# Chapter 5.0

## Conclusion

### 5.1 Summary of Results

This study adopted the questionnaire survey method to examine the effectiveness of information system in respect of user satisfaction. The statistical tools used were cross tabulation, Chi-square test, factor analysis, reliability and coefficient correlation test.

The results of Chi-square showed that there was no relationship among the different groups in respect of age, education, and position/designation, to the level of user satisfaction.

The results of factor analysis and reliability test showed that there were three main factors that affected the user satisfaction. The three factors extracted were the information and system quality; knowledge and involvement; and output quality. These factors were perceived by end-users as important in the systems provided. These factors accounted for 86.8% of the variance explanations. The reliability test showed that 96.45% of the tools used was very reliable.

Single- and composite-scales measurements have also been tested and the results showed that they were highly correlated. Both single - and composite-scales showed the same effectiveness of the systems. This meant that future researchers can choose to use single- or composite--scale in their studies.

Baroudi et al(1988) mentioned that the advantage of standard measures. First, it allows comparison of scores across departments, systems, users, organizations, and industries. Second, it allows both practitioners and researchers to utilize a readily available instrument, avoiding time-consuming process of developing a new measure each time an assessment of information user satisfaction is required. For example, standard systems tend to reduce the amount of work for the central support staff for a couple of reasons. For example, there are fewer questions if everything looks the same from one workstation to the next; and question can often be answered by colleagues in the same office rather than by central services.

The study had successfully developed a tool to measure the success of information system in terms of end user satisfaction using the behavioral approach.

#### 5.2 Implications

The measuring tools for the user satisfaction can be used in three different scope within the organizations.

Firstly, users at different hierarchical levels within the organization will have different views about information system's success, and may be the service attributes that contribute to success. Also, the extent of user involvement in the development of the system may be a factor in the judgment about success.

Secondly, different types of information system could affect the user's perception of success, especially where the anticipated benefits varies. Success could come from cost savings, improved quality and customer service levels, or from strategic advantage. A variety of systems was included in the studies to achieve such understanding.

Lastly, the tool is also useful to measure various organizations within the same sector. If the same systems are provided to the different organization, and obtained significantly different results, the management can use the result to review their management and systems provided.

### 5.3 Future study

As mentioned earlier, the information systems in Malaysia organizations are still in their infancy stage. Therefore, the study should be conducted again after the systems provided become more mature, so that more companies will participate and better and higher validity results will be obtained.

Besides that, this study only concentrated on end-users' perception towards the information systems provided in general. The area of study can be expanded to other industries, for example, service industries, telecommunication, medicine etc.

For the researcher who are interested conducting an in-depth study, they can further expand the study to the specific factors which was generated from this study.

#### 5.4 Conclusion

The results obtained showed that the effectiveness of an information system was highly dependent on the three main factors that were the information and system quality; knowledge and involvement; and output quality.

The study had achieved its target in developing and testing a modified instrument for measuring IS effectiveness in organizations through user perception. The application of this instrument was to test the system's effectiveness in the electrical and electronic manufacturing sectors. Both J Miller(1987) and Barourdi et al (1988) obtained the same result in the different sectors and different environment in their study, that is, J Miller conducted the study in financial sectors whereas Barourdi et al conducted the study in mix functional operations. This provided the evidence that the instrument can be used in any sector or different functional operations.

Out of the eight companies analyzed, the respondents from six companies were satisfied with the information systems provided. On the other hand, respondents from two companies were dissatisfied with their companies' information system. The companies should therefore take appropriate actions to analyze and determine the causes for the dissatisfaction and appropriate steps should be taken to overcome such problems

The advantage of this standard measure was that, it allowed comparisons across the departments, systems, user, organizations, and industries. In addition it also allowed both practitioners and researchers to utilize a readily available instrument, avoiding the time-consuming process of developing a new measure each time an assessment of user satisfaction is required. This showed that the instrument is borderless.

Information technology has spawned a demand for a new breed of managers termed as hybrid managers, who incorporated an understanding of technical areas

with management of change and business knowledge. It is also imperative for managers to understand the underlying technology they are working with, so that they would be able to apply the technology more efficiently. Especially critical are the managers' attitude on how well their information needs were satisfied (Ives et al., 1983; Wescott, 1985) and users' opinion about how well the system enhanced their job.