CHAPTER 5
CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter concludes this study by providing a summary of the objectives on the impacts of E-commerce on manpower requirements in Malaysia. It then proceeds to discuss the investments in IT and E-commerce and also a discussion on E-commerce training and finally some policy recommendations for effective and efficient implementation of E-commerce in Malaysia.

5.2 The Impacts of E-commerce on Manpower Requirements

In general, E-commerce applications in Malaysia have brought tremendous change in the way organizations and firms conduct their businesses. As people handle organizations, this means that the E-commerce applications also have a direct impact on the manpower requirements. It involves many parties and at all levels of the organization, such as the structure of the organization have to be changed from traditional way of doing business to business on-line, the employees themselves have to be educated and retrained a few times during the course of their working life due to the rapid changing nature of the subject itself, the government also have to think of new policies regarding the ICT and last but not least, the consumers.

The objectives and the findings of this research are summarized in table 5.1 below:
<table>
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<th>Objectives</th>
<th>Findings</th>
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<td>a) To find out the level of knowledge concerning E-commerce among the workers in Malaysia</td>
<td>The majority of the workers indicated that they have heard of E-commerce but some of them were not sure what it was all about. This is may be because E-commerce is relatively a new subject to most of them.</td>
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<td>b) To investigate the impacts of E-commerce on manpower requirements in Malaysia</td>
<td>Undeniably E-commerce has great impacts on manpower requirements. E-commerce, not just introduce new technology, it requires the workers to learn new skills in doing business on-line. The Malaysian manpower must have knowledge on the E-commerce applications, specifically using the Internet for marketing, advertising, customer service and support, ordering, delivery and payment. The advent of E-commerce, requires that the current and future workforce of Malaysia be computer literate, have strong business application skills, and therefore a flexible and multi skilled workforce is necessary.</td>
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<td>c) To examine the implications of E-commerce on human resource development in Malaysia</td>
<td>The changing requirements in human resource means the government along with the private sectors have to invest more in education, especially to produce more computer literate workforce. These skill requirements place new demands on schools and vocational training facilities to be improved. A system of education that familiarizes young students with the technology of the Internet can greatly reduce skills acquisition costs and decreases in participation rates in E-commerce in the various segments of society.</td>
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<td>d) To find out what kind of training is needed in human resource for E-commerce</td>
<td>ICT is a highly dynamic field, it keeps changing very rapidly over time. Due to its dynamic nature, the manpower involve in ICT field need to be trained and retrained to be able to cope with the changes. The empirical findings in this study reveal that the majority of the employees indicated that they need more training to handle E-commerce. Organizations can train their</td>
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resources locally or send them to get exposure from overseas, which probably will be costly. The present employees can easily be trained by on-the job training where they do not have to spend too much money and can train many workers at the same time.

5.3 Human resource

As Malaysia enters the 21st century, human resource development will continue to remain a key strategy in ensuring that all Malaysians share in the nation’s prosperity and develop a dynamic labor force that is globally competitive. The widespread application and diffusion of ICT in all sectors will require workers with high level of computer literacy and high technical skills. According to a joint-study by the National Productivity Corporation, (NPC) (a Statutory Body under the Ministry of International Trade and Industry) and University of Malaya (UM), one of the reasons E-commerce is hard to be fully implemented is because of the human resource factor. The findings in their research revealed that there is a lack of skilled workers. This is may be due to the fact that E-commerce is relatively new hence many resources (employees) have not been exposed to it. In relation to this fact, is the lack of knowledge, where many workers indicated they have heard of E-commerce but some do not actually know what E-commerce is all about.
This fact is also revealed in the current research from the answers given in the questionnaires.

Another related matter to human resource is pertaining to the change of mindset of the workers. Since E-commerce is a new way of doing business, the workers (resources) have to change their mindset and accept new way of conducting their daily transactions. We have to bear in mind that not everybody is ready to change their mindset swiftly, especially in learning new skills and technologies. It also involves a lot of money. This will mean that more IT professionals from other countries need to be brought in to teach the new skills and this will involve more money.

Another related matter is the lack of technical experts in E-commerce. According to a study by NPC and UM (1999), there is an increase in consultancy fees among organizations that implemented E-commerce. This implies that these organizations did not have their own E-commerce experts and thus have to depend on outside consultants.

5.4 Training

Training is essential to keep up with the latest changes. As Malaysia is shifting from productivity-based to knowledge-based workers, training is becoming more important. The empirical findings in this study showed that the majority of the respondents indicated that they need more training to be able to cope with the changing technology. This finding is similar to another finding in a study by NPC and UM (2000), where they found out that 46 percent of the organizations surveyed do send their employees for E-commerce training. However, there was still a majority of the organization (54 percent) did not do so (Table 5.2).
Table 5.2: Organization Send Staff for E-commerce Training

<table>
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<tr>
<th>Send for training</th>
<th>Frequency</th>
<th>Percent (%)</th>
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<tbody>
<tr>
<td>Yes</td>
<td>258</td>
<td>46.2</td>
</tr>
<tr>
<td>No</td>
<td>301</td>
<td>53.8</td>
</tr>
<tr>
<td>Total</td>
<td>559</td>
<td>100.0</td>
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5.5 Policy Recommendations on E-commerce

The recommendations made were based on the general issues related to the barriers in implementing E-commerce on a full-scale basis in Malaysia. These issues include the high cost of implementing E-commerce infrastructure, the security issue and the human resource factors. Regarding the high cost in implementing E-commerce infrastructure, it is recommended that special allowance or exemption in the form of tax relief or subsidy to be given to organizations that implement E-commerce. The government also should play their role by not imposing too many regulations for organizations that want to set up E-commerce applications in Malaysia. There also should be a clear guideline for the setting up of E-commerce infrastructure. What is more important is that the government and the relevant agencies must disseminate the guideline to all organizations in Malaysia so that they are aware of its existence. The government also should allow foreign organizations to set up E-commerce in Malaysia so that we can benefit from their skills and technology.

One of the main barriers to the implementation of E-commerce in general and in Malaysia as well, is security. The security issues involved were hacking and viruses as well as the security for on-line payment using credit cards and others. It is recommended
that severe penalty for hackers be implemented and a stricter cyberlaws to be enforced. Related to this matter is law to protect consumers against defective goods and services purchased on-line. So far, Malaysia has set up a working committee to handle this problem. Problem arise as consumers do not have a channel to complaint to if the goods or services obtained on-line are defective as the Ministries for Consumer Affairs do not cover them under their laws. Thus it is recommended that merchandise purchased on-line be covered under some kind of laws to protect consumers.

With regard to human resource problem, such as lack of skill, knowledge and keeping up with the changing technology, it is recommended that every organization have a structured training program that follow a proposed training guideline. Training programs should be geared towards skills training and business re-engineering to need s of E-commerce. On top of that, it is also recommended that the government to provide more computer facilities to the people in urban as well as rural areas. This is to give equal opportunity to every aspects of the society to be computer literate. School children should be taught about computers as early as in primary school so that more people learn about computer and its related technology at early age, however, the government should be careful not to generate a supply of skilled manpower that exceed the demand.

5.6 Conclusion

Undoubtedly, the advent of IT has tremendous effect on manpower requirements and employment in Malaysia. The manpower requirements are changing from productivity-based workers to knowledge-based workers. The present and future workforce must be computer literate, highly creative and innovative, as in the world of E-
commerce, creativity is essential in order to be able to cope with the rapid changes in skill and technology.

On the other hand, the overall effect of E-commerce on employment will be the balance of creation of direct and indirect new jobs; especially in web designing (the creation of web-sites is one of the first steps that organizations have to take to do business on-line) created by increased demand and productivity, and job losses, due to workers or other intermediaries, especially in retail) being replaced. Gains and losses may differ by industry, geographic area or skill group. In order to assess the impact of E-commerce on employment, it is important to understand in which industries it is generating or will generate new demand and growth, the type of jobs to be eliminated or created, with emphasis toward IT skills development.

In general, the main problem in implementing E-commerce in full scale is the human resource factor. The empirical findings in this study indicated that, in general, it is agreed that the infrastructures for IT and E-commerce applications are adequate but the human resource to handle them are still insufficient. The government also can accelerate the E-commerce applications in the business industry by implementing stricter policies regarding security using Internet and also enforcing stricter rules to protect consumers doing transactions on-line.