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ERP in Retail Industry

Management

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ABSTRACT

In the modern era of business, the retail sector has received a red carpet welcome from consuming community of the society. Enterprise Resource Planning (ERP) is an integrated computer-based system used to manage internal and external resources including tangible assets, financial resources, materials, and human resources. Retail is the sale of goods to end users, not for resale, but for use and consumption by the purchaser. The retail transaction is at the end of the supply chain. Wal-Mart is one example of a retail business with its operations spanning across different continents around the world. Management of such a distributed network of retail chains is a Herculean task indeed. The retail Enterprise Resource Planning (ERP) packages help the retailers in better management of their enterprise wide operations spanning the entire globe. ERP packages are heavily used by larger retail chains.

INTRODUCTION

In the modern era of business, the retail sector has received a red carpet welcome from consuming community of the society. This article throws a light on the applications of Enterprise Resource Planning (ERP) in the retail industry and the challenges faced by the retail sectors in the effective implementation of the ERP software. It presents the competitive benefits that the retail industry can consistently enjoy from using ERP system in the retail business.[1] This article also puts a narrow focus on top four leading ERP solution providers such as SAP, Oracle, Peoplesoft, BAAN, Microsoft Dynamics, etc. and their competitive applicability and pitfalls.

Retail is the sale of goods to end users, not for resale, but for use and consumption by the purchaser. The retail transaction is at the end of the supply chain. Manufacturers sell large quantities of products to retailers, and retailers sell small quantities of those products to consumers. A person who wants to obtain a product for his/her own personal use will usually purchase it at a retail store or from some other retail marketing channel. Thus, retailing refers to the sale of goods or commodities in small quantities sold directly to ultimate consumers.[2],[3]

Enterprise Resource Planning (ERP) is an integrated computer-based system used to manage internal and external resources including tangible assets, financial resources, materials, and human resources. It is a software architecture whose 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. Built on a centralized database and normally utilizing a common computing platform, ERP systems consolidate all business operations into a uniform and enterprise wide system environment. [4]

ERP & RETAIL ERP

Enterprise Resource Planning systems or the ERP systems refer to the software packages that integrate all the data and the related processes of an organization into a unified Information System (IS). An ERP system uses a central database that holds all the data relating to the various system modules. In order to achieve a seamless integration, an ERP system uses multiple hardware and software components. ERP packages are heavily used by larger retail chains. Designed to facilitate the administration and optimization of internal business processes across an enterprise, ERP packages have become the competitive tool for most large retail organizations.[5],[6]

ERP software uses a single database that allows the different departments to communicate with each other through information sharing. ERP systems comprise function-specific components that are designed to interact with the other modules such as the Order Entry, Accounts Payable, Accounts Receivable, Purchasing, Distribution etc. ERP systems comprise of different modules such as order entry, purchase, sales, finances, inventory management, DRP (Distribution Resource Planning) and human resources. The components are designed to work effortlessly with the rest of the system and provide a consistent user interface throughout the system.[7]

CONTEMPORARY CHALLENGES TO THE RETAIL INDUSTRY

In the current business environment, the retail industry faces two major challenges that threaten its profitability and the long-term survival prospects. The twin challenges are:

Market Competition

To beat the competition, retailers have to understand consumer demand at the point of interaction and respond to the various inputs in real time across the enterprise. This calls for a proactive approach on the part of the retail organization to sense the specific requirements of the consumer before other competitors and respond to them in real-time ensuring customer satisfaction in the process.

Regulatory Pressures

In order to meet the regulatory standards, the retailers require an enterprise wide process visibility, data access and near-instant performance reporting. However, the need for flexibility, process efficiency, reliable information, and responsiveness is very hard to achieve given the existing portfolio of legacy, home grown and packaged software applications used by a majority of the retail organizations.

PROBLEMS WITH ERP APPLICATIONS IN THE RETAIL SECTOR

Integration of the various business functions is an essential prerequisite for synchronization among the different business activities involved in a retail business. A number of large retail chains around the world has already invested in packaged software suites to integrate their core business activities. However, a lot of retailers are still using fragmented legacy software applications to manage their core business functions which results in somewhat lower levels of effectiveness and efficiency. Moreover, a majority of Chief Information Officers (CIO) in the retail sector believes that it is cumbersome to rip and replace their existing information systems handling the routine management of the retail operations.[8]

Outdated Architecture

Most of the legacy enterprise applications in retail have an outdated architecture that is inflexible and rigid. This inflexibility and rigidity pose a challenge to the business efficiency.

Limited Scope:

Most of the legacy systems were designed to take care of specific problems tasks and as a result, lacked an enterprise wide approach to the problem solving process. This makes such sys-

tems unsuitable for use in the contemporary business environment that is highly competitive in nature.

High Maintenance Costs
Legacy information systems are costly to maintain. The cost component is high because such systems are no longer used in the industry and require specialized personnel for maintenance purposes. Moreover, the maintenance cost of legacy systems keeps on increasing with the passage of time. The older an information system is, the higher are its associated maintenance costs to be borne by the retail business.

Integration and Scalability Problems
Legacy software does not allow addition and integration of new applications. This prevents such systems from scaling up or integrating with similar systems used by the associates or business partners. Such integration and scalability problems tend to multiply as the size and scope of retail operations increases.

Increased Risk to the Business
A combination of old and new information systems makes the whole system susceptible to failure or crash. The heterogeneity in the system is the primary cause of risk. The solution lies in a close knit, homogeneous information system that can integrate seamlessly with other such systems in real time while imparting the much-needed stability to the whole system.

SWOT ANALYSIS OF RETAIL ERP SYSTEM
SWOT analysis is generally designed to determine Strengths, Weaknesses, Opportunities and Threats of a System. A detailed SWOT analysis of Retail ERP system is presented below:

STRENGTHS
- Provides an enterprise wide view of the workflow.
- Allows integration with systems of associates and business partners.
- Helps in routine decision making.
- Allows streamlining of business processes.

WEAKNESS
- Expensive to procure
- Requires significant employee training
- Compatibility issues with other/legacy systems
- Security concerns

OPPORTUNITIES
- Booming retail sector in the emerging global markets.
- The retail sector is overlooked by the major ERP solution providers.
- High efficiencies becoming critical in the retail sector due to the cut-throat competition and paper-thin margins

THREATS
- Opposition to globalization and transnational movement of goods.
- Increasing complexity of such systems.
- Divided opinion over the Return-On-Investment (ROI) from such tools.
- Security concerns regarding sharing of data over a network.

COMPONENTS OF RETAIL ERP SYSTEM
The major components of a retail ERP system include the following:

Merchandise Management
It constitutes the primary component of a retail ERP system that supports the merchandise management operations undertaken by the retailers. This component includes activities such as the setting up, maintenance and management of the retail outlet, keeping track of the prices of the items, inventory, and the different vendors etc.

Retail Planning
This element of the ERP system allows the retailers to undertake the planning activities at a large as well as a small scale as per the need of the situation. It focuses on the different strategies to be employed in order to help the retail store in increasing the sales of the merchandise. The retail-planning component focuses on achieving the economies of scale and attaining the desired efficiencies by increasing the merchandise sales at the retail chain.

Supply Chain Planning and Execution
It provides support to the internal as well as the external supply chain process. It covers both the planning and the execution part of the supply chain management in retail. Supply chain forms the backbone of the retail operations.

Store Operations
This element of the ERP system takes care of all the operations related to the store management function. The store operations are central to a retail chain since the retailers keep the majority of their inventory at the stores. Moreover, the store operations are unique to the retail ERP systems as the other ERP packages do not offer such a comprehensive component like the store operations as offered by a retail ERP system.

Corporate Administration
This component aims to serve the information needs of the administration and usually includes the process management and compliance reports required by the top management for the decision-making purposes. This feature also includes other corporate financial reports such as the accounts receivables, accounts payable, general ledger and the asset management reports.

BUSINESS IMPLICATIONS OF RETAIL ERP
The Business implications of a retail ERP system are immense indeed. The retail Enterprise Resource Planning (ERP) packages help the retailers in better management of their enterprise wide operations spanning the entire globe. The retail ERP systems provide one-stop solution for most retail information processing challenges by providing a comprehensive solution to managing a complex retail business.[9] The major competitive benefits of using the ERP system in the modern day retail include:

- Graphical User Interface (GUI) support.
- Allows optimum utilization of the resources
- Reduction in the overhead and Inventory
- Timely responsiveness
- Enterprise wide solution
- Integrated work environment
- Easy scalability and adaptability
- Knowledge transfer between industries

CONCLUSION
An Enterprise Resource Planning (ERP) system helps the retailers manage their businesses in an effective and efficient manner by providing integrated and consistent information flow. It makes the task of keeping track of all the transactions so much easier. A retail ERP system allows automatic recording of the transactions in real-time environment. They have become indispensable tools to survive and increase profitability in the retail sector for large retail organizations. A retail ERP system makes management of a retail business a lot easier by utilizing the computing power offered by the modern day Information Systems (IS) in an integrated and consistent manner.

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