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IMPACT OF ENTERPRISE RESOURCE PLANNING (ERP) AND E-COMMERCE ON ACCOUNTING SYSTEMS

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Abstract- Enterprise resource planning (ERP) integrates internal and external management information across an entire organization, embracing finance/accounting, manufacturing, sales and service, CRM, etc. ERP systems automate this activity with an integrated software application. Its purpose is to facilitate the flow of information between all business functions inside the boundaries of the organization and manage the connections to outside stakeholders. ERP systems can run on a variety of hardware and network configurations, typically employing a database as a repository for information.

Enterprise resource planning

Issues concerning E-commerce are increasing as more companies are developing a web presence and cond ucting business on the Internet. Convenience and money are prompting consumers to shoponline. The accounting profession i s affected in many dimensions by e-commerce. Management accountants must be aware of the company's strategy and how the Internet fits into the company's business. They must also be able to integrate accounting software that can track sales orders and customer data. Internal auditors must understand the laws relating to sales and ensure the company website is secure and trustworthy. Web assurance services are available that assure customers about the security and features of a website. These services create new opportunities for CPAs and licensed accounting firms. Tax issues are also emerging that governments and tax professionals must resolve. The increased technology and change in which global business is conducted will expand accountants' duties and offer new challenges. Accountants must be informed about various e-commerce strategies in order to advise management on the best and most profitable way to enter into the world of e-commerce. The Internet and e-commerce will only continue to grow as security is enhanced and consumers become more trusting of its services and benefits.

ERP systems typically include the following characteristics:

- An integrated system that operates in real time (or next to real time), without relying on periodic updates.
- A common database, which supports all applications.
- A consistent look and feel throughout each module.
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- Installation of the system without elaborate application/data integration by the Information Technology (IT) department.

What is Accounting system?

Organized set of manual and computerized accounting methods, procedures, and controls established to gather, record, classify, analyze, summarize, interpret, and present accurate and timely financial data for management decisions.

What is ERP?

Enterprise resource planning (ERP) is an integrated Enterprise resource planning (ERP) is an integrated computer based system used to manage internal and computer based system used to manage internal and external resources including tangible assets, financial external resources including tangible assets, financial resources, materials, and human resources. Its purpose is to facilitate the flow of information between all business functions inside the boundaries between all business functions inside the boundaries of the organization. ERP systems consolidate all business operations into ERP systems consolidate all business operations into a uniform and enterprise wide system environment.

What is e- commerce?

Electronic commerce, commonly known as e- commerce consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks. The amount of trade conducted electronically has grown extraordinarily with widespread Internet usage. The use of commerce is conducted in this way, spurring and drawing on innovations in electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web at least at some point in the transaction's lifecycle, although it can encompass a wider range of technologies such as e-mail as well.

OBJECTIVE OF THE RESEARCH

- To Understand ERP and E-commerce and their Importance .
- To understand Impact of ERP and E-commerce on Accounting systems through case study analysis

The impact of ERP implantation on Accounting system

The fact that management accounting tools included in ERP system, such as budgeting and forecasting do not offer such user-friendly functionality as the most sophisticated accounting software may make accountants confused as well as they concerned minor change the ERP system automate and standardize existing conventional practices within existing structures may be secondary effecting. However, fully integrated collapse traditional notions of time and new systems were created and reproduced by conventional accounting systems, tending organizations with less clear functional, destroyed boundaries and integrated central databases may reach management of information that needed In assessing the influence of ERP system on management accounting methods. ERP system did not influence these on the companies' decisions to adopt ABC, as several of companies were already familiar with the ABC, ERP system complexities did not influence accounting logic and that companies planning to update the ABC and build it into ERP system once the ERP implemented.

The impact ERP system implementation on Accounting reports

The change in accounting report made up when the company is engage to reorganization by adopting and implementing new systems such as ERP system. The interesting point in this argument the reports could be compiled for non accountants and there for should be designed so that the new ERP system and an accountants will aid management in the progressive constructive development of the mental picture of what have transpired into the report of accounting to be creative tool to support decision making process, Without destroying the basic criteria of management accounting reports.

The objectives of management accounting reports

1. The management reports should be provide information that is useful to management, the information should be comprehensible to those have a reasonable understanding of business and economic activities and willing to study the information with reasonable diligence.
2. Provide information to help a management to assess the amount, timing, and uncertainty of cash flow prospective about the enterprise.
3. Provide the mangers with information about the resources of an enterprise and claims to those resources.

How are reports addressed by ERP System?

In the Management accounting , ERP system have left more time for analysis instead of routine task through integrated all aspects of organization into one system, and one source for information access and enhance the communication within organizations to reach decision making process. The reporting practice has a direct effect by implemented ERP system especially in the content, form as well as scheduling. The ERP has direct effect on management accounting practices, for instance, reporting practices in the content, form and scheduling. Indirect effects occur when the change to management accounting comes via a changed management accounting practice and/or changes in business processes, initiated by the ERPS implementation indirect changes such as move from accounting method to another one that need to make superior changes into management accounting practices

Convergence or Conversion: Understanding Emerging ERP Requirements

Accounting policies still remain in flux and the convergence agenda continues to gain momentum. But whether regulators ultimately converge with or convert to IFRS, it is important to evaluate the likely impacts on ERP under both scenarios.

Given the lead times for system changes, it is better to understand the capabilities of current ERP systems in meeting emerging accounting policies than waiting until every detail has been finalized. The convergence of U.S. Generally Accepted Accounting Principles (GAAP) with IFRS has the potential for immediate and significant impact on ERP systems in areas such as revenue recognition and leases (see a recent CFO Insights paper on IFRS convergence). Companies using "percentage of completion" for revenue recognition and bundling different types of revenue together in the same billing document may have to make system and process changes to comply with new requirements (e.g., "unbundling" of service revenue). Convergence to IFRS on lease accounting also reinforces demands on ERP systems to correctly track leases.

Under IFRS, substantially more leases are likely to come onto balance sheet. ERP – or related systems – will have to support the need to track how these leases are capitalized and amortized, and how specific lease terms are interpreted and measured. Thus, if a company has a significant number of leases, the ERP or related systems will have to accommodate any impact resulting from the changes in lease accounting.

Future conversion to IFRS would entail further changes to ERP systems. Two areas for consideration that could require significant change include:

Accounting for research and development (R&D)

Under IFRS, certain costs related to the development phase of a project would now be capitalized and amortized. The major ERP systems will need to support this accounting change. For example, consider a global manufacturing company with distributed R&D operations consisting of about 4,000 engineers. With a conversion to IFRS, the company will have to design a process to capture the engineering activities, and determine whether those activities constitute "research" or "development," with any development-related costs being capitalized and amortized. Typically, this means that engineers may be required to track their time against a specific project or program. The burden exists for the finance team to make sure these engineers understand how to charge their time to different products and programs. Finally, prior to the date of IFRS conversion, finance will have to evaluate and determine the opening balance for specific programs.

Fixed assets

IFRS often leads to a greater componentization of the assets. Consider the example of a chemical company with multiple plants where one plant may cover over 250 acres. Trying to figure out what the components are in each part of the plant might prove to be a challenging task. Thus, CFOs and the finance and accounting organization need to decide what components should be capitalized per the IFRS rules. These decisions then need to be reflected in information systems so that expense and capitalization information is correctly captured. Both convergence and conversion efforts potentially require significant changes to systems. The above examples only illustrate some of the critical areas for CFO consideration.

Impact of E-commerce on Accounting System

E-commerce began during the 1970's. The availability of credit cards, overnight delivery and mail order catalogs began the shop at home concept. The Internet has furthered this by changing from an information tool to a shopping alternative. Consumers who shop on the Internet do so because they desire convenience, choice, information, and value.

An organization that chooses to participate in the electronic market must look at its information technology (IT) capabilities and knowledge of the electronic market and the company's efficiency.

There are two types of businesses that use electronic marketing: the expert and the passive. The experts are the firms who have reengineered their business to function effectively in the electronic market. The passives are the firms who have a presence but do not conduct business in the electronic market.

Accounting Issues

The growth of e-commerce has not changed the existence of professional guidelines, reporting requirements and the mentality of the business world. A CMA who is involved in ecommerce must know how traditional business knowledge applies to the new economy. One item to consider is the strategic value of your product or service. Whether the company is virtual 8or semi-virtual will determine the strategies needed to market the product or service. If the nature of the product or service is electronic, like AOL and Ebay, the organization is virtual. These companies should focus on strategies that are related to product/service offering and customer care, marketing and asset management. Semi-virtual companies are those that use ecommerce to enhance the value offered to its customers by providing the same product or service over the Internet. Strategies for semi-virtual companies would involve the enhancement of customer care, delivery, marketing, and asset management. Another consideration is the issue of appropriate infrastructure. Traditional companies will already have experience in this, which includes customer service and timely delivery. Virtual companies must be able to meet customers' expectations regarding infrastructure. E-commerce technology also allows companies to track customers' choices by following their clicking patterns.

This information and technology can help accountants by providing meaningful details that allow the true cost of products to be found. Advertising expenses can be matched directly with the product sold. Intellectual capital is now the most commonly discussed issue as companies determine how knowledge and expertise can be valued on the financial statements and determine future benefits to be derived. This concern is very important to management accountants because it allows them to understand the impact of intellectual capital, contributes to proactive management, and increases the value of external reports (Kupiec 2000).

The newest battle that has arisen from e-commerce is the issue of taxation. Do current the taxes where they live or where the business is located? These are just a couple of the questions that governments around the world are trying to answer. Most governments support tax free zones or simplified taxes thatfollow a single tax regime. Governments that rely on sales tax, like local and state governments, 9are worried that Internet shopping without a sales tax will hurt physical store locations and reduce the sales tax amounts they take in. There still is no definite answer as to what should take place. Governments of many different countries must agree on a similar plan in order to fully solve the problem (Horn 2003).

The widespread use of the Internet has fueled record economic growth and productivity gains because of the readily accessible, free flow of information. With information-sharing technology, companies are able to respond faster in the economy. Communication has improved with the common network. However, there had not been a common language available to share application data. That has changed with the presence of extensible markup language (XML).

XML is instantly recognized by the sender and the receiver and is more manageable than electronic data interchange (EDI). "Tags" identify each data element and can also be interpreted by people. XML is flexible, easy to implement, and implementation is free. XML significantly improves the efficiency and accuracy of information exchange because humans are not needed to intercept, translate, and transcribe information. XML is now part of a new business strategy that will allow the free flow of information within and between companies (Livermore 2002).

Productivity and growth will continue to increase as more people recognize the benefits of XML.

CASE STUDY-ANALYSIS

Two case studies show the benefits and drawbacks of e-commerce and operating a business online.

CASE-1-Shell has recently incorporated e-commerce tools that will allow the company to spend more effectively. Its strategy includes a global spend analysis, participation in industry exchange, and online bidding. The company reports that it has received the quickest benefits 13from online bidding. Online bidding allows contracts to be bid online to get fast responses and determine which bid provides the most value. "Transformational" building is the new method where suppliers include "extras" in the bid, like land transportation, for the customer to decide which extras they really want (Porter 2003).

CASE-2-The TechMall.com case provides an example of some difficulties that can result in the technology sector. TechMall is an Internet channel of "cyber stores." The company faces revenue issues because the company wants to report fees invoiced as gross revenue and book a commission expense for the costs. However, under SAB No. 101, companies must book net revenues instead of gross revenue, even though operating income will be unaffected. However, TechMall bases its bonus plan for employees on gross revenue and reporting net revenue will cause the company to miss their performance goal. SOP No. 97-2 also provides that revenue must be deferred and recognized over the amount of time that services are rendered to the customer. An additional problem facing the company is the recognition of setup fees. Currently, the company recognizes the full setup fee in the original invoice month. However, the setup fee could be deferred over the average life of the merchant (Swain et al. 2002).

Conclusion

These issues are some of the problems facing companies who provide services that span beyond an operating cycle or fiscal year. The increase of Internet service companies and other technology companies will bring the uncertainties of revenue and expense recognition to light and regulatory bodies must be prepared to address these issues. As technology expands, new opportunities arise for companies that can increase productivity and sales. With these opportunities, reservations also arise about how to operate in this new high-tech environment and how to make this technology work for a specific company and its customers. Companies that 14embrace e-commerce and tailor it to their customers' needs will receive the greatest benefits and achieve greater productivity and success. The future of management accounting is difficult to predict with any degree of certainty but is likely to be a future marked by change the management accounting reports can be included by ERP system that expected to provide the management and other users information to support decision making process, Moreover the ERP system can be provide this information with high flexibility , and reports could be good indicator to determine if the ERP implementation is a success of failure. Since ERP is likely to impact future firm performance and explain a firm's need for information the firm may be more likely and easily to extract this information form the ERP system. The expectation Gap shown up to be more clearly , the enterprise prospective implying, what is the value that ERP system should add on the reports and what is the add value that ERP system can add on the report , under this issue the enterprises' managers were expected from ERP implementation to add new features and characteristics on the management reports to satisfy there needs of information to support decision making process in there enterprises , and the ERP system with new situation and new modules can satisfy the enterprise's need of information through the reports that produced through ERP system's modules.

References

[1] Avraham Shtub (1999) *Enterprise Resource Planning (Erp): The Dynamics of Operations Management, Kluwer Academic Publishers Norwell, MA, USA*, ISBN:0792384385

[2] Bret Wagner, Ellen Monk (2008) *Enterprise Resource Planning, Course Technology; 3 edition*, ISBN-10: 1423901797

[3] Jim A. Carter (2001) *Paperback]Developing e-Commerce Systems, Prentice Hall*, ISBN: 0130911127

[4] Robert T. Plant (2000) *Ecommerce: formulation of strategy, Prentice Hall Professional.*