

# THE DESIGN OF THE FRAMEWORK OF THE SIYE INTEGRATED E-COMMERCE PLATFORM BASED ON THE THEORY OF THE INTEGRATED E-COMMERCE

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**Keywords:** Integrated e-commerce, Integrated e-commerce platform, Siye Technology.

**Abstract:** This article describes the meaning and development of the integrated e-commerce and the integrated e-commerce platform. The integrated e-commerce is the integration of ERP and e-commerce. The integrated e-commerce platform is a e-commerce supply chain management system (eSCM) which is a informationization platform for small and medium enterprises. Then, based on the theory, it proposes the design idea of the framework of the SIYE integrated e-commerce platform.

## 1 INTRODUCTION

The concept of the integrated e-commerce was first proposed by Gold Abacus. According to the explanation of Gold abacus, the integrated e-commerce is a new type of e-business models who creatively integrates e-commerce with supply chain management. It not only extends the scope of supply chain management to company's suppliers and customers from the internal of a company, but extends the scope of e-commerce to e-procurement, credit certification, online payments and collaborative work from information release and business-opportunities search. It fully realizes the integration of the management software and e-commerce.

The integrated e-commerce is the integration of ERP and e-commerce. It is a one-stop application which can achieve the informationization of management and e-commerce. SaaS(software as a service) has a close relationship with the integrated e-commerce. SaaS is referred to Software as a Service, a completely innovative model of software application which is emerged in the 21st century, along with the development of Internet technology and the application software. In brief, the software companies made money by selling software before. However, they give users free trials or charge a small rental fee and make money by servicing users. This kind of model reduces the expenses of

corporations and is more suitable for small and medium enterprises to apply.

The integrated e-commerce platform is a e-commerce supply chain management system (eSCM) which is a informationization platform for small and medium enterprises. It integrates the internal business management with supplier management and customer management. It is a one-stop application platform for small and medium enterprises to manage the internal business and to participate various business activities. It can help users to complete the internal management together with the business management and collaboration with external partners. Therefore, it can improve overall operational efficiency. Besides, it helps users to get more customer information, expand the sales volume and smooth sales channels. It can help users to optimize the structure of suppliers to reduce purchasing costs. It can also offer a fast, efficient marketing platform for complete-enterprise display and product promotion. Therefore, it helps users to realize low-cost brand promotion and product marketing.

## 2 INTRODUCTION ABOUT THE SIYE TECHNOLOGIES

SIYE Technology Company has been committed to the promotion, consulting, implementation,

development and services of enterprises informationization for a long time. Recently, it is mainly focused on the information construction of the colleges and the entrepreneurship education. It had been qualified successful bidder for the Government Procurement Program of the Ministry of Education of China for six consecutive years. It will provide personalized products and services. Besides, it will make an effort to give help for the employment and entrepreneurship of the colleges' students.

### 3 DESIGN OF THE FRAMEWORK OF SIYE INTEGRATED E-COMMERCE PLATFORM

This section describes the design of the framework of SIYE integrated e-commerce platform.

#### 3.1 The Overall Design of the Platform

The integrated e-commerce platform is mainly composed by the application services. It can help users to achieve "external collaboration" from the "internal management". Besides, these application services are integrated so that it achieves the integrated application.

The design of the framework of the platform is shown in Figure 1.

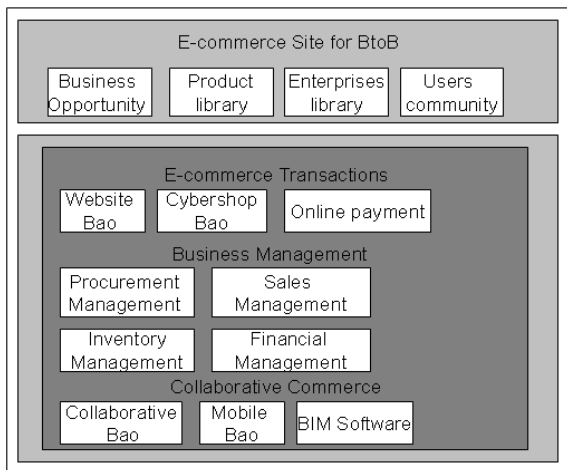


Figure 1: The overall design of the platform.

### 3.2 The Analysis of the Framework

#### 3.2.1 e-Commerce Site for BtoB

E-commerce Site for BtoB will provide a one-stop e-commerce service platform which is based on the Internet and is an integration of online business-opportunities search, online discussion and online trading between the firms. It can help enterprises to promote products and services, look for business opportunities, develop business partners and get more orders and customers in the context of the platform. At the same time, it is integrated with the internal management of enterprises, so that it can realize the tracking and information sharing during the whole business process.

#### 3.2.2 e-Commerce Transactions

Website Bao: It mainly provides services to help companies quickly build their own personalized Web site. What's more, it also provides services for publishing, search and subscriptions of business opportunities. It will help companies to look for business opportunities, develop business partners and get more orders and customers while promoting their products and services.

Cybershop Bao: Cybershop Bao provides a direct marketing Website or online-store which is aimed at the end consumers. It is fully integrated with the eERP system in the background, so that it can provide a complete solution from sales to management.

Online payment: For BtoC business model, it provides personal online payment function for individual users. For BtoB business model, it provides online payment capabilities for enterprises.

#### 3.2.3 Business Management

Procurement Management: Including procurement, purchasing storage, purchase returns. It can help enterprises to fully manage procurement activities. In the meanwhile, it can realize operational synergies with suppliers through the payment notice, receiving notifications, etc.

Sales Management: Including sales, sales returns, etc. It helps firms to manage sales operations roundly.

Inventory Management: Including procurement storage, sale out-stores, returned purchases, sales returns, other storage, other out store, stock-taking, and so on. It helps enterprises to manage in-store, out-store and remaining inventory storage of products. It enables companies to know excessive

stock or shortage of products, so that they can immediately reduce or supplement products which can improve the efficiency of inventory management. Financial Management: Including the purchase payment, proceeds of sales, purchase refund, sales refund, other income, other expenditure, etc. It can provide financial revenue and expenditure accounting information for external and detailed analysis of financial reports for internal. Therefore, it can provide supporting information for managers to make scientific decisions.

### 3.2.4 Collaborative Commerce

Collaborative Bao: Collaborative Bao primarily provides support for various features for the enterprise and business partners on the supply chain to realize business collaboration. It can help enterprises to achieve real-time transmission of business documents, real-time notifications of business news and the tracking during the whole business process.

Mobile Bao: Mobile Bao is composed of two parts, the mobile mall and mobile business experts. The mobile mall provides digital trade platform for companies, which is based on mobile communications network. Enterprises can build their own mobile portal in the mobile mall for mobile marketing, creating efficient marketing channels. The mobile business experts are used in mobile device to realize the collaboration of enterprise management and supply chain. It enables users to do management and online trading at their fingertips. Users can find business opportunities, do business, and manage their companies through mobile phone. At the same time, it can reduce the cost of informationization and improve the popularizing rate of information technology.

BIM Software: BIM (Business Integration Methodology) software provides instant means of communication for exchange, office and collaboration. Employees can use this tool to communicate with colleagues at all levels of the enterprise, upstream suppliers and downstream customers. It enables users to receive real-time tracking information and the enforcement notice of miscellaneous service.

### 3.3 Advantages of the Platform

This part mainly analyzes the advantages of this platform.

#### 3.3.1 Integration of Online Trading and Business Management

Buyers and sellers can use “E-commerce Site for BtoB” to inquire/offer prices of products. Besides, they can use BIM software to do business negotiations, issue trading orders, complete the execution of orders (income/consignment, collection/payment) and complete real-time tracking during the implementation process.

#### 3.3.2 The Whole Process Control

The platform can manage the trading process of releasing business opportunities, ordering, collection/delivery, collection/payment, sales return and refund. What’s more, it can track the executing process of business each other.

#### 3.3.3 Integration of e-Commerce and Online Business Management

The platform can combine online transactions with the enterprises’ internal management. It enables companies to collaborate consultation / quoteprice, order and the fulfillment process of the orders.

## 4 CONCLUSIONS

Traditional ERP software can help enterprises to improve internal management processes and their architecture. It can address the various internal problems, such as informational isolation between different systems, lack of coordination and other operational problems. However, it only focuses on internal business management and cannot integrate the advantages of e-commerce. So that it can not help companies to capture business opportunities timely. With the development of e-commerce and the focus changes of business management from improving operational efficiency to providing high customer satisfaction, the old ERP systems were insufficient to support the integration of all business processes on the entire supply chain. Integration of external e-commerce and management software, that is, the integrated e-commerce platform will be the general trend.

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