



# Manpower Requirements in the Emerging Information Society of the Baltic States

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1. Introduction
2. Methodology design and execution
3. Demand for information specialists in the main sectors of employment
  - 3.1. Information service sector
  - 3.2. Information specialists in industry
  - 3.3. Library sector
4. Qualitative requirements for information specialists
5. Conclusion

## Summary

The presented work is based mainly on the results of “Survey of Information Specialists Labour Market in the Baltic States”, a research project which was undertaken by the Faculty of Communication at Vilnius University and the Department of Information Studies at the Tallinn University of Educational Sciences. The objective of the research was to establish the main tendencies in the labour market for the information specialists that will enable to plan the studies and number of students for the institutions of higher education. According to this objective three main sectors of employment are selected: a) emerging sector of information service; b) established sector of libraries; c) information management in different sectors of economics. The author introduces methods of research and main findings.

## 1. Introduction

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Department of Information Studies at the Tallinn University of Educational Sciences according to the recommendations of the UNESCO/IFLA/EUCLID Workshop on Education and Training of Information Specialists in Eastern Europe and CEI (UNESCO 1995). The Workshop was supported by ASSISTANCE. The need of labour market in information specialists was never researched before in the Baltic States. The project was carried out in 1995-1997, additional data was collected in spring of 1998. The data from literature and periodicals about Latvia is used to complete the picture on the Baltic states.

The objective of the project is to establish the main tendencies in the labour market for the information specialists for a long term planning of higher education in library and information science in the Baltic states, as well as to find out and define new areas and possibilities for information specialists in the emerging information sector. The project includes three basic steps and involves:

- 1) the development of methodology for research of the changing labour market in information sector;
- 2) data collection and creation of a data base;
- 3) analyses and comparison of the data and recommendations for the educators.

## **2. Methodology design and execution**

The very start of the work on the project was marked by considerable conceptual problems. The obvious and recently clearly defined profession of a librarian and information specialist has become an opaque concept without clear job description or professional obligation. The second difficulty was the establishment of the sectors of employment for the information specialists that should be covered by the project. The preliminary exploration of the job and profession classifications used by the labour exchange and other employment institutions in Lithuania and Estonia and study area classifications of the institutions of higher education or research have presented a very ambiguous picture. Even the librarian's profession may be found under different chapters in the same classification, not to speak of the different kinds and aspects of the information professionals. Only the Classification of Economic Activities (NACE) constantly places the information and library field in the "Other communal, social and personal services" area. To define the attitudes of the participants of the project towards these main problems was essential for the further design of the methods and data collection.

The current need to identify an information specialist or a new information professional is justified by emergence of information intensive economies throughout the world. The concept of the profession changes according to the development of the information sector and under the influence of the changing needs of society as well as requirements of the new information technology. According to some concepts the information sector is treated as the largest sector in economics and most of the workers as doing one or another kind of information job. However, this is not entirely correct and cannot be used as a basis for our research.

The broad concept of information specialist requires a major survey of demand and professional requirements in a huge sector of economics and is unrealistic

with regard to available resources. The objective of the present research is to establish the main tendencies in the labour market for the information specialists that will enable to plan the studies and number of students for the institutions of higher education. According to this objective three main sectors of employment are selected:

- a) emerging sector of information service (governmental and private);
- b) established sector of libraries;
- c) information management in different sectors of economics.

Each sector presents special problems and difficulties for researchers and requires a slightly different approach though the main methodology should remain the same.

The objective of the first stage was to work out the complex of methods of research that is suitable for the establishment of the main trends in the labour market for information professionals in the Baltic states. It could be repeated and applied in other Central and European states and give results compatible with the results in other parts of the world.

The greatest challenge is the changing environment and society of the newly emerged democratic states and the rapid growth of information sector. The change from the centralised economics to decentralised systems and the liberalisation as well as the growth of the private sector change the information activities and services very quickly. It is impossible to predict the development of the needs and requirements for modern jobs in information field for certain as the investments into information technology of the country and from abroad is constantly increasing.

The main activities carried out with regard of the methodology development was the analysis of the similar research carried out in other countries, review of the available information resources and the preliminary examination of the situation in information sector.

The main conclusion reached by the working group is as follows: the diversity and quick changes of the information sector require constant monitoring and data collection about the quantitative demands and qualitative requirements for information specialists using a variety of research methods. Only this way can produce reliable and usable data for forecasting of the demand, planning of professional education and curriculum development.

For the current research the following methods were used: Analysis of the statistical sources and documents used in labour exchanged systems. The main result of this activity was to define the status of the information specialists among other workers and the reflection of the job demand for these specialists in the labour exchange systems of the CEE countries. The analysis of the advertisements in the periodical press. The result showed awareness and general job definitions of the information-related jobs as reflected through mass media (indirectly showing the status of the information specialists in society).

The analysis of the growth in information services, businesses and systems.

The survey of the employers (questionnaire) was the main method for collecting data about the possible changes in the market and the present requirements for information professionals. It is implied that this way the data about the people occupying the jobs of information professionals at present was also collected. The described methods were intended to complement each other and were used selectively for different parts of information sector research.

The questionnaire suitable for the collection of the data in Estonia and Lithuania and applicable to the different parts of the surveyed manpower parts in the information sector was prepared on the basis of UNESCO guidelines (UNESCO 1986). The questionnaire was prepared in two parts (and third part was added for the survey in library sector):

PART I consisted of the questions the answers to which supply data for the qualitative evaluation of the labour market for information specialists;

PART II was designed to supply qualitative data on the skills and knowledge demanded by the market from information specialists. The list of competencies was modified from the research made in Latin America (Paez-Urdaneta I. 1992).

III PART is designed only for the survey of librarians and serves to gather data about the attitudes and orientation of present professional librarian in the context and main problems of the library work as well as the attitude towards the professional development and activity.

The second objective was to collect reliable data that could be used to characterise the labour market for information professionals in Lithuania and Estonia. The questionnaires were disseminated among information services providers in April. One third of them was returned and processed. The first data from the library sector was collected in October. The collection of data from the third sector (information management in other economic sectors) was finished in May, 1997.

### **3. Demand for information specialists in the main sectors of employment**

The labour market in the Baltic states is a comparatively new officially recognised phenomenon. The organisation of information flows in the labour market helps employers to fill vacancies in time and the employees to find jobs. An effective system of employment should be based on the active processes of job seeking and information support for these processes. However, the information factor is not considered to be important in the regional employment programmes. The labour exchanges in Lithuania, Latvia and Estonia are the main mediators between employers and employees from 1991. These institutions were established according to the state of economics and to the experience of countries with developed market relations (Sweden, Denmark, Germany). It is the main institution gathering information about labour demand and supply. The data about employment are received in the surveys, questioning the citizens. The surveys are carried out in according to the recommendations of the International Labour Organisation (April 1994; February and May 1995; June 1996). The main trends in the labour market of the Baltic states are: the growth in unemployment, decrease in vacant jobs, increase in regional differences in unemployment, the growth of the number of unqualified young people, and increase in the numbers of registered

unemployed persons. The main growth of jobs takes place in the private sector, where specialists knowing foreign languages and working with computers are in great demand.

According to the households survey in 1995 the main channels of getting information about jobs are:

- friends and acquaintances (60%);
- labour exchange (50%);
- advertisements in newspapers (40%);
- direct contact with employers (20%);
- organisation of individual business (2.3%).

Employers looking for employees use:

- labour exchange data (50%);
- recommendations of the enterprise employees (36.4%);
- lists of previous employees (27.6%);
- advertisements in newspapers (13%).

According to the results of the surveys we used the labour exchange data and the advertisements in newspapers to define the information specialists demand and supply situation. The Labour Exchange in the Baltic states do not separate information specialists as such. Information work does not figure in the Classification of Economic Activities either, most probably because of its novelty. The data bases on employment mark out Information activity as a part of the sections “Computers and related activity”, library work is a part of the section “Recreation, entertainment, cultural and sports activities” not to speak of other sections in which information specialists are disguised as well. In fact the Labour Exchange information system does not allow to evaluate the demand and supply situation for information specialists even according to institutional criteria.

The institutional criteria (the advertisements of libraries or librarians, information service firms and centres, enterprises looking for specialists for information departments) were used to evaluate general labour demand and supply situation as reflected in the Lithuanian periodical press. Three main dailies, two regional newspapers and three advertising newspapers were selected. The main criteria for the selection of the papers was the existence of a special column for job advertisements (job seeking as well as advertisements about vacancies). The advertisements published from 1995/01 to 1996/02 were retrieved. The repeated advertisements were treated as separate ones as they reflected an unsatisfied demand. It is clear that information specialists do not generally advertise their availability for work in the newspapers: only one such advertisement from a librarian was found in a regional newspaper (Sekunde).

The demand for specialists in information sector was far greater. All in all 98 advertisements were found in surveyed newspapers. The largest number of advertisements offering jobs for information specialists was found in January, 1996 (25). A general trend of slight growth towards the end of the year 1995 and at the beginning of 1996 emerged in all three types of papers (1-2 ads per month). However, in some papers the number of advertisements for information specialists is very low, or they do not appear at all. The general overview of information specialists' labour market shows that the awareness of existence of this special

type of professionals and the need for them is growing in Lithuania. However, there is an evident lack of general information sources about this specific section of labour market.

### **3.1. Information service sector**

The direct indicator in the information service sector growth and the indirect indicator of the labour market for information specialists situation is the number of information service companies and centres.

One of the features that characterises the growing Baltic market of information services after 1990 is differentiation of services according to changing demands of the users. Before 1990 most information centres offered to their users scientific technical information and served the needs of research and innovation activities. At present the market demands mostly services for growing Lithuanian and Estonian businesses. Bigger enterprises and companies can afford to establish a department of information usually combined with public relations activities or at least to hire an information specialist, however, a growing number of small and medium businesses turn to specialised agencies. The need was quickly perceived and the number of institutions and companies that offer information services started growing rapidly. Some of the previous ones have converted their services and turned to serve the most prospective users – businessmen (Lithuanian Institute of Information, Lithuanian Technical Library).

The situation in the information services sector is rather complex and difficult to sum up, because of the indefinite usage of the term “information services” and the wide range of the companies offering them. For example, in Estonia in 1997 there were 156 firms according to the REG-2 (electronic database of Estonian firms) offering business consultations. Other companies are selling information technology and provide services connected with the exploitation of those. However, some of them are broadening the scope of their activities in connection with Internet (Virkus S., Maceviciute E. 1998). We have tried to establish the rate of growth of the business information companies in Lithuania from 1992 to 1996 checking the data provided in companies’ registers and catalogues. Those that provide to the customers collection, processing and dissemination of economic, industrial, commercial data, market research, etc. are considered as the providers of information services. The data shows that the number of these companies have grown twice in Vilnius from 1993 (from 24 to 58) and the growth rate is rather steady every year (from 8 to 15 per year). During 1996 that number increased to 92 (in January, 1997).

The survey of employers was conducted at the beginning of 1996 and reflects the labour market situation in 1995. The questionnaires were sent to 58 companies and institutions. 30 of them returned the questionnaires after several reminding (51,7%). However only 28 were considered fit for the analyses (48,2%). According to the returned questionnaires 36% of information service companies are creating data bases and disseminating or publishing information from them; 21% – creating data bases and providing information from them as requested; 21% – establish

reliability of business partners; 21% indicated such services as marketing, information retrieval, publishing newsletters or information leaflets, etc.

The labour market for information specialists quantitative situation in this sector is represented in the summary Table 1.

**Table 1. Number of employees, number of vacancies**

	Types of services				Total
	DB, publish.	DB, retriev.	Business reliability	Others	
1. Staff employed	240	72	40	278	630
2. Vacant posts	10	4	28	8	50
3. Total posts	250	76	68	286	680
4. Vacancy rate	4%	5.3%	41.2%	2.8%	7.4%

The results indicate that there is a balance between specialists demand and supply. The percentage of vacancies in this sector is 7.4%. The least satisfied are the companies performing deep information analyses services in business sphere, i.e. demanding the specialists of the highest qualification. Total turnover in the information service sector is approximately 19% and in some sections reaching up to 35%. This turnover is rather high. Further analyses of the data allows to state that the large arrivals rate is equalled by the high departures rate in the information services sector, especially in business information services. One can indicate that most probably these services lack good professionals who are qualified for the job. The financial considerations of employees in these services could not serve as a reasonable explanation for quitting the job. The new arrivals are most often attracted by high salaries and expectations.

The recruitment need in five years is quite obvious from the data presented in Table 2 and indicates that the job market in this sector is unsaturated.

**Table 2. Supply and demand in 5 years**

	Types of services				Total
	DB, publish.	DB, retriev.	Business reliability	Others	
1. Present supply	240	72	40	278	630
2. Minus departures	300	70	70	160	600
3. Plus arrivals	350	110	100	10	570
<b>4. Supply in 5 years</b>	<b>290</b>	<b>112</b>	<b>70</b>	<b>128</b>	<b>600</b>
5. Present posts	250	76	68	286	680
6. Plus net growth in 5 years	62	54	70	40	226
<b>7. Demand in 5 years</b>	<b>312</b>	<b>130</b>	<b>138</b>	<b>326</b>	<b>906</b>
8. Demand in 5 years	312	130	138	326	906
9. Minus supply in 5 years	290	112	70	128	600
<b>10. Recruitment need in 5 years</b>	<b>22</b>	<b>18</b>	<b>68</b>	<b>198</b>	<b>306</b>

The answers to the questionnaire show that, at present, most often the information services employ specialists who have no professional education in information science: economists, journalists, engineers, teachers, designers, physicists, mathematicians, etc. The fact that this niche is filled by the job-seekers from different fields shows that the demand for information specialists is not satisfied.

### **3.2. Information specialists in industry**

Despite the difficulties of the transitional period Lithuania remains an industrial state. Though the share of industry in the General Average Product has become smaller, it is 29% and is growing constantly. The process of privatisation according to the law has reached all the industries and regions. Main factors that influence the labour market in industry are: economic situation, structural and functional changes in economy and management, formation of market economy relations. The revival of the economy is manifesting itself in revival of the services that were closed down or squeezed during the first hard years of restructuring. Information services are among them. At present the need and significance of information in industry is rising. However, no one has tried to survey the possibilities of this sector from the point of view of the labour market for information specialists. A first modest attempt was made in order to complete the picture of the whole situation at the end of this survey. From the surveys of the industrial and services sector in Estonia conducted in 1995 it was clear that the greatest part of small and average-sized businesses do not employ information specialists permanently. Mainly they use the possibilities offered by information services and centres. However, the larger and stronger industrial enterprises establish either posts or departments to fulfil the information needs of the organisation. That was the main criterion for selection of the respondents for the survey. In Lithuania the biggest and best enterprises are announced in the main business weekly "Verslo ziniuos". The list of 200 best and largest enterprises in 1996 was published in February, 1997. 90

(45%) enterprises were randomly selected from the list and the main data on them was gathered from the registers and catalogues. 40 (44%) of the surveyed enterprises from different towns have returned the questionnaires by the end of April, 1997.

The analyses of the data has showed that practically there are no vacancies for information specialists – the posts of that kind are filled. The negative net growth of posts (diminishing) in three years may be explained by the fact that the climate in industry is unstable and too many factors effect the enterprises. The employers do not intend to create new posts in administration or services. They are too concerned with general survival. However, one has to have in mind that this assumption may be wrong. It is possible that the present level of information services in the surveyed enterprises is satisfactory, or that the employers do not see the necessity of creating this kind of new posts. The conducted survey does not allow to give the final conclusion on the basis of available data.

The arrivals rate among information specialists exceeds the departure rate. Some of the enterprises have created totally new posts for this kind of employees. The overall results show that the industry as a labour market for information specialists is not growing at present and the recruitment need is rather low. It may be satisfied without additional educational effort. However, the survey of this sector has revealed its difference from the other two sectors. The employers in it have not met with the concept of the information specialists and are not used to it. Besides, they are not primarily interested at the problems of recruitment of these specialists and are not ready to spend time thinking about this. This was not taken into account before the start of the survey. For further research in this sector it would be worth looking for a different method of data gathering or at least to adapt the questionnaire to its peculiarities. However, the evaluations of the main competencies of information specialists in this sector are very useful for further recommendations:

### **3.3. Library sector**

According to the international standard ISO 2789: 1991 (E) prepared after the UNESCO guidelines “a librarian” is a person who works in a library, receives a salary and is educated professionally to do this work (on the job or at the educational institution).

Labour market of librarians in Estonia and Lithuania at present is a problematic object of research for several reasons: 1) the relevant statistical data necessary for deep analyses is scarce or non-existent; 2) libraries are still undergoing major changes; 3) the system of library jobs may fall under direct change as well. It is difficult to predict which system of job categorisation will eventually be implemented. Statistical offices and Ministries of Culture provide data on different types of libraries. However, staff data is represented poorly and only with regard to educational qualifications. It allows to make only relatively simple and routine forecasts.

There are 3135 librarians working in Estonian libraries. 48% of all librarians are professionally educated, more than half of them have university degrees. With respect to different types of libraries the picture is somewhat different. Of 1184 librarians at work in public libraries 320 have university degrees and 446 have college degrees. So six out of ten librarians have professional education. The education qualification of librarians in rural areas are considerably lower than in urban areas.

**Table 3. Standards for education in libraries urban and rural areas**

		Urban (%)	Rural (%)
<b>Professional education</b>	university degree	37	14
	college degree	3	2
	secondary education	33	39
<b>Education in other fields</b>	university degree	13	8
	secondary education	14	37
	Total	100	100

Of librarians in research and special libraries 38% have professional education and in school libraries 37% of librarians have professional education (a 5% rise compared to previous years). Although the number of librarians with higher professional education has been constantly increasing in recent years, the librarians without qualification still make up more than a quarter of all librarians. The bigger the library, the higher is the number of employees with university and college degrees in other fields (computer specialists, economists, sociologists, lawyers, psychologists, etc.) (Papp U., Markus T. 1996). In Lithuania the analyses of the staff in the public libraries shows that the number of the people working in the libraries is rather stable and the number of posts is growing slightly. The difference may be explained by the fact that the salaries in the libraries are low and the same person tends to occupy more than one post.

**Table 4. Library posts and staff in Lithuania**

1994		1995		1996	
Pers.	Posts	Pers.	Posts	Pers.	Posts
2659	3314	2665	3317	2664	3361

84.4% of library workers in the libraries of the Ministry of Culture system have professional education (19.48% – university degree, 52.36% — vocational library education). The situation is different looking at the school libraries. In 1996 they had 1775 staff members, 339 (19.09%) of them with a university degree and 32 (1.8%) with a vocational education.

The questionnaires were distributed among 114 libraries and 60 (52.63%) of them have returned the questionnaire. Among those that returned the questionnaire 7% – special libraries; 14% – university libraries and 79% — universal public libraries. No questionnaires were distributed among school libraries. The answers have shown that 18% of libraries have created at least one and 20% plan to create additional posts (from 1 to 5) in next three years, 17% have deleted posts in 1996, but no one plans to delete them in the future. The departure of librarians was quite

significant in big cities, yet the new employees were not difficult to find there. The libraries in smaller towns mostly experience loss for natural causes (retirement, death). Most libraries claim difficulties in finding young specialists or specialists with higher education (63%). The age of the librarians may be envisaged as the factor that will cause greatest problems in the future. 22% of the staff members are over 50 years, 7.05% among them over 60 years old. 49.19% are the people in between 36-50 years. Having in mind that the majority of library workers are women (retirement age – 60), in ten years every fifth librarian will retire and should be replaced. There is no possibility to make a more precise forecast of the labour market for the librarians at present if the library posts system will undergo major change.

#### **4. Qualitative requirements for information specialists**

The quality requirements for modern information specialists may be determined from the answers to the questionnaire (part II). The most valuable competencies differ slightly in the surveyed sectors. The rating interval was a scale from 0 to 3 (3 being the highest rating for the competence).

**Table 5. What competencies are most important for your institution?**

Competencies	Rating in		
	Information service sector	Library sector	Industrial sector
1. computerised information storage and retrieval	2,9	2,0	2,8
2. systematic search of information	2,7	2,5	2,8
3. information resources management	2,6	2,3	2,3
4. selective dissemination of information	2,6	1,7	2,1
5. promotion of organisation's inforsources	2,5	1,8	1,8
6. use of external databases	2,3	1,8	2,5
7. production of commercial data bases	2,3	0,8	2,1
8. use and design of information systems	2,1	1,5	2,0
9. design and marketing of infoproducts	2,1	1,4	2,8
10. forecasting and current planning	2,0	2,2	2,5
11. in-house data base design and development	2,0	1,6	2,5
12. training in inforesources and technologies	2,0	1,8	2,1
13. reviewing of specialised literature	1,9	1,6	1,8
14. optimisation of information flows and functions	1,8	1,2	2,3
15. production of abstracts and reviews	1,7	1,7	2,0
16. preparation of reports and newsletters	1,7	1,8	2,1
17. creating bibliographies, indexes and catalogues	1,5	2,4	1,2
18. infosupport to decision making	1,5	1,4	2,3
19. other (indicate)	-	local history work; event organisation	-

The differences are defined by the nature and objectives of the information specialists working in different sectors. Libraries are non-commercial institutions, the usage of the modern information technology is at the lower level, and the functions as well as the work processes in libraries have special features. Therefore creation of bibliographies and catalogues in the libraries has much higher rating. The high rating of optimisation of information flows and functions and infosupport to decision making in industrial sector is defined by special features of information work in these organisations similar to selective dissemination of

information and promotion of organisation's inforesources in information service sector. However, there are competencies: systematic search of information; information resources management; and computerised information storage and retrieval - that are highly rated in all sectors.

The attributes in information professionals are slightly different in information service and library sectors. The data received from the industrial sector in answer to this question is incomplete and is not presented here.

**Table 6. What attributes do you prefer in information professionals?**

Attribute	Rating	
	Information service sector	Library sector
verbal and written communication skills	2,7	2,5
need of self-improvement	2,6	2,6
English language	2,5	2,8
friendliness	2,5	2,1
ability to use the computer	2,4	2,8
foreign language	2,3	2,8
management skills	2,1	2,3
inclination to science and technology	2,1	1,5
higher education	2	2,5
knowledge of economics	2	1,5
education in a second area	1,9	2
knowledge of managerial concepts	1,8	2,4

Table 6 shows that though the computer usage at present is not as high as in information service sector, the ability to use the computer is considered to be very important. Only the foreign language skills are valued at the same rate. Need for self improvement is as ranked higher than university degree and communication skills.

The third part of the questionnaire shows the attitudes of the present library staff towards the context and main orientation of the libraries in society. This survey covered 80 respondents in Estonia and 67 respondents in Lithuania. 32.5% of them were working in academic libraries, 11.3% in school and children libraries, 56.3% in public libraries. Half of the respondents are library leaders. In Lithuania this part of the questionnaire was distributed during the annual conference of the Lithuanian Librarian's Association. The indicators of professional attitudes may be categorised into three groups:

relating to internal factors of library

relating to external factors

relating to activities of librarians themselves.

Both in Lithuania and Estonia more than half of respondents give high priority to all presented statements. Appreciation of the role of library by state and local authorities received highest ratings (83% of respondents gave the highest ranking 5 to it). In Lithuania the next highly ranked statement concerned the need for a librarian to know the new ideas about library development and experience (70%). The existence of the strategic plan and understanding social environment was not

important for 25% of respondents in Estonia, however, in Lithuania only 6% of respondents indicated that strategic plan is not important, 6% had no opinion if it is necessary to design active and purposeful development of libraries and 30% had no opinion if librarian should understand social environment.

Evaluating present and future problems the librarians have not shown great differences between present and future problems. Most of the problems were derived from the lack of funds, including low competence and motivation of librarians, lack of foreign language skills and young specialists, poor acquisition, low automation and equipment level. However, conservative attitudes of librarians, indifference, lack of normative documentation and standards, lack of co-operation among libraries, service quality and variety were mentioned as well. Among the Estonian respondents 40% were unable to define the critical points in their library. All Lithuanian respondents indicated the problems in their libraries and common problems for the libraries in Lithuania. The difference may be accounted to the fact that Lithuanian survey included the most active part of the professional body.

## **5. Conclusion**

The answers to the questionnaire show that, at present, most often the information services employ specialists who have no professional education in information science: economists, journalists, engineers, teachers, designers, physicists, mathematicians, etc. Information service and library sectors form a constant and growing market for the labour of information specialists. For the lack of information specialists this niche is filled by the job-seekers from different fields. The other potential sectors should be monitored and closely surveyed using special methods. The most important competencies (as measured on a three-point scale) are those from the information specialist's repertoire. Computerised information storage and retrieval as well as traditional information search abilities top the list of information specialist's competencies. Ability to use the computer is highly valued as an attribute of an employee though it does not outrank such qualities as oral and written communication skills, need for self-improvement, friendliness and knowledge of English language. The attitudes analyses has showed that professional skills and knowledge as well as the ability and willingness to acquire knowledge permanently is given a high priority among professional librarians.

According to the results of the research Vilnius University has created a new Bachelor's degree programme in Business Information Management as the need for a specialised expertise in this field was indicated by the high turnover rates revealed by the research in the information services sector. The ranking of the main competencies and skills in different sectors of the labour market were taken into account in changing curricula (e.g., introducing a Communication Skills module) for the information specialists and librarians not only at the Faculty of Communication of Vilnius University and Tallinn Pedagogical University but at the other higher educational institutions as well (e.g., in design and establishment meetings and curriculum development activities for the International Centre of Information Management Services and Systems at the Torun University).

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