

The Challenge of Showing Economic Impact of Library

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Abstract: The libraries are organizations financed with public funds and they have to evaluate their operation and report it to their financiers. In the present, even still tightening economic climate they must also be able to show that they produce their services cost-effectively. So the service offered by the library shall be of as high quality as it is feasible with an acceptable cost level. Developing of quality of the library services may be included in a library law. National library policies obliging to developing and maintenance of the quality of the services may also be defined in some countries. The International Organization for Standardization (ISO) published the standard ISO 16439 "Methods and procedures for assessing the impact of libraries" in 2014. In this paper, the challenges related to the showing of the economic impact of the library are discussed and a critical review for the economic impact analysis of the library is presented.

Keywords: libraries; evaluation; impact assessment; evidence based librarianship; ISO 16439

1. Introduction

During the past decades, the libraries have been refining their tools and skills in order to show their positive impact to education, to research, to science and to the overall society.

The aim is to provide essential information for library managers and decision makers to show the positive impact of library. However, the qualitative and quantitative analyses showing libraries' impact should also provide indications about change, i.e. the transformation of such social practices that challenge the essence of libraries. At the same time, the libraries meet the demands of showing cost-efficiency and a positive economic impact - they have to justify their existence and to prove their ability to serve their customers.

So: What is "economic impact"? In discussion connected with investing in the business world, the term "impact investing" is known. This term can be

explained as investments which, in addition to an economic profit produce large and measurable positive social and/or environmental effects.

So, the objective is a desired social impact pre-defined by the investor and the profit of the investment may be connected with producing the social impact.

Though this example comes from the business world, it – actually – fits the library environment fairly well.

Namely, the mission of library is to provide fresh information for the need of education and learning and in the conditions of tightening economic climate they must also be able to show that they produce their services cost-effectively. So the service offered by the library shall be of as high quality as it is feasible with an acceptable cost level.

However, this kind of “treasurer sentiment” may jeopardize carrying out the above-mentioned mission of the library. Instead, one should become aware of so-called socially responsible investing that means responsible owner policy often with no direct aim for a specified societal value. However, the library if something produces societal value, but there are challenges to demonstrate and measure the societal (or monetary) value produced by the library.

The benefits usually fall on many different directions and it is difficult to recognize which of the benefits observed might be accredited to the library institution.

It is not unusual that the library’s role in good results of education is recognized in speeches, but the challenge is how to concretize this praise so that it would lead to securing the resources the libraries need instead of considering the library just as an item of expenditure.

In 2014, as a result of international cooperation, the International Organization for Standardization (ISO) published the standard ISO 16439 “Methods and procedures for assessing the impact of libraries”. It is the first documentation concerning the evaluation of the impact of libraries. In the standard, the concept of impact and other focal terms are defined and the standard is intended as a tool for the evaluation of impact and value of all types of libraries.

ISO 16439:2014 considers the impact of libraries on individuals, institutions and society. It is applicable to all types of libraries in all countries. However, not all methods described apply to all libraries. Limitations on the applicability of individual methods are specified in the descriptions.

2. The Concept and terminology of Impact

The impact of library can be defined as the influence of libraries and their services on individuals and/or on society (ISO 16439:2014(E);4.2). So, as a

result of impact, a tangible or intangible change in an individual or group resulting from the contact with library services may be seen (ISO 16439:2014(E);3.25). The impact of library institution is seen as an effect of the output related to the library's planning.

To piece together the concept of impact, following terms should be adopted (ISO 16439(E);4.2).

- **input:** contribution of resources in support of a library (e.g. funding, staff, collections, space, equipment)
- **process:** set of interrelated or interacting activities which transforms inputs into outputs (e.g. cataloguing, lending, reference service)
- **output:** products of library processes (e.g. titles catalogued, loans, downloads from the electronic collection, reference questions answered)
- **outcome:** direct, pre-defined effect of the output related to goals and objectives of the library's planning (e.g. number of users, user satisfaction levels)
- **impact:** difference or change in an individual or group resulting from the contact with library services
- **value:** importance that stakeholders (funding institutions, politicians, the public, users, staff) attach to libraries and which is related to the perception of actual or potential benefit

Illustration of the idea of impact is shown in Fig. 1. Input to the library turns on the service processes as a result of which outputs and outcomes are created. Turning of any of the cogs affects all the others. To get the desired impact, one must define the number and quality of the needed outputs and outcomes. Inputs must be adapted to produce the needed outputs and outcomes. Quality is the "oil" that makes the processes more effective. Having the library operations positive impact, societal or monetary value may be detected.

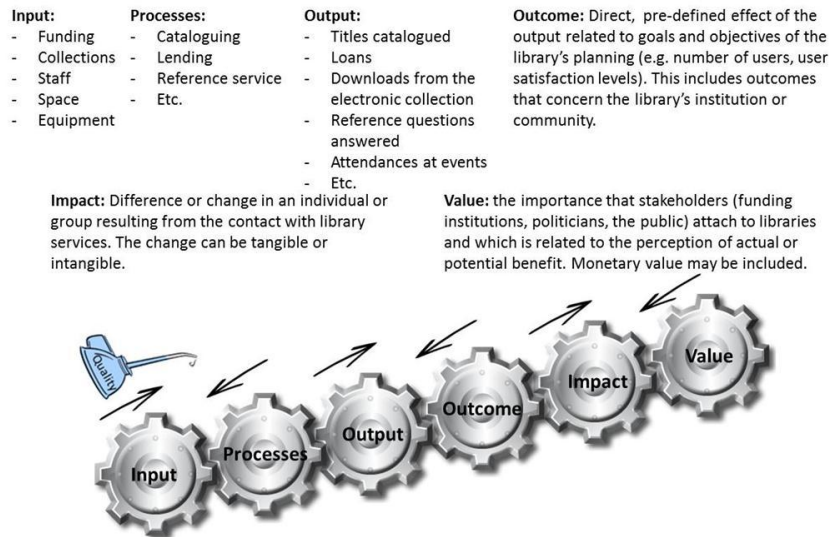


Fig. 1. The “Cogs of Impact” according to Laitinen (2014) and the focal terms of impact (ISO 16439:2014(E);4.2).

The impact of library may be immediate or long-term, far-reaching or limited, intended or unintended. The actual benefits of library differ from the potential benefits. (ISO 16439:2014(E);4.3.)

There is a challenge of showing the impact of the library operations and the monetary value of libraries, because the positive impacts on the individual users or the society are mostly intangible.

However, a strong correlation between use of electronic resources and student performance was detected by Cox & Jantti (2012). Liu (2003) detected contribution of library collections to the prestige of universities as well as their academic programs. Also, attempts to provoke discussion about positive effects on the economy of the society have been made (Kiviniemi et al. 2009).

3. Observations – Case Finland

There are not too many studies of library cost structure following the recommendation of the standard ISO 2789 - International library statistics. An early procedure for a functional cost analysis of libraries was introduced by Kantor (1989).

Though the mission of libraries is to provide fresh information for the need of education and learning, the most prominent item of expenditure on the libraries

seems to be the staff cost. Library material costs seem to be only one fifth or even less of the budget. (Fig. 2 and 3.)

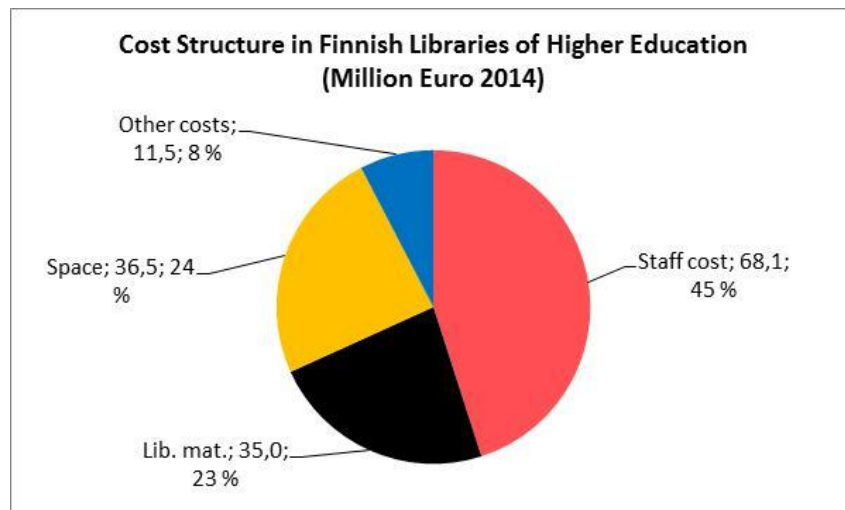


Fig. 2. The biggest items of expenditure in Finnish libraries of institutions of higher education are the staff, space and library material costs, albeit library material costs are only one fifth of the budget.

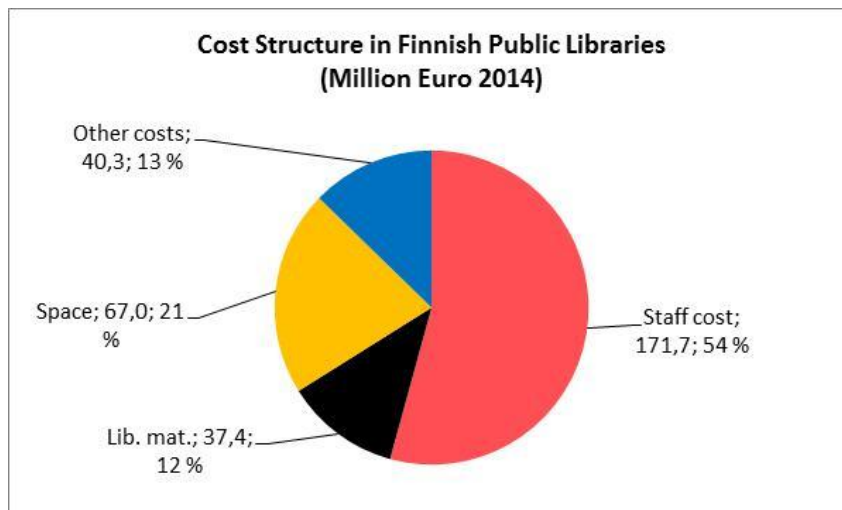


Fig. 3. The biggest items of expenditure in Finnish public libraries are the staff, space and other costs. The library material costs are only 12 % of the budget.

According to information of the Finnish Library Statistics (2010-2014), the cost structure of the libraries has remained unchanged when presented according to the recommendation of the standard ISO 2789 (Fig. 4 and 5).

Because of economic austerity policy run, the Finnish libraries are primarily obliged to show that they are producing their services cost-effectively. The transition of library services from physical to digital format meets this demand (Fig. 6) whilst the users are willing to accept the new services and they express their satisfaction (Fig. 7).

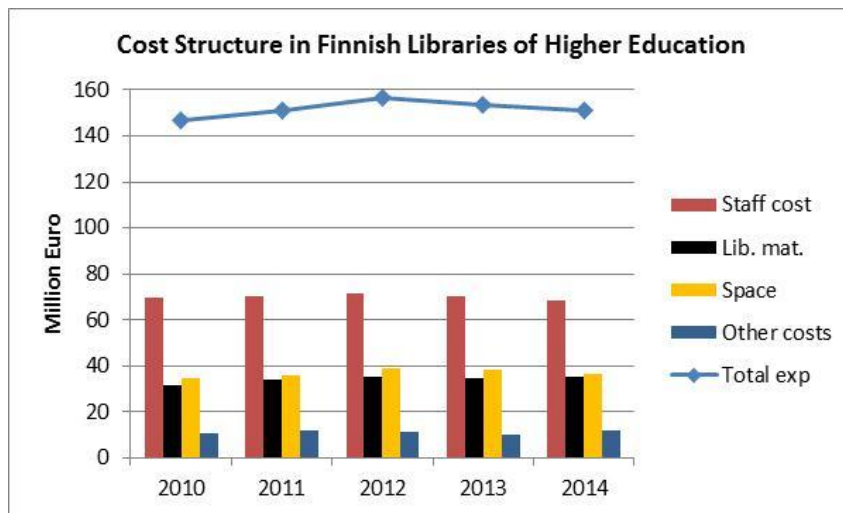


Fig. 4. Cost structure of Finnish libraries of institutes of higher education.

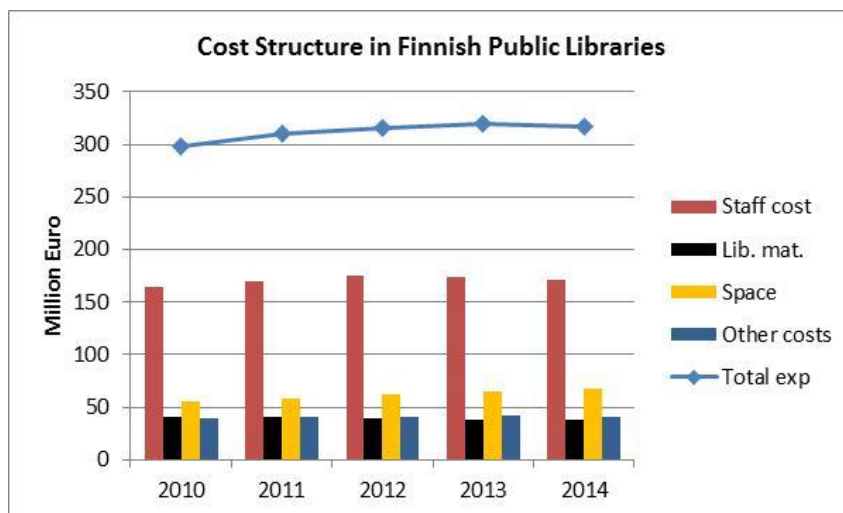


Fig. 5. Cost structure of Finnish public libraries.

Counting the price of physical and virtual customer contacts seems to point out the cost-efficiency of electronic services (Fig. 6) as well as the cost savings of electronic materials together with more materials available (Fig. 7). User satisfaction, on the other hand, remaining on a good level together with the above-mentioned measures, seem to point out successful collection policy of electronic materials.

However, new ways of showing both economic efficiency and impact of library to support the libraries in their task to show the impact of their performance are needed.

Collecting objective data from the library statistics next to subjective data obtained from user surveys, gives possibilities to get more exact information about the quality of the services and about the effects of resource allocation on the customers and services and this way, information for assessing the outcomes and impact of the library is gained.

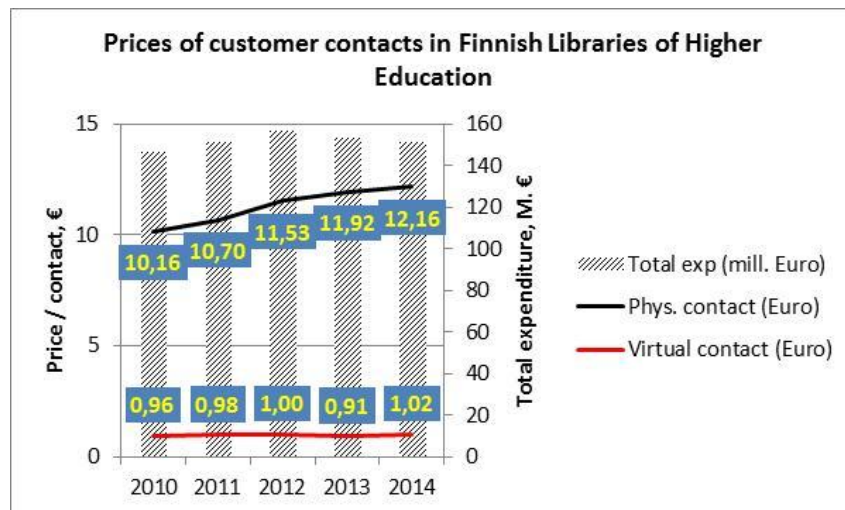


Fig. 6. The prices of physical and virtual customer contacts in Finnish libraries of institutes of higher education.

In a comparative survey of the use of electronic journals and user satisfaction in the Finnish universities of applied sciences in 2006-2013, both a positive impact on users and cost-efficiency were detected (Laitinen 2014). The number of full-text electronic journal articles downloaded during the above-mentioned period increased 3.5-fold at the same time the user satisfaction increased. In this follow-up, the users evaluated their satisfaction on scale 1 to 5, the numerical values being 3.69 in 2006, 3.73 in 2007, 3.95 in 2010 and 3.91 in 2013. To

make it feasible to show the data on the same figure, an index series was used (Fig. 7).

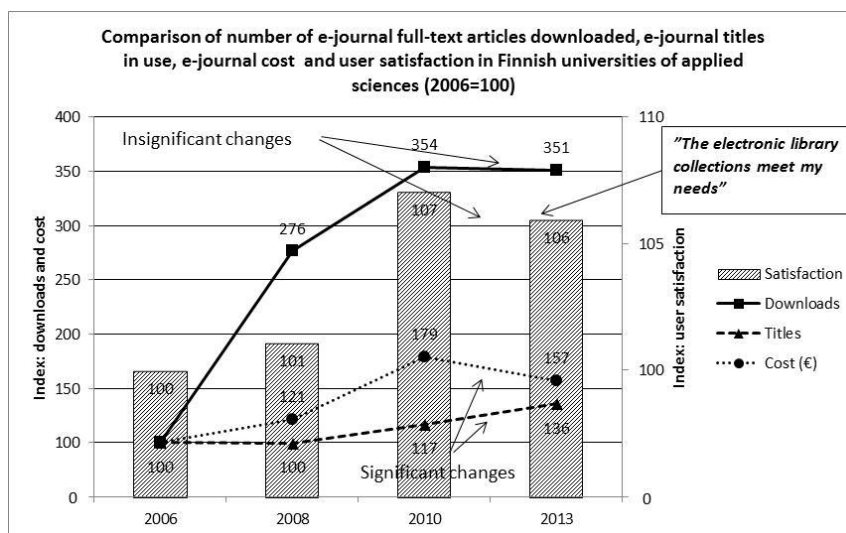


Fig. 7. Results of comparative survey of the use of electronic journals and user satisfaction in the Finnish universities of applied sciences in 2006-2013.

4. Discussion

The libraries are little by little adopting the idea of “argumentation by impact” and, doing so, adapting the challenges of the changing world that sets new challenges to library services as well as to evaluation data regarding these services. Thus, moving beyond the traditional library performance measurement and focusing on the contribution and value that library services provide to their users is the right way.

Inspecting the results of the use of electronic journals and user satisfaction in the Finnish universities of applied sciences in 2006-2013, perhaps user satisfaction stabilized on a good level in spite of cutting the cost on electronic journals is thanks to correct choices made in the acquisitions of electronic materials.

The beginning of the time series of the survey was the time the customers “found” the service, so what is essential in the time series, is the period starting from 2010. It can be concluded that the electronic journals seem cost-effective and the customers' satisfaction with these materials has remained good – however considering that we still do not have a statistically significant time series of it; just the beginning from 2010. The next national survey with the same format will be performed in 2016.

It seems that in addition to monitoring the traditional phenomena like the number of library visits, the number of loans or level of customer satisfaction, the evaluation data should also be able to help the libraries in showing the impact and to recognize the users' changing needs and behaviour. A cost-effective service may turn into ineffective if the motives of customer behaviour are not reflected.

It is, too, essential to take into consideration that the perceived value of library services is not necessarily constant but the desired impacts and benefits of library may change in the course of time.

In order to stay up-to-date, statistical data and survey results may be complemented by various data types like interviews, log analysis etc. In libraries of institutions of higher education, statistics regarding performance within the frame organization of the library may give valuable information about the role of the library in supporting the strategy of the frame organization.

Especially for public libraries, demographic data, non-user studies etc. in addition to traditional library statistics and user surveys may apply.

Studies on information behaviour, urban studies, or leisure time studies as well may all provide viewpoints that can help in identifying the customers' needs and understanding the impact of library.

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