The Development Trend of the New Retail Format Integration Application Cloud ERP System

Li Zhang a, Haimeng Fan b and Chen Xue c
School of Tianjin University of Science & Technology, Tianjin 300222, China.
a jannyzl@163.com, b 1607862623@qq.com, c 1305436203@qq.com

Abstract. The enterprise resource planning (ERP) system brings great convenience and advantages to e-commerce and SMEs. However, with the continuous upgrading of the consumer market, the era of pure e-commerce is about to withdraw from the historical stage, and the new retail approach combining online and offline has gradually entered people's field of vision. Cloud ERP is a cloud-based ERP system. Cloud computing is a computing model that relies on the Internet to provide a running mode with scalability, reliability, availability and low cost. This paper analyzes the advantages and challenges of implementing and running ERP system through the cloud, and proposes the direction and necessity of the integration of new retail format and cloud ERP, in order to better promote the development of new retail, showing cooperation, collaboration, sharing and sharing. Win a new situation in retail.

Keywords: New Retail; Cloud ERP; Integrated Application.

1. Introduction

Because the Internet plays a pivotal role in life, consumers are offline, but most of their lives and work depend on online. Therefore, the future business model must be online plus offline, which is what retailers want to do. Strong inevitable choices, they must use offline to allow consumers to touch and perceive goods, and to observe the advantages of consumers, while eliminating the disadvantages in terms of inventory and payment. If a small retailer wants to have a complete operating and management system based on its own ERP software, it is very inefficient and costly, but there are some third-party platform companies that are small. Companies provide the same efficient services as large companies. In the future, there may be more intermediate service providers, provide corresponding ERP system software services, and reduce their service costs. More and more companies are launching cloud-based ERP systems as a solution to integrate integrated business functions into the Internet. Today, with the steady development of new retail formats, the integration of cloud ERP systems into new retail formats is considered to be an inevitable trend in keeping with the trend of the times.

2. New Retail Formats

2.1 New Retail

The new retail is a combination of online and offline, using the Internet to help the traditional retail industry transform and upgrade, enhance customer satisfaction, improve efficiency and increase profits. The new retail format aims to make consumers truly become the focus of the retail industry, delivering consumer preferences to the company in a timely manner, thereby providing consumers with personalized services. Future physical stores will become a place to experience products, communicate with experts, and automate cashiers. The new retail enterprise will achieve full digital operation, and will create new economic value together with other related industries, thereby improving consumers' living standards and changing consumers' lifestyles and interpersonal relationships.

The new retail is a retail form of data collection and analysis around the consumer experience, which minimizes losses within the enterprise and the enterprise and reshapes the value chain. Practice has found that when some traditional offline brands put some of their operational energy online, they will receive surprising results. The Internet will resonate with the brands of traditional stores, boost...
sales and increase corporate profits. Correspondingly, the lack of a unique brand effect of some pure e-commerce companies can only gain temporary gains, and gradually lose their advantage with the rise of other e-commerce. With the development of new retail, the once unfavorable departments ushered in hope, e-commerce has gradually become the support of offline brands, and has an impact on the production methods and organizational structure of the traditional retail industry.

2.2 Characteristics of New Retail

The new retail model uses the user experience as the core standard to obtain maximum production transaction efficiency through network technology and platform. Its characteristics are as follows.

(1) The same price is available for online and offline products. In the future, with the integration of online and offline and logistics, physical stores and e-commerce will unify the price, quality and experience of the same product to provide consumers with a better and more professional service experience.

(2) The experience scene has a consumer experience and a customized service overlay experience to promote the development of new formats.

The new retail model will establish a terminal service location in the future where consumers can experience an efficient and enjoyable purchase process and provide customized services to consumers. In the payment link, there is no need to queue up for checkout, and the in-store smart system will automatically deduct the payment from the consumer account, and then notify the consumer of the amount of consumption through SMS to check the amount. Such a terminal experience scene will promote the development of a new social ecology.

(3) The consumption scene will change from holistic to fragmentation. In recent years, due to the emergence of the Internet and Internet e-commerce, from the standardization of traditional retail industry to the development of refined new retail, consumers have more choices for consumer scenes, and gradually become fragmented.

To achieve the integration of all aspects of online and offline. Through the establishment of "unified channels", the new retail will integrate network e-commerce and physical stores in terms of customer data, traffic, commodity prices, and product experience.

3. Cloud ERP

Cloud computing is defined as the applications delivered as services and the hardware and system software in the data centers that provide them. It is a computing environment that provides the peace of mind, scalability, and flexibility of computer security at different levels of abstraction at low operating costs. Cloud services can be seen as a set of service solutions based on cloud computing that involves providing computing, data storage and software services over the Internet. The models of cloud computing services can be divided into three categories, as shown in Figure 1.
Software as a Service (SaaS) is for end users or businesses. It involves delivering software applications to multiple users over the Internet. SaaS is flexible and seamlessly simplifies the remote use of large numbers of software applications.

Platform as a Service (PaaS) is the delivery of middleware, software development frameworks and components delivered on the web that contain tools, services and platforms for software developers to allow them to build SaaS applications, on-demand, payment usage patterns. The PaaS model will include the operating system, programming language execution environment, database and web server computing platform package. The PaaS client is able to develop and run its applications at the software layer.

Infrastructure as a Service (IaaS) is the computing power hardware and software for administrators. An integrated environment of computing resources, storage and network structures provided over the network. As an on-demand use, payment usage mode.

4. New Retail Format and Cloud ERP Integration Strategy

In the development process of new retail enterprises, how to make cloud ERP more effectively support the new retail format and how cloud ERP integrates and integrates with the new retail format system is the key to the success or failure of new retail enterprises, and is of great significance. In order to better integrate cloud ERP with the new retail format, the following points should be emphasized:

(1) The integration of new retail formats and cloud ERP needs to be carried out in conjunction with business process reengineering, and the functions between the various modules of the application software should be properly integrated and divided. The integration of the cloud ERP system with the new retail format is to reorganize the internal processes within the enterprise, integrating each individual computer management information system into a whole system. When the integration of the two is completed, the cloud ERP should give priority to the modules closely related to logistics and capital flow. The new retail format should fully consider the management problems, sales and procurement issues, and funds after the combination of online and offline. The collection and payment problems, etc., integrate the modules corresponding to these problems, thus forming a new integrated application system.

(2) The cloud ERP system should carry out corresponding organizational innovation around the new retail format and optimize and reorganize between departments. The integration of cloud ERP and new retail formats requires the entire new retail enterprise to coordinate actions, which requires a large rectification of business organizations that are only online or just offline. To better integrate cloud ERP with new retail formats, new retail companies must constantly reorganize and improve existing operating models, change the original functions of some departments, adjust staffing, establish new working models, and build A combination of online and offline business philosophy. At the same time, the changes in the business model of new retail enterprises will have an impact on the structure of the new retail business structure, which will enable the development of the new retail business structure to be continuously improved, so as to better serve consumers and make a virtuous circle between cloud ERP and new retail business optimization. Promote the common development of both sides.

(3) Ensuring better integration of cloud ERP with new retail formats requires a shift in traditional thinking. The integration of cloud ERP and new retail formats will affect the deep changes in the new retail format. This will inevitably affect the management system, management ideas and management methods of the retail industry today, and may encounter many obstacles. This requires the top leadership to find ways to change the traditional concepts of the management and employees, and strive to accept advanced management concepts, requiring all staff to establish a correct understanding of their ideology, so as to tap their potential, in the organization Give full play to the individual's subjective initiative and improve the response speed of the new retail format to market changes.
The combination of talents plays a crucial role in the integration of cloud ERP and new retail formats. The integration of cloud ERP and new retail formats will require complex talents, and management personnel must have both management theory, business knowledge, ERP knowledge and computer technology. In this way, we can understand the requirements of the cloud ERP in the new retail format and how to implement it technically. Without such a compound talent, it is impossible to effectively implement the integration of cloud ERP and new retail formats. Therefore, attaching importance to high-level talents and cultivating composite talents is the primary choice for recruiting new retailers.

5. New Retail Formats use the Advantages and Challenges of Cloud ERP

Most of today's internal ERP vendors have expanded their product portfolio with cloud-based ERP solutions, and new vendors have entered the market. Increasingly, companies are adopting cloud-based ERP solutions to reinvent their enterprise systems, reducing the complexity and cost of their hardware, software, upgrades, and IT support, thereby increasing their productivity, scalability, and flexibility and flexible deployment of services is easier. Adopting cloud ERP also makes better use of available IT resources to enable access to data and service system functions. The continuous advancement of information technology (IT) has been changing the way we do business. This has spurred a shift from an industrial economy to a network economy, in which companies participate in a world of super-interconnect. Of course, the new retail format uses the advantages and challenges of cloud ERP.

5.1 Advantages of the New Retail Format using Cloud ERP

(1) Low cost and fast implementation. Lower upfront costs, because computing resources are separated from the location of new retailers, new retailers do not need to pay for the computing environment that pays for access to the environment through the Internet; lower operating costs, cloud service providers (CSPs) are responsible for operating and providing cloud Services that isolate the operating processes of new retail companies from operating costs.

(2) Enhance scalability and improve accessibility. Cloud services are highly resilient; new retail companies can expand or shrink their resources based on current needs; many cloud ERP providers allow potential customers to try out ERP systems before they buy.

(3) Advanced technology to enhance core competitiveness. Some CSPs implement encryption and decryption standards, leading to security issues and work shifts from customers to CSPs. CSP provides well-defined policies and plans for backup and recovery and all other features related to availability and hard recovery. Cloud ERP systems help new retailers manage their business more effectively and provide opportunities for new retailers to focus on issues related to their core activities.

5.2 The Challenge of Using Cloud ERP in New Retail Formats

(1) Risk issues. Security Risk: Due to the high availability of cloud services to cloud services, security risks also increase. Handling security issues ERP is a challenging and complex process; performance risk: in the cloud, clients and CSPs are geographically separated from each other, and connected to each other via the Internet, network failures and many other connectivity issues may occur in the cloud, which will be directly reflected in the cloud ERP performance; strategic risk: the new retail format assumes the strategic risks of relying on CSP and should comply with these policies; compliance Risk: Compliance with data, energy and environmental standards are other difficulties faced by cloud-based ERP, and there are not enough regulations to deal with these difficulties.

(2) Limitations and difficulties. Customization and integration limitations: CPS provides ERP solutions with limited customization and integration options. These limitations do not exist in traditional ERP systems; functional limitations: Over time, traditional ERP systems gain more stability and change To be more mature and reach a high level of maturity, it takes time to achieve this stability and maturity of cloud ERP; SLA issues: Defining a Service Level Agreement (SLA) is a very difficult and complex process for cloud ERP. All aspects of the services provided, including
integration and customization, should be considered; organizational challenges: The process of implementing a cloud ERP system may face organizational challenges rather than technical challenges, such as top management involvement and poor cross-functional communication; migration between CSPs: CSP provides many similar ERP suites at different costs. Moving between different CSPs is a major challenge for cloud ERP customers.

(3) Other issues. Sensitivity of information: Many new retail companies view their data and information as private property and cannot be stored outside of new retail; control of cloud ERP: the cloud ERP system is located outside the new retail enterprise, and the control process is better than traditional ERP. More powerful; ERP is required as a service standard: The cloud ERP market is still new, there are no clear regulations and standards between cloud ERP vendors and customers; knowledge about the cloud: usually its customers are afraid of new technologies and implementing this new technology. For their business impact, cloud ERP providers should pay full attention to describing cloud ERP services and facilities, and make them clearer; start-up support: In order to facilitate the transition from traditional ERP to cloud ERP customers and customers need support from cloud ERP vendors, Promote this transformation; choose between cloud ERP systems: There are many cloud ERP systems on the market today. These ERP systems are developed by different vendors. Choosing these systems is a challenging process, choosing to participate in the assessment and choosing the right one. The individual of the cloud ERP system is also a challenge.

6. Summary

The rapid development of e-commerce, when people think that physical stores will be replaced, a new type of online and offline combination of new retail formats stand out, but because of the emerging model, business processes and e-commerce and physical stores are also certain differences, traditional ERP systems cannot be directly copied to use, so the need to develop an ERP system that can meet the needs of new retail formats, so that new retail companies can develop steadily and efficiently. With the maturity of the Internet and cloud computing technologies, cloud ERP systems have served more SMEs and e-commerce companies. This paper makes a comprehensive analysis and discussion on the development and transformation of cloud ERP in the new retail environment. The paper focuses on the integration of cloud ERP and new retail enterprises, summarizes the strategies and key points of cloud ERP integration with new retail enterprises, and the development trend and direction, and analyzes the advantages of cloud ERP in the development of new retail enterprises. And challenges provide a way of thinking and way for the development of China's new retail business long-term strategy.

References


