

Towards a Stakeholder Analysis of an ERP Adoption in a Higher Education Institution

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This study presents a case study carried out in a public Higher Education Institution (HEI) that adopted an ERP solution for its economic management processes. The objective of this study is twofold. First, we attempt to understand how the process of selection, implementation, use and maintenance of the ERP have evolved in the HEI. Second, we attempt to analyze how the different employee roles changed along the whole process and how they perceived the process. The research methodology is a combination of different research methods and techniques. Next we will explain in detail the case study background and the research methodology. Finally, we present the key aspects that we will present in the workshop.

1 Case Study Background

The studied Higher Education Institution (HEI) is a Spanish public university founded in the seventies, which integrates schools of great tradition, some of which go back to the 19th century. This HEI is a reference of experimental and technological studies in Spain and Europe. It develops its activity in the areas of: architecture, several engineering disciplines, economy, applied sciences and mathematics. This HEI has more than 30,000 students and around 2,200 teachers, and is structured in 40 departments, more than 20 schools and several research institutes. The research work that carries out this HEI has as objective the transfer of its results to the productive sectors of the society, and it is one of the leader institutions in volume of resources obtained by research projects and technology transfer contracts.

2 Multi-method Interpretive Research Approach

As we believe that the understanding of ERP implementations cannot be achieved without considering the organizational context where it occurs, the chosen research method was the in-depth case study method (Yin 1994). In order to identify the organizational factors that affect an ERP implementation we opted for an interpretive research approach. Interpretive research does not predefine dependent or independent variables and it attempts to explain phenomena through the meanings that people assign to them (Orlikowski and Baroudi 1991).

We started the case study by defining a plan for data collection. We first analyzed documentation created during the SAP implementation project that was provided to us by the project manager. The documentation helped to understand the project background and to prepare the questions for the interviews. The other main technique chosen for data collection was semi-structured interviews. Following the contact with key informants in the company, interview schedules were agreed upon, interviews were tape recorded and transcribed to ensure accuracy of written data, and to minimize researcher's bias. Initially, three interviews were made with the project manager, another member of the project team and a key-user. Then, we interviewed the remainder

members of the project team. Data from interviews was triangulated with the documentation so far accumulated.

In order to build theory from this case study, we adopted the Grounded Theory (GT) method. GT is a general method developed by Glaser and Strauss (1967) for building theories that are grounded in data systematically gathered and analyzed (Glaser and Strauss 1967). Strauss and Corbin (1990, p. 23) explain that by using GT “a theory is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, and then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge”. The coding process of all interviews and documentation allowed major themes/categories to emerge. Then, we used the paradigm model proposed by Strauss and Corbin (1990) to relate these categories. Briefly, the paradigm model encompasses the following elements: causal conditions, the phenomenon, the context, the intervening conditions, strategies and actions, and finally the consequences.

Finally, we also used stakeholder analysis technique. Recently, this technique and its underlying theory – stakeholder theory – are gaining relevance in the academic world (Friedman 2002). Freeman (1984) defines stakeholders as “any group or individual who can affect or is affected by the achievement of the firm’s objectives”. In our case, the different stakeholders analyzed were: project manager, top management, information systems department, end users, key-users, and external consultants. After the identification of the different stakeholders (with the creation of the map of stakeholders), we created different types of semi-structured interviews for each stakeholder. Finally, we analyzed the behavior of each stakeholder in each ERP phase.

3 Discussion

Based on the documentacion we collected and the interviews, we will present the perceptions of the different stakeholders along the different ERP phases. We will show how the different stakeholders had different interest and perspectives along the process.

The findings suggest that users need a large period of time to adapt to a new system such as SAP for our HEI. Therefore, we hypothesized that change management should be seen as a continuous activity rather than as a simple change management plan limited to the ERP implementation. Also, top management commitment, training and the behaviour of the implementation consulting company play an important role in the change of mentality.

The different stakeholders provide useful information for further research on ERP arena. These findings may also help to understand the impact of ERP adoption in organizations and the decision making process during the ERP lifecycle. Finally, we have also developed a Grounded Theory model for ERP implementations based upon this and other case studies.

4 References

- Freeman R. 1984. “Strategic Management: A stakeholder Approach”, Boston, MA: Pitman.
- Friedman A. 2002. “Developing Stakeholder Theory”, journal of management studies, 39(1), pp. 1-22.

- Glaser B., Strauss A. 1967. "The Discovery of Grounded Theory: Strategies for Qualitative Research", first edition, Aldine.
- Orlikowski, W., and Baroudi, J. "Studying Information Technology in Organizations: Research Approaches and Assumptions", *Information Systems Research* (2:1), 1991, pp. 1-28.
- Strauss, A, and Corbin, J. 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, Sage Publications, Newbury Park, CA.
- Yin, R. 1994. *Case Study Research: Design and Methods*, Thousands Oaks, Sage, CA.