for storytelling. This activity once again proved to be a good activity to develop storytelling skills.

4. Observation Video. Duration 15 min. The participants watched the video presenting a murder case. The goal of this exercise was every participant to notice as many changes as she could in the scene in which the crime had been committed.

   Notes and lessons learned: Some of the participants (probably half of them) noticed many differences in the crime scene. After watching the video one more time all of them mentioned almost all of the details. This activity was focused on participants' observation skills. It is easy to miss something particular that you do not look for. This is a good activity to show that people notice and see different things.

5. Perception exercise FLIP or FLOP and Rabbit or Duck. Duration: 10 min. Looking at the same image could have different interpretations. Participants were asked to define what they saw. Everybody see the problems in a different way. Sometimes it is necessary to change the angle to see the problem and fix it.

   Notes and lessons learned: The participants saw different words: FLIP and FLOP, and different animals. And appreciate the differences among themselves. This is a good team building excersice to keep in the Xlibris tool set).

6. Observation Video. Duration 10 min. The participants were shown a video presenting two little girls Marry and Amy, digital native children and future library users. They explained their needs and expectations which can be inspring for libraries.

   Notes and lessons learned: All participants enjoyed this video which gives a hint that there is/will be a big change in people's expectations in the 'digital world'. If somebody or something is not appeared in Internet s/he or it just simple does not 'exist' for the digital native people.

It is very important libraries to be presented in social media as well, because people would 'skip' them as means of information. This is a librarians' task. Users want to be involved in developing new services and the libraries have to be redesigned. Tis video is found quite useful for librarians to think about their future users and adapt their services according to their needs.

7. All participants were reminded that for the workshop's purposes the Library was replaced with a restaurant and all of them were looking for new recipies (services) to improve the 'menu'. The other competitors on the market like Google for example serve users (provide information) very fast. The only one thing libraries could benefit in this situation is that they provide information from trusted sources. The new digital era requires libraries to provide new services integrated with social media and smart ICT.

8. Lego® Serious Play® activity: What new services do you need in your library? Duration: 120 min. The participants were asked to build a model of a new service (for 15 min.). All of the models were presented.

   Notes and lessons learned: The participants were instructed to focus on Smart ICT services only, not on the library buildings. It was an important condition because the common vision of users was that the most important thing for Varna Publis Library is to have a new building. The participants showed good skills in using different social media channels. The librarians in small Chitalishte libraries focused on services connected with online catalogues, book- mobile and book delivery for disabled people.

9. Lego® Serious Play® activity: Build a group shared model of one new service based on the personal models. Duration: 120 min. Participants were divided in to 5 groups (3 people each and one 4 people). Each group was asked to develop 1 common model in 30 min. Each group, in the end, presented their common vision.

   The 5 concepts for the group works based on the personal models were:
   • Green Library
   • Gamification
   • Reinventing activities with children
   • Library as a Cultural Hub
   • Clubs or Communities of interests.

   Notes and lessons learned: The participants managed to build a group common model in the specified time limit. It was a matter of some difficulty to merge different services developed by every member of the group in one common. Some ideas of services were similar to those proposed by users, such as Clubs of Interests and Library as a Hub. The librarians re-designed users' ideas into suitable ones. Creating shared models help very much to find out the best feature of each model.

Day 2 – 30th July 2015
There were two main tasks carried out on the second day of the workshop: to create Business Model You® Canvas of all 5 service and to create a Prototype of each service.

1. Business Model You® Canvas. Duration: 150 min. The 5 groups were asked to structure their ideas for new services which were designed on the previous day and put them on the BMYOU Canvas (duration 40 min).

Originally BMYOU Canvas is designed for setting up new business. The canvas appears in English language. As it was explained previously the Canvas was adapted for Librarians by Pencho Slaveykov Regional Library staff. The Canvas was translated to Bulgarian language as well. All participants had to explain their ideas using 9 different blocks in the canvas. This forced the librarians to answer important questions such as what is the service (key activities), who helps you (key partners), how the service helps (expected results), how you interact (relationship Library-Users), who are your users (target groups), what you have (key resources), how you deliver your service (channels), what you give (costs&efforts) and what you get (revenue and benefits). Then each group gave a presentation of its BMYOU model.

Notes and lessons learned: As it was mentioned before the important part of Xlibris methodology is the BMYOU Canvas adaptation to library's needs (Business Model of New Library Service) and to get more benefit out of it. The translated Canvas helped each group to progress faster. While presenting their models the participants proceeded to develop their services motivated by questions and propositions of moderators. It was confirmed that BMYOU is a very good tool for structuring and clarifying the initial ideas.

2. Prototyping the new services. Duration: 120 min. Based on BMYOU Canvas the librarians were asked to fine-tune their services and to think about specific steps for the implementation through building a prototype of each service. All project partners (DE, ES, LT and TR) were involved in this activity to help the groups with their expertise. Each group used different tools: such as laptops, iPad, Lego bricks, books, flipchart sheets, colour markers, post-its, cameras, smart phones, etc. The groups presented their prototypes by Stop-motion movie; Pinterest board; YouTube video; Step-by-step model.

Notes and lessons learned: This activity was considered as an extremely successful – all participants manage to make prototypes of the services they developed. Some initial ideas for services were shifted or changed on the fly. It was a common vision that for prototyping the services librarians need an expert to help them in developing new Smart ICT services. First time within all Xlibris workshops, prototyping was included. It was concluded that if there are experts to help prototyping helps very much to the development of the new services. It also helps to recognize the gap in the knowledge and skills of the library staff.

3. Workshop feedback and evaluation form. Duration: 15 min. The evaluation form and the summary of answers are attached to the minutes.

The main conclusions are: All participants felt very satisfied and feel more confident about developing and implementing of new Smart services

Recommendations:
- To put additional attention on the business model and implementation of new services in the library;
- To pay special attention on specific social media options and technological tools;
- To train librarians on how to use mobile apps.

General Conclusions
- It was a very good idea to run the Users' workshop before the Librarians workshop. The ideas generated in the first workshop were adapted, re-designed and expanded in the second one.
- All participants did like the training model and Xlibris Methodology. They share the vision that they will be able to develop new SMART ICT services based on BMYOU model.

- It is necessary to introduce all participants to each other in beginning of the workshop. This step was skipped in this workshop and some of the participants were a little bit unhappy.

6.3. Services Defined by Participants

Five new library services defined and designed by workshop participant librarians based on the outcomes (needs, ideas and reflections) from user workshop.

6.3.1. HubiC – Interactive Calendar of Varna

A Web-based platform (a mobile version is possible too) where the citizens and visitors of Varna will be able to retrieve information provided by all cultural institutions in Varna: theatre, opera, ballet, museums, galleries, cultural centers etc. The platform will be located on the library web site. The added value of the idea is that it will be not only information about the cultural events but additional links to books, AU, DVD and any items which are kept in the Library collections. HubiC is a kind of calendar with dates of performances, exhibitions and other events. Users will be able to read a review for each event and will have an access to all library recourses connected to it – metadata of author, director, actors etc. There will be a link to the event as well. Links for sharing the information into the social media will be provided too. If the user logs into the system with her/his library account, s/he will be able to buy a ticket for the event with a discount. In the future the information will be harvested automatically by the cultural institutions web sites. This service resembles the idea for connection between different institutions appeared in the users' workshop. **Presented:** Web site home page; Web site structure and logo

6.3.2. Green Library

An online guide for local herbs and spices growing in the Varna Region. The library will carry out several fundraising campaigns with the help of social media channels for buying all tools and devices needed for the service implementation such as equipment. Children will take pictures of local herbs while their parents and grandparents will tell some recipes for herb treatment and alternative medicine. Videos could be done by children for preparing herb tea and infusions. Librarians will help the children to make video spots. All pictures and video spots will be uploaded on Pinterest board using different hashtags. Library will announce a competition for collecting pictures and video "likes". The winners will be awarded. A book containing information about herbs and recipes will be printed too. This service is aimed at preserving the local traditions in a region with population of different ethnic groups. The collected information could be used by all people, not only by the local community. It could be turned into a sustainable service. **Presented:** a Pinterest board

6.3.3. Granma's Recipes

A book containing traditional local food recipes will be published online. The library will announce a competition among school children (aged 6-10) for collecting recipes of traditional dishes by asking their grandmothers. The children will go to the library to use its computer equipment for word processing in order to provide the recipes for the competition. A jury of a master chief, kids, grandmas and grandpas will select top 50 recipes. The results will be announced and published on the library web site, municipality web site, Facebook and any other social media. An exhibition presenting the dishes cooked based on the awarded recipes will be organized. The library will publish information about the exhibition on the library web site and social media channels such as Facebook, Pinterest, Instagram. As a result a book will be published with the awarded recipes. This service is aimed at protecting cultural heritage and preserving local traditions in a region with population of different ethnic groups. **Presented:** A book structure, step-by-step model

6.3.4. Digital Curator

A Gamification service based on play-and-learn method. As a result of the service a number of virtual exhibitions, based on the Varna Digital Library collections will be created. Varna Digital Library includes

full-text periodicals, postcards and photos from 19th and 20th century as well as calendars, invitations, posters and etc. The users choose their favourite digital items according to a topic provided by the Library staff. They could transform history into a personal story. All users of this service will be provided with a personal virtual board. The most attractive users' boards will be promoted in the library web site and different social media- Facebook, Instagram, Pinterest, Flipagram. This service will promote the library collections and attract new library users. **Presented:** A promotional video made by the group

6.3.5. Clubs/Communities of Interests

A service based on different trainings and group meetings organized at the library. The main aim of this service is to attract new users by promoting the library resources. Different kinds of trainings for users who are interested in specific topics could be carried out in the library. These training will be based on a survey results. The library staff is qualified enough and is highly motivated to use any advanced devices such as smartphones, tablets and different apps. Depends on the clubs of interests the librarians could be trainers or moderators. In some cases they could need support by external experts such as volunteers. These communities' activities will be accessible via the library website and social media channels. Many digital items such as stopmotion videos could be developed to promote the service and bring users together in a community of interests.**Presented:** A stopmotion video made by the group

6.4. Services Defined Based on Participants' Reflections

Since Pencho Slaveykov Regional Library is a second public library in Bulgaria the whole workshop and reflections of participants and services they designed needed to be evaluated from general public needs. Based on participants' work and reflections following 5 new services were developed. Three of them are mainly based on the ideas participants developed. Two of the services developed by the participants are already in place in the Library.

Nevertheless 5 services were developed and prototyped during the librarians workshop two of the services (*Green Library and Grandma's Recipes)* were considered like almost similar while one of them (*HubiC – Interactive Calendar of Varna*) is hardly possible to be developed and implemented due to huge administrative work for collecting all necessary information. That's why he Library staff decided to suggest two new services. The first one is based on the two similar services *Green Library and Grandma's Recipes* and capitalizes on them. The second one is new and replaces the *HubiC – Interactive Calendar of Varna*. It is considered that this new service will be more useful and suitable for the general public.

6.4.1. Digital Curator

This service is based on Digital Curator service proposed by the Librarians workshop. *Digital Curator* lays on the Varna Digital Library service, which provides access to the digital copies of more than 55 000 visual materials from the end of XIX^{-th} and the beginning of XX^{-th} century and their bibliographic records. This service gives an opportunity to the user to create a virtual exhibition selecting materials from the Varna Digital Library on a theme chosen by the Library staff. The themes are announced 4 times a year and everybody could become a digital curator. Everyone could create an exhibition on the social media Pinterest, which corresponds thematically with the most interesting materials having a common hashtag. The aim of the service is to increase the users' interest on the local history and traditions as well as to increase their abilities to use the ICT services and social media.

6.4.2. E-User

Entirely new service proposed by the Library staff. This service replaces HubiC – Interactive Calendar of Varna proposed by the Librarians workshop. E-User is a service making possible personalization and customization specific parts of the Library Information System. It is available online, as well as at the

library and fully follows the trends in the library services of 24/7/365 availability. The aim of E-USER is to adjust library services to the requirements of modern world as taking the library to the users and saving users' time & money.

6.4.3. Webinars for Training on Social Media

This service is based on both Green Library and Grandma's Recipes services proposed by the Librarians workshop. This is an online training service for presenting and promoting libraries in social networks. The aim of this service is to develop training program on using different social media channels such as Pinterest, Vimeo, YouTube, Facebook, Instagram for presenting and promoting library resources. During the workshops Varna Library staff realized that most of the librarians are lack of knowledge and skills on social media and especially how to use Pinterest. Although there is a great wish to use this media, it is hardly possible to start creating boards without any particular training. It was decided to include the two services mentioned above in one new which primary aim is to train librarians. This new service is designed to use new ICT tools such as Webinars for training on different social media.

6.4.4. Makerspace for Children

To complete the 5 services list Varna Library staff suggests an entirely new service. Makerspace is an innovative service, which gives the opportunity to the user to get to know the technology achievements and their implementations for educational purposes. The potentials of the modern library as a place for studying are shown through the Makerspace method "learning through making" and "play and learn". The traditional educational function of the library is integrated with the innovation methods for studying, which makes the library an attractive place for young people. A mandatory element for the program Makerspace is the presence of a mentor, who introduces the participants with the science terminology about a certain topic and who helps with the practice side of the activity. The service develops cognitive and creative skills in the young audience as well as in the librarians through a game approach. The library turns into a space not only for knowledge but for practical skills as well. The innovative service shows the real potential of the library for knowledge and creativity.

6.4.5. Video Tutorials "Library Knowledge"

This service is based on Clubs/Communities of interest service proposed by the Librarians workshop. The service is a series of video tutorials, showing the variety of library resources through the means of the modern information and communication technologies. The video tutorials are presented on the library's website and are accessible via different social media or on the library's workstations. The tutorials are developed for PC, tablets, smartphones and other mobile devices. The aim of the service is to increase and/or improve the information literacy of the users through an innovative programme presenting the library services.

6.5. Providing Insights through Crowdsourcing

After defining the services and completing service design crowdsourcing is used get some inputs and reflections from users and peers. This provided different perspectives from wide range of individuals (from potential users to experts) before the services are actually implemented.

Within Xlibris a special crowdsourcing platform Brick-me, which is developed by Daniel Weiss, one of the members of the project team, was used (http://platform.brickme.org/index.php?page=ex). Brickme platform helped to share new service ideas and obtain insights from peers across the country.

This platform allows to create a Business Model YOU Canvas for presenting different aspects of the project based on canvas segments. It also allows to add Lego Serious Play videos.

Brick-me interface was translated in to Turkish. An account was created for Hacettepe University. Within this account a board was created for each service in Turkish (to ease the undersatnding of local stake holders and actual target groups) which includes the following:

- The title
- Short description
- Detailed description
- Short video presentation
- Business Model building blocks
- Business Model Canvas
- Lego Serious Play model building videos
- Photos

A deadline was set for each «service project». Contributors were invited through various channels to give feedback and provide inputs about the services by choosing predefined categories along with personal inputs. These inputs were used for fine-tuning the service design.

Brick-me service boards can be seen in the following links:

Digital Curator: http://platform.brickme.org/index.php?page=cp&id=11
E-User: http://platform.brickme.org/index.php?page=cp&id=7
Webinars for Training on Social Media: http://platform.brickme.org/index.php?page=cp&id=10
Makerspace for Children: http://platform.brickme.org/index.php?page=cp&id=12
Video Tutorials "Library Knowledge": http://platform.brickme.org/index.php?page=cp&id=13

6.6. Matrix

A matrix which is developed for the Xlibris was used for further fine-tuning as well as determining infrastructural and training needs. Xlibris Matrix includes several components additional to a short description. Components of the matrix are:

- Description of the service
- ICT to use
- Nature of the service
- Target group
- Infrastructure
- Support
- Knowledge & competences needed by the service provider
- In-service training needs for service provider
- Knowledge & competences needed by users
- User training needs

These information is partly derived from the Canvas completed during the previous phase. New elements were carefully filled. Infrastructural requirements and support needed (if any) from other professionals such as graphical designer, innovation designer, programmer, teacher, app developer, certified Lego Serios Play expert, are determined. Knowledge and competences required to deliver these services are defined. In-service training needs are determined based on the comparison between knowledge and skills required to create the service and the actual case. Training needs for users are determined based on the comparison between knowledge and skills required to use the designed service and their actual competencies.

Bulgarian services matrix can be seen under Resources/Matrixes/Matrix-BG on project's website: http://www.xlibrisproject.org/resources/

6.7. Service Development and Implementation

Infrastructure, support and in-service trainings are provided if/when necessary and the process continued with the actual service development and implementation.

6.7.1. Digital Curator

Background Information

Virtual Exhibition: An online exhibition, also referred to as a virtual exhibition, online gallery, cyber-exhibition, is an exhibition whose venue is cyberspace.

Museums and other organizations create online exhibitions for many reasons. For example, an online exhibition may: expand on material presented at, or generate interest in, or create a durable online record of, a physical exhibition; save production costs (insurance, shipping, installation); solve conservation/preservation problems (e.g., handling of fragile or rare objects); reach lots more people: "Access to information is no longer restricted to those who can afford travel and museum visits, but is available to anyone who has access to a computer with an Internet connection.

Unlike physical exhibitions, online exhibitions are not restricted by time; they are not forced to open and close but may be available 24 hours a day. In the non-profit world, many museums, libraries, archives, universities, and other cultural organizations create online exhibitions.

A database of such exhibitions is Library and Archival Exhibitions on the Web. Online exhibitions are also increasingly being utilized by businesses and individuals.

Pinterest: Pinterest is a place to organize and share online images people find interesting or inspiring. Once uploaded or shared on Pinterest, these images become known as Pins, which the user can place on customized, themed Boards. You can create Boards for any topic imaginable, from cats to classic cars to cats driving classic cars. The possibilities are endless.

While there's nothing wrong with just pinning pictures of cool stuff all day, Pinterest can be a really valuable tool for people with a specific purpose in mind. Some people create a Board for each room in the house and then pin decorating ideas for that space. Artists use it to organize inspiring images for their work. Cooks keep online recipe boxes. College students might create shopping lists of things they need to buy for school.

Any Boards can have multiple contributors; so collaborating with co-workers on a project is easy with everyone's ideas and inspiration in one place. Pinterest helps people discover things in a simple, visual way. Pinners might find something they love while browsing your boards; scrolling through a category you're listed in or searching for you directly.

Pinterest connects people through shared interests—their passions, hobbies, tastes and values. You can inspire them by using Pinterest in a personal, authentic way. Boards are where people collect and organize their Pins. Each board tells a unique story about what that person cares about. People can follow boards whose Pins they like. Each Pin is an idea—a gift, recipe, or even a quote. They always point back to the sites they came from (like yours!). If the Save button is added to your site, people can use it to add your content to Pinterest.

Curator: Traditionally, a curator or keeper of a cultural heritage institution (e.g., gallery, museum, library or archive) is a content specialist charged with an institution's collections and involved with the interpretation of heritage material. A traditional curator's concern necessarily involves tangible objects

of some sort—artwork, collectibles, historic items or scientific collections. More recently, new kinds of curators have started to emerge: curators of digital data objects.

The curator makes decisions regarding what objects to select, oversees their potential and documentation, conducts research based on the collection and history, provides proper packaging of art for transportation, and shares that research with the public and community through exhibitions and publications.

Additional Information: The user gets the opportunity to learn the history of Varna and to show interpretation when presenting the facts in a unique way. The participants understand the options of the social media for presenting the cultural-historical heritage and learn how the digital content could be useful for finding artefacts from the local history.

As a result:
- Reveals the cultural heritage of Varna and the region in an attractive and unexpected way
- Helps the study process in school
- Stimulates a creative way of exploring the history of the region

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Service Description: Digital Curator lays on the Varna Digital Library service, which provides access to the digital copies of more than 55 000 visual materials from the end of XIX-th and the beginning of XX-th century and their bibliographic records.

This service gives an opportunity to the user to create a virtual exhibition selecting materials from the Varna Digital Library on a theme chosen by the Library staff. The themes are announced 4 times a year and everybody could become a digital curator. Everyone could create an exhibition on the social media Pinterest, which corresponds thematically with the most interesting materials having a common hashtag.

Aim: The aim of the service is to increase the users' interest on the local history and traditions as well as to increase their abilities to use the ICT services and social media.

Target Group: Varna Digital Library users; workers from museums and archives; explorers and researchers of the local history; teachers and cognitive game players.

Importance: The information technologies can be found everywhere in the daily life and it becomes necessary to change routines and stereotypes even in the conservative institutions, which have a constant behaviour towards their customers during the last several decades. The library is faced to be one of them, which is considered as one of the most conservative. The communication channels are changing and improving. This leads to dramatic changes in the library activities and to increasing and

universalising the access to the information. Innovation services and programs, which correspond to the needs of information lead to a change in the role of the library as an informational broker with an unique contribution to the process of connecting the users with the information.

Rationale: Even though the most of the library information activities remains unchanged the increasing number of online materials makes the traditional service more virtual than before. The role of the librarian goes from an informational specialist "seeker" to an informational specialist "evaluator". The Digital Curator service involves the users in those processes as curators, who could explore the thing found in the Varna Digital Library collections and who could present items to the other users in a way of a virtual exhibition.

Scope: Lifelong learning. Good practices for searching information and using Varna Digital Library database. Ability to work with social media. Promoting and popularizing the cultural heritage on social media.

Smart ICT Used: Two webinars for promoting the Digital Curator service are carried on. The video conferencing software based on the web platform anymeeting.com

Outcomes: The proposed model of a new library service corresponds to the modern trends of the SMART ICT services. The expected advantages are:
· Gaining skills to work in digital environment
· Gaining knowledge and skills for searching information
· User to become a curator of at least one exhibition
· Getting knowledge about the history of Varna
· Adopting new approaches for presenting the cultural heritage

Development Process:
1. A team was set up.
2. A BMYoU of the service was developed.
3. Pinterest was chosen as the best appropriate platform for the digital exhibitions.
4. A demo board was created.
5. A webinar for introducing the service was organized
6. A presentation, explained in details the idea behind the service i.e. Varna Digital Library features was developed.
7. A couple of webinars was conducted. The first webinar introduced the idea while the second one presented the first Digital Curator and the board which gained the highest number of likes.
Demo Board:
https://tr.pinterest.com/bibliotekavarna/%D0%BC%D0%BE%D1%80%D1%81%D0%BA%D0%B0%D1%82%D0%B0-%D0%B3%D1%80%D0%B0%D0%B4%D0%B8%D0%BD%D0%B0/

Implementation of the Service: Two webinars for launching the service was organized. 53 people in total took part in them – librarians in public, school and community libraries ('Chitalishte') from all over the country, as well as individuals.

1. On 9th December 2015 a webinar launching the Digital Curator service was held on. 30 participants from different places all over the country - librarians from Varna and Varna region, representatives of 'Chitalishte' libraries attended to the event. The aim of this webinar was to launch the new service as well as to promote Varna Digital Library. On the webinar Varna Digital Library features were presented, the first Pinterest demo board was promoted and the first topic for the future virtual exhibition was announced.

   Promo Video https://www.youtube.com/watch?v=GBdG1GqzrmE

First Webinar Photos : http://www.libvar.bg/projects/xlibris/webinardc/photo37.htm

2. On 10th February 2016 a second webinar was organised. – 23 participants attended. All of the 'Digital Curators' who created their own boards on Pinterest attended to the meeting. Their boards were presented to the auditory and explained in details. The winner – the board with the highest number of likes was announced.

   Second Webinar Photos: http://www.libvar.bg/projects/xlibris/webinardc2/webinardc2.html

3. During the second webinar the BrickMe platform was presented to the attendees as well. The benefit of this service was evaluated by the comments and bricks received later on the platform.

4. A regional conference titled 'Libraries – Place for **Everyone'** organized by 'Pencho Slaveykov' Library was held in Varna on 11th May 2016. About 100 participants from more than 35 university, school and small community ('Chitalishte') libraries attended the conference. This service was presented in details and discussed.

   Conference program:
   http://www.libvar.bg/culture/2016/may-2016/programa_seminar_11052016.pdf

Service statistics:

Virtual Exhibitions on Pinterest	
Theme 1:	5 boards
Theme 2:	1 board
Total	6 boards

Facebook Page			
	9.12.2015	04.02.2016	09.02.2016
Visits	1758	706	407
Shares	13	8	5
Likes	38	39	17

6.7.2. E-User (E-Services for the Library Users)

Background Information: The concept of e-service (short for electronic service) represents one prominent application of utilizing the use of information and communication technologies (ICTs) in different areas. Sometimes e-services are defined as: "…deeds, efforts or performances whose delivery is mediated by information technology. Such e-service includes the service element of e-tailing, customer support, and service delivery". This definition reflects three main components- service provider, service receiver and the channels of service delivery (i.e., technology). For example, as concerned to public e-service, public agencies are the service provider and citizens as well as businesses are the service receiver. The channel of service delivery is the third requirement of e-service. Internet is the main channel of e-service delivery while other classic channels (e.g. telephone, call center, public kiosk, mobile phone, television) are also considered.

Additional information: Time is so crucial to individuals, organizations and even the Society. Libraries are established to provide information to users. Saving Users' time is one of the major objectives of any library. There are many strategies that libraries can put in place to save the time of Library Users,

such as proper organisation of materials through effective cataloguing and classification, accurate shelving, effective and efficient reference services, application of ICT in libraries, user education programme, etc. Based on these, it is recommended that libraries should as a matter of fact consider all these strategies in order to remain relevant in this present age.

Varna Public Library is the first public library in Bulgaria, which implements self check-in and check-out process of library items.

All these e-services provide the following:

- Modernization of the library process
- Increasing the usability of the library outside the opening hours
- Active communication 'User – Librarian'
- Reaching new target groups
- Active positions when using the library services
- Receiving users' feedback

Service Description: E-User is a service making possible personalization and customization specific parts of the Library Information System. It is available online, as well as at the library and fully follows the trends in the library services of 24/7/365 availability.

Aim: The aim of E-USER is to adjust library services to the requirements of modern world as taking the library to the users and saving users' time & money.

Target Group: All users of the library.

Importance: Contemporary libraries shall develop new smart services in order to attract their current and potential users. The e-services help users to get quick and easy access to the library collections as well as quality and reliable information. The tendency for an active presence of the libraries in virtual space is in compliance with the users' need for using library online.

Rationale: The Internet has already had a major impact on how people find and access information. In this changing landscape, public libraries are trying to adjust their services to these new realities while still serving the needs of users who rely on more traditional resources. Many library users are eager to see libraries' digital services expand.

Varna Public Library and its staff have:
- Long time experience in applying ICT
- Completely computerized Library Information and Technology System
- Library Database

Scope: At this stage the E-User service includes:
- Online Request for library items
- Self-service for check-in
- Self-service for check-out
- 'Ask a Librarian' online live chat

Smart ICT Used:
- Online catalog of Varna Public Library http://catalog.libvar.bg/

- Online Request on web address http://catalog.libvar.bg/orders/book_order.html
- 'Ask a Librarian' on web platform https://www.purechat.com
- Library Databases

Outcomes: Users who use these e-services get the following:
- Easier communication
- Active positions when using the library services
- An opportunity for time planning
- Saving money
- Flexibility

Development Process:
1. A team of library experts and IT specialists was set up.
2. A research about users' needs and expectations for the e-services was carried on.
3. The Library Information and Technology System was optimized in the end of 2015.
4. A BMYoU of the service was developed.
5. Expanding the scope of services: self check-in and self check-out services were launched.
6. Two other e-options are provided – an online form for requesting books as well as 'Ask a Librarian' live chat application. These options are available on the library web site www.libvar.bg. The web site is easy to navigate and allows quick access to all online recourses.

Development Process Video: https://www.youtube.com/watch?v=8ybokpuEkes

Implementation of the Service: E-User Service is implemented through the following e-services:

1. Online Request is accessible on the Varna Public Library web site. Users can search Library Catalog by title, author or subject headings. When they retrieve the requested information it's filled into the online form, which is proceeded to the librarians. The materials are ready for usage at the circulation desk after a couple of hours.

   Library Catalog : http://catalog.libvar.bg/
   On-line Request Form: http://catalog.libvar.bg/orders/book_order.html

2. 'Ask a Librarian' - live chat application accessible on the library home page. Live chat is a service faster and more personal than phone calls and emails. 'Ask a Librarian' gives the opportunity to chat live with the library staff. Users and not only users ask for availability of books, services etc.

   Library web site: http://www.libvar.bg/

3. Self check-in of library items – this is a module of the Library Information and Technology System, which was launched in March 2016. It is a self-service, which is designed for users who don't need help by a librarian.

4. Self check-out of library items – this is a module of the Library Information and Technology System, which was launched in March 2016. It is a self-service, which is designed for users who don't need help by a librarian.

5. All these e-services were presented on 2 conferences and on different media and TV channels:

- Regional Information Conference titled 'Libraries – Place for Everyone' organized by 'Pencho Slaveykov' Library was held in Varna on 11th May 2016. About 100 participants from more than 35 university, school and small community ('Chitalishte') libraries attended the conference.
- 26th Annual National Conference 'Dynamic Libraries – Access, Development and Change' organized by BLIA (Bulgarian Library Information Association) was held in Sofia on 9th and 10th June 2016. More than 120 participants from the whole country attended to the conference.
- TV interview with Mrs. Emilia Milkova, the Director of Varna Public Library was given on BNT1 about the new e-services of the library

Regional Conference 'Libraries – Place for Everyone' - Conference program: http://www.libvar.bg/culture/2016/may-2016/programa_seminar_11052016.pdf
Annual Conference 'Dynamic Libraries – Access, Development and Change' – Conference program: http://www.lib.bg/index.php?option=com_content&task=view&id=1125&Itemid=112
Emilia Milkova's interview: https://www.youtube.com/watch?v=J_sMUxASn0c&feature=youtu.be

Statistics

Self Check-in & Check-out (01.03.2016-20.06.2016)	
Visits	1037
Number of item borrowed/returned	3607

Online Requests (01.03.2016-20.06.2016)	
Number of requests	434
Titles	937
Users	252

Ask a Librarian Service (01.03.2016-20.06.2016)	
www.libvar.bg	39815 visits
Ask a Librarian	895 requests

6.7.3. Webinars for Training on Social Media

Background Information: Proposed online trainings are web-based seminars.

Webinar: Webinar is a live meeting that takes place over the Internet. It can be a presentation, a discussion, a demonstration or an instructional "how-to" session. Those who participate view a live video feed, an application or documents via computer.

A webinar is a scheduled event. People plan to attend, set aside time and schedule that time in their calendars. Very different from "interruption marketing" which is the case with TV commercials, website popups, and video posts on social media. A webinar creates a heightened attention. When people attend a webinar the information is all that matters. The coach commands their full attention because he has information they find very valuable. The coach has a captive audience. Viewers want the information he has and he can create a state of mind with his presentation.

Presenting quality information with a webinar will create a perception of authority for you and your brand. Keep in mind that when you participate in a webinar session there are usually many other

people participating as well. That means that it is important for you to be ready to go when the session begins.

- Have the email that contains the URL to attend the session and login instructions handy.
- Five to ten minutes before the start of the session, login by going to the URL that was sent to you via email.

Use your telephone or microphone's mute button if you have background noise in your computer area. Voices of patrons or staff, ringing telephones, and other noise can be distracting for webinar participants.

Pinterest: Pinterest is a place to organize and share online images people find interesting or inspiring. Once uploaded or shared on Pinterest, these images become known as Pins, which the user can place on customized, themed Boards. You can create Boards for any topic imaginable, from cats to classic cars to cats driving classic cars. The possibilities are endless.

While there's nothing wrong with just pinning pictures of cool stuff all day, Pinterest can be a really valuable tool for people with a specific purpose in mind. Some people create a Board for each room in the house and then pin decorating ideas for that space. Artists use it to organize inspiring images for their work. Cooks keep online recipe boxes. College students might create shopping lists of things they need to buy for school.

Any Boards can have multiple contributors; so collaborating with co-workers on a project is easy with everyone's ideas and inspiration in one place.
Pinterest helps people discover things in a simple, visual way. Pinners might find something they love while browsing your boards; scrolling through a category you're listed in or searching for you directly.

Pinterest connects people through shared interests—their passions, hobbies, tastes and values. You can inspire them by using Pinterest in a personal, authentic way. Boards are where people collect and organize their Pins. Each board tells a unique story about what that person cares about. People can follow boards whose Pins they like. Each Pin is an idea—a gift, recipe, or even a quote. They always point back to the sites they came from (like yours!). If the Save button is added to your site, people can use it to add your content to Pinterest.

Additional information: The first 'Ecolibrary' webinar is a prototype of new service design, which presents social networks' tools in library works. The training presentation of using Pinterest was provided to the participants for their library practice.

The service 'Webinars for Using Social Media' suggests a way for integration of library practices and IT tools. As a result of the service librarians and their users could develop online guides of collected digital items.

Nowadays tendencies are the libraries to be both 'green' and virtual presented. The possibility of publishing Information in social media channels expands the traditional ways of publication and is in compliance with environmental protection practices. To be a 'green-thinking' library is the mission adopted by the modern libraries.

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Service Description: This is an online training service for presenting and promoting libraries in social networks.

Aim: The aim of this service is to develop training program on using different social media channels such as Pinterest, Vimeo, YouTube, Facebook, Instagram for presenting and promoting library resources.

Target Group: Librarians from all types of public libraries such as regional, city, small community libraries ('Chitalishte') and school libraries who want to learn and/or improve their knowledge and skills in using social media channels.

Importance: According to a survey the library is a programme, not just a building. Social media help create an immediate interactions with library users, and more important, make non-users into library users. Librarians have several reasons for using social media to help them achieve the following goals:

- To announce and promote news, events and services;
- To reach library users in their homes or 'virtual spaces' as today's modern online library is no longer relying only on its physical space as an access point;
- To encourage collaboration between libraries;
- To encourage development of collections with content specific to certain user groups;
- To increase usage of library collections by promoting new and existing content;
- To provoke debate and to receive an opportunity to respond to library user feedback;
- To build a sense of community with both users and also with other libraries and institutions.

Rationale: Development this service is laid on the need of providing more specific trainings on social media for librarians. In 2015 during the X-Libris training workshops with librarians and end users in Varna it was observed that social media had been always used in presenting library models and creating new library services. The librarians admit that there is a lack of knowledge on social networks usage and there is gab in training on that subject. The librarians face the need of trainings focused on their specific requirements.

According to the librarians, the top three objectives for using social media tools are to promote:
- events,

- library resources and/or collections;
- library services.

These online trainings aim to address this need and can be used as a tool to 'take the library to the user'.

Scope: The webinars include training on the most popular social media like Pinterest, Facebook, YouTube, Instagram, Vimeo. They concern subjects as registration and settings of an account, ways of communication, publication of content, type of content, copyright etc.

Smart ICT Used: Video conferencing software based on the web platform anymeeting.com

Outcomes: Advantages and benefits for librarians and libraries of these webinars are the following:
- promotion of library services;
- delivering the information directly to the library users;
- increasing engagement and interactions with the users;
- gathering feedback to enhance user services;
- promotion of library collections via social media helps to increase usage of content;
- dissemination.

Development Process
1. A team of library experts was set up.
2. A research on practical skills of librarians for using social media and needs of trainings on the topic was conducted.
3. A BMYoU of the service was developed.
4. Different web platforms for online conferences and trainings were investigated and anymeeting.com was selected
5. Pinterest was determined as the first social media for training.
6. A presentation, explained in details registration and settings of an account, uploading pins, creating boards, publishing pictures and video, editing content and copyright issues, was developed.
7. An informational flyer was designed on www.smore.com which was an invitation for the target group to participate in the webinar.
8. A couple of webinars was conducted. The first webinar introduced the social networks while the second one discussed the results of the training.
9. Next scheduled training is on YouTube social media.

Development Process Video: https://www.youtube.com/watch?v=vf78VTq8Yw8&feature=youtu.be
Information flyer: https://www.smore.com/by7vr

Implementation of the Service: First two webinars were organized within the life span of the project. 41 people took part in them – librarians in public, school and community libraries ('Chitalishte') from all over the country, as well as individuals.

1. On 11th November 2015 the first webinar on the topic ECOLIBRARY was held. The participants were from more than 25 places all over the country - librarians from Varna and Varna region, representatives of 'Chitalishte' libraries, as well as individual participants, even one from abroad.

    The aim of this webinar was to show the opportunities, which social media provide for promoting information resources of the library. The webinar was an online training including a presentation about Pinterest and its options for creating and publishing content by combining photos, videos and texts focused on ecology.

    The healing plants in Bulgaria were presented, combined in a board 'Ecolibrary', created by 'Pencho Slaveykov' Public Library Varna as well as the ways of presenting online were described. The participants asked questions about the options of the social media for sharing information and actively participating in the creation of new library services. They expressed their positive impressions from the online training.

    First Webinar Photogallery:
    http://www.libvar.bg/culture/2015/november-2015/webinareco/index.htm
    Presentation about Pinterest:
    https://www.youtube.com/watch?v=-V05jWHadwI&feature=youtu.be

2. A month later, on 9th December 2015, a second webinar was organized about sharing creative ideas on Pinterest. Some of the participants in the first webinar took part again. They had registered in Pinterest and made their own boards. Some problems in using this social platform were discussed and the successful boards were presented.

    Second Webinar Photogallery:
    http://www.libvar.bg/culture/2015/december-2015/webinareco2/index.htm

3. During the second webinar the BrickMe platform was presented to the attendees as well. The benefit of this service was evaluated by the comments and bricks received later on the platform.

4. An online training for using YouTube is in the development process.

5. Regional conference titled 'Libraries – Place for Everyone' organized by 'Pencho Slaveykov' Library was held in Varna on 11th May 2016. About 100 participants from more than 35 university, school and small community ('Chitalishte') libraries attended the conference. This service was presented in details and discussed.

    Conference program:
    http://www.libvar.bg/culture/2016/may-2016/programa_seminar_11052016.pdf

Step by Step Development of a Webinar	
Step	Description
Step 1	Setting up a team of library experts

Step 2	Conducting a research on practical skills of librarians for using social media and needs of trainings on the topic
Step 3	Developing a BMYou of the service
Step 4	Investigating different web platforms for online conferences and trainings and selecting the proper one
Step 5	Selecting the first social media for training and developing a detailed presentation for its usage
Step 6	Registration of the first webinar on the selected platform
Step 7	Creating an information poster or flyer which to invite the target group to participate in the webinar
Step 8	Launching the scheduled webinar
Step 9	Processing the results
Step 10	Registration of the second webinar on the selected platform
Step 11	Inviting the first webinar participants to take part in the second one
Step 12	Launching the scheduled webinar on which the usage of the selected social network is discussed
Step 13	Feedback and evaluation
Step 14	Final adjustment of the service if needed

6.7.4. Makerspace

Backgorund Information: A library makerspace is an area and/or service that offers library patrons an opportunity to create intellectual and physical materials using resources such as computers, 3-D printers, audio and video capture and editing tools, and traditional arts and crafts supplies. In the field of library science, makerspaces are classified as a type of library service offered by librarians to patrons.

In a library makerspace or maker program, patrons of varying ages can work together, alone, or with library staff on creative projects. These spaces often give community members access to tools, technology, and social connections that may not be easily accessible otherwise. The goal of a makerspace is to allow patrons to learn through direct experimentation and from each other. Library makerspaces do not require specified areas; a pre-existing space can be temporarily modified (or "made") to better suit the needs of participants. It is more about the intentions of the makers than about the qualities of the space itself

Beginning around 2006, the "maker movement" grew out of DIY culture. Libraries took notice and began offering programs and redesigning spaces to address related interests within their communities. The first public library with a maker space was the Fayetteville Free Library.
A library makerspace is intended to allow community members to experience technology or activities that they previously were not able to access. As many maker spaces include technology like 3D printers, sewing machines, soldering guns, coding, robotics, and wood carving machines, patrons are invited to experiment freely. The purpose of a maker space is often expressed to be inspiring an interest in science, technology, design, and life-long learning in the people who are served by the library. Over time, it is expected that the available activities within each individual maker space will grow to reflect the interests of each community in which the library is housed. Makerspaces are also intended to allow minorities or underrepresented populations, like women, or people with disabilities, to become involved with technology and fields they may not have previously considered.

There are many types of makerspaces offered as a library service. They are usually developed around a certain type of medium, technology, or even patron age group. Some examples include computer programming and coding, 3D modelling and printing, games, and traditional arts and crafts. Although experts in the area may be available, the community atmosphere of the space allows patrons to learn from each other and experiment rather than receive lessons.

Maker spaces have also grown to allow patrons to take classes to develop a certain skill, like cooking, sewing or yoga.

References

1. Bagley, Caitlin A. What is a Makerspace? Creativity in the Library. www.alatechsource.org December 2012. http://www.alatechsource.org/blog/2012/12/what-is-a-makerspace-creativity-in-the-library.html
2. Britton, Nicole and Ward, Michael. The Makings of Maker, Library Journal, 2012
3. Clark, Melody. "Libraries & makerspaces: A revolution?". Technology and Social Change Group. University of Washington. Retrieved 1 April 2015.
4. Dixon, Nicole and Ward, Michael. The Maker Movement and the Louisville Free Public Library, Accidental Press, 2014.
5. From Stacks to Hacks: Makerspaces and LibraryBox. Metropolitan New York Library Council. Metropolitan New York Library Council. Retrieved 1 April 2015.
6. 7 things you should now about Maker spaces, Edacuse, 2013

Service Description: Makerspace is an innovative service, which gives the opportunity to the user to get to know the technology achievements and their implementations for educational purposes. The potentials of the modern library as a place for studying are shown through the Makerspace methods "Learning through making" and "Play and learn". The traditional educational function of the library is integrated with the innovation methods for studying, which makes the library an attractive place for young people. A mandatory element for the program Makerspace is the presence of a mentor, who introduces the participants with the science terminology about a certain topic and who helps with the practice side of the activity.

Aim: The service develops cognitive and creative skills in the young audience as well as in the librarians through a game approach. The library turns into a space not only for knowledge but for practical skills as well. The innovative service shows the real potential of the library for knowledge and creativity.

Target Group: Kids, teens and young people, educational organisations.

Importance: When most people think about libraries, they think about books. But the libraries could offer a lot more for studying thna the synthesised knowledge in books, giving the opportunity to gain practical skills - from customs to science. The libraries are a cultural space for transmitting experience through book and through dialog. Makerspace gives the opportunity to learn something new through an experiment, inventing and exchange of experience as it presents the library to the young people with science achievements, though the "play and learn" methodology, through science games and mentors - specialist in different fields.

Rationale: There is a lack of formal teaching and technological equipment, which can satisfy the needs of the young people for gaining skills in the field of 3D modelling, as well as the already developed

programs like "play and study", which introduces the achievements of the modern science and the opportunity for renew energy to the younger people. A series of Makerspace is developed, in which the participants have the opportunity to meet the 3D technology through design and models with a 3D pen and/or 3D printer. In Makerspace basic knowledge and skills for using the new technologies as a mean for saving the nature's resources is gained. Robotics, ecology, physics and electro technic become more accessible for the younger audience of library visitors through constructing robotics models of alternative energy sources. It is curious to learn how a potato becomes a watch battery.

Scope: Actively implementing the method "Learn and play" in an informal teaching of kids, teens and young people.

Smart ICT Used: 3D Doodles, 3D printers, Software for 3D printing

Outcomes: The new library service has the potential to develop creative and cognitive skills in the kids and teens, but it is oriented towards life-long learning. The library becomes an attractive and creative space: atelier for creation, space for learning, sharing and having fun.

The expected outcomes are:
• Gaining new skills
• Getting to know the modern 3D technology
• Breaking the stereotypes in the teaching models and giving the opportunity for knowledge and skills, gained in an unusual way
• Reaching more users with the library-informational products and services
• Attracting new users
• Increasing the users knowledge and creativity

Development Process:
1. A team of library experts was set up.
2. A process of defining the users need for such activities was conducted.
3. Examining the world experience in the field of Makerspace.
4. A BMYoU of the service was developed.
5. The most suitable equipment - 3D printer, 3D doodler was selected
6. Training the library's staff for working with the 3D printer, 3D doodler.
7. A promotional video and posters were designed.

Promotional video: https://www.youtube.com/watch?v=gMabIHaAApQ

Implementation of the Service: 15 Makerspace events were organised in the period January-June 2016.

• 3D modelling course started in 2016. It is scheduled on a monthly base.

    3Doodler Maker-space. Art Gaming with my favourite 3D Model

    April 2016: http://www.libvar.bg/culture/2016/april-2016/maker-space-06.04/index.htm
    April 2016: http://www.libvar.bg/culture/2016/april-2016/maker-space-08/index.htm
    May 2016: http://www.libvar.bg/culture/2016/may-2016/makerspace/index.html
    June 2016: http://www.libvar.bg/culture/2016/june-2016/makerspace02/index.html
    June 2016: http://www.libvar.bg/culture/2016/june-2016/makerspace08/index.html

June 2016: http://www.libvar.bg/culture/2016/june-2016/makerspace09/index.html

- 3D printing and modelling course
  March 2016: http://www.libvar.bg/culture/2016/march-2016/3d-modelirane/index.html
  April 2016: http://www.libvar.bg/culture/2016/april-2016/3d/index.html
  June 2016: http://www.libvar.bg/culture/2016/june-2016/3D2/index.html
  June 2016: http://www.libvar.bg/culture/2016/june-2016/3D17/index.htm

- Maker-space Robotics
  June 2016: http://www.libvar.bg/culture/2016/june-2016/makerrobotics14/index.html

Statistics

Facebook Page (January-June 2016)	
Visits	910
Shares	2
Likes	12

Participants (January-June 2016)	
Participants	310

6.7.5. Video Tutorials "Library Knowledge"

Backgorund Information: The user could watch the video tutorial in a suitable time and place. Users could overcome the worries when having trouble when searching the database. The complex information is delivered easier through a video tutorial and captures the attention of the potential library user. Step by step different opportunities about working with the electronically resources are presented. As a result the next step is building an own version of "Get to know the library" tutorial for the next participants.

When working in a group an important motive is the desire to look back to the history and to share mutual values.

Advantages of a visual presentation:
- Captures attention
- Influences emotions effectively
- Delivers fast more complex information
- It is perceived easier and faster

In both versions (individual and group) the aim is to explain the resources of the library for young people, who prefer presentations with modern tools. For the young people the visual presentation is closer to the way they communicate. The video tutorials are not a traditional way of attracting the community's interest to the world cultural heritage available through the library's collections. The Visual approach is an informal lifelong learning model.

Service Description: The service is a series of video tutorials, showing the variety of library resources through the means of the modern information and communication technologies. The video tutorials

are presented on the library's website and are accessible via different social media or on the library's workstations. The tutorials are developed for PC, tablets, smartphones and other mobile devices.

Aim: The aim of the service is to increase and/or improve the information literacy of the users through an innovative programme presenting the library services.

Target Group: Teachers, explorers, and professionals expressing interest in this field, students and potential library users. It could result in establishing communities or clubs for interests. It provides information about the library's resources through video spots created by librarians and users.

Importance: The number of information resources increases very fast in the last few years. It is getting difficult for the people to orient among all of them, which leads to the fact how important the information literacy is. Now, when the information literacy has become a part of the program of many institutions, it is important for the libraries to present their potential in different formats. The library services are oriented directly to the public needs and have to respond to them. This increases the importance of the user trainings about the information opportunities and the functions of the library.

Rationale: There is a need of presenting the ways of using the information resources of the library. A lot of information and communication resources, created for the Varna digital library are presented. Video tutorial on different topics are created, which increases the interest of the young public towards the history of Varna. Those are published on the library's website (Winter Varna, Summer capital, Bulgarian authors in a Bulgarian school). The main reason for the development of this service is that there weren't any video tutorials presenting the services of the public libraries in Bulgaria. There is a need of creating innovative programs on this topic. The tutorials could be applied for individual work or for group trainings. The model is applicable for every library.

Scope: Problems about the informational literacy, creation of an informational resource. Services and practices for searching information and working with the library's database: Varna digital library, ways of searching in the online catalogues etc. The training includes video tutorial, theme tasks about the content of the promoted informational resource. New informational and communicational technologies are used.

Smart ICT Used: Software for producing video materials

Outcomes: The people who are trained under this program are able:
- to increase their informational literacy
- to get to know the library services
- to express their informational needs
- to get new opportunities for their research work
- to include the library's resources in their programs and practices

Development Process:
1. A team of library experts was set up.
2. A research on practical skills of librarians for using social media and needs of trainings on the topic was conducted.
3. A BMYoU of the service was developed.

4. Different software solutions for stop motion animation were investigated. Apple iPad and its mobile app was selected.
5. A video tutorial was developed how to use the resource of the Varna Digital library.
6. The first tutorial is focused on Varna Digital Library and its searching tools. The tutorial reveals the usage of the advanced IT tools in the library's informational recourses.

Development Process Video: https://www.youtube.com/watch?v=2vlOd14lWPE
Demo Stop Motion: https://www.youtube.com/watch?v=6Je1sgLOykE
Fisrt Video Tutorial: https://www.youtube.com/watch?v=-KIjTnvAAFo

Implementation of the Service: A few workshops were organised within the life span of the project. 27 people took part in them: 8 cultural specialists, 14 young readers and 5 museum workers.

1. On 9th and 11th May 2016 a series of video tutorials titled *History of Varna in images* were presented at the Regional History department as apart of the National Library Week to the members of the club "Intellect'.

2. On 12th May 2016 the people from Regional History department visited the Revival Museum in Varna. A seminar "The explorer: what will you find in the digital library?" was organised, presenting the Digital library to specialists from the museum.

   Event Photogallery: http://www.libvar.bg/culture/2016/may-2016/muzei/index.html

3. On 16th June 2016 a video tutorial *How to search in the digital library?* was presented in front of students from professional high schools in the field of economics and navigation with the support of the Varna trade-industrial chamber at the Museum of New History. In response of the interest about the history of Varna there was a seminar about the traditions in the navigation and the trade in Varna at the invitation of the Varna trade-industrial chamber. The group, which will use the resource of the library, was trained. During the training there were tasks about searching the database.

6.8. Dissemination
Dissemination was carried out mainly through project website and both general social media accounts of the project and social media accounts of partners.

Project website: http://xlibrisproject.org

6.8.1. Social Media Channels: Bulgaria

- Facebook: https://www.facebook.com/libvarna
- Youtube: https://www.youtube.com/user/libvar
- Instagram: https://instagram.com/libvar
- Vimeo: https://vimeo.com/channels/xlibrisbg
- Smore: https://www.smore.com/u/publiclibraryvarna
Pinterest: https://www.pinterest.com/bibliotekavarna/

Chapter 7
Common Multilingual OER & MOOC

Table of Contents

CHAPTER 7

COMMON MULTILINGUAL OER & MOOC

7.1. Service Co-design for Libraries: Xlibris Approach

A complete guide that takes you through every step of Xlibris Approach for service co-design for libraries.

- Lectures   11
- Video   1.5 hours
- Skill Level   Beginner Level
- Languages   English, Turkish, Bulgarian, German, Lithuanian
- Includes   Lifetime access

7.1.1. Course Description
The main aim of this course is to teach how to co-design library services by involving users and how to use various tools and techniques to address their needs and ideas.

In this course, main features of the tools such as Lego® Serious Play®, Business Model YOU Canvas®, Crowdsourcing and Xlibris Matrix will be introduced and how to use each tool for different phases of service co-design will be presented with examples. This will include helping librarians and library users to define their ideas, needs, wants, desires, likes and dislikes; defining resources, facilities and limitations; obtaining inputs from peers and uncovering training needs.

7.1.2. Requirements
- This course doesn't require any special skills
- This course does require only an interest towards user needs and desire to learn how users can be involved in library service design

7.1.3. Outcomes
- Learn the phases of service co-design for libraries (Xlibris Approach)
- Learn what Lego® Serious Play® methodology is and how it is used for service definition and design
- Learn what Business Model YOU Canvas® is how it is used for exploring service details
- Learn what Crowdsourcing is how it is used for obtaining inputs about a proposed service
- Learn what Xlibris Matrix is and how it is used for uncovering training needs of both users and librarians

7.1.4. Target Audience
- This course is meant for librarians from all types of libraries
- It does not require any specialization in any library specific area

7.1.5. Instructors
This course is developed as an output of Xlibris Project by the project team. Xlibris is a Strategic Partnership for Adult Education project under Erasmus+ Program. It is funded by European Commission through Turkish National Agency.

Following individuals from partner institutions contributed to the content development:
Serap Kurbanoglu, Orçun Madran and Tolga Çakmak from Hacettepe University, Turkey.
Daniel Weiss from ISES, Spain.
Radka Kalcheva from Pencho Slaveykov Regional Library, Bulgaria.
Skirma Petraitiene from Radviliskis SSPC, Lithuvania
Carola Dierich from Wisamar, Germany
Angela Hirsch from Gemeinde Kabelsketal, Germany.

7.1.6. Curriculum
- Lecture 1: Introduction
- Lecture 2: Preparations
- Lecture 3: Team Building
- Lecture 4: Team Building - Xlibris Approach
- Lecture 5: Defining & Designing (Lego® Serious Play® Methodology)
- Lecture 6: Defining & Designing (Lego® Serious Play® Methodology) - Xlibris Approach
- Lecture 7: Exploring the Details (Business Model You Canvas®)
- Lecture 8: Exploring the Details (Business Model You Canvas®)- Xlibris Approach
- Lecture 9: Obtaining Input (Crowdsourcing)
- Lecture 10: Obtaining Input (Crowdsourcing) - Xlibris Approach
- Lecture 11: Fine-Tuning (Xlibris Matrix) & Finalizing

7.1.7. Testing
Once the MOOC content is prepared before it is made publicly available it was tested to make sure that the content was clear and the systematic it is presented in makes sense for users with different bacgrounds, different level of knowledge and skills. The common OER and MOOC were developed firstly in English. When it is completed it was tested in every partner institution. Based on partner's insights and reflections it was fine-tuned.

Following the partner testing links were send to five academics, five LIS students and five librarians (from different sectors) to collect their reflections, suggestions and critics. Testing included the content, interface and file structure. When the testing is finished suggestions and insights from users were taken into account. Language used in the content revised and additional explanations were added for the new concepts. Structure of the course is a bit changed to provide a better flow. Additional examples from practice were provided. Finally, different fotmat of the content pptx, pdf, MP3 and MP4 were decided to be provided to satisfy user demands. After the fine-tuning of the prototype (English version) was completed partners translate the content into their national language. Second testing was run by each partner mainly on the tanslated content. Lastly, when the MOOC was uploaded in Udemy Platform (an international MOOC platform) it was controlled and tested by the platform editors according to platform requirements and approved. Udemy.com is a platform for online learning. Udemy provides a platform for experts of any kind to create courses which can be offered to the public, either at no charge or for a tuition fee.

7.1.8. MOOC Content
MOOC content is made available in project languages through two different platforms. One is through Udemy the second one is through Project website.

Web site: http://mooc.xlibrisproject.org/
English: http://mooc.xlibrisproject.org/mooc_en.html
Turkish: http://mooc.xlibrisproject.org/mooc_tr.html
German: http://mooc.xlibrisproject.org/mooc_de.html
Bulgarian: http://mooc.xlibrisproject.org/mooc_bg.html
Lithuanian: http://mooc.xlibrisproject.org/mooc_lt.html

Udemy
English: https://www.udemy.com/service-co-design-for-libraries-xlibris-approach/
Turkish: https://www.udemy.com/kutuphaneler-icin-hizmet-ortak-tasarim-xlibris/
German: https://www.udemy.com/co-design-von-bibliotheksdienstleistungen-xlibris-ansatz/
Bulgarian: https://www.udemy.com/service-co-design-for-libraries-xlibris-approach-bg/
Lithuanian: https://www.udemy.com/xlibris-projekto-metodologija/

Lecture 1: Introduction

INTRODUCTION

The aim

Image: Clip Art

The main aim of this course is to present how to use Xlibris Approach for co-designing library services.

Xlibris Approach helps librarians and library users to define their ideas regarding user training, in-service training and new library services.

This approach helps to move from user-centered service design towards service co-design with users.

Background

a b c

Image: Clip Art
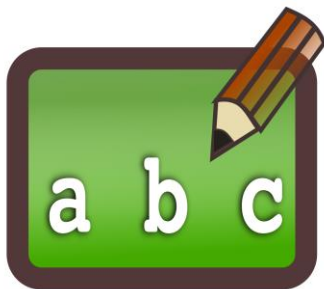
Xlibris Approach is used for addressing the needs and ideas of two main groups:

- librarians as service providers and subject of in-service training programmes,

  and

- users of libraries as service consumers and subject of user training programmes.

Background

Xlibris approach is developed by the use of a wide range of tools and techniques within Xlibris Project.

Xlibris Project is a Strategic Partnership for Adult Education project under Erasmus+ Program.

It is funded by European Commission through Turkish National Agency.

Tools & techniques

Image: Clip Art

Xlibris Approach requires utilization of various tools and techniques such as Lego® Serious Play®, Business Model Canvas, Crowdfunding and Xlibris Matrix.

These tools are used to help librarians and library users:

- to define their ideas, needs, wants and desires as well as likes and dislikes,
- to define resources, facilities and limitations,
- to obtain inputs from peers, and
- to co-design services.

Scope

In this course

• the phases of library service co-design are introduced

• the tools and techniques which are used in each phase are presented

• how to use each tool and technique is explained
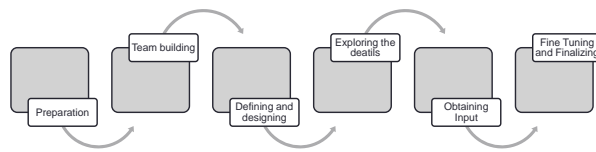
Phases of service co-design	Service co-design through Xlibris Approach is composed of following phases:
Preparation → Team building → Defining and designing → Exploring the deatils → Obtaining Input → Fine Tuning and Finalizing	• Preparation, • Team building, • Defining and designing, • Exploring the details, • Obtaining input, • Fine tuning and finalizing.

Lecture 2: Preparation

PREPARATION	

Planning	A successfull implementation of «service co-design workshops» by the use of Xlibris Approach requires careful planning regarding different aspects such as:
Programme Facilitators Participants A successfull planning Venue Implementation Image: Davide Guglielmo	• Programme, • Facilitators, • Participants • Venue and • Implementation.

Programme Image: Xlibris	A detailed workshop programme is prepared. The aim, duration and venue decided.

Facilitators Image: Masterful	Facilitators come together and work on each tool and technique in advance and get help from certified experts if necessary. Facilitators are assigned clearly defined roles and responsibilities. One of the facilitators takes the leadership role. Leadership role should be assigned carefully based on • knowledge, • skills and • personal characteristics.

Participants Image: BSK	Participants (actual users and/or librarians) are carefully selected and invited. Selection criteria should be decided in advance and agreed by facilitators. Participants should represent diferent user groups and different librarian profiles. Number of participants between no less than 12 no more than 24 provides better results. Expectations from participants are clearly defined and shared.

Venue Image: Justine Furmanczyk	The room is prepared in advance including tables, materials, projector, computer, Internet connection. Tables are arranged for group work. Materials and templates are photocopied. All technical devices are checked to make sure that everything works properly. All presentations and videos are checked to ensure a smooth process.
Implementation Image: X-Libris	Measures are taken to start and finish on time. Measures are taken to use time effectively, including: • A careful in-advance planning, • Reharsing, • Indicating time frame for each activity and following up, • Using timers. All activities are documented by observation notes, videos and photos.

Lecture 3: Team Building

TEAM BUILDING	
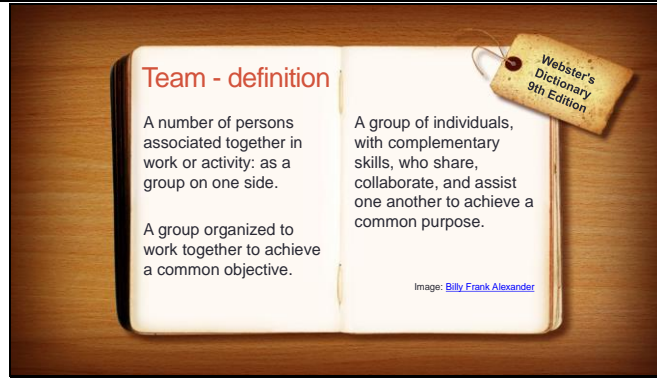
According to Webster's Dictionary, team is a group of people who work together.

There are other similar definitions such as:

A group organized to work together to achieve a common objective.

A group of individuals, with complementary skills, who share, collaborate, and assist one another to achieve a common purpose.
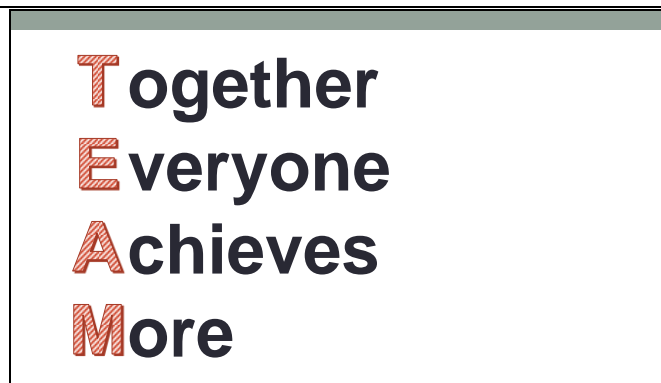
Team allows common people to attain uncommon results.

In other words, team allows everyone to go beyond their limitation.

Successful teams often achieve:
- Increased productivity,
- Increased quality through collective measures,
- Increased efficiency,
- Increased creativity. Team members may raise ideas they may not have thought of if working on their own,
- Increased satisfaction and
- Decreased stress.

Team work provides:
- Better morale and motivation,
- Better problem diagnose,
- Better problem solving. Teams can help to approach problems in new ways,
- Better decisions through collaborative efforts.

Principles of team work

- Leadership
- Unanimous focus on a common goal
- Clearly defined roles for team members
- Shared resources
- Effective communication
- Consistent, united and enthusiastic effort
- Suppression of the ego

1. Leadership: The leader is responsible for and has authority over the team.
2. Unanimous Focus on a Common Goal: Each member of team must personally commit to the goal. Team goals come before individual goals.
3. Clearly Defined Roles.
4. Shared Resources: All tangible and intangible resources must be shared. Ideas are valuable resources to be shared.
5. Effective & Frequent Communication.
6. Consistent, United & Enthusiastic Effort: Maximum team effectiveness is only possible through maximum individual efforts. Team members need to support one another recognizing individual differences or responsibilities.
7. Periodic and Temporary Suppression of the Ego: All team members are responsible for suppressing their ego, when necessary, to benefit the success of the team.

Team building

Takes time

Usually follows some stages

Images: Andre Petrov, BSK, Colin Cochrane

The team journeys from being a group of strangers to becoming united team with a common goal.

Team building takes time.

It usually follows some stages.

Phases of team building

Forming

Storming

Norming
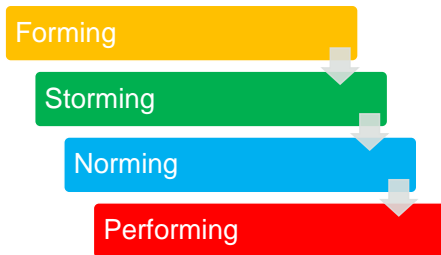
Performing

As the team matures, members gradually learn to cope with each other and the pressures that they face.

As a result, the team goes through the fairly predictable stages such as forming, storming, norming and performing.

Phase 1: Forming

Image: Clip Art

Forming is the first phase in team building.

This phase includes following:
- Getting acquainted with team members and the task,
- Defining the problem and strategy,
- Setting goals,
- Providing clear directions,
- Determining individual roles,
- Developing norms, trust and communication.

Phase 2: Storming

- Sorting out differences and understanding each other
- Clarifying the problem, goals and objectives
- Clarifying core issues
- Defining tasks
- Discussing roles and responsibilities
- Questioning interpersonal skills
- Negotiating conflict
- Eliminating resistance

Image: Clip Art

Second phase in team building is Storming.

At this phase team members try to

- Sort out differences and understand each other,
- Clarify the problem, goals and objectives,
- Clarify core issues,
- Define tasks,
- Discuss roles and responsibilities,
- Question interpersonal skills,
- Negotiate conflicts if there is any,
- Eliminate resistance.

Phase 3: Norming

Image: Clip Art

This phase requires team members:

- to work cohesively together,
- to establish roles and relationships,
- to seek consensus,
- to reach an agreement on ground rules,
- to create a more supportive environment,
- to accept team rules and procedures as well as roles in the team,
- to cooperate in problem solving,
- to develop team spirit,
- to give and receive feedback.

Phase 4: Performing

- Focusing on the task and working productively
- Cooperating
- Decision making
- Problem solving
- Understanding of each other's strengths and weaknesses;
- Gaining the ability to prevent or work through group conflict and resolve differences
- Developing a close attachment to the team

The last phase of team building is performing. Teams that reach this phase achieve results.

At this phase team members:
- Focus on the task and work productively,
- Cooperate,
- Make decisions,
- Solve problems,
- Understand each other's strengths and weaknesses,
- Gain the ability to prevent or work through group conflict and resolve differences,
- Develop a close attachment to the team.

Adjourning
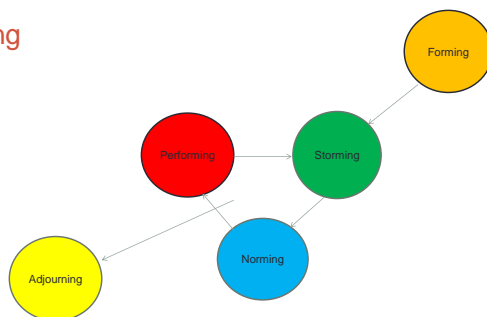
It is possible to add one more phase in team building process: Adjourning.

Adjourning is about completing the task and disbanding the group.

Team building strategies

Image: Michelle Ho

To be able to build effective teams one needs to:

- Be selective when choosing team members,
- Know the individuals (skills, abilities, strengths and weaknesses),
- Include enough members,
- Clearly define expectations, roles and responsibilities,
- Reinforce beneficial behaviors,
- Confront inappropriate behaviors,
- Interact purposefully, consistently, and predictably,
- Integrate coaching and team-building,
- Provide support,
- Encourage group interaction.

Characteristics of a successful team

- Willingness
- Patience
- Good communication
- Trust
- Commitment
- Harmony and flexibility
- Support
- Participation and contribution
- Innovation
- Motivation

The period when a team forms and when they are working as a unit is often a period of stress and chaos.

During this period each team must have the following characteristics:

- Willingness: Willing to work together,
- Patience: Acting calmly and not jumping to conclusions,
- Good communication: Talking openly about problems and feelings,
- Trust,
- Commitment,
- Flexibiliy: Being open minded, accepting different ideas and change,
- Support,
- Participation,
- Innovation,
and
- Motivation.

Conclusion
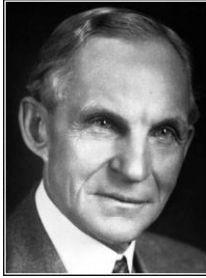
Coming together is a beginning;
keeping together is progress;
working together is success.

— Henry Ford —

We can conclude this section with a quotation from Henry Ford:

Coming together is a beginning;
Keeping together is progress;
Working together is success.

References

- Ancona, D. & Bresman, H. (2007). *X-teams: How to Build Teams That Lead, Innovate and Succeed.* Harvard Business Review Press.

- Dyer, W.G., Dyer, J.H. & Dyer, W.G. *(2013). Team Building: Proven Strategies for Improving Team Performance* (5th ed.). Jossey-Bass.

- *Geoffrey M. Bellman, G.M. & Ryan, K.D. (2009). Extraordinary Groups: How Ordinary Teams Achieve Amazing Results.* Jossey-Bass.

For more information on team building you can refer to these sources.

Lecture 4: Team Building - Xlibris Approach

TEAM BUILDING - XLIBRIS APPROACH

Introduction

Image: Clip Art

In this section team building approach and activities within Xlibris Project will be presented.

Xlibris Approach tries to build the best possible teams from groups of individulas who come together for a short period of time for co-designing library services.

The main aim of these activities is to understand who can cooperate better in the same team.

Aims

Image: Xlibris

Aims of team building activities are:

- Providing insight into the individual's characteristics and profile,
- Understanding the value of listening,
- Understanding the value of careful observation,
- Understanding personal differences and its importance in a team,
- Understanding the importance of communication and empathy.

Implementation

- Photo Wall
- Building a self-model
- Alignment game
- Diversity exercises
  - Perception excercise
  - Building a duck
  - Observation skills
  - Left vs right brain test

Several activities can be used, such as:

Photo Wall,
Building a Lego® self-model,
Alignment game,
Diversity exercises,
        Perception exercise,
        Building a duck exercise,
        Observation skills exercise,
        Left versus right brain exercise.

The aim of the photo wall activity is to provide a quick get to know each other excercise which helps to discover connections between participants.

Resources used for this activity: A big wall canvas, a pollaroid camera, colourful posts-its and colorful pens.

Facilitator's role is taking photos and explaining the expectations.

Duration is 10-15 minutes.
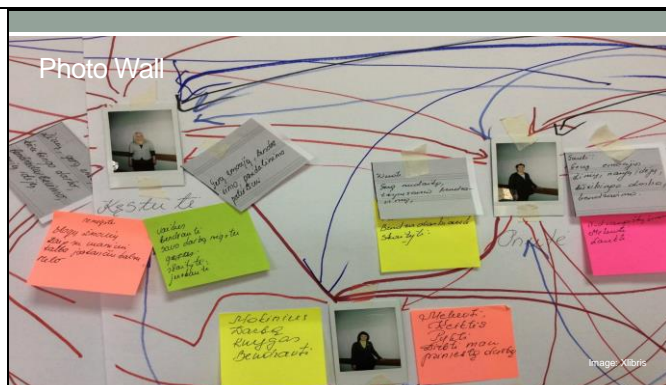
Participants are invited into the room.

Their poloraid pictures are taken.

They are given their photos, posts-its and colorful pens.

They are asked to write some information in keywords form about themselves on post-its such as:

- who they are,
- their expectation and
- their emotions.

Participants are invited to create a corner for themselves on a big size pre-prepared canvas.

Each participant mounts his/her photo and sticky notes in his/her corner.

After everybody has a place on Photo-Wall, participants are asked to draw links with other people they already know.

Following the completion of all links participants are invited to talk about themselves and their connections with others on the photo-wall.

Photo Wall - Tips Image: Clip Art	This exercise generaly takes longer than planned and expected. Participants need clear instructions. They generally have some difficulties to understand what to write on the post-its and how to express themselves by simple keywords. It is helpful to create examples on the wall before the workshop starts. It is easier for participants to follow the examples. That helps with better time management.
Building a self-model Image: Xlibris	Building a self-model with lego Building a self-model with lego activity aims to provide more information about each participant. Resources: lego bricks and pieces. Facilitator's role is explaining the expectations. Duration is 10-15 minutes.
Building a self-model Image: Clip Art	Participants are asked to build a model of themselves with Lego®. When completed each participant talk about his/her model. When they talk about the model, they provide some new information about themselves which is not mentioned before.
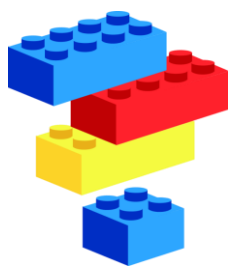
Building a self-model - Tips

Image: Xlibris

It is useful to indicate duration when this excercise starts. It might take more time than expected because some participants might not have experience with Lego®.

For those who have no previous experience with Lego® it takes longer to get familiar with pieces and put them together.

However, this is a good start to get familiar with Lego® Serious Play®.

This excercise provides valuable information for team building.

Alignment Game

Image: Clip Art
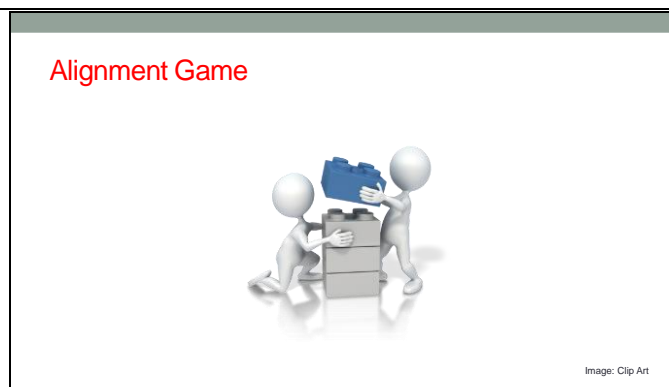
Alignment Game with Lego®

The aim of the Alignment Game activity is to understand the value of cooperation, communication and co-creation.

Resources are Lego brick pieces in 8 different colors and one big table accessible from all sides.

Facilitator's role is explaining the rules and provide reflections about why the mission is not accomplished, why it is important and how does it affect the team work.

Duration is 10-15 minutes.

This activity requires 12 players. Depending on the number of players there could be more than one group or one player might have more than one mission.

Alignment Game
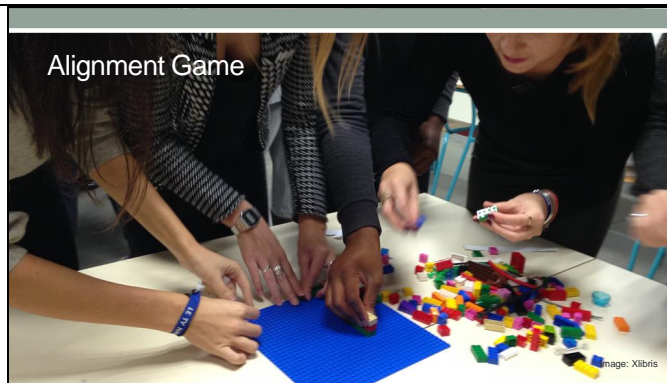
The goal is to construct a building with lego bricks.

Each player is given a secret "mission" to help accomplishing this goal such as building a certain floor or building it in a certain color or with a certain number of bricks.

One player is given the role of observer.

All instructions are written on small papers and not known by the other players.

Players are not allowed to talk to each other.

Play starts.

Alignment Game
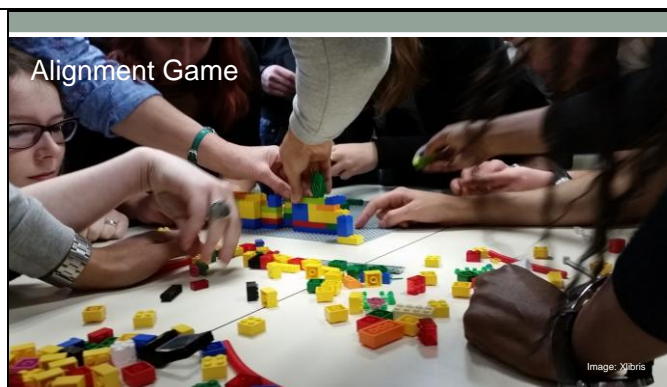
After the first 5-8 minutes facilitator stops the game and asks observer to reflect on what is happening.

Facilitator asks who has accomplished the mission and all together analyze one or two missions.

With this new knowledge that everyone has a unique mission in constructing the building, players are given a second chance to play for another 5-10 minutes.

This second phase is to see how players communicate without speaking.

Facilitator stops the game and reflects.

The main message is about constructing a team rather than a building and it is not possible without communication and collaboration.

Alignment Game - instructions

1. You are the only person allowed to build the first 3 layers of the structure
2. You make sure that the 3rd and 4th layers are only yellow
3. You make sure that the 2nd and 6th layers are made up of 8 pieces
4. You are the only one allowed to build layers 5 and 6 of the structure
5. You make sure that a maximum of 8 pieces are used in layers 3 and 5
6. You make sure that pieces next to each other in the 1st and 6th layers are not the same color
7. You make sure that you and only 2 others build layers 4 and 8
8. You make sure that layers 2 and 5 consist only of red pieces
9. You make sure that the construction is completed as fast as possible
10. You are the leader of the group
11. You make sure that maximum 3 people build layer 4
12. You are observing and you will tell what is going on and what the problem is

Here are the instrcutions for players.

As can be seen, each player has a unique mission.

Alignment Game - Tips

Image: Xlibris

If you translate game instructions make sure that they are translated correctly and clear enough.

Make sure that players understand well that they cannot speak with each other.

Make sure that they understand that they are not allowed to show their mission to others.

Clearly explain what went wrong after the first run.

Carefully observe players to get more information about their capabilities and team work capacity.

Talk about lessons learned after the second run.

Diversity exercises

Image: Clip Art

The aim of diversity exercises is to show the diversity among people (the way they percieve, observe or do things).

Depends on the exercise resources could be some pictures or videos or Lego bricks, and a computer and projector.

Facilitator displays the picture or plays the video and question about the perceptions of participants. Duration is maximum 5 minutes.

Perception excercise Image: Clip Art	Illusion pictures (such as Rabit or Duck) are presented and participants are asked one by one to define what they see. The participants see different things. Different shapes or words. Some are able to see both. Good to mix these people when building a team.
Building a duck Image: Xlibris	Participants are given exactly the same pieces of Lego brick sets. They are asked to create model of a duck by using all pieces. They are given a short span of time (no more than couple of minutes). They work individually. All ducks are displayed in the end to observe the differences.
Observation skills Image: Clip Art	Participants are shown the «Whodunnit» video about a murder investigation. While watching the video 21 things change on the scenery (such as clothes, objects and people). Participants are asked to watch it carefully. When it is finished they are asked whether they could spot 21 differences. Generally one or two people notice one or two changes. Participants allowed to watch the film again with the knowledge that things change. Second time they manage to observe more changes but not all. Reflections focus on the lesson learnt: It is easy to miss (not notice) something you are not looking for. And people might notice different things. https://www.youtube.com/watch?v=ubNF9QNEQLA
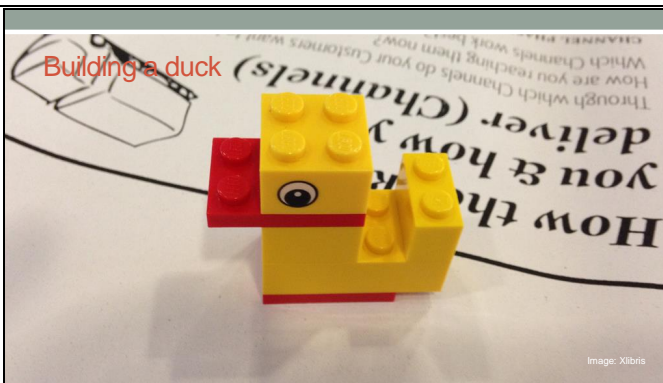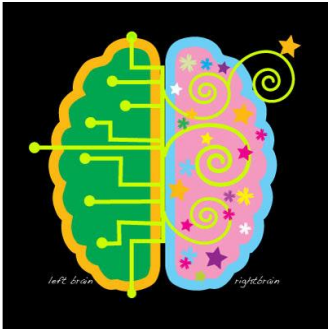
Left vs right brain test left brain · right brain Image: Clip Art	Participants are shown a video about the differences between left and right brain people. They test themselves and reach a conclusion about themselves. They get a clear idea about how complementary left and right brained people are. Focus is on team building. You can test yourself by watching this video: https://www.youtube.com/watch?v=feAikjPqOq8

Helpful Tips Image: Clip Art	Allocate very short time for diversity exercises and do not allow collaboration because participants might influence each other. For observation video, before you show the video do not mention that things change. In each excercise focus on diversity. Point out the importance of individual diversity in team building. And build the teams accordingly.

Lecture 5: Defining & Designing (Lego® Serious Play® Methodology)

DEFINING & DESIGNING	

| | In the service co-creation the first two steps are definition and the design of the service.

Lego® Serious Play® methodology can be used for both service definition and design.

In this way, participants provide preliminary information about their service idea by creating a model. |

| | Lego® Serious Play® is a structured, facilitated thinking, communication and problem solving technique.

It is a playful and still serious way to create new insights and to develop innovative ideas.

It helps to image and explore ideas by building models with bricks.

It helps individuals, teams and organisations to get a clear view of the current situation, their aspirations and goals and the way to get there. |

| | Lego Serious Play is used for:
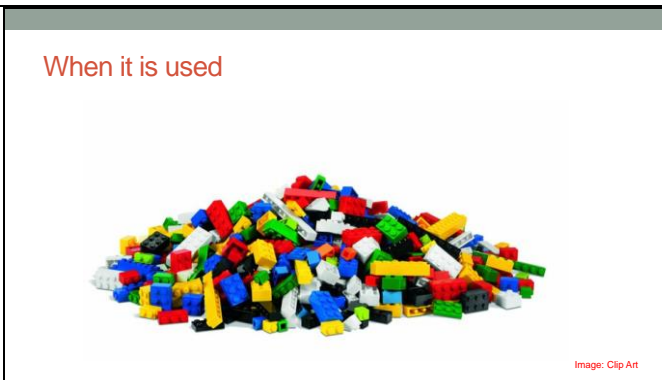
• Team building,
• Facilitating and fostering creative thinking,
• Exploring relationships and connections,
• Building and creating a shared vision,
• Working out a solution to a problem,
• Facilitating constructive discussions,
• Facilitating to handle complex problems. |
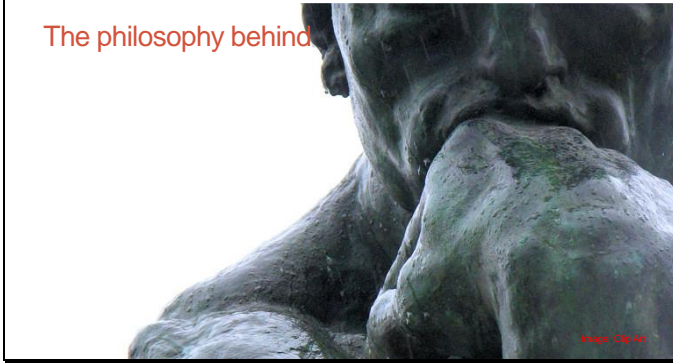
The philosophy behind Lego Serious Play is

- to focus on the story (not on the bricks). Bricks help creating stories,
- to understand the metaphors used in stories. They provide richer descriptions of the reality, and open a wider perspective to new possibilities,
- to explore possibilities, generate options and develop new understandings together,
- to understand that the knowledge is already in the room. It unlocks hidden knowledge and constructs new knowledge.
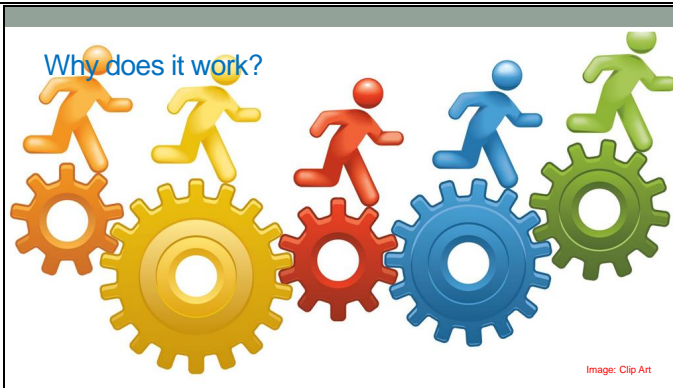
Lego Serious Play works well because

- 3D models help to understand better,
- playing with the bricks helps with thinking with hands,
- building with the hands creates strong involvement and commitment,
- while playing participants think creatively without stress,
- the models are constructed in a flow of intense playing without any long-term rational pre-design,
- playing with the model constructs new knowledge through self-reflection,
- models engage communication because participants explain the metaphors of the model.

Principles & rules

Image: Clip Art

Following principles and rules should be applied:

- The facilitator sets the challenge and timelines, and guides the process,
- The model is participant's answer to the challenge,
- There is no right or wrong answer in building with the bricks,
- Interaction with and inspiration from others are allowed,
- Everyone participates (builds and tells),
- No one can alter the model of someone else. The builder's meaning and story in the model is accepted,
- The builder owns the model and its story,
- The model and its story are questioned– not the person,
- Every story is listened,
- What the model looks like is not important. The meaning attached to the model is what makes it valuable.

Core steps in application

Challenging

Constructing

Sharing
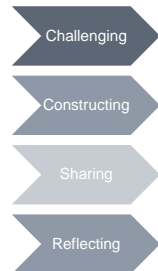
Reflecting

Core steps in application

Four steps in application are

- Challenging,
- Constructing,
- Sharing,
and
- Reflecting.

Step 1: Challenging Image: Clip Art	At the Challenging step • The facilitator poses the question, in other words sets a challenge to the group, • Participants are asked to build and create stories in response to the question posed. The question should be clear, however be open-ended, • This challenge depends entirely on the issues and topics the workshop shall address, • There is no standardised question set in Lego Serious Play, • Questions posed at this stage determine the content of the following steps.

Step 2: Constructing Image: Xlibris	During the construction step • Participants image and build their 3-D models in response to the question that has been posed, • Participants work with the special set of bricks designed to inspire the use of metaphors and story making, • They make sense of their model in response to the challenge given.

Step 3: Sharing Image: Xlibris	Each participant shares his/her model's meaning and story with the rest of the team, They explain their thoughts, associations, emotions and feelings coming to their mind when constructing the model, All participants understand the thinking and rational behind every model, Storytelling is a memorable method of communicating what has happened or what is currently happening, Storytelling with LEGO models makes a situation come alive before it occurs in real life and allows to test what might happen if a certain decision is made.

Reflecting follows sharing as a final step. At this step

- The facilitator and participants crystallize key insights, and ask clarification questions of the models,
- The builder provides the information wanted,
- The facilitator sums up connections.

The main role of the facilitator is that he

- Creates open-ended challenges,
- Gets the group's dialogue to serve its purpose,
- Makes the reflections and dialogue process easier,
- Helps participants express themselves,
- Asks clarifying questions.
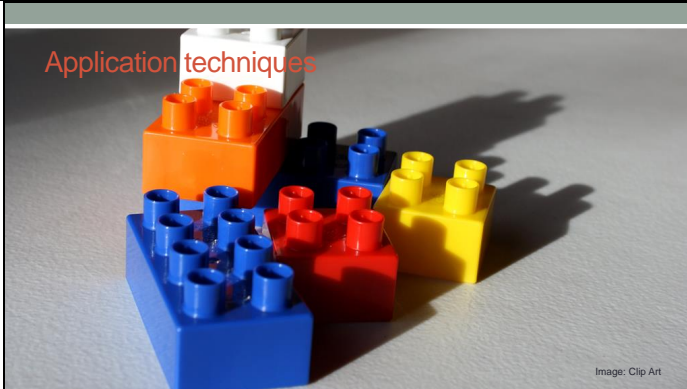
Application techniques

Application includes several phases which are not necessarily in linear sequence.

Which techniques are applied in which order depends on the workshop topics and purpose.
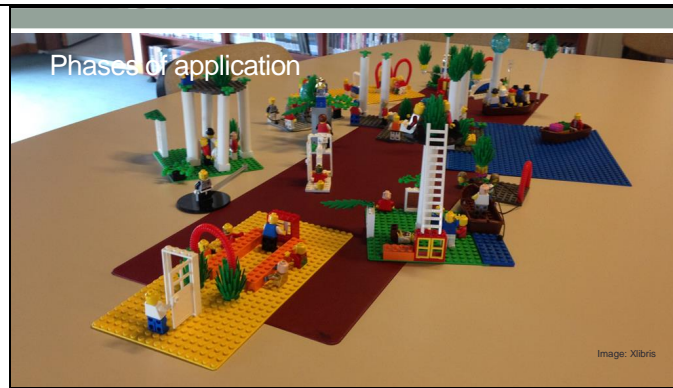
Application techniques include:

- Building individual models and stories,
- Building shared models and stories,
- Creating a landscape,
- Making connections,
- Building a system,
- Playing emergence and decisions,
- Extracting simple guiding principles.

Benefits of Lego Serious Play can be summarised as follows:

- It helps to image alternate solutions,
- It is an iterative tool,
- It allows to construct, deconstruct and reconstruct,
- It creates commitment and alignment,
- It is serious play,
- The use of metaphors generate new ways of understanding things,
- It is thinking by doing,
- It situmulates strategic imagination.

References

- Kristiansen, P. & Rasmusses, R. (2014). *Building a Better Business Using the Lego Serious Play Method* . Wiley.

- *The Science of Lego Serious Play.* (2002). Lego. Retrieved from http://www.strategicplay.ca/upload/documents/the-science-of-lego-serious-play.pdf

For more information about Lego Serious Play, you can refer to these sources.

DEFINING & DESIGNING -
XLIBRIS APPROACH

Introduction

Image: Xlibris

The first steps in the service co-creation is the definition and design of the new service.

Lego Serious Play methodology is used to help with service definition and design.

Participants are encouraged to provide preliminary information about their service idea by creating a model by lego bricks.

Starting

Warm up activities help with

Geting acquinted with Lego bricks

Creating stories & understanding metaphors

Clarifying expectations
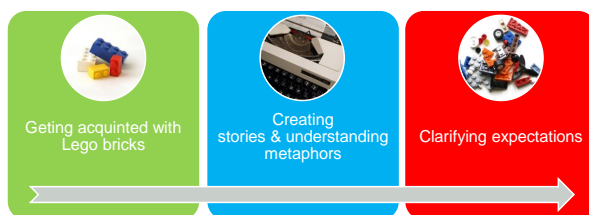
Defining and designing the service phase of Xlibris Approach starts with some warm up activities

These exercises:

- help participants to get acquinted with Lego bricks and the methodology,
- helps facilitators to share the philosophy behind using bricks to create stories, understanding the metaphors,
- clarify the expectations from participants and model building exercises.

Warm up activities Image: Clip Art	Different activities can be used for warm up purpose. Main idea here is to build something and assign a description and/or metaphor. These are simple and short activities before the actual study starts. Duration should be indicated clearly before each activity starts. Some of these activities are also useful for team building.

5 **Warm up activities - examples** • Building a duck • Building a tower • Building a model of yourself • Building a model of your choice	
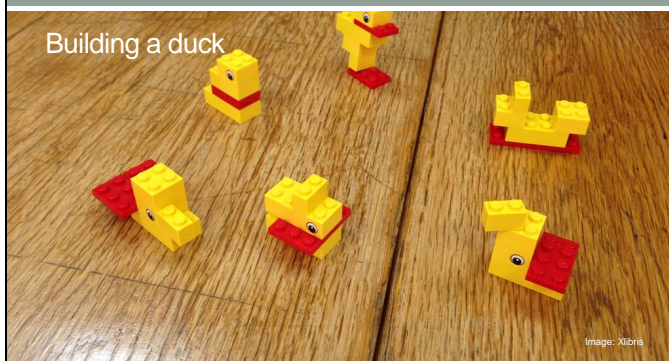
Building a duck Image: Xlibris	Building a duck activity • Participants are given exactly the same pieces of brick sets (7 pieces), • They are asked to build a duck by using all pieces, • They are given a short span of time (no more than 2-3 minutes), • They work individually, • They are asked to explain how it is a duck, • Ducks are displayed to show the differences, • This is a good exercise to use in team building to display differences in individual perspectives.

Building a tower
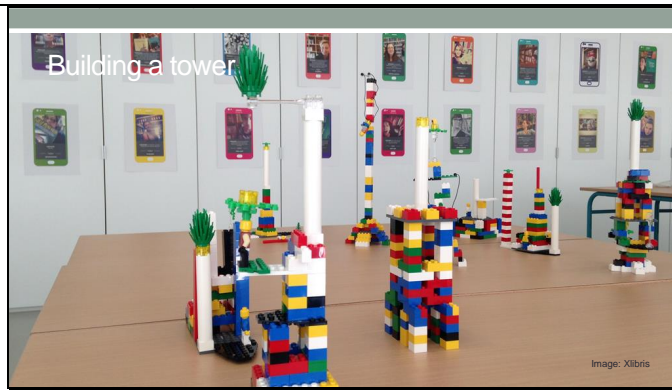
- Can be done either individually or in teams,
- Participants are asked to build the highest tower they can in five minutes,
- They are asked to explain their towers,
- Pointing out differences among the towers and explaning that there is no right or wrong way of building it helps encouraging creativity.

Building a self-model
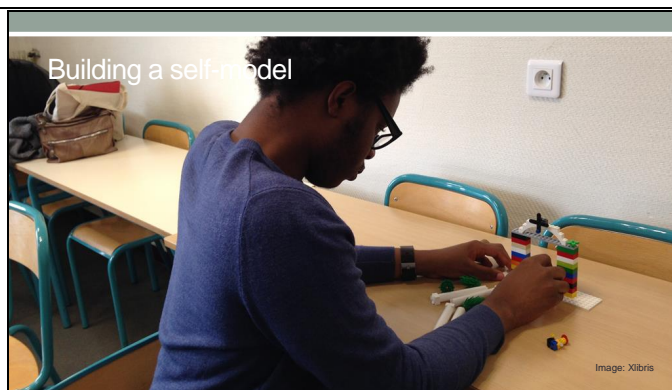
- Participants are asked to build a model of themselves in five minutes,
- Each participant talks about his/her model,
- When they talk about the model they provide valuable information about themselves which is not mentioned in a traditional way of introduction,
- The facilitator asks questions to better understand the meanings of different parts of the models,
- This is a good exercise to use in team building.

Building a model of your choice

- Participants are asked to build a model of their choice without any specification,
- After the models are constructed participant are asked to pick a card among pre-prepared cards each has an arbitrarily choosen single word written on it such as book, kettle, apple, cinema,
- Participants are expected to make a connection between the word and their model and explain how their model could be connected to the word written on the card they have picked,
- This exercise helps developing the utilization of methaptors skill.

Moving towards the main task

- After completing the warm up activities facilitators can move towards the main task
- Depending on group dynamics more than one warm up exercise can be used. It all depends on the time available and interest of the group
- Main task here is defining and co-designing new library services

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Defining and designing library services

Image: Xlibris

Defining, designing and co-designing library services

- Here one relatively more general and one more specific activity are suggested,
- First activity is about building a model of a library. Which allows participants to build and talk about the library concept in their mind,
- Second activity is about building a model of a library service they desire but does not exist today,
- It is always possible to be more specific at the second level. Facilitators can focus on a specific type of service.

Individual models

Image: Xlibris

Defining and designing services by individual models Core steps in Lego Serious Play methodology are applied in defining and designing the library service through individual models:

- The Challenge: Facilitator poses the question about the service,
- Building a model individually: Each participant builds his/her individual model by using his/her metaphors,
- Telling the story: Participants explain the meaning of their model and its components,
- Reflections: Facilitator asks questions to better understand the meanings of different parts of the model and makes reflections.
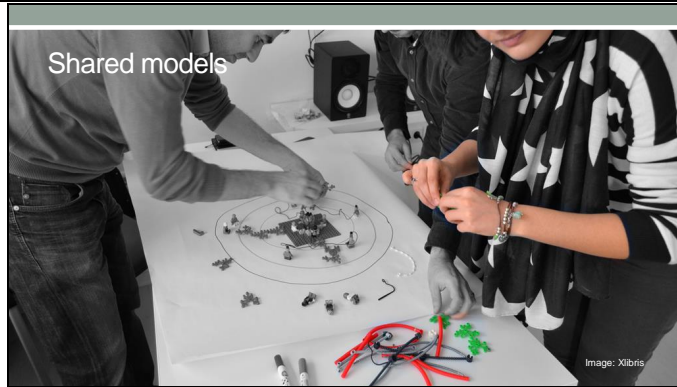
	Co-designing services through shared models
	For creating shared models participants work in teams:
	• Similar ideas (services) are choosen by the facilitator and teams are composed based on the service idea in their individual model,
	• Participants are asked to bring their models together and make a shared model by taking one (preferably the most important) aspect from each model,
	• Everybody should agree on all the parts of the shared model,
	• Everybody on the team explains the shared model,
	• Facilitator asks questions to better understand the meanings of different parts of the model and makes reflections.

Examples of challenges

Followings are some examples used to challenge participants within Xlibris Project
• Build a model of your dream library
• Build a model of your vision for your library in 5 years time
• Build a model of libraries in the future
• Build a model of what you like to change in your library
• Build a model of a library service you need
• Build a model of a service which is not provided by your library today
• Build a model of a user training service you desire
• Build a model of a smart service (a service delivered by using smart technologies)
• Build a model of a service delivered by social media tools
• Build a model which shows the barriers which prevents success

	Tips for using Lego Serious Play for service co-design:
Image: Clip Art	• Always start with warm up activities, • Prepare open ended challenges (questions) very carefully in advance, • Always let participants to work individually first and in teams later on, • Apply team building principles to construct better teams, • Get the group's dialogue to serve its purpose, • Make the reflections and dialogue process easy, • Help participants express themselves, • Ask clarifying questions.
Tips Image: Xlibris	• If you like to work with library users, choose the ones who are familiar with the existing services and facilities. Otherwise they might end up describing what you already have, • Avoid using professional jargon when working with users. They might not be familiar with it, • Work with users with different profiles, • Work with librarians from different services and if possible from different libraries, • Work with users first and librarians later on the ideas introduces by users.

Lecture 7: Exploring the Details (Business Model YOU Canvas®)

EXPLORING THE DETAILS	

Further developing the service

- After initially defining and designing the service, there is a need to go into detail and explore each and every aspect of it to be able to design and implement it

- At this stage there is a need to use other tools and techniques

- The Business Model YOU is one of the tools to explore different aspects of the services defined at the earlier stage

The Business Model Canvas

Image: Clip Art

A business model describes the rationale of how an organization creates, delivers, and captures value.

The Business Model Canvas is a tool to create and analyze business models. There are canvases developed for organizations as well as individuals.

The canvas is the visual representation of the various elements of a model.

Business Model YOU is a derivation of Business Model which focuses on individuals in work related settings.

Since all canvases are composed with the same segments, in this section the original canvas will be presented.

Benefits

- It helps to

    - see the relationships among the parts of the model
    - identify assumptions and risks
    - find ways to add value
    - brainstorm strategies

The Business Model Canvas
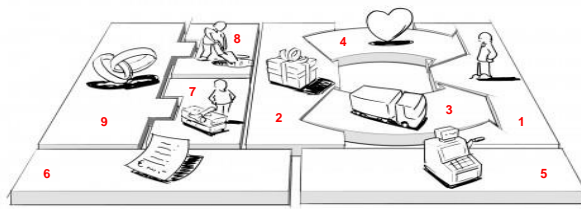
Image: JAM

The Business Model Canvas includes 9 building blocks. Each block helps to explore more about the business.

- Customer segment,
- Value prepositions,
- Distribution channels,
- Customer relationships,
- Revenue streams,
- Key resources,
- Key activities,
- Key partners,
- Cost structure.

Customer segment

Image: JAM

Customer segment is about who the customer is. Following questions should be answered:
- Who are our most important customers?
- For whom are we creating value?

  At this segment
- We must create a detailed portrait of each customer type.
- We should look beyond the obvious and focus also the following:

- who are the stakeholders?
- who is most motivated?
- who is most underserved?
- who has the most to gain?

Value prepositions
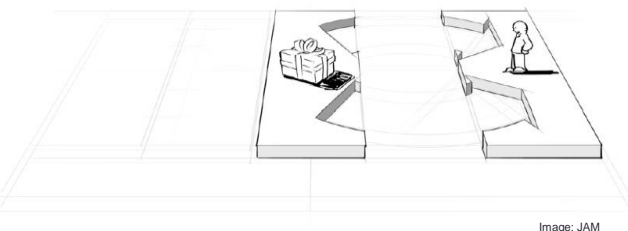
Image: JAM

At the value preposition segment following questions need to be answered:

- What value do we deliver to the customer?
- Which customer problem are we helping to solve?
- Which customer needs are we satisfying?
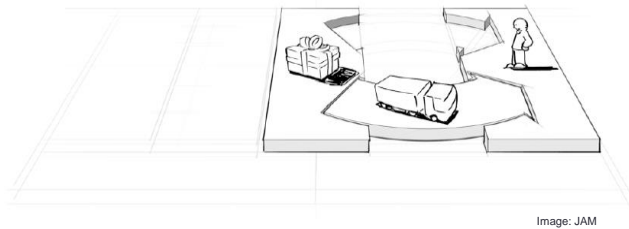
Distribution channels Image: JAM	Distribution channels are about how we deliver the value. Questions to ask are: • Through which channels do our customers want to be reached (physical or virtual)? • How are we reaching them now? • How are our channels integrated? • Which channels do work best? • Whish ones are the most cost efficient?
Customer relationships Image: JAM	Questions for customer relationships segment are: • What type of relationship do our customer segments expect us to establish and maintain wit them? • Which ones have we established? • How costly are they? • How are they integrated with the rest of the model?
Revenue streams Image: JAM	Revenue stream is about: For what value our customers care for?
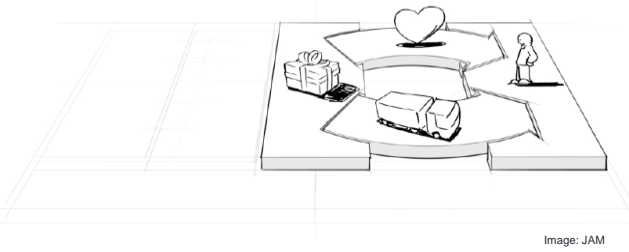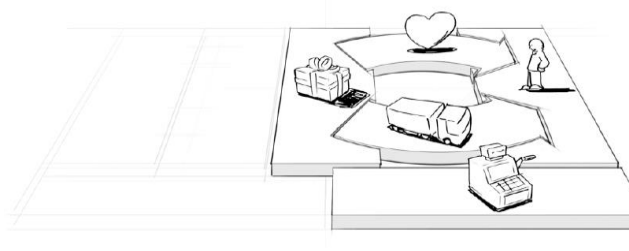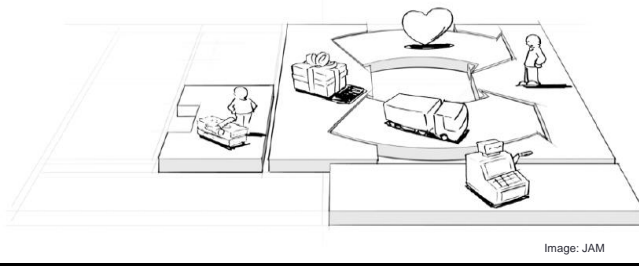
Key resources Image: JAM	What key resources does our value preposition require? What infrastructure and resources we need to deliver what we promise? Resources include: • tools, space, locations, • personnel, • equipment, • licenses, intellectual property, • supplies, • financial requirements.
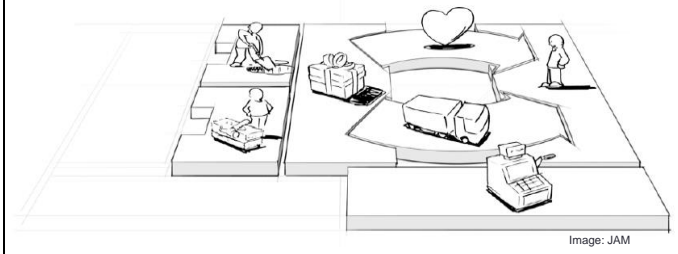
Key activities Image: JAM	What key activities does our value preposition require? What major activities (deliverables) we must produce – and when
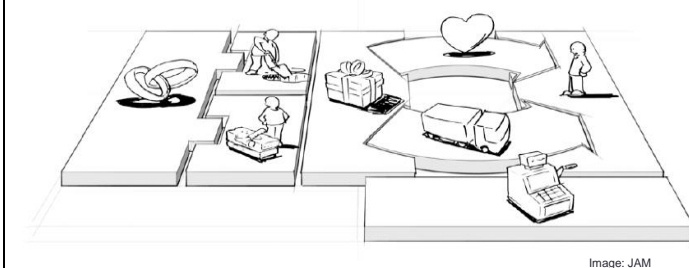
Key partners Image: JAM	Who are our key partners: • Suppliers • Developers • Distributors • Investors • Collaborators • Affiliates • Competitors How does each partner help or hinder the business model?

Cost structure
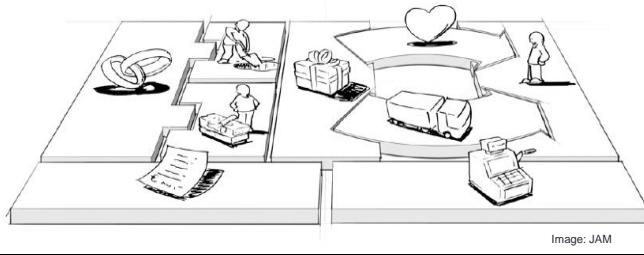
Image: JAM

What are the critical elements of the cost structure?

- Fixed costs,
- Variable costs,
- Resource, activity, partner costs,
- Infrastructure, operational cost,
- Payroll costs,
- What are the costs of each element of the business model?
- What are the risks, the unknowns?

The Business Model Canvas

www.businessmodelgeneration.com
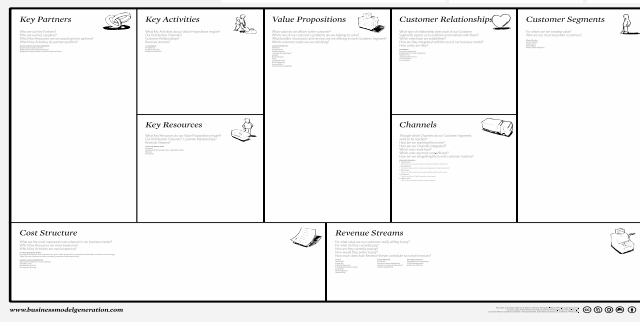
Business Model Canvas is a useful tool which helps us to see the big picture.
It helps to answer what, how, who and why questions:
- What products or services did not exist up to now?
- How new products or methods allow the service/product to be produced faster, cheaper, and in better quality?
- Who is poorly served until now ?
- Why: Meeting a need that is valued by customers ?

Filling in the canvas.

Image: Xlibris

1. Write key words on sticky notes (so you can remove and change as necessary).
2. Place sticky notes on the related segment of the canvas
3. Present it to others.
4. Discuss and fine-tune.

References

- Clark, T. , Osterwalder, A. & Yves Pigneur, Y. (2012). *Business Model You: A One-Page Method for Reinventing Your Career.* Wiley.

- Osterwalder, A. & Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers.* Wiley.

For more information about Business Model Canvas you can refer to these sources.

Lecture 8: Exploring the Details (Business Model YOU Canvas®) - Xlibris Approach

EXPLORING THE DETAILS – XLIBRIS APPROACH

Exploring the defined service

Image: Xlibris
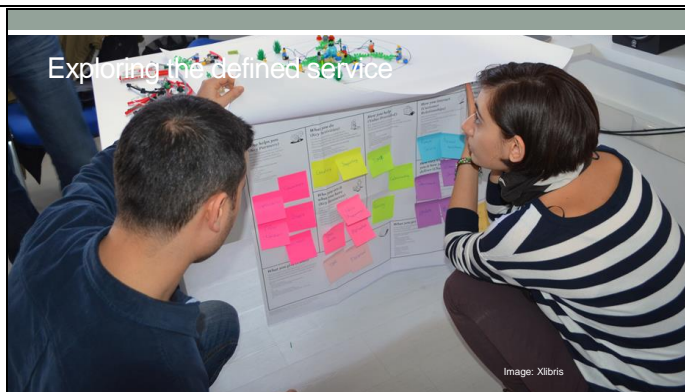
Following the initial definition and design of the service through creating a collective model with bricks, participants are encouraged to explore all possible aspects of the model.

At this stage the Business Model YOU Canvas is used.

The Business Model YOU Canvas 	The Business Model YOU Canvas The Business Model Canvas is licenced under creative commons. There are multiple versions available in different languages. It is easy to find, edit and use tool. Within Xlibris Approach it is used for service development for libraries.
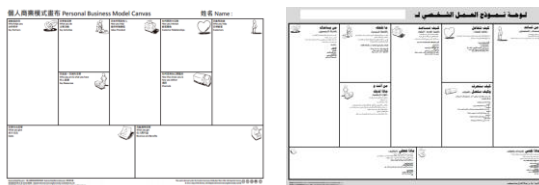
Preparations 	The Canvas should be translated into participants' language (if not available in that particiular language) to make sure that participants understand each segment in the Canvas. If and when necessary the Canvas can be adopted to the jargon of the profession. For instance, for libraries it is better to use the term user instead of customer and to use term benefit instead of revenue. The Canvas is introduced to participants and each segment in the Canvas is explained.

Business Model YOU Canvas Image: Xlibris	Business Model YOU Canvas is a derivate work from Business Model Canvas and includes the same 9 building blocks. Each block helps participants to further explore a different aspect of the proposed service. Here, to provide a concrete examples, the segments in the canvas will be filled for Xlibris Project.

Who you help (customers/users)?

Image: Xlibris

Who you help (customers/users)?

At the customers segment following questions are answered:

Who is the target user group?

For whom you are creating this service in other words, for whom you create the value?

Who is your most important user group? Does this service target the most important user group?

Within Xlibris example, main target groups are:
- library users,
- librarians from all types of libraries (such as public, shool, academic libraries),
- other information professionals,
- Library and Information Science Students.

How you help (value provided)?
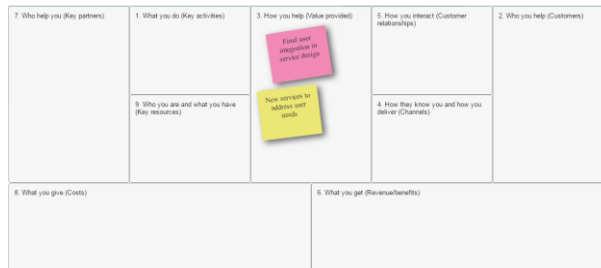
Image: Xlibris

How you help (value provided)?

At the «value provided» segment describe specific benefits users will get from this service.

Try to answer following questions:

- Which needs this service will satify?
- Does it increase convenience or usability
- Does it improve service quality and performance?
- Does it increase user satisfaction?

Within Xlibris example integrating final users in service design and creating services which address their needs and desires are the values provided.

How they know you, how you deliver (channels)?

At the channels segment, questions to answer are:

- Through which channels do your users want to be reached?
- Which channels work best with the target user group?
- Which channels will be used to provide user awareness?
- How new/potential users will find out about this service?
- Which delivery channels are the most desirable for users?

Within Xlibris example channels are mainly website postings, newsletters, social media postings (especially FaceBook and Twitter), several workshops organized at international conferences as well as postings to professional discussion lists.
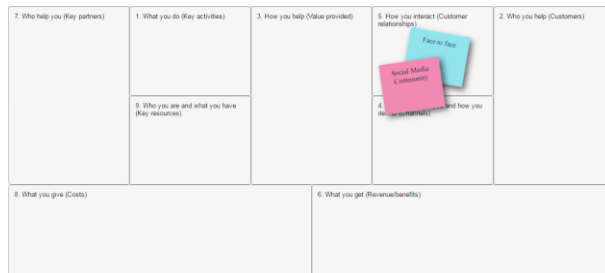
How you interact (customer relationship)?

How users will be interacted and communicated are explained at the customer relationship segment.

How the service will be delivered?
- Face to face
- Remote access

Within Xlibris face to face interaction was heavily used. Some project outcomes will be delivered remotely through e-platforms.

What you get (benefits)?

Benefits segment requires information mainly about soft benefits, since libraries are non-profit organizations.

This might include: satisfaction, enjoyment, flexible hours, quality, fully used services, heavily used collection, more time for other services, professional development, reputation and recognition.

Some of the soft benefits such as professional satisfaction, professional development, reputation, recognition are also the benefits gained from Xlibris.
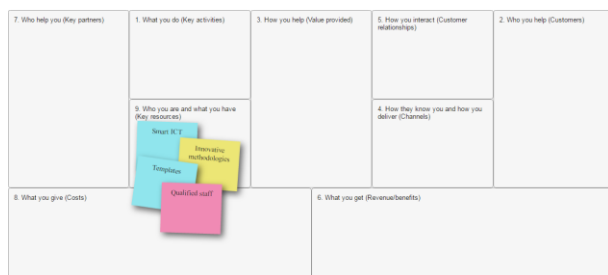
What you have (key resources)?

What key resources we have are explained in the key resources segment.

These are the resources to deliver what we promise.

It includes existing personal and professional qualifications, tools, equipment, qualified personnel.

Within Xlibris qualified staff from partner institutions, smart ICT and templates are some examples for key resources.

What you do (key activities)?

What key activities we will perform to provide the service are listed here at the key activities segment.

All major activities should be mentioned:

- User profile definition,
- Research on smart services,
- Training on Web 2.0 tools,
- Team building,
- Service co-design with innovative methodologies,
- Crowdsourcing for obtaining inputs,
- Prototyping new smart services are examples from Xlibris.
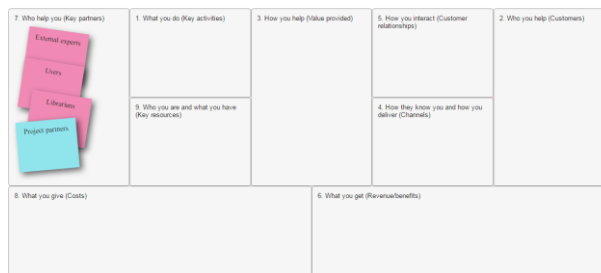

Who helps you (key partners)?

Who will help to provide this service are listed at the key partners segment.

It could be
- Suppliers,
- Academic staff,
- Other libraries and information centers,
- Vendors,
- Professional Associations.

How (in what way) does each partner will help to provide it?

Within Xlibris key parners are project partners, library users, librarians, external experts.
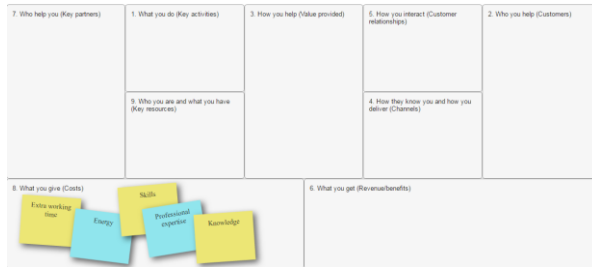
What you give (costs)?

At the cost segment what you give as well as what you give up are summarised.

- Excessive time commitment,
- Energy,
- Stress,
- Low recognition,
- Lack of flexibility.

Extra energy, time commitment, skills, professional knowledge and expertise can be mentioned regarding Xlibris example.
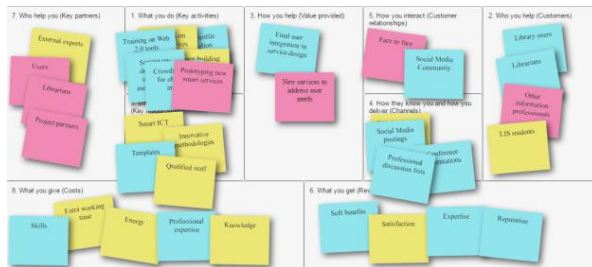

Tips for filling the canvas:

1. Make each group to fill in one Canvas based on their shared model.
2. Allocate enough time for this exercise to allow teams to discuss every segment in the Canvas.
3. Use the right size of the canvas A1 or A0 mínimum.
4. Provide help when needed for further explanations about Canvas segments.
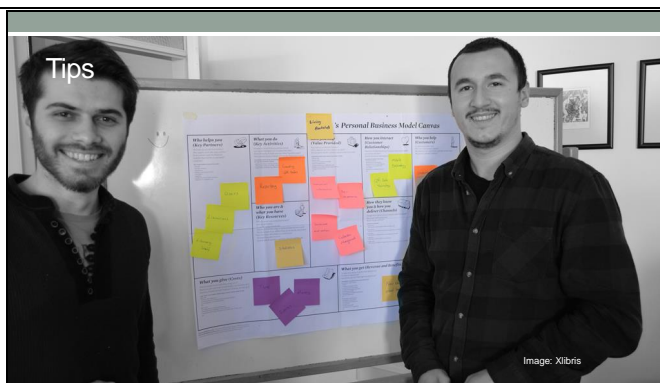5. Encourage participants to use keywords and write them on sticky notes.

6. Encourage participants to write with big letters so that it can be read from a distance
7. Allow 4-5 minutes for presentations
8. Listen carefully and make reflections
9. When necessary add, remove and relocate sticky notes, however make sure that these changes are agreed and understood by the team members

OBTAINING INPUT

After defining the service and completing service design, it is useful to get some inputs and reflections from outsiders.

This provides different perspectives from wide range of individuals (from potential users to experts) before the service is actually implemented.

Crowdsourcing is one way of obtaining inputs.

According to Jeff Howe, it is the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call.

Coordinating a large group of people on the web to do small contributions that solves problems which cannot be solved by a software or one individual.

Obtaining information or input into a particular task or project by enlisting the services of a number of people, either paid or unpaid, typically via the Internet.

Collaborating with the people who used to be the silent audience to make something better than you could make alone.

Components requester worker platform	Croudsourcing has got three main components: Requester: people who submit tasks or projects and collect answers; Worker: people work on tasks and provide answers; Platform: Program used for publishing and managing tasks.
Utilization Image: Crowdsourcing	Crowdsourcing can be used for many different purposes. For instance • for getting a work done such as translating, logo design, mobile app testing, data verification, brand creation; • for stimulating action such as crowdfunding, political activism, citizen participation, civic innovation, community improvements; • for obtaining input such as idea generation, product feedback, collective brainstorming, problem solving, Beta Testing.
Tasks required Image: Clip Art	Tasks required through crowdsourcing includes: • Complex tasks such as developing a software, • Simple tasks such as designing a logo, • Macro tasks such as testing a mobile app, • Micro tasks such as labeling an image.

When to use crowdsourcing?

To do tasks which

• computers cannot do

• a single person cannot do

• can be split into small parts

Tips for crowdsourcing

- Crowd should be defined: Is it a specific group or everyone, where can you find your crowd, how can you best reach this crowd?
- Message to the crowd should be clear: The crowd must understand what you are asking. It should not be interpreted differently.
- Process should be described: Describe how the whole process works. Define all steps in the process such as contribution, selection, voting.
- A deadline should be given.
- The reward system should be explained: What you will give back to the crowd.
- Questions of the crowd should be answered.
- Feedback should be provided to contributors.
- There should be a minimal barrier to entry.

Phases of crowdsourcing process

- Define the task, ask question, define the service or project;

- Choose crowdsourcing platform;

- Publish your project/tasks and wait for answers;

- Aggregate answers.

Benefits of crowdsourcing
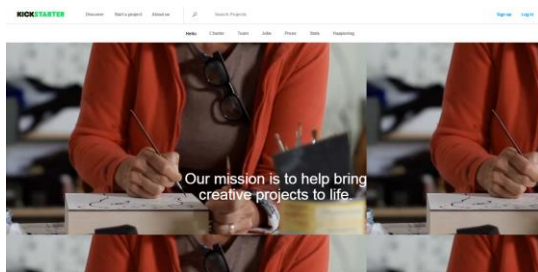
When crowdsourcing used properly, it

- generates new ideas,

- cuts development costs,

- creates a direct and emotional bond with customers.

References

- Howe, J. (2009). *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business.* Crown Business.

- Grier, D. A. (2013). *Crowdsourcing For Dummies.* Wiley.

For more information about crowdsourcing you can refer to these sources.

OBTAINING INPUT –
XLIBRIS APPROACH

Platform (http://platform.brickme.org/index.php?page=ex)

Image: Brickme.org

Platform

Within Xlibris a special crowdsourcing platform is used: Brick-me. It is developed by Daniel Weiss, one of the members of the project team.

Brickme is a platform helping to share project ideas and obtain insights from peers across the world.

Brickme platform is a crowdfunding like platform where contributions received in form of insights which help to improve the proposed project.

This platform allows users to create a Business Model YOU Canvas for their project and present different aspects of the project based on canvas segments. It also allows to add Lego Serious Play videos. It is very unique in this sense and serves very well to the Xlibris Approach.

Image: Clip Art

Brick-me is a multilingual platform. Interface can be used in Bulgarian, German, Lithuanian, Spanish, Turkish, as well as English.

It allows to create an account and manage projects. Within Xlibris, it is used to obtain insights about proposed services.

A board is created for each service which includes:
- The title
- Short description
- Detailed description
- Short video presentation
- Business Model building blocks
- Business Model Canvas
- Lego Serious Play model building videos
- Photos

Image: Clip Art

Platform allows to determine a deadline for each «service project».

It allows contributors to give feedback and provide inputs about the project by choosing predefined categories along with personal inputs.

Platform allows account holder to track and agregate the inputs.

Utilization of the platform

1. Opening an account
2. Treating each service as a project
3. Giving the service project a title
4. Summarising the service project
5. Preparing a video
6. Filling the Canvas
7. Determining a time frame
8. Explaning the rewards
9. Finding the crowd
10. Communicating with the crowd
11. Managing the process

Giving the project a title Image: Xlibris	Giving the project a title Project title should be • Concise, • Catchy, and • Descriptive.

Summarising the project Image: Xlibris	A short and a long description of the service is presented. Following aspects are explained: • What is the main goal? • Who is the target group? • Who is involved? • What makes it innovative? • What will be the impact?

Preparing a video Image: Clip Art	The video prepared is a short description of the service and value preposition. This video is expected to encourage the crowd to react and provide insights. Therefore it should be: • short, • clear, • and attractive.

Filling the Canvas Image: Xlibris	Business Model Canvas helps to explain and present different aspects of the proposed service.

Putting a timeframe It's Time Image: Clip Art	How long the project will be open for inputs is indicated.

Explaining rewards Reward Just Ahead Image: Clip Art	• Offering rewards is a good motivation for contributors. • If you have a reward, explain it clearly. • It could be, for instance, a place on a Course or Workshop, if it is a training service. • The best rewards relate directly to the project, have little associated cost, and contribute or support legacy of the project.

Finding the crowd

Image: Clip Art

Answering following questions helps to target the right crowd:

- Who is going to be interested?
- Who is going to be willing to provide input?
- Who has something to gain directly from this service?
- Who has expertise to provide valuable insights and most likely contribute?

Reaching the crowd

Image: Clip Art

- Make a good list of interested parties/potential stakeholders
- Ask influencers to spread the word
- Use social media, especially Facebook and Twitter.
- Get support from friends and colleagues
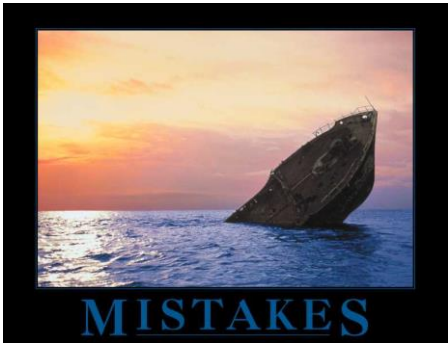- Draft an email with a link and ask people to forward it

Managing the process

Image: Clip Art

After publishing the «service project» on the platform and reaching the crowd, it is important following up, answering questions and being involved in communication.

Insights are agregated at this stage to further evaluate and use for improvements in the service design.

Image: Clip Art

Most comon mistakes

Common mistakes during crowdsourcing are expecting that:

- putting a video and a description will be enough,
- the word will travel around by itself,
- there will be dozens of inputs,
- all inputs will be useful.

Lecture 11: Fine-Tuning (Xlibris Matrix) & Finalizing

FINE TUNING & FINALIZING

Fine-tuning service co-design

- Based on the inputs aggregated from peers and users, the proposed service is fine-tuned

- The best approach is prototyping the service before the actual implementation

- This practice helps to find out about training needs

- Within Xlibris Approach a matrix is developed for further fine-tuning as well as determining infrastructural needs and training needs

Based on the inputs aggregated from peers and users, the proposed service is fine-tuned.

The best approach is prototyping the service before the actual implementation.

This practice helps to find out about training needs.

Within Xlibris Approach a matrix is developed for further fine-tuning as well as determining infrastructural needs and training needs.

|	
Matrix a b c d e a b c ■ d e Image: Clip Art	Xlibris Matrix includes components such as: • Description of the service • ICT to use • Nature of the service • Target group • Infrastructure • Support • Knowledge & competences needed by the service provider • In-service training needs for service provider • Knowledge & competences needed by users • User training needs This information is partly derived from the Canvas completed during the previous phase.
Service description Image: Clip Art	A short description of the service is provided from the earlier stages.
ICT resources Image: Clip Art	Information and Communication Teknolojies to be used ICT to be used to deliver the service such as applications/channels to use like Pinterest, Instagram, Twitter, Vimeo and/or devices to use such as tablets, mobile devices are listed.
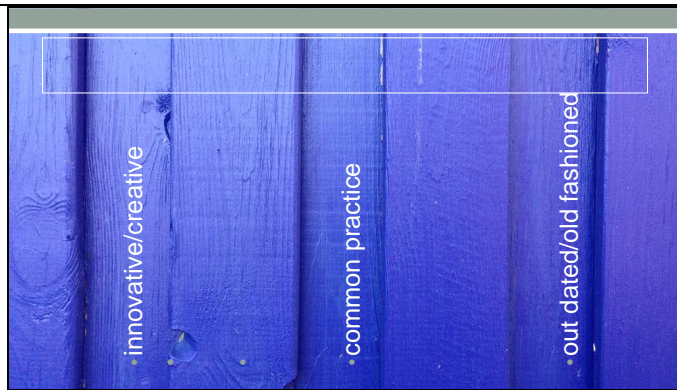
The nature of the service is labelled as:

- innovative/creative,
- common practice,
- out dated/old fashioned.

Target group

Image: Clip Art

The main target user group of this service is defined.

It is decided whether this target group is the group library wants to focus.
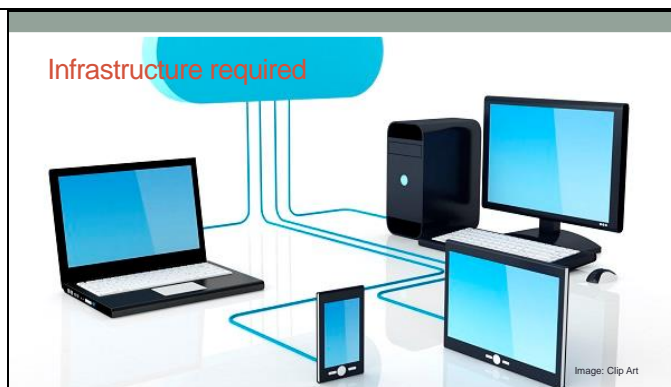

Infrastructure required

Image: Clip Art

Infrastructural requirements such as Internet connection, broadband, features and the quantity of devices to utilize are determined.

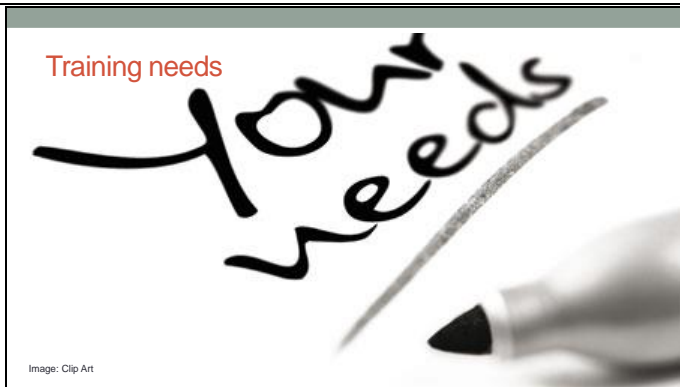|	
Support needed Image: Clip Art	Support needed (if any) from other professionals such as graphical designer, innovation designer, programmer, teacher, app developer, certified Lego Serios Play expert, are determined.
Knowledge & competencies Image: Clip Art	Profile, knowledge and competences required by the librarians of the library which will deliver this service are described. Knowledge and competences required by users to be able to use this service are defined.
Training needs Image: Clip Art	In-service training need for librarians are determined based on the comparison between knowledge and skills required to create the service and the actual case. Training needs for users are determined based on the comparison between knowledge and skills required to use the designed service and their actual competencies.

Conclusion

• Infrastructure and support are provided when necessary

• Librarians are trained

• Service is developed and implemented

• Service is promoted

• User training is provided