

# Quality Management and Innovation in Information Services - The case study of the Documentation Services of the University of Minho

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NOTE: There's a confidentiality agreement between this paper's author and SDUM. During the presentation at BOBCATSSS 2009 some documents will be shown and the information will be more specific but this paper can only be a simplified sample of the work that is being developed at SDUM. Professional ethics, as you must understand. Thank you for the comprehension.

## ABSTRACT

[The present paper is based on a curricular traineeship, part of the Degree in Information Science, under the theme of the implementation of Quality Management Systems, occurred at the Documentation Services of the University of Minho (SDUM).]

The SDUM have their main purpose in providing the best resources, services and easy access to all the community of the University of Minho (formed by students of several areas, teachers, collaborators and investigators). In order to fulfill the users' needs, it was essential for SDUM to grow and mature as an organization.

The main objective of this paper is to give a general vision of all the work executed at SDUM, emphasizing this project, pioneer in Portugal: the implementation of Quality Management Systems, based on ISO 9001:2000 and Balanced Scorecard, in order to obtain the services' certification.

Between the amount of steps needed for a complex process as this one is, it is important to have the perception that Libraries are now dealing with a new "generation" of users and it's important, not only to understand their needs, but knowing how to satisfy them and supplant what they are expecting. The Quality, allied, most of the times, to Innovation, is a new opportunity to change what is not working the way it was supposed to but, more important than that, to involve and motivate all the collaborators, making

them feel as a real team. And it will surely reflect in the services rendered to the users.

From mapping processes, to documental management, passing through the Quality Manual, Benchmarking and the issues related to the human side of this question, the present paper aims to be an example of what is Quality applied to this area and also encourage everyone to take a step ahead into the future of Libraries.

**KEYWORDS:** Balanced Scorecard, Documentation Services, Information Management, Information Science, ISO 9001:2000, LibQual+, Quality Management Systems, Quality Management Systems applied to Libraries, Services Quality, Services Certification.

## 1. THE DOCUMENTATION SERVICES OF THE UNIVERSITY OF MINHO

The Documentation Services of the University of Minho (SDUM) have their main purpose in providing the best bibliographic resources, making them accessible, and also supply quality services to the community of the University of Minho, which is composed of a wide range of knowledge areas, involving investigators, students, teachers and collaborators. In order to accomplish its Mission, the SDUM select, acquire, organize, preserve

and provide the intellectual and physical access to all collections, in all the supports.

Physically, SDUM have four major spaces:

- **General Library (BGUM)** - it's the principal library, where several collections of many knowledge areas can be found, in order to fulfill the users' needs. Besides the collections, this space includes the general deposit of the University's publications, the bibliographic estate of Dr. Salgado Zenha, the documental found of the already extinguished Library of the Institute of Child Studies and the old schools of the Primary Teaching of Guimarães and Braga, and also an access point to the National Institute of Statistics, which is serving all Braga district.
- **Library of the University of Minho at the Guimarães Campus** - collection centered in engineering areas but also covering other knowledge areas such as Geography, Architecture and history of populations.
- **Congregados Library (BEC)** - this is the library where all the documental estate related to Nursery and Music can be found.
- **Library of the Education Sciences (BCE)** - holds the collection referred do education sciences.

More specialized documentation is available at the several existing organic unities of the University.

All the documental estate of SDUM is registered at the bibliographic catalogue (available at the research portal), in order to help users consulting the documentation and find what their searching for more easily.

Besides holding the RepositoriUM, an information repository of reference, the SDUM also offer the possibility to search information in various signed databases and in other free access web resources. Some other services are also supplied, such as loan for domiciliary reading, documentation reproduction (self-service printing, scanning or copying), wireless access to the Internet and to University of Minho's net, search help (physical and online), chatbox and Skype services, formation actions, among many others.

## 2. WHY TO APPLY QUALITY MANAGEMENT SYSTEMS TO SDUM?

In order to improve all the services offered and make them even more customer-oriented, the SDUM have decided to bet on the implementation of Quality Management Systems. Having the certification as the main goal, and after a long reflection about the method(s) to apply in this specific case (as EFQM, CAF, ...), the

choice went in the direction of ISO 9001:2000, the standard norm that defines the guidelines of the requirements which are necessary to implement a Quality Management System, and also Balanced Scorecard, a management support tool, focused in four different perspectives (Learning and Growth Perspective; Customer Perspective; Finance/Sustainability Perspective; Internal Business Processes Perspective).

The first stage of the process had the support of two students from the Degree in Public Administration (University of Minho). During this stage, through individual interviews of all the members of the team, occurred the first internal survey of the activities of all the SDUM's sectors (according to the organizational structure predefined by the Services' Direction), which were: Documental Analysis, Catalogues, Reading and Loan, Information Diffusion, Formation, Informatics, Bibliographic Acquisitions, Maintenance, General Office.

On a second stage, there was the need to continue the work that was already developed. So it was decided to require a student from the Degree in Information Science with the purpose of continuing the work left from the first stage.

## 3. THE BEGINING – FROM THE STRATEGIC APPROACH INTO THE FIRST DEFINITIONS FOR QUALITY

After acquiring and carefully reading a vast number of bibliographic references and case studies related to Quality in Services, the first step really necessary was to plan all the actions to apply in SDUM. So, the first action relapsed on Benchmarking, in scope of (re)defining SDUM's Mission and Vision. In order to do this action, there was a great research to list all the Spanish and Brazilian university libraries, with the condition that these libraries had a site. To research Spanish cases, REBIUN was used.

As a consequence of this research, a table was elaborated, with parameters such as:

- Library Name
- Country
- Site
- Responsible
- Charge in Institution
- Contact
- Mission
- Vision
- Strategy
- Certification/ Quality Policy

Due to the large number of libraries and institutions, a few were excluded. The method used to include the libraries in the table was to consider relevant information as: certification process already concluded, good definition of Mission and/or Vision, existence of a

Quality Policy or even implementation of actions to processes' improvement. This work allowed us to have a large perception of this kind of process adapted to real cases (for e.g. the University of Granada case) and have the possibility to understand concretely what's needed and relevant.

After this stage, it was really important to define the key-processes of the core business. The first step to do that was to list all the activities from all SDUM's sectors using the 2007 Activities Report and also the work already done by the two Public Administration Students. As a result, it was possible to conclude that there was disparity in what concerns to the procedures of the same activity and also that the key-processes should have another type of organization (they were firstly divided in "internal" and "external" processes, due to the physical disposition). To solve the first problem, a few grills were created. They were supposed to be delivered to the elements of the respective sector, in order to eliminate the ambiguity of the activities and establish homogeneous procedures. To solve the second question, the Processes' Network was redesigned. At this point, a team of external quality consultants was contracted to support the implementation process and, after analyzing the internal processes, they were responsible to establish the new Processes' Network and also define their inputs and outputs.

Besides this, an internal Quality Team was formed, to better organize the resources (specially time and human resources). The team should represent all the activity sectors and the present collaborators should convey the decisions and ideas (related to the quality process) to the remaining elements. The first Quality meeting at SDUM had the main purpose to redefine the Mission and also define a Vision. So, after showing a few examples, all the collaborators were asked to think about where they wanted to be in 10years. All the opinions were collected and compiled. The general results/ideas were:

- To be a Reference and Excellence Library to the Academic Community;
- To be a modern service (always a step ahead);
- Concerning to the team:
  - o Open communication relationship;
  - o Formation/Training;
  - o Good work practices;
  - o Develop an efficient work, with quality;
  - o Good environmental conditions at work;
- Material aspects:
  - o A new library;
  - o An ecologic library;
  - o Change the disposition of the furniture at the Reading Rooms.

This step was closed with a presentation to clarify technical aspects to all the collaborators and also

to define a plan of actions.

#### 4. MISSION, VISION, VALUES AND QUALITY POLICY

After this first initial period, the new definitions of Vision, Values and Quality Policy and also the redefinition on the Mission were finally approved and became part of the Quality Manual.

- **Mission**

The Documentation Services form an integrated system which involves all the functional library and bibliographical information unities of all the University libraries, having as fundamental attributes:

- a) To collect, manage and provide scientific, technical and cultural information to all the activity sectors of the University;
- b) To participate in systems or bibliographical, scientific and technical information nets, in agreement with University's interests.

- **Values**

- User-oriented
- Respect people and the environment
- Innovation
- Access to information and intellectual freedom
- Excellence

- **Vision**

Responding to the defined and assumed compromises established in its Mission, and also guided by the values of its activities, the SDUM intend to:

- Be recognized by its users (individual and institutional) as an indispensable and excellence service, supporting education, learning, investigation and also creation, diffusion and valuing of the knowledge generated at the University of Minho;
- Be a reference and a leader in developing and rendering innovative bibliographical information resources and services;
- Be a social and environmental responsible organization, controlling costs, eliminating wastes, promoting professional training and personal development of the collaborators, offering a welcoming working

atmosphere, facilitating interaction to its users and collaborators.

To what concerns to Quality Policy, the parameters won't be focused in this paper for a simple reason: confidentiality and professional ethics. Anyway, the Quality Policy meets the four Balanced Scorecard perspectives and, to ensure that the proposed objectives were accomplished, indicators and goals were defined and an evaluation plan for the users' needs was also established.

## 5. KEY-PROCESSES NETWORK

At this point all the attentions were concentrated in SDUM's activities and main processes. As written before, there was a need to redefine the Key-Processes Network in order to understand the interaction between the different sectors and activities and, then, percept what needs to be improved.

So, the main input considered was "Customer Requirements/Legal Requirements/Others" and the main output "Customer and Stakeholders Satisfaction/Continuous Improvement". The Core Business Processes were fixed in:

- **Acquisitions Management:** involves all the activities inherent to bibliographical acquisitions (monographs and periodic publications), from the moment there's an order or a request to acquire documents, to the moment they have authorization to follow to documental treatment;
- **Documental Circuit Management:** related to the information treatment sequential order. After the acquisition, the document follows up to Documental Analysis, Catalogues, Labeling, Shipment and Distribution.
- **RepositoriUM Management:** involves all the procedures and activities related to documents' acquisition, management and elimination and infra-structures/technology for the RepositoriUM.
- **Promotion and Animation Management:** Refers to the procedures and activities related to SDUM's animation and promotion, as, for example, expositions.
- **Inter-libraries Services Supply:** involves the necessary procedures to require bibliographical material to other libraries and also the opposite process.
- **Reading Services:** procedures which support reading activities, such as help the users finding certain document online or physically.
- **Loan Services:** procedures related to the act of loaning documents, no matter their support. This process involves several sub-processes, such as Return, for example.

- **Digital Documentation Services:** this process involves all the procedures and sub-processes related to electronic resources management, search portal management, website management and digital reference services.
- **Non-Conformities and Complaints Treatment:** treatment of the non-conformity situations and also the users' complaints.

Besides the core business processes, SDUM also have support processes (like Documental Management or Infra-Structures and MMD Management) and control processes such as Operational Analysis and Audit.

All the processes were mapped and all the collaborators have been working on them to make them even more "perfect". The maps also show the responsible for each activity/procedure and the documentation related to it.

## 6. USERS' SATISFACTION

SDUM periodically collected users' data to understand how to suppress their needs, using two kinds of inquiries:

- A general inquiry, to evaluate global satisfaction levels, carried through between short periods of time;
- A deepened inquiry, to get more exhaustive data, executed between long chronologic spaces.

These inquiries were subdivided in users' categories: students, Post-Graduation and Master students, teachers, collaborators.

However, based in the Spanish case studies, it was decided to use LibQual+ to evaluate SDUM's performance. Well, LibQual is a system that allows evaluating services' quality. It is an inquiry made of 22 questions and measures services' minimum level, observed value and desired level in three different areas:

- a) Service's affective value;
- b) The library as a space;
- c) Information Control.

It also permits to add open answer questions for suggestions and opinions and its scale is numeric (usually a pair number, to avoid "central answers").

The SDUM chose to use this method, allied to the exhaustive inquiry already existent. It will be implemented in January 2009 and will be:

- Anonymous;
- Online;
- Open to all Community;
- Accessible online through authentication.

To evaluate the impact of the results, in each question, a value will be considered as "acceptable" for the users' satisfaction. If the average result for that

question is above the acceptable value it will be considered that the procedures are correct. If the average result is below the acceptable value, this question shall be considered as a complaint and corrective action shall be applied.

## 7. DOCUMENTATION MANAGEMENT

ISO 9001:2000 obliges the institutions to document every single step of the implementation. In fact, the documentation produced during the whole process is evaluated in internal and external audits. As a consequence, the certification process is dependent from this documentation.

SDUM adopted a code methodology to apply to its documentation (number of the document and its version) but there was a small issue to solve: what information system should be used? It had to store every single document, with different security levels and also allow communication between all the members.

And the answer became simple: a Wiki system.

The Wiki is not totally elaborated, yet. But there were a few items (a few ideas, indeed) considered in its construction:

- **Public Area:**
  - Services Presentation;
  - Contacts;
  - Hours;
  - Location;
  - Images;
  - Organizational Structure;
  - Quality Manual;
  - Explanation for the Quality Initiative;
  - FAQ's;
  - RSS Feeds;
  - News;
  - Rules;
  - User Manual;
  - Links;
  - Suggestions.
- **Private Area:**
  - According to the different sectors of the Processes Network:
    - Workflows;
    - Procedures Manual;
    - Rules;
    - Documentation;
    - Norms.
  - For general area:
    - Service's Information Notes;
    - Responsibilities and functions matrix;
    - Calendar for all the tasks;
    - Debate space (as a forum);
    - Strategic and operational objectives;

- Balanced Scorecard elements;
- Reports;
- Audit area.

The platform used will be *Wiki Spaces*.

## 8. PERSPECTIVES

This kind of process is really complex, especially because services and persons are not tangible and can't be treated as a simple physical product. In what concerns to processes modulation, they're being improved every single day but there are some concluded versions just waiting for approval.

All of the steps will be presented at BOBCATSSS 2009 along with a few more surprises related to Quality Management, SDUM and the RepositoriUM.

For more information, please visit <http://www.sdum.uminho.pt>.

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