



Application of New Software and Technology for Audit and Accounting

Seyed Mohammad Hassan Mohammadi Zarchi, Simin Nikpey

Islamic Azad University, Ardakan Branch, Iran

ABSTRACT

New software and technology and new electronic and computer devices in the past decade has brought enormous change in different societies, and certainly an important influence on the direction and meet to the needs of the community. They are also influenced on accounting. From the perspective of accounting, information technology is the application of knowledge recorded in the process, summarization, classification and interpretation of financial data, and includes mechanical and electronic devices that produce more efficient systems, with increased accuracy, speed, time and less diversity in the financial reports required for users to access objectives. In this paper, the main features of modern technology and also four of them were explained, in addition the application of technology in two dimensions, and how to use the application form and describe a typical example is followed in every feature. In terms of usage, RFID technology (RF identification) and terms of use, ERP technology (Enterprise resource planning) has been selected. This will eventually result the accounting profession must be trained based on technology-driven approach.

KEYWORDS: technology, accounting, RFID, ERP.

1- INTRODUCTION

Many researches have talked about how diverse accounting information systems (AIS) research has been and obviously continue to be [1]. Advances in information technology (IT) make it that many company in professional services industries, but perhaps none as much as those in the public accounting industry. One striking observation in this regard is that AIS research has largely ignored the production of information for management control (MC) and partly decision making.

We try to explain the relationship between management decisions and accounting information. Accounting information regarding decisions aims to translate as many as possible of the diverse consequences of a decision alternative into a single financial unit of measure. This appears obscure as production of managerially relevant information is considered. Management decisions have consequences in different functional areas, departments, and different companies along the value chain. Drawing on these insights, it can be argued that studying the interfaces between modern IT and management control is important in its own right for several reasons. If knowledge is power [2] and modern IT, especially in terms of integrated IS, creates new knowledge, the importance appears obvious.

We can argue that studying the interfaces between modern IT and management control is important in its own right for several reasons. If knowledge is power [3] and modern IT, especially in terms of integrated IS, creates new knowledge, the importance appears obvious. This research note draws on an extensive literature review of major accounting, AIS and IS journals. However, we have limited understanding of the forms, functions and outcomes of integration. The analysis also facilitates several other sources of information. These include data collected for the author's earlier studies on IT and accounting and experiences gained in various expert projects. Dozens of discussions with specialists operating in the field, such as software consultants (e.g. from leading Enterprise Resource Planning Systems/ERPS, and other software vendors), and various technology users, such as CFOs, CIOs, controllers, production managers and logistics managers, have further clarified the picture of the developments in the area. Written material (incl. more than one hundred software product descriptions) and contacts obtained in in-house training, supervision of other empirical studies, and executive seminars have benefited the formation of a comprehensive picture of the issues dealt with in the following.

1- MATERIALS AND METHODS

Need for better decision and control support (directly value adding) together with cost effective processes has led to outsourcing and the establishment of shared service centers; to more efficient, especially cost efficient,

*Corresponding author: Seyed mohammad hassan mohammadi zarchi, Islamic Azad University, Ardakan Branch, Iran
Email: mh.mohammadi@iauardakan.ac.ir

accounting processes in general. Data warehouse technology and the rapidly increased supply of analytical package software have empowered many enhancements in multidimensional analytical power and the efficiency of accounting processes, but obviously only to a limited extent. Modern IT has also enabled on-time and easy-to-use rolling forecasting and performance measurement systems for global companies. However, there exist indications that companies around the world are not using the analytical capability embedded in ERPS and other software packages to anywhere near its full potential [4]. It is a fact that IT can help in realizing such objectives. Another question though is, does this also mean reduced decision times and more effective decision-making? This assumption is problematic, and it will definitely not flow automatically from enhancements in IT. In general, internet-technology [5] and [6]) combined with modern software package development has led to a situation where rehearsal of accounting and control is in principle independent of time and space.³ In multinational companies, modern IT has been used to create global information systems. At the same time, these developments have helped accounting in demonstrating functional efficiency. It is obvious that developments in IT have greatly enhanced routine accounting tasks and the process of closing accounts. However, at the same time it has appeared that the speed of these developments in general (e.g. web-invoicing and the paperless office) has year after year remained considerably lower than predicted by commercial research institutes. But why? Commercial surveys seem to suggest it is not that customers would suspect the financial benefits of the new technology, but rather that most (smaller) companies are reluctant to adopt modern IT due to the costs included, including hidden costs, and the fact that they have many other development projects simultaneously ongoing. Therefore, it seems in many cases to be a question of inadequate resources. In some cases, it also tends to be about suspicious attitudes, even fears towards new technologies. It seems that as long as old systems and routines are still working and there is no compelling pressure deriving from legislation, group headquarters or customers, the change does not really take off. This has led to situations where new technology is not taken into use no matter the various positive arguments for it, or if it is implemented, it is not used to the extent intended. If this is true regarding basic accounting processes, we may raise the question how advanced management accounting processes are then working. We may find superficial success stories in marketing materials, but we have little research-based knowledge on sophisticated management accounting processes – from data warehousing to analytical reporting-especially if we consider the whole population of companies in different lines of business and of different size.

In the modern technology, only by identifying the scope of information, in terms limitation on certain operations within the system, we can be receive the report without delay and by high speed data processing. In addition, Variety reports also provided far more than traditional systems. The exchange of information: the most important issue application of modern technology is the exchange of information. In addition, some features, such as: reducing the physical size of the tanks, the elimination of administrative corruption, creating a full-time work, reduced system costs, and create opportunities to work remotely as well as the outstanding characteristics of modern technology is possible (Iran -3675). Technology applicationIncludes hardware (equipment, tools, facilities) and in addition in aspects of the accounting software. Therefore, this paper describes the use of technology systems, RFID, (a combination of hardware and software) and to describe the use of technology systems, ERP, (a combination of software and network) selected is presented in the next section.

2- RESULTS AND DISCUSSION

In this section we survey RFID implementation and ERP in some organization in Iran. We can hypothesize that integrated technology drives homogeneity (convergence) in practices, at least as their underlying management philosophy is considered. Spreading of best practices embedded in the systems and through in-built benchmarking should explicitly drive homogeneity and standardization. It is also a fact that as the number of ERP systems sold is enormous, similar solutions are adopted globally with minor or no variation. A different question is whether the same technology means exactly same calculation procedures, for instance. It may also be that as companies want to implement a certain method, e.g. ABC, the IT platform they have employed forces them to do it in different ways. Besides, practice has shown that all ERPS implementations are different even if the software package would be the same. the mantra of integration does not mean same things for all companies implementing ERPS: an integration project may as well lead to the preserving of functional barriers and hierarchical control than to their breakdown. The promise of global process-oriented integration and control may thus remain unrealized, or it is mobilized only as a taken-for-granted, institutionalized notion in the public annual report [7]. Such ostensible changes decoupled from action are widely discussed in studies informed by the various genres of institutional theory [8].

Radio-frequency identification (RFID) uses radio waves for transferring data from an electronic tag that is attached to an object in order to identify and track the object. This type of technology has been used for auditing and accounting application also. This technology stores information that is necessary for accounting such as ID and

number of products, the time of production and other cost information for production. Using this technology, we can implement counting operation in the same time as soon as possible. RFID can transmit the encoded information that related to ID tag. Tag can receive necessary message and respond the identification information.

Tag can be appendixed to product and used to transfer message about the following information:

- 1 - Inventory of goods in terms of gender
- 2 - Components of inventory that they need to re-order
- 3 - Level of inventory at each stage of production cycle
- 4 - Date of entry and exit of warehouse inventories
- 5 - The major buyers of our products.

Using the technology of RFID, the manufacturer has the ability to access the above information, and precisely at any time can control number and type of any part bicycle. For example we want to receive the number of bicycle tires using RFID with capabilities in software and hardware system design, signs and warnings issued to the manufacturer's tires to buy. RFID can also call the store's inventory problem in the conventional method. For example, if a factory bicycle with defective tires in the

Suppose the body of the bicycle after the initial workshop was prepared, to complete of the construction, the body of bicycle are transferred to the spray paint section. The body is carried using pallet that RFID tags were installed on pallets and contains information on production order number and the destination. Since the exiting doors are equipped with the tag reader, the system can automatically update its information when the body is in motion using information from the tags.

System can control the pallets in order to operate correctly on any color in order to determine that a body have a temporary paint or is completely painted. After the paint job was finished, the body returns to the initial workshop. The color information systems are integrated into the workshop. The company is aware of the perpetration time if there is no problem in the car, spray paint. Since this information is transmitted as part of the workshop, the workshop with a series of actions can compensate for the delay. When tags returned again to the bicycle shop system, system inform the groups in order to indicate the final assembly is completed. When a shipment from the factory goes to the distributor of the bicycle, bicycle storage palette is disassembled. The pallets are passed in front of an antenna - the antenna that is associated with the tag reader. This product may pass the information directly into a plate and thus the display shows the information and the driver can see the information. In the exiting door of distribution is available a tag reader RFID. RFID that reads all the information about loading of the Pallets. After the pallets were downloaded, the operator use screen of the loading operation in which the output is confirmed. The system is designed such that there is no possibility of human error.

ERP software consists of many enterprise software modules that an enterprise would purchase, based on what best meets its specific needs and technical capabilities. Each ERP module is focused on one area of business processes, such as product development or marketing. Some of the more common ERP modules include those for product planning, material purchasing, inventory control, distribution, accounting, marketing, finance and HR.

One important thing frequently omitted in AIS research on ERP systems – though also in some of the research addressed below. That is, how technologies are made to work in practice [10] and [11] how people fix problems in formal infrastructures with additional systems and procedures in everyday practice [12]. Considering the aim to develop and test hypotheses with statistical analysis, this ignorance seems natural. As the ERP methodology has become more popular, software applications have emerged to help business managers implement ERP in other business activities and may also incorporate modules such as CRM and business intelligence and present them as a single unified package. ERP systems experienced rapid growth in the 1990s because of the year 2000 problem and introduction of the Euro disrupted legacy systems. Many companies took this opportunity to replace such systems with ERP. This rapid growth in sales was followed by a slump in 1999 after these issues had been addressed. [14] The assumption that this methodological choice would lead, as a trade-off of ignoring user variety and informal practice, to relevant statistically generalizable results may prove to be wrong: whilst statistically generalizable, relevance for contemporary theory and practice may be limited. This also raises the question of how ERP technology is measured as a variable. There is a risk of misspecification if companies are only asked in survey questionnaires whether they use ERPS. Even information about which modules of the ERPS are in use does not actually tell much about the system in use. This may lead to overly simplified interpretations regarding the relationship between ERPS and its effects on performance, for instance.

A rare example of conceptual research in the field is the study by Brignall and Ballantine (2004). They conceptually examine the role of strategic enterprise management (SEM) systems for accounting and control purposes. SEM systems represent special software packages typically intended to work as add-ons to ERP systems, and facilitate the strategic management and use of the huge amount of data stored in an ERPS database. Whilst there could potentially exist an interaction between performance measurement and management (PMM) and the many

ways in which organizations strive to improve their performance, the interrelationships among SEM systems, PMM and organizational change programs as they affect MA/MC systems may not be too obvious. This might be due to some misspecification or misunderstanding regarding the content and meaning of SEM software. ERP/SEM vendors present SEM products as being key for the technical development of Activity-Based Costing/Management (ABC/ABM), Balanced Scorecard (BSC), or other strategic management accounting tools into software solutions. The rhetoric around SEM, however, mobilizes a strategic view, while in reality, nevertheless, SEM software can just be seen as another way to implement strategic costing and performance measurement constructs. In this light, the objective of building an agenda for future SEM system research, as Brignall and Ballantine recommend, seems unimportant, as there is not much (theoretical) point in studying a specific software package. Stand-alone systems can also be built to support integrated strategic management so that they can facilitate ERPS databases. Ultimately, it is the use of strategic management accounting tools via software that makes a solution strategic (or not). Software development does not drive management accounting logic, as such. In sum, it appears that while there is potential for studying business intelligence solutions in general and their implications for decision making and control, our current understanding of these developments in the accounting academia is very limited.

3- Conclusion

In the recent years, some new software and technology and new electronic and computer devices has brought enormous change in different societies, and certainly an important influence on the direction and meet to the needs of the community. This modern technology influenced on accounting. In this paper, the main features of modern technology and also four of them were explained, in addition the application of technology in two dimensions, and how to use the application form and describe a typical example is followed in every feature. In terms of usage, RFID technology (RF identification) and terms of use, ERP technology (Enterprise resource planning) has been selected. This will eventually result the the accounting profession must be trained based on technology-driven approach.

REFERENCES

1. Ahlawat, Sunita S., and Lowe, D. Jordan. "An Examination of Internal Auditor ivity: In-House versus Outsourcing". *Auditing : A Journal of Practice & Theory*. Vol.23, No2 September 2004, 147-158.
2. Anderson, Dick. "Strengthening Internal Audit Effectiveness". *Corporate Governance*, September 15, 2004, Dow Jones & company, Inc.
3. Bae, Benjamin., Epps, Ruth W., Gwathmay, Susan S., "Internal Control Issues". *Information System control Journal*. Volume 4, 2005.
4. Flott, Leslie W. "Quality Control" ,*Internal Auditor Journal*, november 2000.
5. Krogstad, Jack L., Ridley, Anthony, J & Rittenberg, Larry E, "Where We Are Going?" .*Internal Auditor Journal*, oct, 1999. 27-33.
6. Ray, MR, & Gupta, PP "Activity Based Costing" *Internal Auditor Journal* (Desember 1992) ;PP45-51
7. Robbins, Stephen P. "Organizational Behavior" *New Jwrsey*, 1993, 45.
8. Stoner, E. & Stagliano, AJ "A Survey of US Manufacturers on Implementation of ABC" *Journal of Cost Management* (March/April 1997); 39-41.
9. Tatikonda, LU, & Tatikonda, RJ, "Overhead Cost Containment" *Internal Auditor Journal*, (February 1993); 51-55
10. American Institute of Certified Public Accountants. "AU Section 319: Consideration of Internal Control in a Financial Statement Audit". 1999.
11. American Institute of Certified Public Accountants. "AU Section 326: Evidential Matter". 1999.
12. Attaway, Morris C. "Billing Risks and SAP R/3." *Internal Auditor*. August 1999.
13. Attaway, Morris C. "Cash disbursements control." *Internal Auditor*. April 2001.
14. "Better Bang for the Buck." *Software Magazine*. June 1997.
15. Bui, Andrew. "Staying in Control." *Internal Auditor*. August 1999.
16. Covaleski, John M. "Giant ERP vendors suffer setbacks in middle market." *Accounting Today*. Jan. 2000.
17. Dance, D. Richard. "Five keys to evaluating client/server accounting." *Accounting Today*. May 1996.
18. Francett, Barbara. "ERP gets the point." *Software Magazine*. Feb. 1998.
19. Gibbs, Jeff. "Going Live with SAP." *Internal Auditor*. June 1998.