

CONTROVERSIES ON INTEGRATED ACCOUNTING SYSTEM

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ABSTRACT: Integrated solution for enterprise information system is the ideal solution to optimize the flow of financial and accounting information. The effort to collect, process and disseminate information is high and time consuming. Although the idea of integration is not new, information technologies have highlighted new opportunities for integration of information. In the context of financial markets globalization and the need of financial information, the aim of this paper is to present the modality in which investors are examining relevant accounting issues for developing and implementing integrated accounting systems

Key words: integrated accounting system , ERP(Enterprise Resource Planning) , XBRL Extensible Business Reporting Language).

JEL codes: M41 - Accounting

Introduction

The essential role of accounting in the modern economy is to provide fair presentation of financial statements. In the context of financial markets globalization and the need of financial information investors are examining relevant accounting issues in developing and implementing integrated accounting systems.

Information technology is involved in most affairs in modern organizations. It is indispensable in relation to most tasks that involve the analysis and presentation of information and as such it is virtually required to enable management control in modern organizations. (Dechow, 2007)

Literature review

There is an emerging literature about the relations between information technology, information systems (IS) and management control (see Chapman, 2005)

Information technology is not a solution to all problems; it also creates new problems many of which can be found in its relationship with information systems (IS) generally and systems for management control (Dechow, 2007)

Information systems can also represent a barrier in that information systems and enterprise resource planning (ERP) systems can be very difficult to change whereby management accounting cannot always be supported by the information system. Thus, information systems probably should be located on the list of facilitators as well as that of barriers. Information technology has evolved quickly. In the 1990s, companies started purchasing ERP systems which are characterised by the integration of several business functions, sharing one database and by being real-time (Rom, 2008).

During the use of conventional systems it wasn't given attention to information technology. The optics has dramatically changed in present time when systems can be standardized and integrated ERP can provide real time information. Technology has become a key player who can

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help fulfill the ambitions of the company in terms of management control (Dechow, Granlund and Mouritsen, 2007).

But there are also disadvantages the biggest shortcoming of the management of real-time database is a very difficult detection of errors. If an error is looking for the classic route leaving normal account and then log into documents. In contrast, we can not say the same thing for databases where control activity is a difficult task involving rigorous organization and secure database.

Current computerized structured around a database, transactions in a much more rich than the traditional double entry, accounting appears multicriteria or multidimensional (Evelyn Lande et al, 2002).

Where accounting research focuses on 'getting things right' in relation to visibility and transparency, information system (IS) research is concerned with 'getting users connected' by means of requirement analysis, system-building and project management (Dechow, 2007)

Technology mediates the relationship between information systems and accounting systems architecture. If the purpose of research in management accounting is to help companies improve management accounting practices, an understanding of what facilitates and what are barriers to the implementation of management accounting techniques is needed. (Rom, 2008)

Several researchers claim that a prerequisite for getting most new management accounting techniques to work in companies seems to be coupling them with information technology Granlund (2001) identified advanced information technology as an economic facilitator of change.

Also there is an increasing interest in analytic applications such as strategic enterprise management (SEM) systems and business intelligence software is now in evidence (Todor, 2010). These developments in information systems make it seem relevant to explore how information systems simultaneously constitute a facilitator and a barrier in relation to implementation of management accounting theory. (Rom, 2008)

Recent development has focused on web-enabling the ERP systems and making them inter-organisational (Rom, 2008). The profound advantages of a simplified, standardized Internet-based integration scheme for the financial reporting industry are obvious (Briciu, 2010).

The use of the standardized reporting language like XBRL (Extensible Business Reporting Language) for companies means to reduce costs, speed and accuracy in financial reporting. Consumers of the data included here investors, analysts, financial institutions, through this language can receive, find, compare and analyze data efficiently and quickly. (Tabără, 2009)

Bergeron write that „the data expressed in XBRL aren't necessarily earmarked for inter-departmental, business-to-business, or business-to-government communications but may be analyzed, formatted, and otherwise manipulated locally for a variety of purposes. The data also may be archived for repurposing in the future. XBRL facilitates these uses as well. For example, in preparing graphics of payroll taxes for a stockholders' meeting, it isn't necessary to know the exact location of all payroll tax data within a database but merely that data tagged as "sales tax" is collected and repurposed for the presentation.”

Implementation of an ERP system is a complex task; and a study by Granlund and Malmi (2002) indicates that the complexity of ERP systems prevents companies from redesigning their management accounting. Rather, they prefer to implement their traditional management accounting in the ERP system in order to reduce complexity (Rom, 2008)

In the previous era of ledger systems no one paid much attention to IT.

In the present era of ERPS that can standardize and integrate data and render information integrated, up-to-date, available and shareable in realtime technology have become a visible player that can help develop a firm's management control ambitions (Dechow, 2007)

A brief look at the researched relationship between management accounting and information systems, it is seen that the findings reported above are limited to ERP systems. Granlund and Malmi (2002) find that for example the balanced scorecard is implemented outside the ERP system. When

scanning the market for BSC software, several non-ERP systems appear such as Corporate BSC and strategic enterprise management systems from SAP.

A research gap seems to exist with regard to how management accounting is supported by different information systems. Therefore, it is to develop an understanding of the relationship between management accounting and information systems where information systems are not limited to ERP systems.

Although the topic of management accounting and integrated information systems is not a new one (Chapman, 2005), the emphasis will naturally be on recent types of technologies such as ERP and SEM systems.

Studies have shown that data integration is very difficult and that sometimes information-based integration is possible only when firms are willing to throw data away and integrate less information. Yet, these effects become visible only when the relationship of IT and accounting is entangled through the analysis both of technical infrastructure and its organizational mobilization (Dechow, 2007)

ERPs drive questions about integration, standardization and centralization (Granlund & Malmi, 2002); Since tasks of management accounting are an essential part of the definition of management accounting, the framework should have a task focus. Furthermore, research on the relationship between management accounting and information systems indicates that a distinction between different tasks is needed. Among others find that ERP systems are effective with regard to transaction processing and less effective with regard to reporting and decision support. (Rom, 2008)

In order to produce information that can be reported to managers, a choice of what management accounting technique to apply must be made. How should customer profitability be calculated? What measures should be included when measuring the performance of departments or individual managers? What should a report to be used for cost control look like? (Rom, 2008)

Techniques such as activity-based costing (ABC), target costing, strategic management accounting, the balanced scorecard (BSC), contribution margin analysis and life cycle cost analysis are all well known examples of management accounting techniques.

The role of the accountant is an essential theme within research in management accounting and information systems. The information systems that are able to deliver support for management accounting is not a new idea. On the other hand, it is argued that the first use of information systems was in relation to accounting.

It was the purpose of the first information systems to automate the processes of for example posting transactions to journals and sorting the transactions according to the chart of accounts of the general ledger. Regardless hereof, though, it seems as if research within management accounting and information systems is coming to live again. (Rom, 2008)

Advances in information technology add new tasks to the ERP systems regarding the electronic control of the accounting information. Currently witnessing a functional integration between financial accounting, management accounting and fiscal management: a single registration is fueling a global database of which will be able to edit the financial statements of financial accounting, cost analysis pictures of managerial accounting, tax returns. As a result, accounting tends to become an integrated accounting. (Andreica, 2010).

What is new with regard to the support of information systems for management accounting is the advent of integrated information systems (IIS). Previously, each function within the organisation had its own information system that operated separated from the information systems of the other organisational functions.

THE focus now is on integrated rather than disintegrated information systems.

With the introduction and wide-spread adoption of the so-called enterprise resource planning (ERP) systems in the 1990s, new potentials of integrated information systems to support management accounting seem to have emerged. One of the major arguments for companies to replace old legacy systems with integrated ERP systems was the wish to avoid maintaining the

same data in several different places.

That encompasses for example ERP systems, data warehouses as well as executive portals.

In order to underscore that the essential characteristic of the new information systems is that they are integrated, the term 'integrated information system' will be used. The term refers to a system of systems including both transaction-oriented ERP systems and analysis-oriented systems such as balanced scorecard and budgeting.

Integration into a computerized accounting system of financial accounting and management accounting would have the following advantages according to a study conducted in 41 German companies (2001) (Horváth et al., 2009):

- Elimination of internal difficulties of communication between internal and external results
- Reducing complexity
- Efficiency and cost reduction in accounting
- Enterprise-wide standardization and comparability of indices
- A greater understanding and acceptance internationally
- Consistent communication inwards and outwards

From the literature on integrated information systems, a number of characteristics are identified. While software can be described in terms of its general characteristics, focus in the thesis is on the characteristics of IISs of organisations. In this way SAP's ERP system might be broad in scope, but an individual implementation of SAP can be rather narrow if only few modules are implemented.

The characteristics of IISs and their components are:

- Integration
- Transaction-orientation vs. analysis-orientation
- Flexibility
- Scope
- Functionality
- Complexity
- User-friendliness
- Ease of implementation

One of the arguments of the 'relevance lost' debate is that management accounting is suffering from the precedence of financial accounting. Since it is mandatory to prepare the financial accounts, these accounts are also used for managerial purposes by many companies.

What is important to note is that although Granlund and Malmi (2002) report that ABC and BSC are not implemented using the ERP system, they are not saying that management accounting techniques such as ABC and BSC are not implemented at all. Rather, they find that ABC and BSC are maintained outside the ERP system. These management accounting innovations are operated in separate systems such as spreadsheet systems or specialised software. Specialised software for ABC and BSC are considered more user-friendly and flexible regarding analysis and reporting. Furthermore, Granlund and Malmi (2002) argue that ABC is operated outside the ERP system since the ERP system is too complex.

A major stream of research within AIS research deals with the modelling of accounting information systems. Several modelling techniques exist within the information systems literature (e.g. entity-relationship diagram, flowcharts and data flow diagrams). 20 years ago management accounting was carried out by management accountants. Management accounting was a centralised task and management information was at the custody of the management accountants. Management accountants were carrying out counting. This seems no longer to be the case. Now management accounting as a set of tasks to be carried out and management accountants are two separate entities. Management accounting can be carried out by general managers as well as management accountants, and management accountants can carry out management accounting tasks as well as for example general management tasks and tasks in relation to maintaining the IIS

The saying 'from bean counter to business analyst' seems to have something to it. Several authors find that the role of the management accountant has changed. Granlund and Malmi (2002) find that the management accountant is now performing more business-oriented tasks. Therefore a multidisciplinary knowledge is needed as a management accountant. The routine jobs are eliminated and that management accountants are getting a wider role. Thus, it seems to be a general finding that management accountants are getting involved in general management by acting as business consultants.

Management accountants are also getting a new role in relation to the IIS. ERP systems certainly provide accountants with powerful modalities of structuration. Management accountants can choose to take charge of the IIS or they can leave it for someone else. The future role and status of the management accountant is dependent on this choice.

To sum up, it is found that the introduction of ERP systems leads to new, hybrid positions (.Management accountants are now carrying out tasks of business consulting and IIS maintenance in addition to the tasks of management accounting. Also, Management accounting at a more transactional level is also carried out by non-accountants. The ERP system has many in-built routines that for example automatically update the ledgers when data are entered in other parts of the system. (Rom, 2008)

The IIS is able to distribute information throughout the organisation.

In this way line managers are supplied with accounting knowledge. They know their own spend and budgets. Thus, control is decentralised even go as far as to argue that everyone can choose to exert control. Supporting this argument, Dechow and Mouritsen find that management control is now an activity that is integrated with commercial management: "Some ERP configurations even may work to separate management accounting practices from financial reporting" (2005, p.727). along multiple measures.

Whether organisations have adopted ERP or not is found to have no effect on any leading or lagging measure of performance. More detailed ERP variables are needed. Much against what could be expected, findings indicate that ERP system characteristics have an impact on financial indicators but not on non-financial indicators.

Balanced scorecard using specialised software ,data integration can also be studied more narrowly. Kaplan argues that at present information produced for financial accounting purposes is used for management accounting purposes as well.

Rather, Kaplan (1990) would prefer if management accounting was the primary vehicle for cost allocations and that financial accounting then in turn used these calculations for inventory valuation as an example. In this structure, data for management and financial accounting are integrated.

An information system can be integrated along some dimensions.

Research methodology

From epistemological point of view, the work will combine the descriptive research design using research methods and literature review, methods based on the practice field or case studies.

The main objective of the research will mainly follow the analysis in detail and identify the most appropriate solution to integrate financial information within the enterprise. This paper provides an overview of the main enterprise resource integration options outlined in the practice area and summarized the literature and sets out proposals on possible future uses of the instrumentation and technology integration, identifying some key points specific integrated systems in financial accounting.

Research will focus on the prediction that the future of the enterprise information integration will be a requirement for any business operation with a strong echo in the IT industry providing solutions to the integration of organizational activity.

To achieve these objectives the work will present an evolutionary structure, pragmatic

understanding of the presentation stage in the study, analysis methodologies that are suitable to be taken, completing the definition of an application development framework with circumscribed topic of interest.

One of the methods of research in this paper will review literature in the country and abroad, documentation is accomplished based on previous relevant research in reference works, and emphasizing, however, and trends in the development and adoption of enterprise-wide new integrated organizational solutions.

Another research method is descriptive and will undertake a detailed analysis of methodological instruments suitable for an approach of implementing an integrated accounting solutions for businesses. It will start from the notion of alignment with the organizational architecture of the computer system, based on analysis models described according to various perspectives that characterize those architectures

Conclusions

When regressing the management accounting tasks of data collection, reporting, analysis and budgeting on transaction-oriented and analysis-oriented information systems, it was found that transaction-oriented information systems are better at supporting data collection. On the other hand, analysis-oriented information systems are better at supporting reporting, analysis and budgeting. (Rom, 2008)

These findings confirm that ERP systems are good at supporting data collection but not particularly good at supporting reporting and decision making.

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