"Lucian Blaga" University of Sibiu
Field of study: Management

PhD Thesis

Contribution of Library Managers to the Information Society

Abstract

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Appendix 1

I INTRODUCTION

1.1. The aim of the thesis

The aim of this thesis is to identify and discuss the salient features of the challenge of organizing libraries in the digital era.

1.4. Framing the aim of the thesis, research questions and expected usefulness

This thesis is about library managers in three European Union countries, namely, Finland, Romania and Sweden, and how they contribute to the information society in the changing digital era.

The results and knowledge gained through this study will illuminate aspects of library leadership and management as seen through the library managers' information worlds. The results can be used to generally reflect on the function and tasks of library management and to educate new and future leaders of existing or future libraries. In times of change competence development issues become particularly important as libraries move to proactively broaden the competence of all staff to align with development.

II THEORETICAL FRAMEWORK

2.1. Information society in continuous change

The information society is an often used concept and it is defined in many ways (e.g., Dukic, Dukic and Medaric 2010; Webster 2014; Wikipedia 29 March 2017). Shuler (2007), Britz (2008) and Nayar (2007) used the concept of the "global information society," which connotes something that connects the whole world rather than something that relates to one single society. It can be understood as the result of interconnected systems and networks. Thus, "information society" is commonly understood to refer to a highly developed society that is dependent on information-based intangible resources, information-intensive services and information-oriented public service.

The structure of this thesis is illustrated in Figure 1, below.

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INFORMATION SOCIETY

Environmental scanning

Theories of relevance for library management

Framing the empirical study theoretically

EMPIRICAL STUDY

Library managers

Finland   Romania   Sweden

Results and Interpretation

CONCLUSIONS AND DISCUSSION

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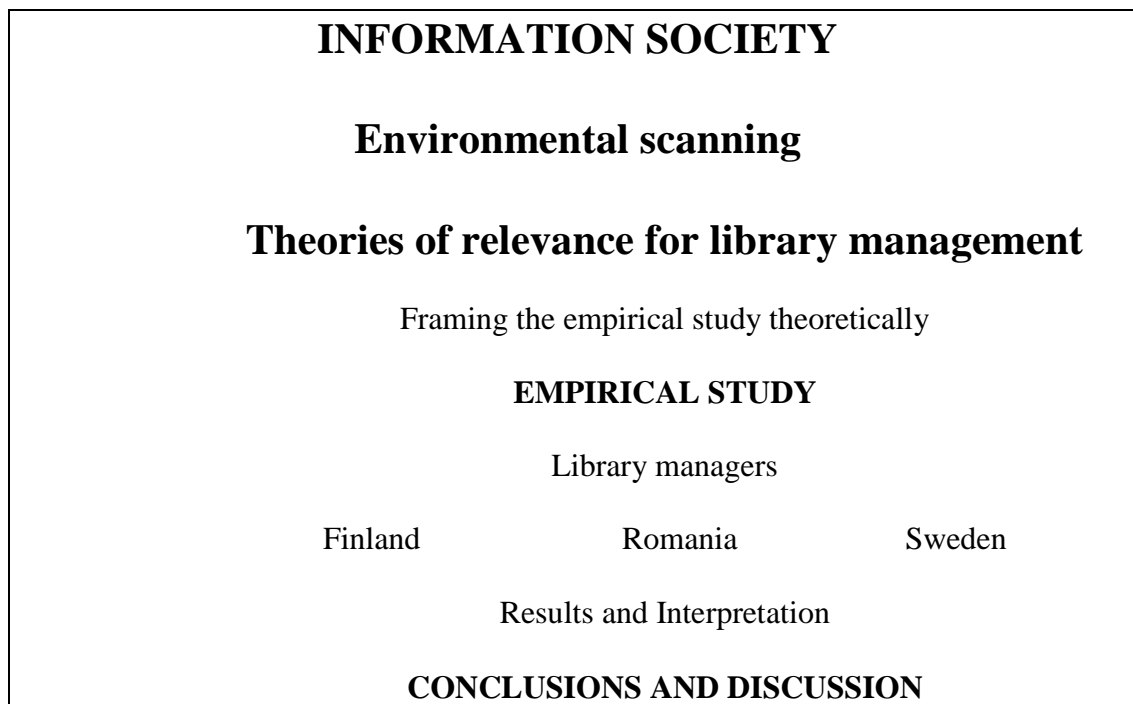
Figure 1. The structure of the present thesis.

2.2. Information mapping in the information sphere

Information is in itself an abstract concept that is concretized as databases, systems, books, facts and in other forms.

2.3. Driving forces

The theory of driving forces was developed in a strategic context focused on the competitive forces of the market. Porter (1979, 1980) created a "five forces model" involving the surrounding forces of the "threat of new entrants," the "bargaining power of suppliers," the "bargaining power of buyers," the "threat of substitutes" and "rivalry among existing competitors." This model serves often as a basis for discussion about surrounding environments.

The five forces model was created for thinking about and looking for corporate profit and survival.

2.3.1. Internal and external driving forces in libraries according to Pors and Hernon

Pors and Hernon (2013) stressed the following forces:

Table 1. Some internal and external driving forces in libraries. Source: Pors and Hernon 2013, p. 112

INTERNAL DRIVING FORCES	EXTERNAL DRIVING FORCES
New staff members	*Globalization*
New technology	*Educational level*
Requirements for effectiveness, efficiency, and accountability	*Demographic shifts and changes*
	New needs in the market
New products and services	*Competing services and products*
New leaders and managers	*Technological development*
Adoption of recipes and internalization of new ideas concerning work processes, services, and the like	*Legislations*
	New trends in values and norms in society

The categorization is not frame-breaking in itself but is rather a description by Pors and Hernon (2013), researchers in library and information science. The categorization could have two-way arrows between the internal and external forces because they are mutually dependent: competition leads to new products and services on the market or to penetration of new markets. New leaders and managers are also listed, giving them a role as an internally driving force.

2.3.2. Some examples of Information and Communication Technology (ICT) forces in legislation

The issue of legislation was the primary reason for the European Union initiative Digital Single Markets.

In Finland legislators have endeavored to create uniform conditions for the operation of the infrastructure of the information society in a body of legislation known as the Information Society Code (7.11.2014/917).

Sweden has an Act (2002:562) governing electronic commerce and other services of the information society. In Section 2 of this Act, the Swedish term denoting "services

of the information society" refers to services that are normally provided for a price and that are provided over a distance, by electronic means and at the individual request of a service recipient.

In Romania the importance of legislation for the information society is reinforced, for instance, by having a designated minister for information society and telecommunications, and this minister recently gave a speech entitled *"Adopting a cybernetic security law in Romania is paramount"* (Haraga 2014).

One way of driving development is through the pressure excerted by international federations and library guidelines for. The pressure exerted by the International Federation of Library Associations, IFLA, is of a more persuasive character.

2.3.3. Ethical aspects of ICT and modernization projects for libraries in the European Union

2.3.3.1. Ethical reflections

The Group on Ethics in Science and New Technologies to the European Commission (EGE), in its report (Number 26, 22 February 2012), described information and communication technology from the ethical point of view.

The right of access to ICT is looked upon as a fundamental right in the European Union.

This ethical position is not new, actually, but was expressed using the modern language of the information society by Jarvis (2009). The ethics of the Google company might be: make mistakes well, life is a beta, be honest, be transparent, collaborate and don't be evil (Jarvis 2009, p. 91-102).

2.3.3.2. Modernization projects for libraries in the European Union

The common theme of the projects is digital infrastructure. A further common feature of the projects is that they were recently finished or are ongoing as a part of the digital agenda of the digitalization of libraries and information in the European Union.

2.3.4. Ethical information facets related to libraries and their users

Information-as-resource ethics gives a positive association: a resource is something that is filled over and over again. Floridi (2010) mentioned the digital divide, the info

glut, and the reliability and the trustworthiness of information sources. A library user (information consumer) relies on the libraries' capability to offer trustworthy information and books.

The information of users is protected and classified as secret in public libraries. The ethical aspect is about generally respecting the other's private sphere in the information society.

2.3.5. Well-informed citizens

As was shown in legal conditions for libraries and their globally expressed mission by IFLA, the citizens are at the heart of libraries. The mission of libraries is about providing access to citizens under certain conditions such as free-of-charge and neutrally.

2.4. Legal basis of the transformation of information infrastructure

The core material of libraries has been paper (paper-based books, journals). Digitalization transforms the books into e-books and the basis of this transformation is data. Libraries are challenged by that development.

2.4.1. Shift from physical to digital, printed to electronic

Libraries in both Sweden and Finland have implemented IT solutions, catalogs, loan functions, and much more, as the Romanian libraries are also doing.

Finland and Sweden are among the countries that have the most advanced digital economies in the EU, according to statistics from the European Union. Romania is one of the countries that have the lowest scores on the Digital Economy and Society Index (DESI, https://ec.europa.eu/digital-single-market/en/desi).

Romania is moving towards the information society with the formulation of its digital agenda for 2014-2020. Creating an infrastructure is a necessary condition of this endeavor, of course.

Table 4. A statistical overview of public libraries.

	Finland	Romania	Sweden
Population in	5.5	19.4	9.8

million			
How many use a computer in the library	900 000	500 000	Not given
Number of inhabitants per library	5 414	6 700	8 604
Adults using the public library	3 million	16%	2.7 million registered users
Number of books or loans	97.4 million books		56.5 million loans
Number of e-books	265 000		1.5 million loans
Online: regular internet users, ca.	90%	55%	85%
Number of public libraries	Ca. 740	2 876	1 145

2.4.2. Library laws and Finnish, Romanian and Swedish library systems

2.4.2.1. Libraries' missions and other directing guidelines

Countries' legislation pertaining to libraries provides direction as to how libraries should be managed, how they should be developed, and how the changes in society may be included in culture and education. As an interesting comparative fact, Finland instituted its libraries act much earlier than Sweden—namely, in 1928, as compared to Sweden, which did so in 1995. Romania instituted its library act in 2002.

2.4.2.2. The Finnish library system and the 2016 Libraries Act

The Finnish Libraries Act sets out the tasks and the frameworks of the nation's libraries. According to the Libraries Act, the task of the public libraries is:

1. to offer access to materials, information and cultural content,
2. to provide a many-sided, contemporary collection,
3. to promote reading and literature
4. to provide information services, guidance and support in the retrieval and use of information, and promote a many-sided literacy,
5. to provide premises for learning, recreational interests, work and civic activities,
6. to foster societal and cultural dialogue.

2.4.2.3. The Romanian library system and the 2012 Libraries Act

The Romanian library system is similar to that of Finland in its organization of functions. There are the National Library of Romania, the Library of the Romanian Academy, university libraries, specialized libraries, public libraries and school libraries. The operations of Romanian libraries are regulated by library legislation. Romania has seen many regulatory frameworks, starting in the middle of 19th century. In 2002 an integrated legal framework appeared—Library Law No. 334 of 2002. The 2002 law was updated in the past few years through a series of legislative acts issued in 2006, 2009, and 2011, which came to supplement the original law.

2.4.3.4. The Swedish library system and the 2013 law

The Swedish library network is built on public library systems, school libraries, hospital libraries (often designed for both medical staff and patients), one National Library, university and university college libraries, special and government agency libraries, county/regional libraries, lending centers and one repository library (Thomas 2011).

Under its new directive, the National Library will build a foundation for closer cooperation between the different kinds of publicly funded libraries. There are a number of common fields for public as well as for academic libraries.

2.5. Managing change in libraries

2.5.1. A Swedish example

In Sweden, change management at five Swedish libraries was studied by Åstrand and Ahlqvist (2012). The study had the subtitle *Heart of Change*. The study's theoretical framework and some empirical findings are described here.

This difficulty to change may depend on several factors (Åstrand and Ahlqvist 2012):

The change-management method depends on the situation and the context

It is difficult to lead people to adopt a new mode

It is important to choose the right strategy for change

Librarians' logic is based on their professional perspective (core values)

Institutionalization in different grades

The meaning of communication

The ability to create safety

2.6. Becoming a library director: a study applying a framework based on four frames

2.6.1. Becoming a library director

The Bolman and Deal model (2013) provides a tool by which to approach leadership through four different frameworks. Each of these frameworks is also associated with a general metaphorical role.

2.6.2. The four-frame model

The speed of development in information societies is rapid, but changes cannot always be immediate, depending on the context and the situation.

I clarify here the different frameworks and the metaphors that Bolman and Dean (2013) connected to each one of them.

Structural Framework (the bureaucrat)

Human Resource Framework (the democrat)

Political Framework (the politician)

Symbolic Framework (the visionary)

2.7. A pyramid of responsibilities and strategies

The contribution of libraries to the information society is a societal responsibility on the highest level. It is important to describe what that contribution is about. Library managers navigate in an information sphere that requires an information map. The map reveals demanding challenges, even dangers. Negotiations about licenses, access to databases, and electronic book collections are examples of such challenges. Libraries are international and global solutions in the world. They are mature organizations. They are easily recognizable and numerous. It is easy to identify a library in a city, at a university or a school—in Finland, Romania, Sweden, or anywhere else in the world. It is not an unknown concept.

Library managers need to have different kinds of skills and abilities (or personality characteristics) in different phases. Naturally, real-life situations and varying contexts complicate the categorization. The concept of the library is firmly established, but library managers face several challenges.

The libraries in Finland, Romania and Sweden can be considered as representing the mature phase.

2.7.1. Challenges, opportunities and strengths

The SWOT model is often used to decipher the strengths and weaknesses that a company might have internally, and the opportunities and threats that might exist externally.

The SWOT analysis is a strategic tool to improve strategic planning. Library managers and librarians can perform different analyses depending on their own particular "information world".

2.7.2. New Public Management as a strategy application

There is actually no self-evident reason why libraries cannot be viewed as core operations instead of support organizations. It could simply be a matter of library

managers noting a lack of "language" in an environment characterized by theories from an area of competence rather than from management. This requires in-depth "language courses" and a desire to analyze, understand and use the different forms of capital that libraries have, as efficiently and effectively as possible. One way of doing this is to study the discipline of management, so as to understand what kind of lessons can be learned from management.

New Public Management (NMP) identifies and promotes the attitude that there is also a financial reality and that common resources could be used more efficiently, in my understanding.

One example of reforms in the world of libraries, into which NPM thinking seeps, is the amalgamations of libraries that are occurring in Finland, with the Tritonia Academic Library in Vaasa, Fellmania Information and Library Services in the Lahti Regional Consortium, Lappeenranta Academic Library, and the Lapland University Consortium.

2.7.3. Leadership roles in the pyramid of responsibilities

The theory of leadership assumes that it is possible to clarify the kinds of roles a leader (manager) has. Mintzberg (1973) based his argumentation on the manager's formal authority and position.

Informational roles are:

The role of monitor

The role of disseminator

The role of spokesman

The role of entrepreneur

The role of disturbance handler

The role of resource allocator

The role of negotiator

2.7.4. Possible cultural differences in management

A logical question, in consideration of the aim of this study, is if the roles of management can be applied in the same way in different countries: Are there cultural differences?

The role of managers in Sweden in the inclusive management tradition (Bredin et al. 2016) could be that the manager becomes more like a team member than a team leader, or assumes any of various other different, more side-by-side roles than the ones Mintzberg (1973) found. It can be assumed that in the information society the leadership roles involved in managing information have changed, that organizing information flows in the complicated and challenging information map demands updated knowledge of information technology.

III EMPIRICAL STUDY

3.1. Introduction

The research in this study was conducted using case methodology. Case studies aim to analyze specific issues within the boundaries of a specific environment, situation or organization. A case can be almost anything: a country, an organization, a person, or a situation. There are two ways to describe the method for the analysis of cases. First, there is analysis within a case (often called a single case study) and secondly, analysis between cases (often called comparative case study or multiple case study).

3.2. Pre-understanding

Qualitative research often recalls the concept of pre-understanding. "Pre-understanding" means prior understanding, beliefs and attitudes acquired previously. Pre-understanding refers to the concept of framing in the theoretical framework.

3.3. Execution of the study

3.3.1. Library systems

The library systems in Finland, Romania and Sweden were generally drafted within the theoretical framework. The main types of libraries included are national libraries, academic libraries, public libraries, school libraries and special libraries. There are also private libraries, operated by companies, but they are not part of this study. There are a few universities in Finland, Romania and Sweden that are operated more as private companies, with more or less private funding and management. They were not excluded from this study if they also had a library or a person in charge of the library.

The library types that were chosen for this study were academic or higher education libraries but also public library systems (i.e., one main library with several branches) in the same cities as the academic libraries, in Finland and Sweden.

Table 8. Approximate numbers of libraries, librarians and library users in Finland, Romania and Sweden. Source: https://www.oclc.org/en/global-library-statistics.html

Number of	Finland	Romania	Sweden
Libraries	6 100	12 000	6 400
Librarians	7 600	16 000	6 000
Users	4 000 000	5 700 000	4 500 000

3.3.2. The managers as respondents

The questionnaire respondents taking part in this study were library supervisors (managers). The criteria for the selection of the respondents will be explained below. They were all library directors, managers or other supervisors. They were found by studying different kinds of catalogues and other information from Finland and Sweden on the Internet. The questionnaire was emailed directly to the managers as a link (an invitation to participate in this study) contained in a short message about the study in the body of the email.

The method of selecting Romanian respondents for this study differed from that used for Finland and Sweden. The aim was that the study would encompass, as far as possible, the diversity of libraries in Romania in terms of their location, size and staffing, and the specificity of their collections and users. The total number of questionnaires distributed in Romania was 20, and of these, 19 were completed, resulting in a response rate of 95%. The link was sent directly to the Romanian library managers. The responses were collected between March 2 and April 1 2016.

Forty-eight questionnaires were sent to 48 different library directors in Finland. The number of electronic responses was 16 (i.e., 33%). The inquiry was carried out between February 21 and March 21, 2016. The sample for the questionnaires was expanded to include libraries of Higher Vocational Institutions in order to increase the number of responses. One potential factor complicating the activity of probable respondents may have been the cut-backs in the higher education system going on in Finland at that time of my inquiry. An illustration of this was the case of Finland's National Librarian refusing to accept cuts in library funding. In general, the universities and the institutions of higher education were in the midst of re-organization and amalgamation, and the libraries as units of these institutions were significantly involved in this.

The total number of questionnaire links distributed in Sweden was 67. The total number of responses received from Swedish respondents was 33 (i.e., 49%).The time frame for receiving responses from Swedish respondents was January 21 until February 19, 2016.

The total number of responses from the three countries' library managers was 68, that is, 50%. The opportunity to respond to the inquiry was ended on June 29, 2016.
A reminder was sent to all selected libraries, three weeks after the initial distribution of the questionnaire.

3.3.3. Description of the questionnaire as an instrument of the study

The questionnaire was created and the results gathered using the software called Survey Monkey®.

The respondents could indicate their preferred language in each case, for instance, between Finnish and Swedish in Finland, and between English and Romanian in Romania.

The presumed language barrier was concurred in this study as a result of the option to use preferred language, due to the highly skilled translators.

The questionnaire format is flexible in that the questionnaire can be delivered directly to the probable respondent electronically as a link, as mentioned earlier. A common problem in questionnaire-based studies is that the percentage of received responses is very low.

The respondents were promised anonymity.

The questionnaire resembled a semi-structured interview. The difference is that there is no direct two-way communication between the researcher and the respondent. The communication is of another kind, between the question given and the answer developed in the mind of the respondent.

The processing and analyzing of the responses was a step-by-step procedure:

Testing different software solutions to create a form that would be manageable, in consideration of the circumstances (ethical dimensions, storage options and transparency in creating the questionnaire)

Choosing a tool (in this case Survey Monkey)

Creating and formulating the questions for the questionnaire

Testing the questionnaire technically and the questions on test persons

Creating the link and sending it to the probable respondents directly by e-mail

Following up the number of responses

Sending reminders

Closing the link and ending the opportunity to respond

Starting analyzing, visualizing and interpreting

The questionnaire, which was created and developed to fulfil the aim of the study, is attached to the thesis as an Appendix (Appendix 1).

3.3.4. Construction of the questions

The main theme of the thesis is library managers' contribution to the information society. This was also given as the title of the questionnaire. To make it easier for the reader to follow the presentation of the results later in this article, I present here the structure of the study. The questionnaire was divided into sections A to F, entitled as follows:

A. *The mission of libraries in the information society*

B. *The library director's description of the mission*

C. *External and internal factors that affect how you lead operations (SWOT analysis)*

D. *The organization and your mission in it*

E. *Metaphor/image/feeling*

F. *Background facts*

3.4. Results of the empirical study

3.4.1. The library's primary mission in the information society

Table 9. The library's primary mission in the information society (Q1). Response options concerning the library´s primary mission in the information society are shown as percentages and in alphabetical order for the three countries studied, Finland, Romania and Sweden. The number of respondents is given in the column N.

Response option	All responses%	Finland %	N	Romania %	N	Sweden %	N
Spreading new technology	**27**	**36**	5	**50**	9	**13**	4
Cost-effectiveness	**18**	**27**	4	**23**	4	**13**	4

Provision of professional assistance and knowledge to everyone in the name of democracy	**76**	**87**	13	**89**	16	**66**	21
Meeting-place	**42**	**71**	10	**63**	12	**19**	6
Services adapted to various target groups	**58**	**47**	7	**95**	18	**41**	13
Total respondents			15		19		32

The results show that the library's primary mission in the information society is clearly to provide professional assistance and knowledge to everyone: 76% of all respondents regarded this as the most important library mission (Table 9). This was similar for all the respondents regardless of the country. Fifty eight percent of all respondents selected providing services adapted to various target groups as the second most important library mission. The combination of providing assistance and knowledge to everyone and/or to various target groups, that is, reflecting the cornerstones of democracy, is highlighted by the similarity in preferences across the three countries. The library as a meeting-place was the third most frequently selected response. The mission of libraries in Romania emphasizes services tailored to various target groups (95%). The spreading of new technology and cost-effectiveness were regarded as the least important of library missions.

The results are presented in histograms to better illustrate the differences between the three countries (Figure 4).
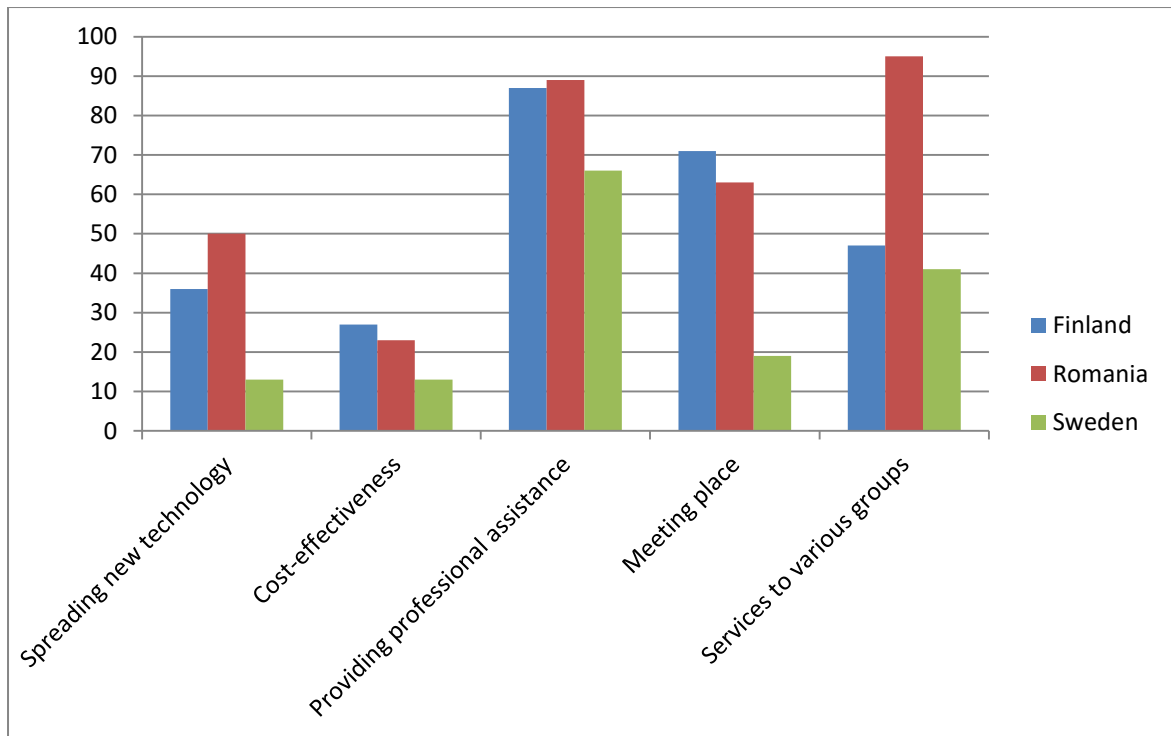
Figure 4. The library's primary mission in the information society in the three European countries. The response proportions are given as percentages.

In Finland digitalization and the spreading of technology are considered a difficult challenge, one that includes the question of licensing and cost-effectiveness.

In Sweden cost-effectiveness (due to diminishing resources) was mentioned as a difficult challenge. Price and managing increasing prices were mentioned in several responses. The need to adapt services was also mentioned several times.

Romanian respondents also emphasized cost-effectiveness and adapting services as the most challenging aspect. The preservation, conservation and communication of digital documents were also mentioned by the Romanian managers.

The information society: positive and negative impacts on libraries (Q3 and Q4)

The information society is a society in which we live, and a society in which our handling of information has to a great extent replaced physical work.
The information society is a changing paradigm. Access to and processing of information has become easier. Finding relevant and important information can be difficult. Finding disinformation is a risk. Libraries live in a parallelism of printed and digital information sources. Visibility is decreasing in the supplier chain.

3.4.2. The library directors' description of the mission

The issue of library directors' description of their mission was explored in three

questions, the first of which included a set of response options about the primary responsibilities, while the other two elicited replies in the respondents' own words about time needed for the tasks and about developing personal characteristics (see Appendix 1, Q5-Q7).

Table 10. Primary responsibilities of library directors (Q5). Response options describing the primary responsibilities of library directors are shown as percentages and in alphabetical order for the three countries studied, Finland, Romania and Sweden. The number of respondents is given in the column N.

Response option	All responses%	Finland %	N	Romania %	N	Sweden %	N
Strategic planning	**97**	92	11	95	18	100	31
Human resources	**85**	67	8	89	17	90	28
Development of skills	**73**	36	5	67	12	90	28
External relations	**87**	83	10	95	18	84	26
Financial management	**90**	92	11	79	15	97	30
IT and internal work processes	**68**	50	6	74	14	70	22
Total respondents			12		19		31

Library managers'/directors' responsibilities were weighed equally by the respondents (Table 10). In all three countries, the strongest emphasis was on strategic planning, and the results varied between 92 and 100%. All responses showed high scores, reflecting the importance of the position of the manager/director. Development of skills was the aspect that revealed the most variation, Finland and Romania placing the least importance on judgment (36% and 67%, respectively) and Sweden the highest (90%). The results are illustrated below in histograms showing the differences between the three countries (Figure 5).
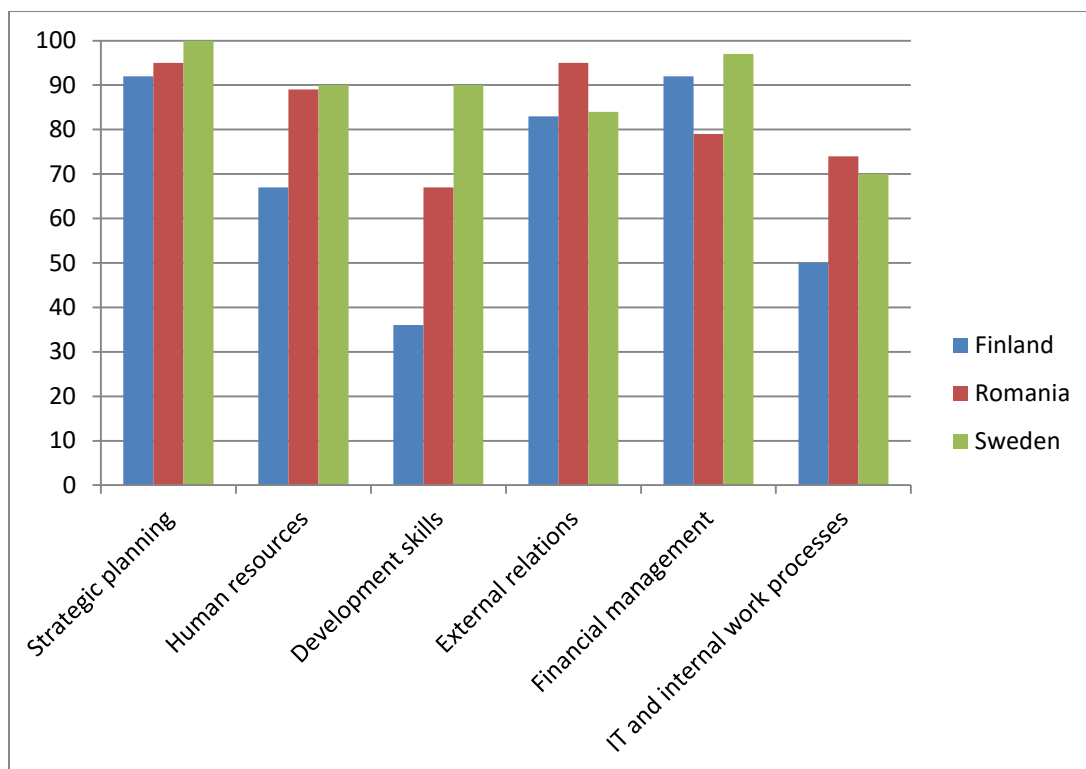
Figure 5. Primary responsibilities of library directors in the three European countries. The response proportions are shown as percentages.

3.4.3. External and internal factors

The strengths, weaknesses, threats and opportunities involved in running a library were explored by means of four questions, all of which offered three defined-response options and one own-words option (see Appendix 1, Q8-Q11).

Table 11. External opportunities for the library director (Q8). Response options describing the external opportunities for library directors are shown as percentages and in alphabetical order for the three countries studied, Finland, Romania and Sweden. The number of respondents is given in the column N.

Response option	All responses%	Finland%	N	Romania%	N	Sweden %	N
Increased need for education	**76**	82	9	89	16	66	19

Awareness of information	**76**	82	9	94	16	66	19
Favorable political trends	**21**	9	1	35	6	17	5
Total respondents			11		18		29

External opportunities for library directors followed the order of the list given in the questionnaire (Table 11). Both the increased need for education—and thus for library services—and awareness of information were selected by 76% of the library directors as the most important external factor. Favorable political trends were regarded as the least important for library operation in Finland (9%) and in Sweden (17%), but were regarded as slightly more important in Romania (35%). This result shows that libraries have identified opportunities connected to the information society (awareness of information) as well as the need for education. The results are illustrated below in histograms (Figure 6).
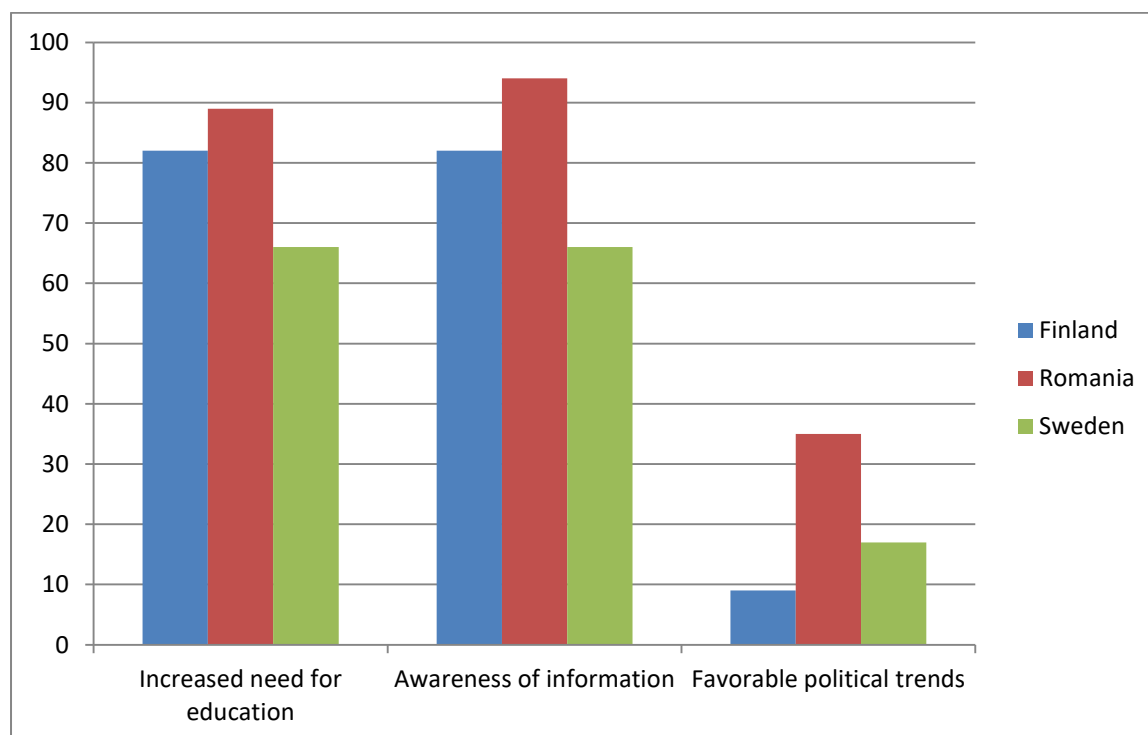
Figure 6. External opportunities for the library director in the three European countries. The response proportions are given as percentages.

Table 12. External threats facing the library director (Q9). Response options describing the external threats to library directors are given as percentages and in alphabetical order for the three countries studied, Finland, Romania and Sweden. The number of respondents is given in the column N.

| Response option	All responses%	Finland %	N	Romania %	N	Sweden %	N
Library's image	**48**	58	7	26	5	59	17
Reduced financial resources	**85**	83	10	95	18	79	23
New actors supplying e-books	**12**	33	4	17	3	15	4
Total respondents			12		19		29

Figure 7. External threats facing the library director in the three European countries. The response proportions are given as percentages.

In Romania the library's image was considered much less important as a threat than in Finland and Sweden (Figure 7).

Table 13. Internal weaknesses in library operations (Q10). Response options describing internal weaknesses are given as percentages and in alphabetical order for the three countries studied, Finland, Romania and Sweden. The number of respondents is given in the column N.

Response option	All responses%	Finland %	N	Romania%	N	Sweden%	N
Resistance to change	**53**	64	7	53	9	54	15
Low salaries	**40**	36	4	78	14	18	5
Staff competence	**62**	58	7	50	9	71	20
Total respondents			12		18		28

The reasons for internal weaknesses in library operations were rated rather similarly (Table 13), with the exception of salary height (Figure 8). The height of salaries was very important in Romania but seemed not to play a role in Sweden (78% and 18%, respectively), or in Finland (36%). Overall, the staff competence profile was regarded as the weakest alternative in the given selection (62%), though in Sweden this was more pronounced (71%, see also Figure 8). Similarly, the staff competence profile was considered as the resistance to change in the given selection (Figure 8). Resistance to change was seen as equally significant in the three countries (see also Figure 8). Figure 8 illustrates the results in histograms.

Table 14. Internal strengths in library operations (Q11). Response options describing internal strengths in library operations are given as percentages and in alphabetical order for the three countries studied, Finland, Romania and Sweden. The number of respondents is given in the column N.

Response option	All responses%	Finland%	N	Romania%	N	Sweden %	N
Library expertise	**53**	82	9	82	14	41	12
Dedicated staff	**76**	82	9	83	15	72	21
Established and well-known operations	**68**	58	7	72	13	69	20
Total respondents			12		18		29

Dedicated staff was considered the most important factor for showing internal strength in library operations in the overall results (76%, Table 14). This was scored the highest throughout the studied countries (see also Figure 9). Established and well-known operations were the second-most important factor showing internal strength, though in Finland this got the lowest scores (58%, see also Figure 9). Library expertise was rated similarly in Finland and Romania (82%), but least in Sweden (41%, Figure 9). Figure 9 illustrates the results in histograms.

3.4.4. Organization and the manager in IT

The library as an organization and library manager's mission in the library were explored through seven questions in the questionnaire sent to the library managers (see Appendix 1, Q12-Q18). The questions concerned the funding of operations (Q12), the working environment (Q13), staff hiring (Q14), decision-making independence (Q15), the need for change (Q16), current projects (Q17), and the description of one's role as a library manager (Q18).

The needs for change are mainly human-related and, more precisely, staff -elated (age structure, job descriptions, composition of competence and capability) but there is a need for a change in mentality throughout the context for libraries, on different levels and even in the organizational structures.

Ongoing projects were often about different aspects of organizational renewal. The themes included cooperation, amalgamation, rationalization, long-term strategic

goals, reorganization, and library plans. Several projects dealt with developing guidelines, services, and spaces. Projects were also related to information and communication technology—for example, digitization and automation, Internet access spaces, radio-frequency identification based solutions, sharing catalogues, repositories, computerized library services, and new system implementation.

3.4.5. The role of the library manager

Table 15. Descriptive roles of library directors (Q18). Response options describing the roles of the library director are given as percentages and in alphabetical order for the three countries studied, Finland, Romania and Sweden. The number of respondents is given in the column N.

Response options	All responses%	Finland%	N	Romania%	N	Sweden%	N
Representative	**65**	40	4	63	10	79	22
Spokesperson	**16**	22	2	24	4	11	3
Negotiator	**35**	56	5	47	8	21	6
Coach/motivator	**51**	44	4	41	7	61	17
Team builder	**47**	33	3	63	10	46	13
Team player	**11**	0	0	31	5	4	1
Technical problem solver	**15**	11	1	44	7	0	0
Entrepreneur	**11**	10	1	0	0	20	5
Strategist	**67**	78	7	63	10	71	20
Total respondents			10		17		28

The respondents to this query described the roles of the library director mainly as representative and strategist (65% and 67%, respectively, Table 15). The second-most important role of library directors appears to be a combination of the roles of coach, team-builder and negotiator (35—51%). The roles they saw themselves in least were those of spokesperson, team-player or entrepreneur, for which the percentages varied between 11 and 16%.

There were slight differences between the countries as to which roles were emphasized as the most important of library directors' roles (Table 15, Figure 10). In Finland, the respondents emphasized the following three roles: strategist (78%), negotiator (56%) and coach/motivator (44%). In Romania, the roles of representative, team-builder and strategist were evenly emphasized (63%). In Sweden, the role of representative (79%), strategist (71%) and coach/motivator (61%) were emphasized. However, strategist was always selected as an important role of a library director (see also Figure 10).
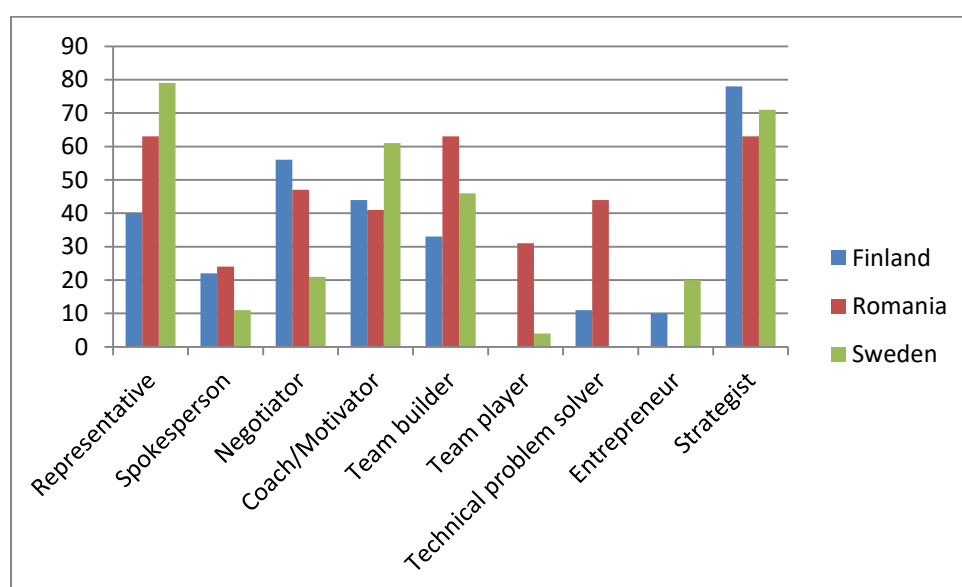
Figure 10. Descriptive roles of library directors in the three European countries. The proportions of responses is given as percentages.

3.4.7. Metaphor/image/feelings

The library managers were asked to characterize, in their own words, their own organization, using a metaphor, image or feeling (Q19, see Appendix 1), as the "heart" of the library. The previously presented responses about the mission of libraries describe it as providing professional assistance and knowledge to everyone.

Table 16. Metaphors/images/feelings given by the respondents listed according to the mission of library.

Mission	Metaphor/image/feeling
Providing professional assistance and knowledge to everyone	We are here for you

	Come together
	Together we will be useful
	Connecting people
	Together for knowledge
Provide services adapted to various target groups	Support for the student in everyday life
	Right services for the university's activities
	Be informed, be strong
	Come with confidence, here you will find the solution
Library as a meeting place	The building place for science
	An enriching place for knowledge, skills and feelings
	The society's living room
	The central place of campus
	Meeting place
	A place where everyone is welcome to meet and get knowledge
	Read, come to the library
	The community cannot do without library, there is no library without the local community
	If the Church is God's House then the Library is the Temple of the Human Spirit
	A space for community
Staff's feelings and ambitions	Out of the box
	Part of the university's success
	We see possibilities not obstacles
	We make a difference in the education
	Warmness, competence and engagement
	The library of the year 2021
	We are close to you
	I think about us often as being a football team: every player is important individually and together we will be more

3.4.8. Background facts of the respondents and their motivation

The respondents were asked several background facts about themselves and their libraries (Q20, see Appendix 1). Here are some facts about the respondents.

Motivation to become a leader

In Finland, the personal motivation to become a leader was most often described as a desire to influence and decide.

Romanian managers mentioned aspects to become a leader like: *"Desire to create a hub of culture and education", "Passion for culture", "Passion", "Desire to fulfill the mission of library".*

In Sweden, the desire to influence and change, develop activities/people, create good libraries and good working places was mentioned most often.

3.5. Concluding comments

The results of the SWOT analysis are summarized below for further reflection. The main results in terms of strengths, weaknesses, opportunities and threats are shown in Table 17.

Table 17. The results in terms of strengths, weaknesses, opportunities and threats.

External		*Internal*	
opportunities	*threats*	*strengths*	*weaknesses*
Increased need of education	Reduced financial resources	Established and well-known operations	Staff competence
Awareness of information	Library image	Dedicated staff	Resistance to change
Favorable political trends	New actors supplying e-books	Library expertise	Low salaries

External opportunities and threats were, according to the library managers, about increased need and reduced resources. Awareness of information affects the library's image. Library expertise is threatened by new actors in the e-books market. Internal strengths and weaknesses are the fact that the libraries' operations are established and well known, their dedicated staff and their library expertise. Dedicated staff is an internal strength, but resistance to change an internal weakness. Library expertise is an internal strength, but low salaries an internal weakness. The results show both

external and internal tensions and contradictions.

IV CONCLUSIONS AND DISCUSSION

4.1. Library managers' contribution to the information society

The study is of explorative character. Puzzle-solving is a suitable metaphor in its image of picking pieces (the underlying principle being "every piece counts"). Library leadership/management is, of course, responsible for considering and taking action to safeguard ethical responsibility, and sustainable development for future generations is at the top of the pyramid of responsibilities for library managers (Bruzelius and Skärvad 2012). The libraries want to improve and contribute to critical and deeper reading skills of new generations (Rowlands et al. 2008). Well-informed citizens, or more precisely, citizens who aim to be well informed (Schütz 1946) are the ultimate vision for libraries as suggested in this thesis.

4.2. The information society: info sphere for well-informed citizens

The development of information and communication technology is an basic infrastructural force, and it is rapid. The (global) information society is also a question of the social requirement of professional skills and qualifications (Degele 1997) in professional activities. Professional activities can be carried out from multiple sites using information technology in real time. The situation is complex and challenging for library managers who must manage big data (in physical and/or digital form), making it accessible to citizens in legal and safe ways.

4.3. Legislations and emerging issues

Interested parts in the information market include authors, publishers, retailers, consumers, organizations and governments. They are involved in the information cycle: creation, production, distribution, access, and use. The libraries' main interest lies in the access to and use in this cycle in accordande with library legislation.

4.4. Libraries' primary mission is to provide access

Library managers' common fundamental value is to provide professional assistance and knowledge to everyone in the name of democracy by offering access to knowledge with the help of tailored services at a place that all people can access and get guidance from.

4.4.1. The difficulty of cost-effectiveness

The structural leadership means that the basic leadership challenge is to attune the structure to the task, the technology, and the environment. Based on the results of this study the leadership challenge also includes attuning the structure to the financial situation. The task (providing access) depends on and is influenced by e-development. The dynamics of the market are also changing. Libraries and library managers operate in a position between the interest of social justice (access to all) and private interests in selling information products.

4.5. Effects of growing faster access with increased costs on libraries

Finland, Romania and Sweden are in different phases of digitalization (Digital Economy and Society Index) but the strategic thrust towards an information infrastructure for all the citizens is there (Digital Agenda 2014-2020).

4.6. Strategic planning as main responsibility

Strategic planning is about resource management. Cost-effectiveness and consequently, costs, is a challenging issue and may depend on many factors.

4.7. Awareness of strengths, weaknesses, opportunities and threats in the information society

Library managers lead living organizations in the digital era. They navigate in a complex info sphere. A SWOT analysis shows the opportunities and threats facing library managers. It is vital for creating strategies because the conditions of library managers' work are changing. This was also pointed out by some library managers

when using the concepts of paradigm and contradiction to describe features that change has precipitated.

4.7.1. Library managers' power in their own organization

Library managers have a mission to fulfill. For this purpose, several factors are needed—factors that when combined show that kind of power library managers actually have.

Funding

Regarding funding for library operations there was significant diversity in funding sources but a pattern that was rather similar through the studied countries. Library operations were publicly funded.

Work environment

The person/persons in charge of the work environment was mainly the manager him/herself, often in cooperation with the management of the facilities.

Hiring staff

The contract is signed by the manager but the hiring process is done in cooperation with a steering committee or with representatives of the staff.

The ability to act decisively

In decisions about using funding within the library, the library managers had free hands; recruiting personnel . however, was done via a steering committee. Several library managers used discussion, persuasion, requesting, and dialogue as methods of gaining influence.

The need for change

Things that should be changed included issues about reorganizing activities and renewing job descriptions, and deconstruction of old structures, to name some of the themes in Finland. In Romania, the respondents emphasized the need for a change of mentality on different levels. In Sweden, the human resources were emphasized.

Current projects

The projects were about rationalization, amalgamation, and adaptation to the environment, as well as developing guidelines, , spaces and digitization, automation, repositories and developing services.

4.8. Strategist and representative are the main roles

The library managers described the role of the library director as mainly that of representative and strategist. The second-most important role appeared to be a combination of the roles of coach, team-builder and negotiator. The least important roles they saw themselves as playing were that of spokesperson, team-player or entrepreneur.

4.9. Metaphors support missions

The mission of libraries was to provide professional assistance and knowledge to everyone. The metaphors support this finding in several ways: "We are here for you", "Come together", "Together we will be useful", "Connecting people", "Together for knowledge". The second mission of libraries was to provide services adapted to various target groups. The metaphors that support this second mission were: *"Support for the student in everyday life", "Right services for the university's activities", "Be informed, be strong", "Come with confidence, here you will find the solution".* The library as a meeting-place was the third-most common mission selected by the respondents. The metaphors supporting this theme were numerous, even when the idea of library as place is included: *"The building place for science", "An enriching place for knowledge, skills and feelings", "The society's living room", "The central place of the campus", "Meeting place", "A place where everyone is welcome to meet and get knowledge*", *"Read, come to the library", "The community cannot do without library, there is no library without the local community", "If the Church is God's House then the Library is the Temple of the Human Spirit", "A space for community".* The leadership of library managers recalls the idea of structural leadership but the metaphor of a machine or factory is not found among their metaphors. The metaphor of a family can be seen, but only vaguely, in the list of metaphors. The metaphor of the jungle is not there. There is in other words a need to

develop new metaphors that might combine the metaphors developed by the library managers. The role of the library managers could be described as that of a democratic bureaucrat with a strong mission in the information society, planning strategies and negotiating to provide access to information to all citizens in Finland, Romania and Sweden.

4.10. Recommendations for further actions

The role of strategist and the responsibility for strategic planning were highlighted by the library managers as their main role and main responsibility. The role of entrepreneur and the responsibility for cost-effectiveness were not prioritized. The responses are similar for all respondents. In my understanding both the library concept and actual libraries are in a mature phase of their life cycle. The library managers identified reduced financial resources as a threat. The mature phase of an organization's life cycle can lead to a declining phase (e.g., attemps to financial cuts affecting the National Library in Finland). A declining phase can in turn lead to the termination of the operations. It can also lead to the renewal and revitalization of the library concept.

There are several indications that libraries (and, hence, library managers) are facing a new phase in the life cycle of libraries, due to the digital transformation. In order to turn the new phase into revitalization there is a need for entrepreneurial leadership. Cost-effectiveness must be proven and the library concept developed further.

In the study several indicators suggest that the revitalization phase should be based on the digital library concept. The digital library entails challenges and threats different from thos of the traditional library. The traditional library is still needed. It is in its mature phase and can defend its position. Library managers have shown that they possess the ability to understand the traditional library's position and navigate within it. Still, a focus on external and internal effectiveness is needed in the mature phase, too. An administrator or a democratic bureaucrat would be suitable as manager in the mature phase. An entrepreneur would be suitable as manager in the revitalization phase. The digital libraries have expansion potential and can be organized in totally new ways. Shared leadership is worth considering in order to catch up to the rapid digital transformation of the information society.

4.11. The study's contribution to knowledge

Sixty-eight library managers in Finland, Romania and Sweden (year 2016) participated in this qualitative study as expert managers of libraries. The results give an indication as to the role and situation within which the library managers act. The validity and reliability of the study can be tested quantitatively.

The study is comparative since it considers library managers in three countries. The results are presented in tables and figures, and summaries of answers of free wording are interpreted. The results are indicative and serve to reduce the lack of knowledge about library managers' role in the rapidly changing information society. They also give new information about the library managers' contribution to the information society in different European countries. They can also be used for educating new library managers to prepare them to act internationally and find ways for renewal.

The contribution of the thesis consists of

1) An overview of libraries in the European context.

2) Carrying out an overall study of managerial activities in libraries in the information society based on an analysis of the library systems in the three countries Finland Romania and Sweden.

3) Comparative analysis of legislation governing the library systems of Finland, Romania, and Sweden.

4) An overview of certain current issues regarding libraries: library modernization, ethics of work, and libraries´ involvement in citizens´ lives.

5) Design of a multilingual questionnaire for the analysis of library management, which can be used in the future as well as for comparative studies.

6) Questionnaire-based comparative analysis for library managers in three European countries on how libraries are involved in the development of the information society.

7) Carrying out an analysis of EU-funded projects aiming at modernizing libraries.

8) A SWOT analysis on the influence of the information society on library managers and how library managers interpret their mission.

9) Recommendations of courses of action for library management in the context of digital transformation in the information society.

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