

# A Study Of Trader Evaluation Based On Case Of A New Sporting Goods Development Factory

許騰瀅、陳偉星

E-mail: 9423679@mail.dyu.edu.tw

## ABSTRACT

It is an important issue for the sport and toy developing factories to evaluate and select proper trader partners efficiently and rationally. The purpose of this thesis is to present a formal traders evaluation process to assist the sport and toy developing factories to select the suitable traders in order to improve the competitive capability of the supply chain and the mutual benefits. This research uses AHP methodology and fuzzy multi-criteria theory as the theoretical foundation to support the proposed traders evaluation process. The required quantitative and qualitative criteria were analyzed and identified in the first stage. Then, the Expert Choice was adopted as the tool to determine the progressing priorities for the all criteria. The qualitative criteria are represented by triangular fuzzy number and are translated to the crisp value by using COA approach to obtain BNP crisp values. All crisp criteria values are weighted and then are sorted by using the method of TOPSIS. The ranking of all traders can be listed and decision of selecting the most appropriate traders can be made efficiently.

Keywords : sport and toy+trader+AHP+COA+TOPSIS

## Table of Contents

封面內頁 簽名頁 授權書 iii 中文摘要 iv ABSTRACT v 誌謝 vi 目錄 vii 圖目錄 x 表目錄 xi 第一章 緒論 1 1.1 研究背景與動機  
1 1.2 研究目的 4 1.3 研究限制 4 1.4 研究流程 5 第二章 文獻探討 6 2.1 供應商評估準則 6 2.1.1 採購者與供應商關係 6 2.1.2  
供應商與製造商關係 7 2.1.3 供應商評選方法 7 2.1.4 供應商評選要素 9 2.2 貿易商產業概要 10 2.2.1 國內貿易商結構 10 2.2.2  
國內貿易商的競爭優勢 11 2.3 運動玩具產業概要特性 11 2.3.1 產業特性 12 2.3.2 關鍵成功因素 14 2.3.3 SWOT分析 16 2.3.4 主  
要外銷市場分佈 17 第三章 貿易商評估準則制訂 19 3.1 構面與評估準則內涵 20 3.2 新產品開發銷售之貿易商評估準則 26  
3.3 委託開發新產品接案與否之貿易商評估準則 28 第四章 決策模式理論 31 4.1 習慣領域理論 32 4.2 層級分析法 32 4.2.1 基  
本假設 33 4.2.2 評估尺度 34 4.2.3 進行步驟與階段 34 4.3 模糊多準則理論 39 4.4 TOPSIS法 41 4.5 應用決策分析軟體Expert  
Choice 45 第五章 個案分析 46 5.1.1 X興運動玩具有限公司簡介 46 5.1.2 新產品開發銷售之貿易商評估準則 47 5.1.3 委託開發新  
產品接案之貿易商評估準則 60 第六章 結論與建議 65 6.1 結論 65 6.2 研究建議與未來研究方向 66 參考文獻 68

## REFERENCES

- 中華民國92年中小企業白皮書，第五章中小企業生產、研發及海外行銷現況，經濟部中小企業處出版。
- [2] 台灣國際貿易局: <http://www.trade.gov.tw/>。
  - [3] 台灣經貿局: <http://www.taiwantrade.com.tw/>。
  - [4] 台灣區運動玩具公會WTO網站: <http://www.toy.com.tw/wto/index.html>。
  - [5] 利豐研究中心(2003), 供應鏈管理:利豐集團實踐經驗。
  - [6] 徐村和, 楊宗欣(1999), 媒體選擇影響因素之研究-習慣領域及灰色理論, 東吳經濟商學報, 第24期, 第115-1頁。
  - [7] 江柏謙(2003), 以層級分析法探討海軍裝備系統維修廠商評選之研究, 義守大學工業工程管理系碩士論文。
  - [8] 陳彥君(2003), 貿易商發展電子商務之策略分析-特力公司之個案研究, 國立台灣大學國際企業學研究所碩士論文。
  - [9] 柏謙基(2003), 由供應鏈觀點探討台灣聚酯加工絲業之採購準則, 國立成功大學高階管理碩士在職專班碩士論文。
  - [10] 貿易雜誌(2002), 第108期, 第8-17頁。
  - [11] 貿易雜誌(2002), 第107期, 第17-26頁。
  - [12] 貿協商情網站: <http://news.taiwantrade.com.tw/>。
  - [13] 楊維謙(2004), 玩具產業在廣東投資的經營策略 - 以甲公司為例, 國立中山大學管理學院國際高階經營碩士在職專班碩士論文。
  - [14] 運動玩具公會: <http://www.toybase.com.tw/>。
  - [15] 遠見期刊, 第221期, 黃菁慧, 2004.11。
  - [16] 鄭振源、曾國雄(1989), 「層級分析法(AHP)的內涵特性與應用(上)」, 中國統計學報, 第27卷, 第6期, pp.5-22。
  - [17] 鄭振源、曾國雄(1989), 「層級分析法(AHP)的內涵特性與應用(下)」, 中國統計學報, 第27卷, 第7期, pp.1-20。
  - [18] Ellram, L.M.(1991), "A managerial guideline for the development and implementation of purchasing partnerships", International Journal of

- Purchasing and Materials Management, Vol. 28, No.1, pp. 2-8, Summer.
- [19] Hwang C.L. and Yoon K. (1981), " Multiple Attributes Decision Making Method and Application ", Springer, Berlin Heidelberg.
- [20] Jewell, L. N., and H. J. Reitz (1981), Group Effectiveness in Organizations Scott-Foresman, Glenview, IL.
- [21] Mohanty, R. P. and Deshmukh, S. G. (1993), " Using of Analytic Hierarchic Process for Evaluating Sources of Supply ", International Journal of Physical Distribution & Logistics Management, Vol. 23, No. 3, pp.22-28.
- [22] Nydick, R. L. and Hill, R. P. (1992), " Using the Analytic Hierarchy Process to Structure the Supplier Selection Procedure ", International Journal of Purchasing and Materials Management, Vol. 28, No. 2, pp.31-36.
- [23] Rohit Verma, Madeleine E. Pullman (1998), " An analysis of supplier selection process ", Omega, Int. J. Mgmt Sci. Vol. 26, No. 6, pp. 739-750.
- [24] Saaty, T. L. (1980), " The Analytic Hierarchy Process ", McGraw-Hill, New York.
- [25] Spekman, R.E.(1988), " Perceptions of strategic vulnerability among industrial buyers and its effect on information search and supplier evaluation ", Journal of Business Research, Vol. 17, pp.313-326.,
- [26] Stuart, F.I. and McCutcheon, D.(1995), " Problem sources in establishing strategic supplier alliances ", International journal of Purchasing and Materials Management, Vol. 31,pp. 3-9, Win-ter .
- [27] Sheng-Hsiung Tsaur(2001),The evaluation of airline service quality by fuzzy MCDM.
- [28] Thompson, K. N. (1990), " Vendor Profile Analysis ", Journal of Purchasing and Materials Management, Vol. 26, Iss. 1, pp.11-19.
- [29] Weber, C.A., Current, J.R. and Benton, W.C. (1991), " Vendor Selection Criteria and Methods ", European Journal of Operational Research, Vol. 50, No. 1, pp.2-18.