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Management information systems and organisational performance: A focus on functional and enterprise information systems

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Abstract
This paper is intended to set the scene for a special issue of Management Information Systems Journal on "Functional Information Systems". It gives a brief overview of Enterprise Information Systems (EISs) and discusses Transaction Processing Systems (TPS), Marketing Sales Systems, Production and Operation Systems, and Human Resources Management System before concluding. The paper analyses literature collected from different writers across the globe. Based on the results this study concludes that accounting managers' knowledge and top management support significantly impact on the accounting information systems in an organization and, consequently, accounting information systems also significantly impact the performance management and organizational performance of that organization. By using modern and emerging management information systems, decision makers obtain useful information and use it in decision-making and strategy building to achieve organizational goals and objectives, which should increase the company's performance.

Keywords: enterprise information systems, transaction processing systems, marketing sales systems

1. Introduction
Enterprise information systems (EIS) are systems that help managers and companies improve their performance by enabling them to seamlessly share data among departments and with external business partners. Enterprise systems allow workers to access and analyze real-time information and transaction processes across the entire organization [2]. Therefore, EIS is an integrated Information Systems that support core business processes and functions. Business processes and functions include: marketing, accounting, finance, information security, human resources (HR), compliance, production, purchasing, and logistics. Integration is achieved by linking databases and data warehouses so they can share data from: Internal functions: Functions that take place within the company, which are referred to collectively as the internal supply chain External partners: Business or supply chain partners, such as customers or suppliers, which are referred to as the external supply chain (Ibid, 2003).

1.1 Functional information systems
Systems consist of several smaller information systems (sub-systems) that support specific activities [4]. Characteristics: Although some sub-systems can be completely independent, they are often integrated to form a coherent functional system. Functional information systems interface with each other to form the organizational wide information system. Some functional information systems interface with the environment, for example, the human resources information system can collect data about the labor market

1.2 Transaction Processing Information Systems
It is a computerized system that performs and records the Daily routines and transactions necessary to conduct business such as sales order entry, hotel reservations, pay role, employee record keeping and shipping (Kenneth, 2014) [8]. For example, Astria system under Institute of Distance Education (IDE) is able to register, capture payments and store student information.

1.3 Objectives of TPS according to Choga (2012:71) [4] are
- To provide all the information needed by law and /or by organizational policies
- To keep business running properly and efficiently
- It allows for efficient and effective operation of the organization
- It provides the necessary data for tactical and strategic systems such as decision support systems
- It provides timely documents and reports
- It increases the competitive advantage of the organization
- It ensures accuracy and integrity of data and information and
- It safeguards assets and security of information TPS

2.0 Accounting and Finance Systems
Each system can be divided into three levels: operational, tactical and strategic.
- Strategic systems for strategic planning
- Tactical systems for Budgeting, preparation and control, Investment management, Capital budgeting
- Operational systems include the general ledger, Account payable and receivable, Sales order processing so on (Lyon, 2015) [9]. For example, Fenix International Zambia has the system that is able to gather general accounting activities and generates report.

2.1Financial Planning and Budgeting

Planning is a top-down strategic plan that defines the strategic aims of the enterprise and high level activities required to achieve the goals of the organization while budgeting is the process of aligning and of resources to strategic goals and targets set across the entire organization [9] Financial planning is divided into short, medium and long-term planning.

2.2 Investment management

Investment Management is a study of individual securities and their properties and the risk and return faced by them**.** **[13]** Investments are important due to increase in life expectancy of a person, planning for retirement income, high planning for additional income due to high rates of taxation and inflationary pressure in an economy, the expectation of continuous stable income in the form of regular dividends, interests and other receipts (Singh, 2016) [13].

2.3 Financial controls

This is the analysis of a company's actual results, approached from different perspectives at different times compared to its medium long term objectives and business [12]. Information technology provides support to the following areas of financial controls which include economic analysis and access to financial and economic reports.

3.0 Marketing and Sales Systems

Marketing and sales systems refer to systems responsible for identifying possible customers for the products and services through determining what they need, advertising and product promotion, as well as selling of the products and services [3].

3.1 Roles of IT on marketing and Sale

Customer service

- Customer profiles and preference analysis
- Mass customization
- Targeted advertisement on the Web
- Customer inquiry systems and automated help desk

3.2 Tele-marketing

This is a process that uses telecommunication and information systems to execute a marketing programme for customers who want to shop from home.

3.3 Distribution channels management

- Delivery management
- Improving sales at retail store

3.4 Marketing management

Many marketing management activities are supported by computerized information systems such as, pricing of products or services, salesperson productivity, product-customer profitability analysis, sales analysis and trends, new products, services and market planning

4. Production and Operations Systems

The systems transform inputs into useful outputs.

Supply Chain The objective is to support the flow of goods and materials from the supplier through production to the customer.

4.1 Logistics and material management

Logistics management deals with ordering, purchasing and in-bound and outbound shipping activities through Inventory management and Quality control

4.2 Planning production/operations

Material requirement planning (MRP) is the software that facilitates the plan for acquiring or producing parts, sub-assemblies or materials manufacturing resource planning. MRP II is an integrated computer system that connects the regular MRP to other functional areas, especially finance and human resources.

Just-in-time systems attempts to minimize waste of all kinds of (space, labour, materials, energy and so forth), Project management and Short-term schedules

4.3 Automatic design work and manufacturing consists of the following designs:

- Computer-Aided Design (CAD): is a system that enables drawings to be produced on a computer screen and subsequently stored.
- Computer-aided Manufacturing (CAM): uses computer-aid techniques to plan and control production.
- Computer-integrated Manufacturing (CIM): is a concept about implementation of various integrated computer systems in factory automation.

5. The human resource management system

This system is a form of human resource software that combines a number of systems and processes to ensure easy management of human resources, business processes and data. It is used in the business to combine a number of necessary functions such as Employee Record Management, Evaluation, Promotion and Recruitment, Compensation and Benefits Management and Training. This system has become complex due to the growth in the specialized occupations, the need to train and promote highly skilled employees and the growing variety benefits program says [11]. By providing a means of acquiring, storing, analyzing and distributing information to various stakeholders, the system enables the improvement of traditional processes that enhances strategic decision making, while [5]. Echoes that our capacity to deal with information is limited hence the need of an information system should be an important Consideration in the design of information systems [5]. The figure below was done by (James, 2011) [6] spelling out the activities involved in human resource management system.

5.1 Recruitment

This is a process of finding employees. This requires planning of human resource and labor force tracking that fits into the strategic system of the organization. Under staffing, the organization need to cost and budget for labor and

analysis its turnover rate. Recruiting staff should be strategic where workforce should be planned and scheduled. Meanwhile, by using the system, the human resource manager can search the database of applicants and existing employee's records to set criteria. This can be experience, education, specific talents, required license or certification. This minimizes the time and money spent on recruitment.
Intranet helps managers post position vacancy announcements which employees can pursue from their own PC's.

5.2 Training and development
This is an important function in the human resource department which improves employee skills. Replacing personnel can sometimes be a difficult, length and expensive process. IT can be used to implement a succession plan. A career development plan can be built for each employee. This can involve skill assessment. Evaluation of performance can be done by supervisors and can be captured in the system. This information can be used to either lay off or reward an employee or transfer. Training software emulates situations in which employees must act and includes tests and modules to evaluate a trainee's performance. The development of the IT training, reduces training costs dramatically.

5.3 Compensation and administration
This system helps managers manage compensation efficiently and effectively. Different programs can easily calculate pays accordingly and tax tables to assist in complying with compensation regulations. The system can also generate pay checks which can be transferred electronically from the firm's bank account to the employees account. Other software can help manage health insurance, retirement plans and sick and leave days. This can also help in the calculating of benefits for employees.

6. Integrated information systems and enterprise resource planning
6.1 Enterprise Systems Firms use enterprise systems, Enterprise systems also known as Enterprise Resource Planning (ERP) systems are used in firms to integrate business processes in manufacturing and production, finance and accounting, sales and marketing, and human resources into a single systems says (Kenneth, 2014) [7]. also known as enterprise resource planning (ERP) systems, to integrate business processes in manufacturing and production, finance and accounting, sales and marketing, and human resources into a single software system. Information that was previously fragmented in many different systems is stored in a single comprehensive data repository where it can be used by many different parts of the business (Kenneth, 2014) [7]. This information system brings departments together from many systems into a single comprehensive data repository which can execute jointly processes across the functional areas.

6.2 Importance of integration
A business needs to invest in this software in order to manage its operations. A growing business needs to manage its operations by investing in an integrated system which manages its operations. When we consider the two factors of 21 century management, we look at the strategy of competition reducing costs, which has a policy of export competitiveness. Integration prevents overlapping of databases giving as accurate view of business performance. This may speed up critical decision making. Constant updates and excess costs. Reduced Employee Productivity: This reduces the in the time of processing. An invoice may take a longer period to process if there are multiple system available because each system will perform a different job and may increase errors. Lack or real time information. The transferring of data between systems does not help in syncing of data. Multiple systems may be expensive to maintain. When one system is upgraded, changes may need to be made on the other systems for them to work together which may prove to be expensive. This may require substantial IT resources.

6.3 Mechanisms of integration
Management can use information (IT) and communication technologies. Today's managers are faced with an abundance of information. Information as data processing system has to be able to understand, diagnosis, maintenance and retrieval. On the other hand, systems management and monitoring tools have been many changes over time; these changes can be noted in four cases. 1 - Traditional Control 2 - Bureaucratic Control 3 - Charismatic Control 4 - Informatics Control.

7. Conclusion
We can conclude that the use of EIS to integrate several functional fields of organization, such as planning, manufacturing, marketing, distribution and e-business that is useful in supporting some management function of an organization as well as expansion of the business process. The accounting managers' knowledge and top management support significantly impact on the accounting information systems in an organization and, consequently, accounting information systems also significantly impact the performance management and organizational performance of that organization. Therefore, functional information systems help decision makers obtain useful information and use it in decision-making and strategy building to achieve organizational goals and objectives thereby leading to an increase in the company's performance.

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