# Application of Quality Function Deployment on Logistic Management of Information System Requirement - A Case Study of...


## 施秀珍、林清同

E-mail: 9701133@mail.dyu.edu.tw



**ABSTRACT**

The developments of globalization and information technology have caused high competitions to markets. Companies must improve effectiveness of logistics management in order to adapt the swift market changes. In order to reduce costs and increase competitive advantages, it is essential for companies to control and manage their raw materials and human resources. Consequently, profits will be increased and customers will be satisfied. Companies will be benefited by creating long-term customers. Besides improving the effectiveness of Logistics Management, companies should also consider the Efficiency-Flexibility in order to effectively apply information technology to businesses. Thus, investing in the effectiveness information technology with efficiency and flexibility has become an important issue and trend for businesses to operate in the future market. This research develops Integrated strategy planned model by applying the quality function deployment concept. It analyzes the business environment, goals, strategies, key success factor and currently applied information technology base on efficiency and flexibility concept, to create the degree of requirement ( α value) for establishing the effectiveness of information system. The α value is a reference for decision-making on the investment of information system. It applies varieties of individual business to exam the effectiveness of the model. The result of the exam shows that the model is able to effectively assist progressing companies to develop business plans for achieving effective operations.



Keywords : information technology ; integrated information system plan ; quality function deployment (QFD)


**Table of Contents**



**REFERENCES**


參考文獻 一、中文部份 Laudon, K. C. & Laudon, J. P. (2002)，管理資訊系統:管理數位化公司第二版(周宣光譯)，臺灣東華書局股份有限公司。 水野滋，赤尾洋二(1987)，品質機能展開(傅和彥譯)，前程企業管理公司。 大前研一(1989)，策略家的智慧(黃宏義譯)，台北:長河出版社。 王立志(1999)，系統運籌與供應鏈管理(初版)，滄海書局。 王信博(2003)，專業物流在企業全球運籌管理之定位與影響之探討，大葉大學事業經營研究所未出版碩士論文。 王士元，王瑞琛(2002)，品質特性評量應用於連鎖便利商店提高服務品質之探討，精鐘學報，5。 吳思華(1990)，交易成本理論在企業經營策略與組織管理上的涵義，管理新思潮，109-140。 吳昭仁(2004)，運用品質機能展開管理企業運籌活動，中央大學企業管理研究所未出版碩士論文。 林文華(2003)，資訊科技投入程度、組織管理相關變數與組織績效之關聯性研究，成功大學企業管理研究所未出版碩士論文。 張卓寰(2002)，加工出口區發展全球運籌應有策略作為之研究，高雄第一科技大學運輸與倉儲營運系未出版碩士論文。 張坤元(2000)，我國個人電腦廠商運籌管理施行績效關係之探討，東海大學工業工程學系未出版碩士論文。 許總欣，潘昭賢，楊長林(1997)，以產品機能為基礎之產品定位研究，工業工程學刊，14，209-216。 陳慧鴻(2001)，以品質機

能展開進行盲人點字機之改良研究，大葉大學工業工程學系未出版碩士論文。 彭彥屏(2002)，加入世界貿易組織我國中醫藥面對大陸衝擊及因應策略之研究，中國醫藥學院醫藥管理研究所未出版碩士論文。 黃昌宏(2000)，全球運籌管理發展趨勢的策略定位，南台灣對全球運籌之未來發展研討會，1-5。 黃驛迅(2007)，全球化觀點建構協同採購資訊系統模式之研究－以A公司為例，大葉大學資訊管理學系未出版碩士論文。 劉秀美(2004)，品質機能展開應用於企業經營策略規劃之研究，大葉大學資訊管理學系未出版碩士論文。 蔡文正(2003)，利用品質機能展開改善護理之家服務品質要素，中國醫藥學院醫務管理學研究所未出版碩士論文。 賴宣名(2002)，全球運籌管理，全球供應鏈，26。 二、英文部份 Aakers, D. A. (1984). Strategic Market Management. New York : John Wiley & Soms Inc., 24, 70. Atkinson, W. (1990). The Customer-responsive Manufacturing Organization. Manufacturing System, May, 58-61. Band W. & Huot, R. (1990). Quality and Functionality Equal Satisfaction. Sales & Marketting Management in Canada, 31, 4-5. Burch, J. G. (1990). Planning and building strategic information systems. Journal of Systems Management, 41 (7), 21-27. Byrd, T. A. & Turner (2001). D. E., An exploratory examination of the relationship between flexible IT infrastructure and Competitive Advantage. Information & Management 39, 41-52 Chandler, A. D. (1962). Strategy and Structure. Cambridge: Harvard University Press. Chang H. H., Kim, J. K., Choi, S. H., & Kim, S. H. (1998). Determination of Information System Development Priority Using Quality Function Deployment. Computers & Industrial Engineering, 35, 241-244. DeLone, W. H., McLean, E. R. (1992). Information systems success: the quest for the dependent variable. Information Systems, 3 (1), 60-95. Downes, L., Mui, C. (1998). Unleashing the Killer App: Digital strategies for Market Dominance. Harvard Business school Press. Duncan, N.B. (1995). Capturing Flexibility of information technology infrastructure: a study of resource characteristics and their measure. Journal of Management Information Systems, 12 (2), 37-57. Hon, J. S., M. Y. Tarng, & P. Y. Chu (2002). A case study exploring Acer's global logistics and innovation. International Management, 2000. Hauser, J. R., Clausing, D. (1998). The House of Quality. Harvard Bussiness Review, 5, 63-73. Hamel, G., Prahalad, C. K. (1994). Competing for the Future. Harvard Business School Press. Jagdev H., Bradley, P., & Molloy, O. (1997). A QFD Based Performance Measurement Tool. Computers in Industry, 33, 357-366. Lei, Hitt, Goldhar JD. (1996). Advanced Manufacturing Technology: Organizational Design and Strategic Flexibility. Organization Studies, 60, 501-523. Lockamy, A. III., & Khurana, A. (1995). Quality Function Deployment: Total Quality Management for New Product Design. International Journal of Quality & Reliability Management, 12, 73-84. Nattarajan R N., Martz, R. E., & Kurosaka, K. (1999). Applying QFD to Internal Service System Design. Quality Progress, 32, 65-70. Philips M., Sander, P., & Govers, C. (1994). Policy Formulation by Use of QFD Techniques: Case Study. International Journal of Quality Reliability Management, 11, 46-58. Porter, M. E. (1980). Competitive Strategy:Techniques for analyzing Industries and Computer. Free Press: New York. Poirier, C. C., Reiter, S. E. (1996). Supply Chain Optimization: Building the Strongest Total Business Network. Berrett Koehler Publisher. Rockart, J. F. (1979). Chief Executives Define Their Own Data Needs. Harvard Business Review, Mar.-Apr., 85. Sanchez R. (1995). Stategic Flexibility in Product Competition. Strategic Management Journal, 16, 135-159. Sanchez R, Mahoney JT. (1996). Modularity, flexibility, and knowledge management in product and organization design. Strategic Management Journal, 17, 63-76. Sanchez R. (1999). Modular architectures in the marketing process. Journal of marketing, 63, 92-111. Sanchez R. (2002). Using modularity to manage the interactions of technical and industrial design. Design management Journal Academic review, 2, 8-105. Sanchez R. (2004). Creating modular platforms for strategic flexibility. Design management review, Winter, 58-67. S.H. Kim et al. (2000). A methodology of constructing a decision path for IT investment. Journal of Strategic Information Systems, 9, 17-38. Theodore, B. K. (1993). What's QFD? Industry Week, November, 31-32. Ward, J. & J. Peppard (2002). Strategic Planning for Information Systems (3rd ed). Wiley, London. Weill, P., Broadbent, M. (1998). Leveraging the new Infrastructure. Harvard Business School Press. Worren N, Moore K, Cardona P. (2002). Modularity, strategic flexibility, and firm performance: a study of the home appliance industry. Strategic Management Journal 23, 1123-1140.