
METHODS PROVIDING SUPPORT FOR QUALITY IMPROVEMENTS OF THE SERVICES IN UNIVERSITY LIBRARIES

Albu Cristina^{1*}, Valter Narcisa² and Cristian Adriana³

^{1) 2) 3)} University "Politehnica" of Bucharest, Romania

E-mail: cristina.albu@upb.ro; E-mail: narcisa.valter@yahoo.com;

E-mail: adriana_elena_cristian@yahoo.com;

Abstract

The paper is in line with the concerns (nationally) expressed by both specialists and organizations that address issues regarding benchmarking tools and techniques specific to the university library. There are presented tools successfully used in evaluation of services quality. These tools (i.e. the causal analysis by Ishikawa chart) represent a novelty in the library field. At the same time, issues related to the benchmarking techniques and tools of the university library are addressed.. We aim to find answers to some questions as: which is a "university library service" definition; which are the possibilities of improving the quality in service delivering; which are the users' perception (feedback) regarding the services? At the same time, it provides a (useful, clear, concise) theoretical basis for conducting a benchmarking project in the university library.

Keywords

Quality management, university library, user, service, assessment, performance, Ishikawa chart, benchmarking.

JEL Classification

I.2. 123

Introduction

Universities are actively involved in development and dissemination of knowledge and competences, essential for knowledge-based economy and society processes. The change in the nature of knowledge imposes new requirements on academic systems, which must provide trained individuals able to operate with new cognitive tools, and it focuses on the harmonious integration of traditional learning processes along formal-informal-nonformal axis (Suciu M. Ch, et al., 2011).

A feature of university library services is the simultaneity of the services that need to be provided in parallel to the requirement of meeting one particular need of a user.

The quality of the university library services offered to users, depends on the librarians' skills and work satisfaction. Improving the quality of library services should be a continuous activity aimed at increasing their efficiency. In this respect, a pro-active attitude means looking for solutions rather than waiting for problems to surface (Upadhyay S., 2017).

* Cristina Albu, cristina.albu@upb.ro

Research on the quality of service delivery activities in a university library holds a central position among other service related issues, both in terms of social-economic policy as well as theoretical outlook (Belás J. et al, 2017).

Every university library should be able to collect information from its users to understand their needs and use them in order to continuously improve the quality of service. After providing the service, the university library must use appropriate methods and tools to assess the degree of user satisfaction. The evaluation of user satisfaction, if made periodically, should be a permanent objective of any the organization, and therefore the university library.

The concept of benchmarking can be used by any organization open to change that promotes flexibility as a management tool. The aim is to obtain performance.

It can be also applied to user centred library services, thereby improving service quality and consequently meeting the users' information needs. The practice of benchmarking in a university library is tantamount to adopting the best existing methods to reach the "target".

When applied to a university library, benchmarking may be defined as: *a continuous process of assessing its services as compared to other competitors (libraries recognized as leaders in the field) or: a powerful tool likely to assist libraries in improving the quality of user centered services and its performance.*

The option for a particular type of benchmarking out of the existing ones (internal, external, competitive, functional (generic), international, etc.) available for library use, when properly applied, can contribute to success and increased efficiency. Benchmarking, if correctly chosen, designed and implemented, can also provide important advantages to the library.

At the same time, benchmarking can also provide unlimited opportunities for implementation whether as part of the quality management system and/or as a tool for continuous improvement.

1. The method approach

1.1. Ishikawa diagram application for identifying the causes leading to the loss of users in an university library

The quality assessment of university library services should be performed:

- from the view point of the recipient (user);
- from the view point of the provider (university library).

As assessment methods, should use:

1. For the beneficiary (user):
 - a) Questionnaire for feedback and suggestions;
 - b) Surveys of user satisfaction;
 - c) Focus groups.
2. For the provider (university library):
 - d) Management and analysis of complaints;
 - e) Causal loop analysis using an Ishikawa diagram.

a) Periodically users are asked to fill in questionnaires. The latter require specification of service strengths and weaknesses as well as suggestions for improving their quality.

In order to be relevant, questionnaire based surveys should cover a large number of users. The optimal survey format is tabular form. The total number of distributed questionnaires should represent at least 50% of the total number of existing users in order to make the survey representative.

b) The survey addresses, as a rule, a representative sample of users at different time intervals. These intervals may be shorter if one finds that users are dissatisfied.

c) Separate meetings are held with user groups who were either satisfied or dissatisfied with the service provided. This is to better understand user requirements and continue to provide better services in terms of quality.

d) User complaints are placed on record (complaints properly speaking or negative feedback). They are classified according to their importance in terms of the quality of the service provided as well as from the view point of its importance in the eyes of the user. The method allows to monitor trends in the users' perception of service quality. The weakness of this method is that users do not express their dissatisfaction if dissatisfied but rather simply turn down any further service.

When the university library is capable of solving the complaints submitted by its users one can make an estimate of how "user-oriented" the library is. Addressing the subject matter of the complaint in an objective and timely manner makes it possible to maintain "user satisfaction". Otherwise "losing users" is inevitable.

e) Diagrams are a diagnostic tool used in the field of service quality offered to users (Valter N. et al., 2016). They allow the analysis of the causes of problems (non-compliance). It also makes it possible to highlight and rank the (actual and potential) causes of a given effect. An issue arising in carrying out a library service is broken down into its main causes. Each main cause is broken down into secondary causes.

1. 2. The concept of benchmarking in the university library

The concept of benchmarking (BM) involves four phases: planning, data collection (research), analysis and adaptation (implementation). Figure no. 1 shows the steps involved in conducting a benchmarking project. (Balm, G., 1994), (Belás, J, et al., 2017).

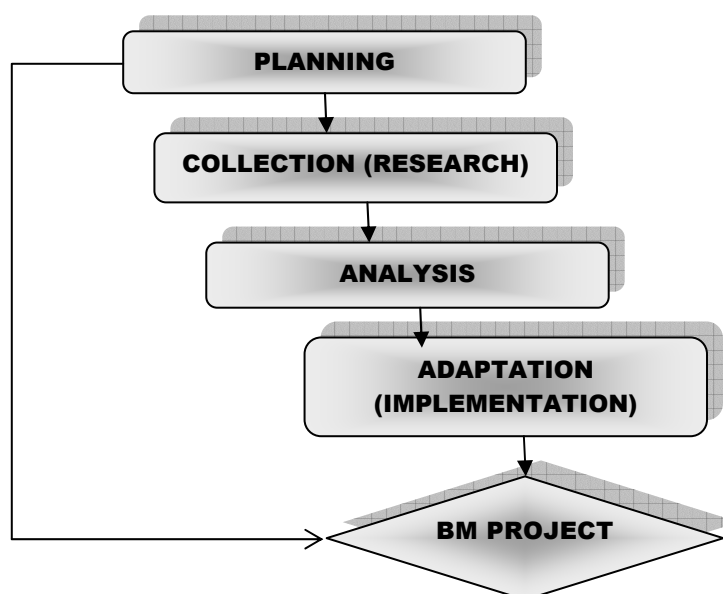


Fig. no. 1. Phases covered in a benchmarking project

Source: Balm, G., *Evaluer et ameliorer ses performances: le benchmarking*, AFNOR, 1994

The implementation of a BM project (phases and sub-phases of a BM process) is shown in an appropriate, clear and concise way in Figure no.2. (Balm, G., 1994), (Belás, J, et al., 2017), (Anand, G. & Kodali, R., 2008). The objective of any BM process is to induce changes. Nevertheless, one often finds that project outcomes yield only recommendations. That happens because the actual study has been disregarded.

In conducting the benchmarking process one can make use of *techniques* and *tools* specific to quality management. Benchmarking techniques cover all working *methods* and *procedures* by which we can go through the working phases and sub-phases (fig.no. 2). The benchmarking *tools* cover the *means* employed in the benchmarking process.

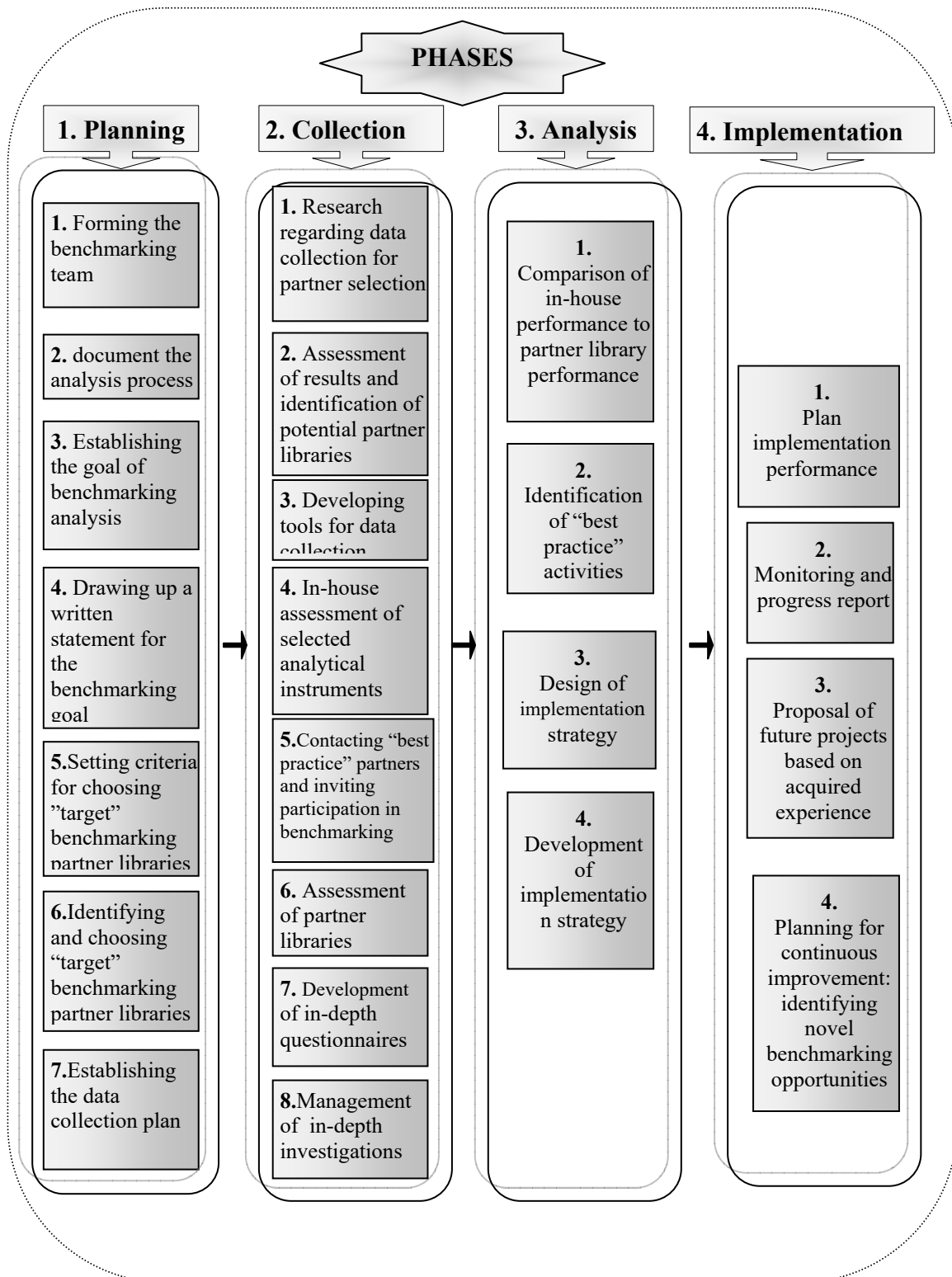


Fig. no. 2. Flow-chart of a Benchmarking project

Source: Authors. Adapted after Anand, G., Kodali, R., *Benchmarking the benchmarking models, Benchmarking: An International Journal, Vol 15, No. 3, pp. 257-291, (2008).*

Table no. 1 exemplifies the most frequently used techniques and tools (in all the four benchmarking phases of). (Anand, G. & Kodali, R., 2008), (Mitu S. et al., 2000).

Table no. 1. Benchmarking techniques and tools

| Phase | Techniques | Tools |
|-------------------|---|---|
| Planning | Brainstorming Objective weighting method | Cause-effect diagrama; Matrix chart; Pareto chart |
| Collection | Surveys Statistical-mathematical methods | Data collection file; Reference guide; Questionnaires |
| Analysis | Critical road map method P.E.R.T. method Decision making tree | Cost analysis Graph representations |
| Adaptation | Management by objectives Statistical research techniques | Histograms |

Source: Mitu S. et al. *Benchmarking, Ed. Fundației Universitare Dunărea de Jos, Galați, 2000*

2. Proposal for Case Study

2.1. Applying the Ishikawa diagram for clear visualization of low-quality in a University Library

The diagram examines the *obstacles that arise in arriving at "Quality Excellence Information Services" offered by the university library* (E effect). The problem is defined in question form: WHY are there so many obstacles in achieving Excellence in the university library? In the wake of research carried out in the library, the main causes are broken down into main categories (1, 2, 3, 4, 5). It identifies the secondary causes corresponding to the main causes that make up the "main bone" (fig. no. 3).

1. Staff

- 1.1. understaffed
- 1.2. lack of motivation
- 1.3. lack of training

2. Procedures

- 2.1. low flexibility to suggestions
- 2.2. lack of involvement
- 2.3. faulty communication channels
- 2.4. insufficient collaboration between the library and the university

3. Policies

- 3.1. unclear policy
- 3.2. hesitating manager

4. Position (location)

5. Leadership

- 5.1. do as I say
- 5.2. leader does not listen
- 5.3. unilateral decisions
- 5.4. fear of criticism
- 5.5. impersonal treatment

The use of an Ishikawa diagram (fig. no.3) allows to highlight the main causes of non-quality of services and it also represents an important tool in quality planning. The diagram in this form does not provide solutions to solving the problem. It only makes it possible to clearly define the problem under study. It may be used as a visual aid in the brainstorming

session. It also stimulates participants to look for solutions to the problem analyzed. The proposals are processed according to the well-known brainstorming technique and will ultimately yield solutions.

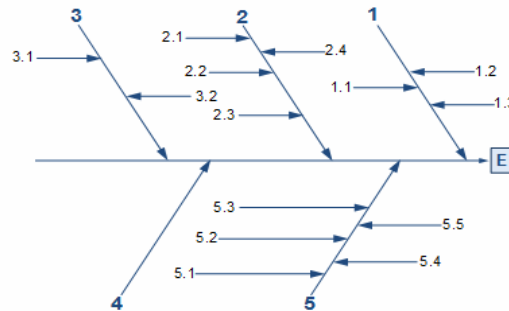


Fig. no. 3. Causal Analysis (Ishikawa) of barriers to achieving Excellence

Source: Authors

2.2. Applying the benchmarking concept to the university library

This chapter focuses on a proposal for implementing external benchmarking at the Central Library of the Bucharest “Politehnica” University involving reputed leaders in the field of librarianship. The aim is improved service for loan users. The steps to be followed in conducting the BM process are the steps referred to in chapter 2 (fig. no. 2). As the process is extremely meticulous, the present study will only illustrate techniques and tools used in the development of sub-phases in the planning and collection phases (code: 1.5, 1.6, 2.1).

2.2.1. Setting criteria for choosing “target” benchmarking partner libraries

One has used the “method of weighting objectives” where objectives have been replaced by criteria (A, B, C, D): A-size of BM partners; B-notoriety of BM partners; C-closeness to UPB Central Library field of activity; D-enrollment of readership/academic year. A matrix of these criteria is made up as follows: one compares systematically pairs of criteria. In Table no. 2: “1” is assigned if the first criterion in the pair under comparison is considered more important, while “0” is assigned if the first criterion in the pair under comparison is considered less important.

Table no. 2. Matrix of criteria

| Criterion | A | B | C | D | Total row |
|-----------|---|---|---|---|-----------|
| A | - | 0 | 0 | 0 | 0 |
| B | 1 | - | 0 | 0 | 1 |
| C | 1 | 1 | - | 0 | 2 |
| D | 1 | 1 | 1 | - | 3 |

According to Table no.2 the criteria ranking is D-C-B-A. The criteria are then placed on a scale of values from 1 to 10 in order to identify and choose benchmarking “target” partners according to Figure no. 4.

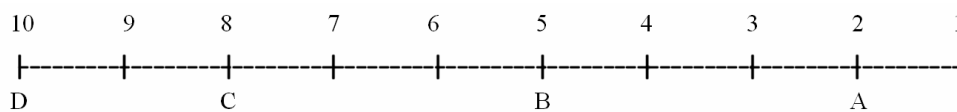


Fig. no. 4. Scale of values

Source: Author

In fig.no.4 has been chosen a scale of values from 1 to 10, where the most important criterion is assigned with the maximum value. The other values are reported to the maximum, established and appreciated by consensus. Criterion C is rated at about 80% of the value of D, B is considered 2.5 times more important than A.

2.2.2. Identifying and choosing “target” benchmarking partner libraries (code 1.6)

-Identifying potential partners

One has to draw up an initial list of possible partners as in Table no. 3.

Table nr. 3. Potential partners

| Reference | Potential partners |
|---|--|
| Central University Library „Lucian Blaga”, Cluj | 1. Central University Library „Mihai Eminescu”, Iași |
| | 2. Library of „Gheorghe Asachi” Technical University, Iași |
| | 3. Central University Library „Carol I” București |
| | 4. Central Library of „Politehnica” University, Timișoara |
| | 5. Central Library of the Craiova University |
| | 6. Library of „Dunărea de Jos” University, Galați |
| | 7. Library of „Transilvania” University, Brașov |

Choice of “target” partners based on weighted criteria

The choice of “target” partners is based on the criteria of choosing partner libraries (Section 2.2.1). This early survey of potential partners is preliminary, given the limited amount of information. One chooses a three tier rating scale. Table no. 4 provides a ranking of potential BM partners based on assessment points awarded and the scale of value in Fig no. 4. One can choose in this way the top partners.

Table no. 4. Identification and choice of BM target partners

| Crt. Nr | BM Potential Partners | Criterion | | | | Weighted Total (Wt) | % (V%) |
|---------------------------------|---|-----------|----------|----------|-----------|---------------------|--------|
| | | A | B | C | D | | |
| 1 | Central University Library „Mihai Eminescu”, Iași | 3 | 2 | 3 | 2 | 60 | 14,96 |
| 2 | Library of „Gheorghe Asachi” Technical University, Iași | 2 | 3 | 3 | 3 | 73 | 18,20 |
| 3 | Central University Library ”Carol I” București | 3 | 3 | 2 | 3 | 67 | 16,73 |
| 4 | Central Library of „Politehnica” Univ. Timișoara | 2 | 2 | 3 | 2 | 58 | 14,46 |
| 5 | Central Library of the Craiova University | 2 | 2 | 2 | 1 | 48 | 11,97 |
| 6 | Library of „Dunărea de Jos” University, Galați | 1 | 1 | 2 | 2 | 43 | 10,72 |
| 7 | Library of „Transilvania” University, Brașov | 3 | 2 | 2 | 2 | 52 | 12,96 |
| Criterion weighting (Cw) | | 2 | 5 | 8 | 10 | | |
| Total (T) | | | | | | 401 | 100 |

Source: Authors

Exemple for Partner 1: $A \times Cw_A + B \times Cw_B + C \times Cw_C + D \times Cw_D = Wt$; $Wt/T \times 100 = V\%$

According to Table no. 4, the FIVE first selected libraries have been: Library of ”Gheorghe Asachi” Technical University, Iași; Central University Library ”Carol I” București; Central

University Library „Mihai Eminescu”, Iași; Central Library of „Politehnica” University, Timișoara; Library of „Transilvania” University, Brașov.

The collection of data about partner selection is according to the reference guide for identifying information sources. This guide includes: **Internal information** (market research; experts; managers; meetings of BM specialists, information from BM network, in-house library studies), **Public information** (books/ articles in periodicals; electronic documents; previous research on topic; association of professional studies), **Private research** (questionnaires, visits; meetings of benchmarking partners).

The sources are diverse: some can lead to data and information directly (e.g. partners' libraries websites), others can lead to alternative sources of information.

Conclusions

The final conclusion and the fundamental idea of this paper could be expressed succinctly as follows: *to know, to understand, to assess, to gauge in order to cope with any kind of constraints*. The acquisition and application of the concept of benchmarking can benefit the library if adopted and implemented correctly and if supported by flexible management.

In conducting a benchmarking process, the people involved must have relevant expertise, extensive experience and be creative. Experience is necessary but not sufficient. It should be complemented by a well-organized methodological basis and adapted to the library particulars. The factors with an impact upon “best practices” are: computerization; staff training; inter-library cooperation agreements.

The study cases could be used as structural methods and tools for continuous improvement of university libraries services.

The present paper is meant to provide a limited contribution to implementing the concept of benchmarking in the university library.

References

- Anand, G. and Kodali, R., 2008. Benchmarking the benchmarking models. *Benchmarking: An International Journal*, 15(3), pp. 257-291.
- Balm, G., 1994. *Evaluer et ameliorer ses performances: le benchmarking*. s.l: AFNOR.
- Belás, J, Dvorský, J., Tyll, L. and Zvaríková, K., 2017. *Entrepreneurship of university students: important factors and the propensity for entrepreneurship*. *Administratie si Management Public*, (28), pp.6-25.
- Cristian, A. and Valter, N., 2012. The Application of Taguchi's “Quality Loss” Concept to Dimensional Precision and ISO Fits. *Bulletin of the Transilvania University of Brasov, Series I: Engineering Sciences*, 5(54)(2), pp. 25-33.
- Mitu, Ș., Neagu, M. and Frumușanu, G., 2000. *Benchmarking*. Galati: Editura Fundației Universitare Dunărea de Jos.
- Suciu, M. Ch., Drăgulănescu, I.V., Ghițiu-Brătescu, A., Picioruș, L., Imbrișcă, C., Șerbu, V. M. and Grigore, C., 2011. The role of universities in the knowledge-based economy and society. Implications for the Romanian economic and business higher education. *Amfiteatru Economic*, [online] 13(30), pp. 420-436. Available at: <http://www.amfiteatruconomic.ro/RevistaDetalii_EN.aspx?Cod=43> [Accessed 6 March 2019].
- Upadhyay, S., 2017. Can spiritual intelligence influence research performance in higher education? Framework for human resource development in higher education. *Administratie si Management Public*, (28), pp.153-173.

Valter, N., Androniceanu, A., Drăgulănescu, I.V. and Duca, M., 2016. Agile Management Based On Modularization Of Products And Processes. In: The Bucharest University of Economic Studies, Allensbach Univesrity and Amfiteatru Economic, *Basiq International Conference: New Trends In Sustainable Business And Consumption 2016*. Konstanz, Germany, 2-3 June 2016. Bucharest: ASE Publishing.