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Building a culture of assessment in Lisbon public libraries: a knowledge management approach

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ABSTRACT

As an answer to the increasing pressure on Portuguese public services towards accountability and performance evaluation, in 2003, the Department of Libraries and Archives of Lisbon Municipality initiated a program aimed at the creation of an assessment culture in Lisbon Municipal Libraries Network. This program has two main axes: (1) the implementation of an Integrated Performance Evaluation System; and (2) the development of a Knowledge Management Initiative to support the emerging culture of assessment.

The aim of this paper is to present the KM Initiative as a strategy for enhancing an organisational culture of assessment. Viewing knowledge as a product of individual and organizational learning (Dudezert et al.), the methodology used to evaluate organizational knowledge on performance assessment is described.

The KM Initiative's four stages – (1) Introduce and advocate; (2) Experiment; (3) Discover and get proficient; (4) Expand and support – are examined, being emphasised the measurement techniques used, namely anecdotal evidence, quantitative and qualitative surveys, Library plans and performance reports content analysis.

Finally, the KM Initiative outcomes are discussed, being stressed the importance of using a KM approach in conjunction with other organizational improvement strategies.

INTRODUCTION

In 1883, the Municipality of Lisbon inaugurated its first public library – Biblioteca Municipal de São Lázaro. This was the first library of a Municipal Libraries Network that would keep on growing and change till our days. Presently, this network is formed

by twenty libraries – one central library, sixteen branch libraries, two mobile libraries and one public garden service point¹.

Along this long road, Lisbon Municipal Libraries (BLX) have generated several innovations² at process, product-service and technological levels. An overview of the last seventeen years, allows us to identify six major innovation cycles³ (Figure 1):

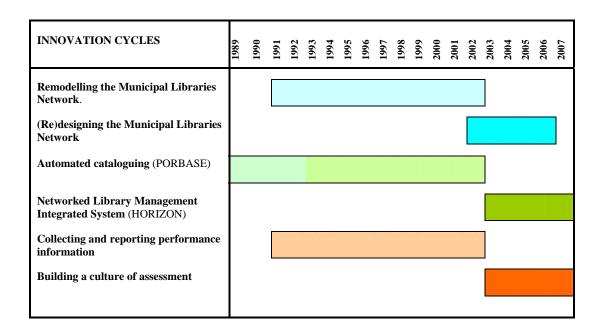


Figure 1 – Innovation cycles in BLX (1989-2006)

- Remodelling the Municipal Libraries Network (1991–2002) according to UNESCO's concept of public library and to a policy of providing public specialised information services⁴.
- (Re)designing the Municipal Libraries Network (2002-) according to a new, more effective and more efficient concept of public libraries network.
- Automated cataloguing. (1989–2002) This cycle started with the introduction
 of the first microcomputers in the Central Library and the beginning of
 automated cataloguing using a software free of charge PORBASE⁵. In 1993, a

¹ More information on Lisbon Municipal Libraries Network can be found on : http://blx.cm-lisboa.pt/blx

² *Innovation* can be defined as the process of creating and introducing something new in the organisation or in the market (Freire, 2000).

³ In general, any innovation project goes through a six phases cycle: **opportunity** detection, **idea** generation, **development** of selected ideas, prototype **testing**, new service, product or process **introduction** and its **diffusion** (Freire, 2000).

⁴ This cycle was strongly determined by the library vision and strategy defined by Lisbon Local Authority during socialist and communist coalition municipal governments (1989-2001).

⁵ Until the 1980s, Portugal had no tradition in library automation. Cataloguing rules based on ISBD appeared only at the end of the 70s and loans, serials or acquisitions were managed manually. In the mid eighties, the National Library launch a project aimed at the construction of a National Bibliographic Database. UNESCO's Mini-micro CDS/ISIS was used to develop a bibliographic database following UNIMARC standard, which was named PORBASE. In 1987, after negotiating with

network catalogue solution was implemented using a new version of PORBASE and a Novell network.

- Networked Library Management Integrated System The implementation, in October 2003, of a networked Library Management Integrated System (HORIZON) open the doors to a huge change in libraries' processes, services and products, as well as in all back-office structures.
- Collecting and reporting performance information. The creation in 1992 of a system for collecting and reporting information based on the main findings of an academic study on performance measurement of Portuguese public libraries⁶. This system, supported by Excel spread sheets, shaped most of municipal libraries' performance collecting and reporting routines for more then ten years.
- Building a culture of assessment In 2003, the Director of the Department of Archives and Libraries of Lisbon Municipality, in the context of a wider quality strategy, set the goal of building an organisational culture of assessment, as a mechanism for continuous improvement and enhancement of libraries social value.

These innovation cycles reflect different organisational strategies and, therefore, different organisational learning processes. In that sense, "It is necessary to distinguish different aims, focus, and processes of learning and analyse ways in which learning is diffuse throughout the organization." (Ochôa, 1993, p. IV)

1. BUILDING A CULTURE OF ASSESSMENT

Like countries, each organisation has its own and particular organizational culture. For more then thirty years, this theme has been central to organisational behaviour studies and Social Psychology and among all definitions one can find in the literature, Schein's (1985) definition of organisational culture is, perhaps, the most frequently adopted. For this author, organizational culture is a set of fundamental values, behaviour rules, artefacts and behaviour patterns that shape the way people interact in the organisation and commit themselves to work and to the organisation. Organisational culture is quite similar to an iceberg (Chiavenato, 2004): in the top, above water level, there are the visible and superficial cultural aspects that can be observed – the type of building, spaces, furniture and equipment, the work methods and procedures, organisational strategies and goals, performance measures, etc.; below, there are all invisible and deep aspects, which are much more difficult to observe or perceive – people's perceptions and attitudes, values and expectations, emotional relationships, group feelings and rules, etc. The deeper we go into the "cultural iceberg", the more difficult to change an organisational culture.

In 1996, Soffle, Renauld and Veldorf, reflecting on the future of academic libraries, emphasised the need for change in library professionals' behaviour: they "...must begin studying processes and using process improvement tools ...must begin to collect data and use them as the basis for decision-making rather then rely on subjective impressions

UNESCO the free of charge distribution of the Portuguese version of Mini-micro CDS/ISIS, the National Library distributed more then 200 copies of PORBASE to libraries (António and Ferreira, 1996).

⁶ Pinto, L. G. (1992) - *A medição da performance de bibliotecas públicas portuguesas*. Study submitted in partial fulfilment for the degree of MSc. in Information Management (University of Sheffield, UK).

and opinions ...must begin benchmarking their costs and processes ...must make decisions based on costs, and benchmarked data and opportunity costs ...need to look at customer needs ...focus on education, knowledge management, assessment, connection development." Clearly, for these authors, assessment and evaluation skills are important change agents.

In order to make assessment and evaluation more influential in libraries, two sets of **values** must be changed (Lakos, 1999):

- Values internal to the library profession emphasis should be placed on the value of the work done by libraries and library professionals, especially as a service oriented profession. "Here the emphasis is on the value of service, especially public services. (...) A profession that sees itself as 'doing good' is less concerned with assessing its outcomes and impacts since it sees its own activities as inherently positive." (p.4)
- Values external to libraries the institutional values of parent organisations, governments, local bodies and others are external forces that determine the wider institutional strategy and goals for the library functioning as an institutional impetus for change.

As an answer to the increasing pressure on Portuguese public services towards accountability and performance evaluation, in the last trimester of 2003, the Department of Archives and Libraries initiated a program aimed at the development of an assessment culture in Lisbon Municipal Libraries Network – the *BLX Performance Assessment Program* (*BLX-PA Program*). As defined by A. Lakos (1998), a "Culture of Assessment is the attitudinal and institutional changes that have to occur in order for library staff to be able to work in an environment where decisions are based on facts, research and analysis, and services are planned and delivered in order to maximise positive outcomes and impacts for library clients. Culture of assessment is an integral part of the process of change and the creation of a customer-centred culture" (p.5).

BLX-PA Program initial focus was the **implementation of an** Integrated Performance Evaluation System that would assist managers and staff in their decision making-process, monitor resource allocations, improve libraries efficiency and effectiveness and, therefore, provide evidences of BLX social value.

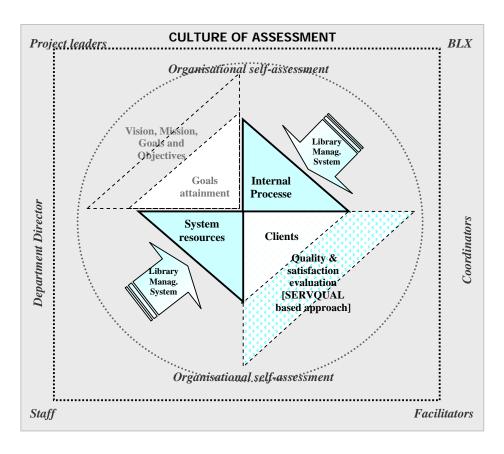


Figure 2 – BLX Integrated Performance Assessment model

The conceptual model that supports this system in the emergent organisational culture of assessment is illustrated by Figure 2.

Lisbon municipal libraries previous experiences on performance measurement (the *Collecting and reporting performance information* innovation cycle) helped us identifying significant cultural barriers that had to be overcome to create an organisational assessment culture. Figure 3 shows those major cultural barriers, as well as some related factors that were expected to help overcoming those barriers.

In what concerns libraries teams' deficient performance assessment skills, it should be noted this is not a specific characteristic of BLX staff. In fact, a recent study on self-image and external image of Portuguese information professionals' skills, carried out by the *Observatory on the Information-Documentation Profession* (OP I-D), shows "Diagnosis and evaluation skills" are among those skills information professionals consider to be the least important to their present and future performance (Pinto and Ochôa, 2006). As Lakos and Phipps (2004) point out, "Assessment has not been taught or appreciated by the profession. It involves "visioning" by the organization, which requires knowing what customers value and focusing on continuous improvement. The evolution of library activities into functional "silos" such as circulation, cataloguing, acquisition, and reference service has imposed an organizational structure that assigns to the administrative periphery the activities concerned with planning, data gathering, assessment and evaluation. In the same way, it has assigned its customers to the periphery." (p.351)

Cultural barriers	Success factors
Library staff skills are much more aligned to (technical) librarianship than to marketing and business	Development of library staff performance assessment skills.
Perception of performance evaluation as a threaten	Create a vision capable of capitalizing on performance evaluation value and potential
Unawareness of the need to demonstrate libraries and library professionals' outcomes and social value	Focus the library profession on customers' needs and libraries accountability, outputs and outcomes (impact).
Gaps between strategic, coordinating and operational levels	Involve libraries coordinators and teams during design, test, implementation and evaluation phases.

Figure 3 – Major cultural barriers

According to Schwartz's theory of values (1994), values are *believes*, which can be used as a standard or criteria for professional observation A literature review suggests that the impact of professionals' believes is a key-factor in innovation⁷: the way they value their professional skills determines their professional performance. As Thompson, in 1976, pointed "A Professional has a depth of knowledge that allows him to work at the perimeters of a field where innovation occur. He is also likely to be strongly oriented toward the organizational values of status and power (...). He is also very likely to have internalized certain professional values that seem to be related in some fashion to innovativeness. These are (1) autonomy in work, both as to means and ends, (2) a belief in professional growth as the measure of success, (3) an acceptance of peer evaluation, rather than the opinion of a superior, as the standard of professional worth, (4) an assignment of the highest value to activities that develop new knowledge."(p.69)

Building a culture of assessment would need a support system for collecting, analysing and reporting data on BLX performance, but, above all, it would need a change in people's believes, attitudes and skills. In that sense, *BLX-PA Program* was restructured in September 2005 to accommodate another main (interrelated) focus: the **development of a Knowledge Management Initiative** to support the emerging culture of assessment.

BLX-PA Program is carried out by a project team of 2 librarians (project leaders) and 34 facilitators (16 library coordinators and 18 local collaborators). Acting as change agents (Freire, 2002), BLX-PA's project leaders have been playing two important functions: creating the vision for the project, in articulation with the Department of Archives and Libraries' goals and objectives; and motivating team members in order to make them willing to overcome obstacles and create an open and participative work environment.

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⁷ Namely Hage e Aiken (1969), Pierce e Delbecq's (1977) and Drazin (1990) (Pinto and Ochôa, 2006).

We consider the process of creating and transferring the vision a key-success factor. In fact, as Tjosvold (1992) puts it, "Successful teams are committed to a *vision* of innovation and experiment, feel *united* and cohesive behind this vision, and believe that the organization itself wants continuous improvement and will respond openly to the team's recommendations." (p. 85).

2. THE KNOWLEDGE MANAGEMENT INITIATIVE

BLX's *KM Initiative*, like other KM projects, can be seen as "...attempts to "do something useful" with knowledge, to accomplish organizational objectives through the structuring of people, technology, and knowledge content." (Davenport, De Long and Beers, 1997, p.2). Before moving onto the issue of managing BLX's knowledge on performance assessment, it is necessary to clarify what we understand by the term knowledge and how it can be managed.

(Organizational) Knowledge

Knowledge stems from data. By combining data, meaningful information can be produced. Knowledge, nevertheless, exists at a higher order than information. As D. Foray (2000, quoted by Dudezert et al., 2001) says "La connaissance possède quelque chose de plus que l'information; elle renvoi à la capacité que donne la connaissance à engendrer, extrapoler et inférer à une "capacité d'apprentissage." (p.14) This "learning capability" emphasises the inevitable role of individuals in organisational learning: "Les connaissances collectives d'une enterprise sont les produits du processus d'apprentissage individual de chacun des acteurs qui la compose. Elles sont portées et appropriées par les individus connaissant et sont donc influences par leurs histoire, leurs cultures et leurs valeurs. Elles sont collectives car elles sont mises au service de l'organisation de façon consentie par les individus connaissant pour atteindre les objectifs que l'entreprise s'est assignés." (Dudezert et al., 2001, p. 16)

In their famous book *The knowledge creating company*, I. Nonaka and H. Takeuchi (1997) define two types of knowledge:

- *Tacit knowledge* the subjective and experience based knowledge that cannot be expressed in words or numbers and, therefore, cannot be easily transmitted. It includes cognitive skills (believes, images, intuition and mental models) and technical skills (craft, "know-how").
- Explicit knowledge the objective and rational knowledge that can be easily captured (in an artificial way) through documents, manuals, job procedures, etc. and then shared with others.

For these authors, the creation of organisational knowledge is the result of a continuous and dynamic interaction between tacit and explicit knowledge. This interaction, the *Knowledge Spiral* – depends on four aspects:

- 1) Socialization It is the process that transfers tacit knowledge in one person to tacit knowledge in another person; it is the initial development of an interaction field which helps members sharing experiences and mental models:
- 2) Externalisation It is the process for making tacit knowledge explicit, through dialog or collective reflection; it takes place among individuals within a group;

- 3) *Combination* It is the process of transferring knowledge that was made explicit among groups across organisations;
- 4) *Internalization* It is the process of understanding and incorporating explicit knowledge into tacit knowledge held by individuals; it allows the transfer of organisation and group explicit knowledge to the individual.

The *Knowledge Spiral* can take place at physical, virtual, mental (shared experiences, believes) or relationship level (Nonaka and Takeuchi, 1997).

Several studies underline the importance of analysing the forces behind knowledge creation, known as *enablers*. Nonaka and Takeuchi (1995)'s ideas on enablers, subsequently developed by Nonaka et al. (2000) and Von Krogh et al. (2000), consider the following enablers: *intention or a common goal, autonomy, fluctuation and creative chaos, redundancy, variety and trust* and *commitment* (Lloria and Moreno-Luzón, 2005). These enablers for knowledge creation were particularly valued in the context of Lisbon municipal libraries BLX *KM Initiative*.

Managing BLX's knowledge on performance assessment

To overcome the cultural barriers that were identified and to create a sustainable assessment culture, the *BLX-PA*'s project team focuses on the "knowledge side" of the ongoing process of implementing a performance evaluation management system. In that sense, the Department of Libraries and Archives launch a *KM Initiative*. This initiative was conceived has a dynamic process with four continuous stages - *Introduce and advocate*; *Experiment*; *Discover and get proficient*; and *Expand and support* – centred on what we considered to be the principal enablers for knowledge creation on performance assessment:

- Vision (*intention or a common goal*, which must be used in the justification and assessment of a created knowledge)
- Staff behaviour and development (*autonomy*, which is related to motivation; skills, values-believes, attitudes towards work methods and procedures,)

(1) Introduce and advocate

Considering that BLX staff had a clear deficit of performance evaluation skills, project leaders invested on the development of "knowledge trap" documents and tools, that is, manuals, job procedures and training sessions that capture specialised tacit knowledge on performance assessment and make it available to all participants in the *BLX-PA* Program. Simultaneously, the vision of performance assessment strategic importance, mainly anchored in the promotion of libraries and library professionals' social value⁹, was reinforced and transmitted in all workshops, follow-up meetings and training sessions. This strategy has a great change potential, since, as Lakos points out, "In an internally focused profession and organisation, only a major change in the perception of value of the activity or the results of the activity will bring about re-examination of the activity itself." (1999, p.4).

⁸ BLX KM Initiative stages' name was inspired and adapted from APQC's knowledge management implementation stages (American Productivity & Quality Center, 2001a).

⁹ This approach was inspired by a research line that is being carried out by the *Observatory on the Information-Documentation Profession* (OP I-D), a knowledge partnership between four Portuguese library and information professional associations.

In this stage, we considered that counting the number "knowledge trap" documents, as well as the number of workshops, follow-up meetings and training sessions would provide some evidence on knowledge transfer from project leaders to all the other team members that formed our repository of internal knowledge

(2) Experiment

The new performance evaluation system was fairly well accepted by library coordinators and staff. In December 2005, library coordinators and other facilitators attended an ongoing evaluation workshop and carried out a SWOT analysis of *BLX PA Program* that provided some anecdotal evidences. Some improvements were introduced in the performance evaluation system and at the end of January, split in two group, project team members attended two training sessions aimed at the development of performance evaluation skills, especially those associated with the use of the new library system statistical module and other BLX performance assessment tools.

At the *Experiment* stage, we started measuring the percentage of disconformities in the process of collecting and reporting performance data by libraries, as well as "knowledge trap" documents usage.

(3) Discover and get proficient

In this stage, we expected BLX coordinators and library staff to be capable of recognizing the value of assessment and using the available performance evaluation tools. In that sense, each library team was asked to explore a simple research topic related to their library performance, using these tools for collecting and analysing data. These topics will be discussed in a Learning session that will take place in May Though there is a convergence at this stage of the knowledge measures used previously, we felt we needed to monitor BLX progress toward a culture of assessment as defined by Lakos and Phipps (2002). We wanted to find out:

- Do library coordinators and staff recognize the value of assessment and support and participate in assessment as part of their regular activities?
- How was the *BLX-PA Program* vision of performance assessment captured, transferred and used by coordinators and library staff?
- Are performance indicators included in organisational planning documents (Activities Plan and Report)?
- Do library/units and staff have customer focused goals which are monitored regularly?
- Do library coordinators and staff have the necessary performance assessment skills?
- Can library coordinators and staff use effectively all BLX performance evaluation tools?

In order to find answers to those questions, a structured questionnaire was designed and will be distributed to coordinators and library staff during site visits (April 2006). Questions were grouped under four main areas: I – Identification; II – The performance assessment Program; III – Performance assessment (vision, values and

attitudes); IV –Skills (Performance assessment skills self-diagnosis and "followers maturity" diagnosis).

During site visits, coordinators will be also interviewed to gather qualitative data on the research questions. Library 2006 plans and 2005 performance reports are being collected in order to carry on content analysis. The main measures that will result from this process are: anecdotal (success stories¹¹), quantitative (progress towards an assessment culture) and qualitative (extrapolation from anecdotal, performance assessment Knowledge Map).

(4) Expand and support

In this stage, performance assessment should have proved valuable enough to be expanded to become part of libraries daily activities and, eventually, of other areas within the Department of Libraries and Archives. We will try to capture lessons learned that can be transferred and used to help BLX better implement performance assessment on a larger and expanding scale. A predefined taxonomy of lessons learned will be helpful in developing conclusions and identifying areas that will be replicated (American Productivity & Quality Center, 2001) throughout the Department of Libraries and Archives. Another survey will help us gather evidences on the impact of the *BLX-PA* Program on the Department and on the Municipal Department of Culture.

A community of practice (CoP) on performance assessment is expected to begin being formalised in this stage has an effective way of creating, sharing, validating and transferring tacit knowledge in an informal way. A CoP assessment-questionnaire for community members will provide ideas on how to improve it, its external impact and its health and effectiveness (American Productivity & Quality Center, 2001, 2001a).

In what concerns *KM Initiative* performance measures, it should be noted that we took in consideration the fact that "Performance measures need to promote and encourage the right behaviours within an organisation, i.e. those behaviours that assist the organisation in achieving its goals. They need to reflect a positive image that encourages involvement and ownership within a non-threatening environment if it is to succeed in the development of a continuous improvement ethos" (Ahmed, Lim and Zairi, 1999).

Figure 4 synthesizes the performance measurements that were carried out and/or will still be implemented during the *KM Initiative*.

Considering that leaders' behaviour, among other variables, is dependent on staff maturity, we considered a situational approach to leadership, namely Hersey and Blanchard's *Follower-based theory* (1982)

As pointed by the APQC best practice report on successful knowledge management initiatives (American Productivity & Quality Center, 2001), stories are powerful indicators of success and promotion tools and one of seven key points regarding KM measurement.

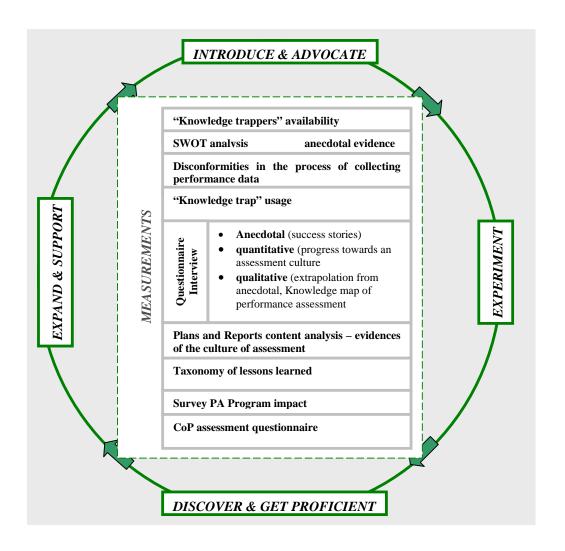


Figure 4 – KM Initiative performance measurement.

3. FINAL REMARKS

Focusing on the knowledge side of performance assessment made us pay closer attention to organisational and individual learning. In fact, we realised the creation and development of a repository of structured internal knowledge was an important step, but it did not guarantee information would become knowledge. Nonaka and Takeuchi's proposal on the knowledge creating process and on the role of enablers, stressed the importance of "managing" the organisational vision on performance assessment. We definitely agree with these authors when they say "...the most critical element of corporate strategy is to conceptualize a vision about what kind of knowledge should be developed and turn it into a management system for implementation" (1995, p.74).

In the process of building a culture of assessment in BLX, the motivational approach that was followed made collaborators and coordinators more opened to change and encouraged more effective performance assessment behaviours. In this context, anecdotal evidence proved to be powerful indicator of success and an effective promotion tool. On the other hand, getting participants together in a face-to-face setting and keeping regular e-mail and phone contacts with them reinforce knowledge transfer.

As Davenport, De long and Beers (1997) point out, "Successful knowledge projects usually address knowledge transfer through a variety of channels, recognizing that each adds value in different ways, and that their synergy enhances knowledge use." (p.19)

Like any innovation, *Building a culture of assessment* is an uncertain, knowledge intensive, controversial, interdisciplinary and inter-functional process (Kanter quoted by Ochoa, 1993). According to Bouwen and Fry (1991), "Three aspects of the day-to-day social fabric of the organizational life are central to the innovation process: how continuity of purpose and worth is provided and maintained; how novelty is introduced and transformed into compelling, generative ideas for action; and how transition from old to new is actually done. The balancing or alignment of these three core themes creates constant tension between a dominant logic (how it is done now; tradition; historically routed values or customs) and a new logic (items, opportunities, trials, experiments, etc.)" (p.39). Will we be able to implement in BLX a new organisational logic centred on a culture of assessment? That is the question.

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