

## **CHAPTER SIX: CONCLUSION**

### **6.1 Summary**

Many organizations are computerizing their procurement process in order to take full advantage of electronic procurement (EP). This dissertation seeks to uncover the fit between uncertainties of business environment and information technologies that affect EP performance. The proposed framework measures the four major impacting factors: (1) environment uncertainty, (2) partnership uncertainty, (3) process uncertainty, and (4) know-how/knowledge.

To test the proposed framework, we study a large PC OEM and its four Taiwanese-owned Chinese companies in the PC-NB industry. Phone interviews are conducted during December of 2005 to January of 2006 to gather useful insights about these firms' purchasing collaboration. After a series of measurement assessment and a cross-case analysis, our framework is proved to be validated.

Through the empirically case study, we find the firms' external and internal factors can affect the performance of EP. That is, EP usage in the form of high-integrated system may lead to greater performance under higher environment, partnership, or process uncertainty, whereas low-integrated EP lives up to more benefit under lower knowledge skills. We also observe that lack of fit between procurement practices and EP system produces extra burdens and costs to companies. Such costs are reflected in the performance of both buyer side and supplier side. Therefore, companies should align their EP with different trading partners to get maximum efficiency and benefits.

### **6.2 Limitations and Implications of Future Research**

Recall that we chose case companies on the basis of representativeness and accessibility, the IT context of this study focuses on low-integrated systems which are the most popular means of e-commerce transaction in Taiwan manufacturing industry (see figure 6-1 and figure 6-2) and leaves highly-integrated EP an unsettled subject. The proposed framework provides a further potential to test our propositions. In our study, we use perceived operational benefit to evaluate system performance instead of quantitative measurement. In the future we can design more quantifiable measures to further examine the impact of fit on system performance. Moreover, we have tried to develop an industry-wide questionnaire to test our hypotheses in the early beginning,

but at the end we did not conduct this survey due to the time constraint. Hence, the result derived from the case study can be further validated via a future survey.

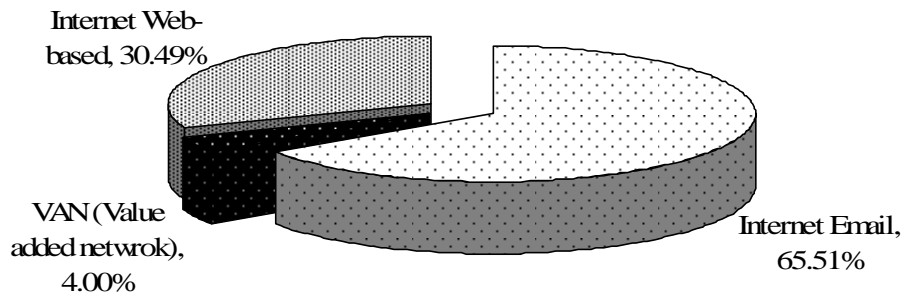


Figure 6-1. Percentages of order dollar amount placed to suppliers via alternative electronic means in Taiwan manufacturing industry

(source: Taiwan E-Commerce Yearbook, 2005)

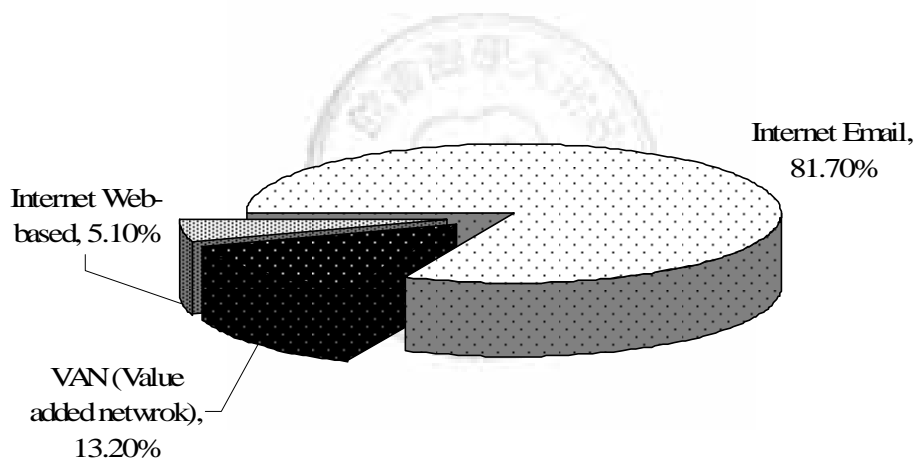


Figure 6-2. Percentages of order dollar amount received from customers via alternative electronic operation in Taiwan manufacturing industry

(source: Taiwan E-Commerce Yearbook, 2005)