

ENTERPRISE RESOURCE PLANNING: IMPLEMENTATION ISSUES

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Abstract: *enterprise Resource Planning (ERP) is a system covering a variety of activities with the help of software. ERP systems have a wide range of functions and integrate them into one unified database. For instance, sales and distribution, financial counting and costing, material management, human resources and production planning. ERP package if chosen correctly, implemented judiciously and used efficiently, will raise the productivity and profits of companies dramatically.*

Despite the importance of the topic, very little research on topics of national culture influence on ERP system has been made. Even fewer researches viewed the adoption of ERP from the point of management accounting.

Keywords: *enterprise Resource Planning (ERP), management accounting, human resources, production planning, productivity, business processes.*

ПЛАНИРОВАНИЕ РЕСУРСОВ ПРЕДПРИЯТИЯ: ПРОБЛЕМЫ ВНЕДРЕНИЯ

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Аннотация: *планирование ресурсов предприятия (ERP) - это система, охватывающая различные виды деятельности с помощью программного обеспечения. ERP-системы имеют широкий спектр функций и интегрируют их в единую базу данных. Например, сбыт и распределение, подсчет финансовых средств и калькуляция затрат, управление материальными потоками, человеческие ресурсы и планирование производства. ERP-пакет, если он правильно выбран, реализован разумно и эффективно используется, существенно повышает производительность и прибыль компаний.*

Ключевые слова: *планирование ресурсов предприятия (ERP), управленческий учет, человеческие ресурсы, планирование производства, производительность, бизнес-процессы.*

1. Introduction

Enterprise Resource Planning (ERP) is a system covering a variety of activities with the help of software. ERP systems have a wide range of functions and integrate them into one unified database. For instance, sales and distribution, financial counting and costing, material management, human resources and production planning. ERP package if chosen correctly, implemented judiciously and used efficiently, will raise the productivity and profits of companies dramatically.

Despite the importance of the topic, very little research on topics of national culture influence on ERP system has been made. Even fewer researches viewed the adoption of ERP from the point of management accounting.

One study written by Chwen Sheu, Bongsug Chae and Chen-Lung Yang uses the case study and secondary data collection approaches analyzing 6 companies from different countries: USA, China, Netherlands, Norway. The purpose of the paper is to answer the following questions: Which aspect of multinational ERP implementation is affected by national differences? What factors of national differences affect multinational ERP implementation practices [2, p. 2]?

Another article analyzes the impact of ERP implementation on management accounting and the work of management accountants. Robert W. Scapens and Mostafa Jazayeri offer a longitudinal case study about the implementation of ERP in the European division of a large US multinational enterprise BM (Europe) [1, p. 1].

So, both researches show, from different points of view, what role ERP systems play, how its adoption influences multinational enterprises and what costs and benefits it causes.

2. ERP implementation issues

ERP system facilitates the process of sharing information between suppliers, customers and intermediary organizations. It is an attempt to consolidate all the data and processes of an organization into an integrated system. Typically, ERP system uses multiple components of computer software and hardware to accomplish the integration. But still some companies implement the system even without following systematic procedures.

For the last decade organizations around the world have been spending a large amount of money to adopt ERP systems. There were several reasons to do that. Firstly, companies require a common database; secondly, they want to improve and standardize their process; thirdly, they require ongoing monitoring; fourthly, cutting

down the operating cost; fifthly, improving relations with customers and suppliers and finally, improving their decision-making capability.

A number of companies have improved their competitive position by implementing ERP in their business processes. But, unfortunately, most ERP implementations did not answer their market expectations. ERP implementations appeared to take a longer time and cost more money than is projected. Too often, the plans for full organization integration become impossible because of system incompatibility, legacy issues, cost overruns, and time extensions.

ERP implementation should never be confused with software installation, which is a small fraction of the implementation cost. Implementing an ERP system requires a thorough strategic thinking that allows companies to gain better understanding of their business processes. It is important for companies to be aware of critical issues affecting ERP implementation and give careful considerations to the issues which would lend themselves to smooth rollouts and timely implementation of ERP systems.

3. ERP implementation practices and results

More and more companies implement ERP systems trying to gain competitive advantage and coordinate supply chain systems. But the experience of many enterprises showed that this implementation appears to be rather difficult and has a number of drawbacks. These drawbacks are usually caused by company's business problems or wrong strategy used rather than technical issues. Sheu, Chae and Yang call this gap between organization's requirements and functions of ERP as "misfits". They analyze these misfits and argue that they very often appear in multinational enterprises due to national differences between its facilities located in different countries.

Sheu et al. have defined a list of national cultural variables affecting global information technology. Socio-psychological factors include problems with language differences, as usually software use only one or two languages. There also appears a problem of communication between companies and subsidiaries, not only because of languages, but due to different cultures, different regulatory environment, need of retraining and different ways of doing business. Moreover, approach and duration of implementation is influenced by management style. It refers to the differences in management strategies, priorities and main objectives.

Another group of categories is economic and political one. It involves differences in government regulation of information exchange, goods transportation and money transfer. Tax policies make the procedure of ERP adoption even more complex due to different tax rates and requirements. In addition, several countries conflict with each other or impose restrictions on exchange of goods, services and information, which requires more efforts to change and adopt software to their use.

Finally, demographic group of factors includes geography, internal technical personnel resources and average educational level. It is evident that labor and education skill vary in all countries which needs more training programs and centralization of implementation decisions. As for geographical factors, they involve mainly the differences in time zones which affect international trade operations.

Nevertheless, there are enterprises which manage to implement ERP systems successfully and, thought, some problems appear, they do not influence the business too much. Scapens and Jazayeri show such "a case study of successful change", where the systems were implemented and actively used in the company. They contrasted their work to the cases where implementation appeared to be unsuccessful, as in article of Sheu et al., and argued that those cases usually outline the difficulties and conflicts arising, which is clearly shown by Sheu et al.

Scapens and Jazayeri explore the way in which the implementation of SAP (enterprise resource planning software) has contributed to the processes of management accounting change in BM (Europe). In particular, they analyzed how main functions and characteristics of ERP system influence management accounting and what changes they caused.

First of all, integrated nature of ERP means that jobs previously done by clerks and other accounting personnel can now be computerized. So, many routine accounting tasks are no longer undertaken by staff in the accounting function, and as a result the size of the accounting function has declined.

Implementation of SAP has facilitated the process of 'decentring of accounting knowledge', which means that line managers taking more responsibility for the financial aspects of their own activities.

There has also been change in the use of management accounting information, in particular with forecasts giving a more forward-looking emphasis. However, authors argue that SAP only facilitates the use of forecasts, and it is not necessarily the driver of this change.

The last change outlined by Scapens and Jazayeri was widening the role of management accountants. Previously management accountants were the providers of information and the 'controllers' of the business, with an independent and objective role, they are now much more involved in the management team, with a direct role in the day-to-day running of the business.

As a result, both papers showed that ERP systems play a very important role in multinational corporations. Though, Scapens and Jazayeri consider that it is not obvious that it was SAP which was driving the management accounting change in the company, but they admit that there were changes in the role of management accountants and, moreover, the implementation of SAP did play an important role in reinforcing and facilitating

the team-working and cross-functional integration. While the results of research by Sheu et al. show that national differences affect ERP implementation and overall success of the business a lot. Information sharing process, project duration, training programs are influenced by those differences and findings of the research are very important for managers of multinational enterprises. Sheu et al. provide several suggestions for future development of ERP systems and improvement of implementation process. For example, managers should consult ERP software suppliers before implementation to get additional help and reduce expenses. Another suggestion was to manage global implementation projects by multi-cultural group of project managers and team leaders, which will help to erase the barriers between nations and avoid misunderstandings.

4. Conclusion

Both papers give clear evidence of ERP implementation issues and problems arising. But still, as stated earlier, little attention has been given to this phenomenon in accounting research journals. Other companies and industries should be analyzed, and more suggestions to improve the process should be made.

In my opinion, the impact of national differences was analyzed rather deep and complete, though authors themselves admit that firm's competitive environment should have been analyzed more.

As for Scapens and Jazayeri study, they didn't directly analyze the impact of ERP systems on management accounting. Although the implementation of SAP in BM (Europe) appears to have facilitated changes in management accounting, the company had already been changing before. Nevertheless, it can be concluded for sure that researchers managed to identify the opportunities which are opened up by implementation of ERP and clearly explained how it affected the changes in role of the management accountants.

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