

Experience in Application of Enterprise Resource Planning In the World and Lessons for Vietnam

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Abstract:

The article has summarized the experience of applying enterprise resource planning on businesses in the world such as the United States, China and Thailand. From businesses in these countries, we offer lessons for retail businesses in Vietnam.

Keywords: *Enterprise resource planning, the United States, China, Thailand, Vietnam.*

1. Introduction

In Vietnam, ERP enterprise resource management has been mentioned since the 2000s, however, the application of ERP in Vietnamese enterprises, especially retail businesses, is very limited. Specifically, about 11% of Vietnamese retail businesses have applied ERP. Only enterprises with large scale, large capital, and high volume of sales can deploy ERP systems such as SaigonCoop, Nguyen Kim, Tran Anh and Mobile World. Foreign-invested retail businesses have the advantage of deploying ERP applications from the support of their parent companies abroad, which also puts great pressure on Vietnamese retail businesses. In the context of increasingly fierce competition in the domestic retail market, Vietnamese retail businesses need to make quick changes to survive on the domestic market in the context of competition and tissue innovation. Figure growth. In order to stand firm and develop, Vietnamese retail businesses need to study domestic consumption trends on the one hand to guide development for the retail industry, on the other hand, they need to enhance the application of information technology and e-commerce, applying modern management methods to optimize business resources and improve competitiveness in the domestic market.

The application of ERP on the one hand brings great benefits to retail businesses in proactively controlling and coordinating resources, cutting costs, improving business processes. On the other hand, in fact, this is not an easy process for most businesses, only some businesses have successfully applied ERP, many failed or encountered many difficulties and must take time. ERP implementation. Moreover, ERP application requires a large investment and many other important factors such as the determination of the business leadership, the willingness to participate and acceptance of the people using the system, require improvement of the rules. submission, and partner acceptance. Therefore, the study of experience in application of enterprise resource management (ERP) of retailers in the world from which to draw lessons and propose suitable solutions for Vietnamese retailers is necessary and practical value.

2. World experience

2.1. Walmart's experience in the United States

Walmart Stores, Inc., founded in 1962, is now the largest retail group in the world with 11,718 stores globally with 2.5 million workers, and the April 2018 market capitalization is approximately US \$ 257 billion (Walmart, 2018). Walmart is not only the largest global retailer and also the largest company of any kind in the world.

ERP application at Walmart supermarket chain started from EDI platform and Retail Link system built itself very early: ERP system at Walmart has platform on integrated e-commerce system, using supply chain management system. An EDI-based application requires major suppliers to use Walmart's own EDI network built in 1980 to fulfill orders placed by Walmart purchasing managers. In 1991, Walmart expanded the capabilities of its EDI-based network by introducing the Retail Link system. This system connects Walmart's largest suppliers to Walmart's own warehouse management system and requires large suppliers to control actual sales at each store and have additional plans in place. demand based on rules set by Walmart.

Walmart is constantly improving its ERP system to meet the requirements of a competitive business environment and innovating its growth model towards innovation and technology: In 2000 Walmart hired an outside company to upgrade Retail Link. from a supply chain management system to a system with better predictability, better planning and supply management. In 2002, Walmart switched to a completely private network based on Walmart. Walmart uses Sterling Commerce, the largest supplier of EDI systems and IBM, to implement this initiative. Walmart innovates the method of building and managing ERP systems: In 2007, the company decided to use a system that completely replaces the original self-built system (Nguyen Van Hong et al, 2013). Wal-Mart purchased SAP ERP financial solutions to support the global expansion of retailers and their needs to effectively respond to changes in the business and management contexts. Purchasing packaged software applications is one of the ways Walmart chooses to regain its dominance in terms of IT and anti-competition. Walmart then focused on speed, innovation with SAP HANA technology, SAP's SAP Business Intelligence platform to perform tasks such as processing corporate transaction records. Wal-mart has used agile methodology to deploy SAP HANA to collect data and insights at scale and speed quickly in real time. Wal-Mart uses Hana's in-memory data processing capabilities to collect data from different parts of the business with 250 million customers a week, more than 11,000 global locations, e-commerce channels growing. and 2.2 million employees (Wilson, 2015).

Walmart's information technology strategy is oriented to "build beyond the need" to build a competitive advantage from technology (Ustundag, 2013). Wal-Mart is not a technology company, but a company that sees technology as an important element of its business strategy. At Walmart, CIO technology executives and business unit leaders collaborate on information technology projects and decisions.

The development of information technology and the Internet has changed the business model and especially the retail industry. Research by Laudon and Traver (2017) clearly analyzed the development history of e-commerce in 3 stages from Invention of new business models, Consolidation of traditional business models and e-commerce. , and Innovation period of electronic business models. Accordingly, the US e-commerce market in the period of 1995-2000 is considered the period of the invention of new business models, the boom of Amazon and .com companies changed the retail market. The United States forces Walmart to adapt to market changes. However, it was not until 2000 that Walmart launched an online sales website, and upgraded the Retail Link system, at which time the business environment of retail businesses changed to 2000 - 2006. is the period of consolidation of traditional commerce and e-commerce models. During this period, Walmart's No. 1 position in the retail market was still consolidated, however, up to phase 3 of the development history of e-commerce from 2006 to now the scale of Amazon.com and Alibaba on The growth of Walmart, along with many names of online sales websites of European and Asian countries, narrows the gap between Walmart and retail companies, especially Amazon.com. This has put increasing pressure on Walmart forcing the company to make drastic changes in enterprise resource management (ERP) to optimize resources and improve competitiveness in a new context.

Thanks to the modern ERP enterprise resource management system, Walmart has a competitive advantage from technology, while improving the efficiency of supply chain management, enhancing integration and sharing with suppliers. The ERP system also helps Walmart improve the efficiency of business management on a global scale.

2.2. Experience of Amazon in the United States

Amazon.com, founded in 1995, has grown from the world's largest bookstore to the world's largest online store with sales of \$ 177.9 billion in 2017 (Statista, 2018). Currently, Amazon.com is ranked number one in online retail, the biggest value that Amazon.com brings to customers is to provide the most product range and the most convenient transactions (Nguyen Van Minh, 2011).

Amazon invested heavily in ERP systems: Between 2001 and 2003, Amazon invested \$ 300,000 in building new distribution centers and equipping information systems (Laudon & Laudon, 2018). Amazon uses information systems to improve profitability and improve competitive advantage. Amazon's information systems include ERP (enterprise resource management), SCM (supply chain management), CRM (customer relationship management).

Amazon selects Oracle's ERP system: Includes a database system that integrates all information related to customer orders such as purchase history, product shipments and invoices, thus enabling streamline the order fulfillment process. ERP systems automate the steps of this process by taking customer orders and processing them into invoices, allowing Amazon to speed up the order fulfillment process, improving visibility by Track orders and reduce errors during delivery.

Amazon's information technology strategy changed from online retail store (B2C) to the world's largest B2B2C e-commerce trading floor in the early 2000s (Nguyen Van Thoan, 2009). However, by the year 2010, Amazon has turned its business strategy to become a web-based service provider, including platform services for ERP solutions: Amazon.com is a typical case in the retail industry, when successfully deploying ERP and providing Amazon Web Services (AWS) - a service providing web infrastructure, capable of providing ERP cloud solutions for customers around the world (Nguyen Van Thoan and Nguyen Thi Hong Van, 2018). Even Infor is one of the four leading ERP vendors in the world, choosing to use AWS services. Because Amazon operates a huge network of data centers located around the globe, those applications can be deployed from those data centers closest to the customer's location.

The online retail business environment has also been constantly changing since 1995, with the change of technology and consumption trends. This puts pressure on Amazon and other online retailers to change with technology and consumers.

Amazon's enterprise resource management system (ERP) is not immutable, but is constantly updated to improve customer service, expand markets, and shorten the distance with retailers. Leading the world - Walmart, as well as consolidating its position on the ever-expanding startup businesses.

2.3. Nordstrom's experience in the United States

Nordstrom was founded in 1901 and is now one of the leading luxury shopping centers in the United States. Many industry analysts say Nordstrom has been particularly successful in its customer service strategy. Nordstrom also applies modern technologies so that employees can access the warehouse at all points as well as use omni-channel retail (OCR) to serve customers the best (Oracle, 2015).

Nordstrom uses Oracle's ERP solution: To implement retail operations management, inventory management. Nordstrom aims to use the latest versions of Oracle retail solutions across the company to support management operations at all stores. The retailer has implemented a suite of software that integrates applications to support core sales, pricing, and storage inventory operations including Oracle Retail Merchandising System, Oracle Retail Price Management, and Oracle. Retail Trade Management, and Oracle Retail Invoice Matching (Oracle, 2015).

Nordstrom's business and management model changes to align with global technology trends. Today's customers are looking for information on the Internet and looking at products on the Internet more, as stores including luxury chain stores have to innovate in this trend. At the same time, Nordstrom upgraded its ERP system to its global expansion strategy: Nordstrom fully assessed and understood the new features and functions in one store before applying them in the rest of its stores. As the retailer applies Oracle solutions at scale across the enterprise, it can take advantage of new features, performance, and functional improvements in Oracle Retail solutions. Oracle is committed to continuing to provide Nordstrom with the latest solutions to enable the distribution of goods anywhere in the retailer's global expansion strategy.

Under the pressure of fierce competition in the US retail market and innovation of the growth model towards innovation and technology globally, traditional retail businesses like Nordstrom are forced to participate. into e-commerce and enhance IT applications. Nordstrom's entry into e-commerce market is different from Walmart or online stores like Amazon.com. The purpose of Nordstrom is not entirely to increase online retail sales, but to reach customers with new tools more effectively, to enhance customer service experience and quality.

Among Oracle's customers, Nordstrom has been recognized as a pioneer in the traditional retail industry investing successfully in the application of ERP solutions. The use of sales management technology in online stores and websites allows Nordstrom to provide customers with the best experience and services, allowing customers to personalize products and shop easily on the system. his system. Towards the next generation of

ERP solutions provided by Oracle for retailers, Nordstrom can keep up-to-date with the latest features and functionality of applications without changing custom code, enable Nordstrom to set up an upgrade path that reduces the total cost of the IT system.

The above analysis is just 3 examples of successful US retail businesses applying ERP. Other examples include Macy's, Kohl's, Perry Ellis, Forever 21, 7-Eleven that successfully applied Oracle's solution; or names like Recreational Equipment Inc. (REI), Discount Tire, Brooks Brothers, Brookshire Grocery Company, Harry & David, Nebraska Book Company Inc. Successful application of SAP ERP solution. In addition to the large-scale retail businesses mentioned above, there are also retail businesses with only a few dozen employees who have implemented and implemented successful ERP solutions like Christopher Lena Shirt Co. (Ponte Atlantico, Inc.) with 12 employees and using the SAP Business One Cloud solution, Butcher & Packer Supply Company with 21 employees and using the SAP Business One solution. Whether large or medium-sized businesses As mentioned above, retail businesses in the United States have had successful experience applying ERP for many years. The solutions that enterprises choose are often provided by the world's leading companies in ERP solutions, namely Oracle and SAP.

2.4. Wumart's experience in China

Founded in 1994, Wumart Stores, Inc. is China's leading supermarket chain, holding more than 35% of the retail market share (Wumart, 2018). Wumart has more than 1,000 stores nationwide, including locations in Beijing and Tianjin, as well as in Hebei and Zhejiang provinces, with sales reaching over \$ 7.2 billion in 2017 (Wumart, 2018). The company develops a business model in the direction of omni-channel retail combined with traditional stores and online retail, which is perfectly suitable in the context of the developed e-commerce market. strong in China in recent years.

To maintain its leading position, Wumart expanded its merchandise products to include 40% of fresh food and other fast-moving consumer goods such as raw and cooked meat, fruits and vegetables - in order to achieve a higher profit level. By partnering with Dmall, an online store that provides high quality fresh food to 4 million users and processes over 100,000 orders every day. Wumart executives have built a business strategy towards increasing IT applications to expand online sales channels to increase sales and improve competitive advantage.

Wumart initially used information technology solutions and services from IBM and SAP. After a period of operation of IBM's system, Wumart decided to upgrade its IT system. Wumart conducted a review and comparison of different vendors, and decided to deploy Oracle Exadata to replace IBM servers and storage devices. Wumart also converted four Oracle databases in place of SAP applications, including the ERP core, and expanded warehouse and business warehouse management to use Oracle Exadata. Wumart Stores completed the entire project from design to construction in just three months and went into operation with the new platform, saving time and budget (Oracle, 2016).

Attempts to apply information technology to improve sales management efficiency at Wumart include the consolidation of 92% of IBM servers and four databases into a single Oracle Exadata database engine. Wumart has achieved an integrated high-performance private cloud platform to support e-commerce growth. Wumart can process orders online 8 times faster and reduce operating costs by more than \$ 100,000 per year. Consolidating old IBM database servers and upgrading storage devices on a single platform helps Wumart simplify maintenance systems and reduce total IT investment costs.

Solutions provided by Oracle for Wumart include Oracle Exadata Database Machine and Oracle Real Application Clusters. These systems help Wumart reduce IT operating costs - such as power consumption and space floor data center by more than \$ 100,000 annually, and simplify IT maintenance by consolidating 92% of old servers. IBM and four Oracle databases in place of SAP applications.

Wumart also implemented the ERP enterprise resource management application provided by SAP to enable the quick processing of online orders from online stores and Wumart online business partners to ensure food quality. fresh and revenue optimization. The ERP system also offers better predictability of customer needs and preferences, such as offering discounts on the most popular meat and vegetable orders, and improving service quality. The solution Oracle provides to Wumart also ensures that the system is always

available by using Oracle Real Application Clusters to allow automatic failover in the event of a major system downtime.

The change of the retail business environment in China is not outside the development trend of IT, Internet and innovation globally. With Alibaba's expansion and its ecosystem in both e-commerce and traditional commerce, store chains and supermarkets in China are forced to have the tools to compete and survive.

With the new system, the ability to handle online customer orders at Wumart is 8 times faster and minimizes the loss from the liquidation of fresh inventory, while reducing the cost of storage. Fresh goods at low temperatures. Logistics costs are also reduced thanks to the company's improvement in the supply chain management process and the modification of the process to ensure customers' order and delivery accuracy.

Customers rate Wumart's service better and 15 times faster when using the new ERP system instead of the old one. The Oracle Exadata solution also enables salespeople to quickly report and analyze customer purchase and interest histories, including brand loyalty and discount interest, to enhance management efficiency. customer service.

2.5. Experience of MC Group in Thailand

MC Group Public is a limited company based in Bangkok, Thailand, with the website address at www.mcgroupnet.com. The company has 2,700 employees and revenue reached 133.31 million USD in 2017 (Sep, 2018). MC Group Public and its subsidiaries aspire to become the leading apparel and lifestyle business in Asia.

The company targets its sales to cover all regions of Thailand by increasing the number of stores, point of sale at modern commercial locations and mobile units as well as expanding the space in High potential stores. By the end of 2017, the Company had a total of 881 points of sales. The reason is that these channels allow better product management, more flexibility in introducing new products and more diverse sales promotions to create new and interesting experiences for customers.

Clothing retailer MC Group has used SAP Enterprise Support services, namely SAP ERP enterprise resource management system and SAP extended warehouse management application to improve efficiency. manage resources in the business. The initial goal when building an ERP system, MC Group was to optimize the ERP system with a small IT team with limited resources, but still to improve the quality, security and compliance of the systems. business, protect the system from security breaches. The reason MC Group chose SAP is due to the availability of a dedicated SAP Enterprise Support consulting team to help develop and quickly implement a customized support plan to address company challenges, providing Remote optimization services such as security and business process performance optimization, quickly solve performance issues and quickly deploy systems. The results achieved with SAP systems are enhanced system security applying practices from SAP, optimizing financial statement performance, and improved user experience to make the business system of SAP. You are more efficient and safe. Providing an enhanced user experience and faster reporting, SAP software better supports the company to overcome challenges not only in Thailand but also in Asia.

The company's business strategy focuses on providing and managing different types of products to serve individualization and individualization needs for customers, through an extensive sales network. The company has built a business plan to achieve future financial goals by achieving 10% revenue growth each year. To strengthen its ability to maximize profits, the enterprise's IT application strategy is thoroughly implemented to achieve its goals and objectives.

The Thai retail e-commerce market is the leading developed market in Southeast Asia, with an annual growth of approximately 20% (ETDA, 2015). The Thai retail market with big brands not only operates in the domestic market but also promotes market expansion in Asian countries, including Vietnam. With a series of Big C brands, MM Mega Market, Robins, Nguyen Kim, Bmart, Lan Chi Mart, C-Epress ..., Thai investors hold most of the retail industry when they have all types from the center. commercial, general supermarket, electronics center, convenience store. Expanding into the international market requires retail businesses to have

the tools to manage resources in distant geographical locations, with market, tastes, currency, and policy characteristics. different economy.

SAP ERP systems implemented for MC Group provide an enhanced user experience and faster report creation time, good support for the company's business strategy, business efficiency and user satisfaction. user, click on the benefits of SAP Enterprise Support.

2.6. Target's failure experience in Canada

Leading US retailer - Target decided to expand the Northern market into Canada market in 2011. By 2013, Target has built 133 stores in some cities of Canada. By the end of 2014, the mighty US corporation had to close all its operations in Canada. Reasons given for this high failure include poor site selection, poor inventory planning, a failed campaign to compete with Wal-Mart's low price strategy, and inability to adaptability to shopping habits in Canada. However, one of the main causes of Target Canada's failure is related to its technology choice, in particular its corporate resource management (ERP) system.

When an ERP system works well, it can bring great benefits to the business. Data is cleaned and updated, communication between departments or locations is clear and leaders can make decisions more quickly and more wisely. A large retailer like Target requires a lot from its software systems. Managers need to keep track of inventory, shipping details, costs, information of thousands of individual products in stores. Moreover, all systems need to be linked together and integrate data as needed. In the United States, Target uses a custom designed software system that has been used for many years. Therefore, Target's ability to access technology is highly appreciated, and precisely because of this advantage, Target had to pay when it failed to fully evaluate the requirements, and challenges when implementing ERP at the chain stores when expanding into the Canadian market.

The company has much experience in ERP application in the domestic market (USA). In addition, because it's a custom system, it is tailored to meet the retailer's specific needs. This is essentially an outstanding system, which can store large amounts of data related to each product that Target Canada will sell. It's a common system with big companies across the globe, but it's also known to be difficult to implement and maintain. In addition, Target has planned to set up SAP and it works smoothly for two years, which is a boldness that many experts think cannot be done.

One of the important factors leading to retailer Target's ERP implementation in Canada is that the data entered into the system failed. Employees are tasked with entering the large amount of data the store requires to perform all sorts of errors, from simple spelling mistakes to incorrect currency usage.

This is in part due to the extremely short time the project implementers have implemented and because the information they receive from suppliers is often unreliable (a well-known issue in the selling industry). odd). As a result, Target Canada's supply chain has fallen into chaos. Target must deal with this disaster and spend time and money.

When company leaders make the decision to move to Canada, they must decide whether to use this same system or deploy a completely new system. In the end, Target decided to use a different, different technology and SAP was chosen for this campaign. This has led to a systematic and custom modification to fit the Canadian market. Target needs to ensure that the systems they apply will help achieve business goals when expanding in new markets. However, Target did not fully evaluate the difficulties in deploying ERP in new markets, the factors of the business environment were not carefully considered and analyzed by the company.

In February 2014, nearly a year after the first store opened, Target's headquarters announced its annual results - a loss of \$ 941 million in Canada (Hornby, 2018; Jackson, 2016). This is combined with the fact that hackers stole the personal information of 70 million US customers, leaving the company with no chance of improving the situation. Shortly thereafter, the company's CEO resigned along with a number of other key members of the executive team. Recognizing the negative impact of the launch on Canadian consumers and the reputation of the brand, Target released a YouTube campaign, apologized to Canadian customers and acknowledged that its strategy was on the Canadian market. not performing well and closing business in this market in 2015 after 2 years of operation.

Based on the above analysis of the success and failure experience of some typical retail businesses in the world, the PhD student synthesizes and assesses the experience of these businesses according to the ERP application process. from Planning, Deploying, Managing and developing the system as follows:

3. Lessons learned from application of enterprise resource planning (ERP) of retail businesses in the world

Based on the analysis of successful enterprise resource management (ERP) experience in a number of retail businesses in the United States, China, and Thailand, analyzing the experience of failure in source management applications Target enterprises (ERP) in Canada, we draw lessons to help retail businesses in Vietnam promote ERP application as follows:

3.1. The application of enterprise resource planning (ERP) in retail businesses is very difficult and expensive but feasible and an inevitable trend.

As analyzed above, the world's leading retail businesses in the United States, China, and Japan have soon realized the importance and agility of applying IT and ERP to improve management efficiency. sales and supply chain. Retailers in these markets also have their own ERP solution choices, processes, and ERP development processes to achieve their business goals. However, not every retail enterprise implementing ERP can achieve immediate success as expected. Successful implementation of an ERP project depends on three groups of factors: the organization's technological capacity (including enterprise IT infrastructure and ERP system quality), organizational characteristics of the selling enterprise. retail (including enterprise business strategy, leadership determination, human consensus on system implementation and operation, standardization of processes and operations), competitive landscape and business environment joint.

The failure of projects in the past includes both subjective and objective factors such as: insufficient resources to implement ERP, without the participation and acceptance of users of ERP systems (Garg, 2013). ; The consulting unit lacks knowledge about enterprises and fields of business deployment (Panorama, 2018). Meanwhile, the production and business processes in the application enterprise are still individualized, have not standardized the regulations and procedures clearly or do not follow the set standards. On the other hand, consulting and implementing units are often aimed at guiding users rather than focusing on consulting solutions (based on the actual needs of businesses as well as the ability to expand development). But even if the business has chosen a leading solution provider, with advanced technology, the enterprise has experience in mastering the technology, and invested a large amount of capital in the ERP but can still fail. .

Target retailer's lessons in the Canadian market are typical, when businesses have hands-on experience, technology, and people can still make mistakes when subjective and lack of environmental assessment and business practices of the business. The implementation of the ERP project cannot be hasty, because the requirement for the implementation time is so short that Target retailer has made many errors in entering data from spelling errors to currency errors, causing the system to cannot operate.

ERP projects often require large investments of the enterprise, including software licensing costs, project implementation costs, infrastructure upgrades, consulting and training costs, and maintenance costs. annual. Retailers often do not disclose the total investment cost for enterprise resource management application ERP, but it is possible to see that the cost of licensing the ERP software for medium and large enterprises can range from a few million dollars. to tens of millions of dollars. Moreover, up to 74% of businesses participating in the 2017 Panorama survey said that they all exceeded the initial investment budget for the enterprise resource management system (ERP).

Moreover, in order to apply enterprise resource management (ERP), enterprises need to invest in time. Specifically, to implement an ERP project takes a lot of time, at least as early as 6 months, while the demand for information processing in the unit is increasing, the number of orders increases with the development trend. development of the business should also have a few changes. At that time, the implementation and application units need to discuss carefully and need a project management board of the parties to agree on the terms. And what is most needed now is the determination of the project participants, including leaders and employees, solution providers. In addition, the level of users is also a matter of concern, they need to be fully trained, directly manipulate the system and contribute to the future process. In short, application of enterprise resource

management (ERP) is a difficult and difficult task to implement, even if the enterprise has enough resources to deploy, it can face many challenges. However, this is an activity that a retailer can carry out if properly invested in all aspects including people, technology, and business environment assessment.

The difficulties that retail businesses overcome when applying enterprise resource management (ERP) also show their competitiveness in the market. Especially when the retail market has been strong changes in recent times. Building a modern distribution system, which plays the role of a bridge between manufacturing enterprises and consumers, is becoming a top concern of businesses. Distribution and retail channels have appeared increasingly diverse and modern such as shopping centers, supermarkets, shops, restaurants attracting a large segment of consumers. However, not all businesses have built an effective retail system, suitable for businesses. New ERP solutions bring standardization to business processes, providing sufficient and timely information to help executives run the operations of supermarkets, restaurants and catering services. drink effectively. At the same time help retail businesses promote integrated multi-channel retail (Omni channel retail).

With powerful and in-depth features, consistent and consistent information and an intuitive, easy-to-use interface, enterprise resource management (ERP) systems provide a comprehensive management picture of all operations. dynamic management; Improve productivity - for high profits and stable net profits; Create tables and reports easily - optimize business plans; Create transparent and effective business processes - bring customer satisfaction and easily measure business performance; Business development responds quickly to changes in organization and business environment.

3.2. Enterprises need to develop a clear and specific application strategy of enterprise resource planning (ERP)

When building and developing an enterprise resource management system (ERP), retail businesses need to clarify the objectives of the ERP system associated with short-term and long-term business strategy, so that identify system requirements, construction steps, and streamline project implementation resources. Retail businesses like Walmart and Nordstrom in the above analysis have made decisions to invest in building, upgrading, or completely replacing ERP systems to fit with their business strategies such as expanding. sales chains, market expansion, or online sales, multi-channel sales. When clarifying the goals of the new retailer ERP system, it is possible to set clear requirements for ERP solution providers, and consultants, implementing ERP systems for businesses. At the same time, there are criteria to evaluate when commissioning the system, and there are appropriate improvements during operation.

Application of information technology in enterprises in general and application of enterprise resource management (ERP) in retail businesses in particular require specific implementation strategies and procedures. Retail businesses need to clearly plan the tasks and the implementation phase to achieve the desired results. This depends on the assessment of the current state of the business and the goals it aims at. Lessons learned by Wumart and MC Group show that these retail businesses aim to expand their business model to integrated omni-channel retail with the enterprise resource management system (ERP). To accomplish this goal, Wumart reviewed the old ERP system, consulted with new ERP solutions and made a choice of solutions that fit the company's business strategy, saving time for deployment and reduce system risk.

In addition, the retailer needs to make a decision on whether to implement the ERP project, whether to deploy each module individually or implement the entire integrated module. Prior to the deployment of ERP enterprise resource management system, chain retail businesses had applied many pre-installed information systems for different departments such as accounting, sales, warehouse management, and marketing. The deployment of enterprise resource management applications can take place on the whole system, however, this is not easy to implement. Enterprises can choose to deploy from the business unit level first, then deploy throughout the system, in order to evaluate the implementation results and issues that need improvement. Retail businesses can also choose from simple to complex deployment solutions, from easy-to-implement modules such as warehouse management and customer management modules, then deploy to modules. complex. This helps retail businesses reduce risks when applying ERP and maintain business operations. In addition, implementing each specialized module will help businesses spend less time to implement. In fact, the majority of retail businesses maintain an

information technology strategy that combines integrated and specialized solutions. Accordingly, although businesses use ERP, some functional departments with in-depth needs still use their own software. The logical decision is that the retail business needs to match and match the specific needs of its business.

Retail businesses should also consider deployment time, because for most businesses deploying ERP software, business processes will have to change and interrupt temporarily, which can affect the revenue of both Retail chain up to six months. Therefore, at the end of the year with many big holidays, the sales of retail businesses often increase sharply, this is not the appropriate time to put into operation of the new ERP system. Therefore, retail businesses should choose the right time to deploy ERP system at the right time and arrange suitable ERP implementation schedule. Retail businesses put ERP systems into operation during the normal business phase of the year to give employees more time to get acquainted and adapt to the new system, and the company also has time to organize meetings training, to bring business operations back to normal, and make the most of the benefits that the new system brings.

An overall enterprise resource management (ERP) system can cover every business process in an enterprise. However, building such a system requires a specific roadmap. Which enterprises can choose to prioritize ERP implementation with which units later depends on favorable and difficult conditions and specific business plans. In fact, it is possible that two retail businesses sell the same items on the same scale, but one business aims to prioritize strict financial management across the chain, one on the other. Priority should be given to solving difficulties in operating the distribution centers, so the ERP implementation roadmap for these two enterprises cannot be the same. Retail businesses need to develop specific ERP and IT application strategies, which are associated with the company's business strategy and take into account business conditions and business environment.

3.3. Application of enterprise resource management (ERP) requires high determination of business leaders

Choosing the ERP provider is very important. The right supplier not only provides the retailer with the best ERP system, but also the most suitable one. Choosing the right ERP partner will help businesses save time and effort by reshaping their needs, examining business processes, and providing accurate solutions for each problem.

By analyzing 3 cases of Wal-mart, Amazon, Nordstrom, we draw that for each type of retail, different retail items, businesses can choose solution providers. ERP is suitable as SAP, Oracle or other suppliers. Whether the supplier meets the current needs of the company for the system is not all business top concern. Therefore, the retail business should provide suppliers with a list of needs so they can demonstrate how the ERP system meets this requirement. Furthermore, the retail business should also raise requirements for proposals for software deployment, integration, and business consulting services. And especially important, the retailer needs to find out if the supplier understands the market and its customers. The situation analyzed above shows that each supplier has a certain set of customers and has certain strengths in some industries, and they have successfully implemented for their customers. For example, SAP successfully deployed ERP system for Wal-mart retailers, or Oracle successfully implemented ERP system for Nordstrom shopping center chain. Similarly, in markets like Vietnam, retail businesses can refer to successful implementation scenarios and choose the right ERP solution provider. ERP for each business is built on the unique business conditions of that business. The effectiveness of the ERP system depends very much on the capacity of the developer. ERP implementation capabilities include industry-specific consulting, technology and support capabilities. Therefore, to choose the right ERP implementation unit for your business, businesses must always consider carefully.

3.4. Retail businesses need proper investment in enterprise resource management (ERP) applications

The effectiveness of the ERP system for businesses is clear, but not all businesses have enough potential to implement. For medium-sized retail businesses in Vietnam, the cost of deploying ERP could reach several hundred thousand USD. This is not a small investment for businesses, so small and medium enterprises can choose cloud ERP solutions at a more affordable cost. For large enterprises with enough potential to invest millions of dollars into ERP systems, it is necessary to consider choosing large, long-term, strategic and visionary solutions.

Retail businesses that want enterprise resource management (ERP) applications need to invest appropriately in ERP project resources. An ERP project often takes months, covering several stages from evaluation survey, to design, construction, training, test run, technology transfer, operation and maintenance. Successful application of enterprise resource management (ERP) requires a close cooperation between the deployment partner project team and the project project team. People involved in the ERP project include the project manager, the project team (who directly makes the request, commissioning, training), the leadership and staff of the operations departments. To achieve the success of an ERP project, businesses need to clarify the requirements, unify the requirements with the implementation partners. When the project goes into the implementation stage, retail businesses need to actively coordinate with partners, actively assess and remove difficulties and always follow the original plan.

In fact, there are many ERP projects that have been delayed in implementation time or fail not because of financial problems or weak implementation partners, but because enterprises have not yet prepared resources well, cooperation is ineffective. As a result, the project administrator has not closely followed the actual situation, handling issues that arise slowly or unreasonably. The lesson of failure from Target retailer in Canada is typical of this problem. When entering the new market, Target's ERP project team was too hasty and overlooked seemingly harmless errors such as spelling errors, typing errors and not handling them promptly. It was the error during the data entry that led to Target reporting and operating problems, resulting in a complete closure of the business in Canada.

In short, the application of ERP is not a temporary work, but requires businesses to always make efforts to improve the system, technological innovation, business process innovation. IT and ERP are solutions to support retail businesses, but they cannot replace management processes and business strategies. ERP system is like a giant software, capable of doing financial, human resources, supply chain management and many other things. But mastering technology, mastering new solutions is important. Learning from the experience of successful businesses is essential, this helps Vietnamese retail businesses can "stand on the shoulders of giants", and optimize technology to shorten the gap for foreign enterprises, helping Vietnamese retailers to compete in the domestic market.

3.5. Enterprises should evaluate the application of enterprise resource management (ERP) and continually upgrade according to technology trends

ERP is one of the most complex and expensive IT applications in every business. However, this does not mean that the enterprise will forever use an ERP system. Technology is always changing, ERP systems also need to be constantly updated to better suit the change of technology as well as the needs of customers. Therefore, one is that when the retailer implements the ERP, it will need to ask the supplier about the need for future improvements and upgrades as was the case with Oracle for Nordstrom. Second, when the system is obsolete and unable to meet the needs of the company, decisions need to be made to either make improvements and upgrade the system, or build a completely new system, as is the case. Wal-mart analyzed above.

Lessons from Amazon also show that the evaluation and upgrade of the ERP system is extremely necessary. Despite being ranked as the world's No. 1 in online retail, Amazon is constantly setting new goals, expanding to the role of an electronic trading platform, becoming a market maker to allow 3rd parties can do retail business on Amazon platform. In this direction, Amazon has changed its ERP enterprise resource management application strategy, combining the use of Oracle solutions with the expansion of the web service platform (Amazon Web Service) to provide for 3rd parties use selling platforms on Amazon. In this direction, Amazon has become an ERP and web service provider, using its ERP application experience to consult and deploy to other retailers. This is a lesson that some Vietnamese retail businesses can apply, especially retail businesses with technological advantages, once ERP has been successfully implemented in their businesses, they can The next option is to expand the consultancy to other retailers in the market. In this way, retail businesses can expand their business based on consulting and implementing ERP projects based on the practical experience that businesses have when deploying and operating the enterprise resource management system. (ERP) at your organization. This approach will be beneficial for Vietnamese retail businesses, when the experience of success in ERP application in the market is not much, sharing the experience from successful implementers is helpful.

and necessary. Moreover, this can be implemented without affecting the business activities of the retail businesses, because retail is an industry with diversified and diversified business forms and commodities. The retailer can advise on ERP implementation for other retail businesses that are not in the same business and are not direct competitors.

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