

DEVELOPING A MODEL FOR B2B ELECTRONIC COMMERCE - AN EXAMPLE OF MRP

林以章、梁文耀

E-mail: 9015623@mail.dyu.edu.tw

ABSTRACT

WITH THE FLOURISHING DEVELOPMENT OF INTERNET AND THE RAPID GROWTH OF THE WORLD-WIDE WEB, THE ENVIRONMENT OF DOING E-COMMERCE ON THE INTERNET IS MORE MATURE. ELECTRONIC COMMERCE BECOMES THE MAJOR GOAL OR THE FUTURE VISION OF THE NATIONAL INFORMATION INFRASTRUCTURE AND BUSINESS INFORMATION SYSTEMS. MOST RESEARCHES FOCUS ON THE OPERATION AND PLANNING OF WEB STORES, AND SOME PROJECTS PROVIDE SOLUTIONS FOR SPECIAL CASES. NEVERTHELESS, SUCCESSFUL WEB STORE MUST DEPEND ON THE EFFICIENT OPERATION OF BUSINESS CORE PROCESSES THAT INCLUDE MANUFACTURING, DISTRIBUTION, ETC. ENTERPRISES ALSO NEED TO INTEGRATE THE INTERNAL AND EXTERNAL RESOURCE THEN QUICKLY RESPOND TO THE REQUIREMENT OF CUSTOMERS AND EFFICIENT IMPROVEMENT OF BUSINESS PROCESSES. CONSEQUENTLY, THIS STUDY WILL FOCUS ON THE RESOURCE INTEGRATION AND INTRODUCE THE APPLICATION MODEL OF ELECTRONIC COMMERCE THAT IS BASED ON ERP AND SCM. THIS STUDY INTENDS TO INTEGRATE HORIZONTALLY THE MANUFACTURING RESOURCE DISTRIBUTED IN DIFFERENT PLACES, AND SHARE VERTICALLY THE VALUABLE INFORMATION BETWEEN PARTNERS. AND EXPECT TO ACHIEVE THE FOLLOWING GOALS: 1. INTEGRATE THE BUSINESS RESOURCES. 2. INTEGRATE ELECTRONIC COMMERCE AND BUSINESS PROCESSES. 3. PROVIDE REFERENCE MODEL FOR B2B ELECTRONIC COMMERCE. THIS STUDY ALSO DETAILS A MRP EXAMPLE TO SIMULATE THE DECISION PROCEDURE OF SETTING PROMISED DELIVERY DATE FOR CUSTOMERS, AND EXPLAIN THE DIFFERENCE OF THE VALUE OF INFORMATION BETWEEN INFORMATION-INTEGRATED ARCHITECTURE AND NON-INTEGRATED ARCHITECTURE. THE RESULT REVEALS THAT INFORMATION-INTEGRATED ARCHITECTURE HAS REDUCED THE PROBABILITY OF LATE ORDERS OCCURRED AND THE AVERAGE LATENESS TIME OF ORDERS. THEREFORE, THE SIMULATION PROVIDES THE EVIDENCES THAT THE INTEGRATION WITH B2B EC AND BUSINESS PROCESSES CAN EFFICIENTLY INTEGRATE AND USE THE BUSINESS RESOURCE, AND THEN IMPROVE THE ABILITY OF COMPETITION AND THE SATISFACTION OF CUSTOMERS.

Keywords : B2B ELECTRONIC COMMERCE, ENTERPRISE RESOURCE PLANNING, SUPPLY CHAIN MANAGEMENT, MATERIAL REQUIREMENT PLANNING.

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