### **CHAPTER TWO**

#### RESEARCH BACKGROUND

### 2.4 INTRODUCTION

This chapter provides the explanation and draws the discussion of the chosen background context of the current study about electronic equipment in Malaysia. This chapter will discuss the role of electronics office equipment in the global market competition and the growth of the electronic industry in Malaysia. One of the important issues which will be illustrated is the discussion on how the assessments move from electronic brand ranking to ethical ranking and its relevance with the issue of this study (i.e. the ethical brand). The presentation of this chapter will start from the study's research background.

### 2.5 RESEARCH BACKGROUND

The aims of this research are to identify what the components of the ethical brand are and to investigate the effect of the ethical brand on the industrial buyers' responses (e.g. company reputation, and brand loyalty) in the context of electronic office equipment in Malaysia. Ethical aspects are described as 'essential elements' in business activities. One illustration is the increasing use of electronic office equipment which results in the emergence of environmental issues because of the waste. On the other hand, the term the ethical brand is a new value, and concerns environmental responsibility. Therefore, it is important to conduct this study. This study tries to identify whether this new value has a significant role and its effect on business buyers' responses towards electronic office equipment. The next section presents an overview of electronic equipment and the growth of its users in Malaysia.

### 2.6 THE ROLE OF ELECTRONIC OFFICE EQUIPMENT

With the growth of Internet users and global competition, business-to-business (B2B) marketers have changed their business practice strategy by adopting technology equipment (i.e. digital products) that can help improve their competitive position in the new economy (Mudambi, 2002). The business' environment has significantly changed from the traditional to the modern, in which almost all business sectors use electronic office equipment to provide a better service than their competitors. Nowadays, companies can even do transactions by using information technology equipment, which is well established in e-commerce. Using information technology, the company can provide various important information; such as introducing new product categories together with the respective specification and the benefits that are useful for their customers. In addition to customer service, the equipment is also frequently used by many companies for their internal activities, such as quick and accurate financial reporting and other routine activities. Especially, the business-to-business company category is typified by a company that uses the network for business transactions. Furthermore, many companies use the Internet efficiently through applying technology information to support their activities, such as advertising, marketing, selling, and direct distribution (Hoffman and Novak, 1996). These technologies need some electronic office equipment (such as computer servers, desktop computers, notebook computers, dot matrix printers, laser printers, photocopiers, scanners, multi-functional products that can perform more than one function like printing, scanning, copying, and faxing, multimedia projectors/LCD projectors, electronic whiteboards, PBX/PABX-Phone-line switches, and fax machine) to support it.

Today, many types of products and brands of electronic office equipment fill the market place, especially products for industrial buyers. This is because of the high

demand by industrial buyers. Therefore, the growth of a company that invests in the electronics industry significantly increases, which in turn provides a good contribution to the country's manufacturing output (www.mida.gov.my).

For a clearer point of view, the next section will describe the electronics industry in Malaysia.

# 2.6.1 The Electronics Industry in Malaysia

The Malaysian government has successfully attracted investors from around the world to invest in the electronics sector. As reported by the government (www.mida.gov.my) many companies from United States of America, Europe, Japan, Korea and Taiwan who manufacture electronic products are located in Malaysia. This industry has world-class capabilities and the electronics industry provides the largest contribution to Malaysia's manufacturing output.

According to the Malaysian Government, Malaysia has established a full-fledged electronic Information and Communications Technology (ICT). ICT products from Malaysia consist of two sub-sectors:

- Computers, computer peripherals and data storage devices; and
- Telecommunication equipment/devices.

Furthermore, Malaysia is well known for its Multimedia Super Corridor (MSC) with a comprehensive global communication and logistics framework. This package is ready to be offered around the world. Many weel known international companies, such as National Semiconductor, Intel, AMD, NEC, Hitachi, DELL, Fujitsu, Toshiba, Samsung, etc have participated in this sector in Malaysia.

This successful condition is based upon the high commitment of the Malaysian Government and the continuous upgrading of the infrastructure to support the growth of this sector. The following table illustrates the growth of Malaysia's electronic industry between 2000 - 2007:

Table 2.1 Malaysia's Electronics Industry, Years 2000-2007

	Output		Employment		Exports		Imports	
Year	RM billion	% growth	No.	% growth	RM billion	% growth	RM billion	% growth
	(US\$ billion)				(US\$ billion)		(US\$ billion)	
2000	167.1	31.0	423,600	10.9	212.7	18.4	143.4	30.6
	(44.8)				(56.0)		(37.7)	
2001	144.4	15.1	355,800	16.0	182.6	14.2	122.1	14.9
	(38.0)				(48.0)		(32.1)	
2002	136.6	(5.4)	345,500	(3.0)	188.4	3.2	138.6	13.5
	(35.9)				(49.4)		(36.5)	
2003	147.1	7.7	360,048	4.2	183.2	(2.8)	138.3	(0.2)
	(42.0)				(48.2)		(36.4)	
2007	197.1	7.6	437,641	5.0	266.3	9.8	Na	Na
	(61.4)				(83.2)			

Source: www.mida.gov.my (2008)

The above table indicates that the total output of Malaysia's electronics industry is RM197.1 billion or US\$61.4 billion for 2007 with a level of growth averaging 7.6 percent from 2003. In 2007, this sector employed 437,641 workers with a level of growth averaging 5.0 percent from 2003. The total exports for 2007 reached RM266.3 billion with an average level of growth of 9.8 percent.

The following figure with bar-chat clearly shows the total output and exports of Malaysia's electronics industry:

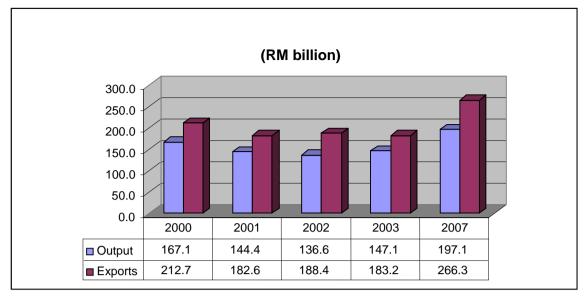


Figure 2.1 Malaysia's Electronics Industry, year 2003-2007

Source: www.mida.gov.my (2008) (data processing)

The success of the electronics industry in Malaysia is achieved through the high level of support from the Malaysian Government. The government pays much attention to creating a business friendly environment. This creativity of the government has provided eco-friendly surroundings with an ideal environment. This is in line with the role of ethics in business practices and is an issue of increasing relevance to business. Therefore, companies involved in this sector are willing to produce an environmentally friendly brand to achieve a higher ethical ranking performance.

## 2.6.2 From Electronic Brand Ranking to Ethical Ranking

Some empirical studies in the past have indicated that the business performance of electronics brands can be evaluated by the quality performance of the product and service (e.g. Bendixen et al., 2004; Mudambi et al., 1997; and Chaudhuri & Holbrook, 2001). Price is also another significant aspect in the purchasing decision (e.g. Mudambi et al., 1997; Alvarez & Galera, 2001; Neslin & Gedenk, 1999). Brand ranking, is evaluated by the total sales achieved in conjunction with the quality performance. Brandweek.com (2002) has recorded some product categories for electronics to

perform brand ranking according to customer evaluation. For example, Hitachi is located in the first rank because it has the highest total sales of up to US\$60.1 billion with a quality performance of 6.29. Comparing this to Panasonic, even though Panasonic has better quality (7.05) than Hitachi's, its total sales is US\$51.7 billion, so it is placed in rank two. The highest quality performance is Sony with a value 7.54, but its total sales are lower (US\$47.6 billion) than that of Hitachi. Thus, Sony is located in third rank.

The following table illustrates the ranking according to customers' (both individual and industrial buyers) evaluation of electronics brands:

**Table 2.2 The Electronics Brands Ranking** 

Rank	Brand	Location	Lead Agency,	Total Sales (US \$ billions)	Media Expenditures (US \$ millions)	Quality
1	Hitachi	Hitachi, Brisbane, CA	Hakuhodo, New York	60.1	13.8	6.29
2	Panasonic	Panasonic, Secaucus, NJ	Grey Worldwide, New York	51.7	25.1	7.05
3	Sony		Young and Rubicam, New York	47.6	201.3	7.54
4	Philips	Philips, Atlanta	DDB, New York	28.8	87.3	6.66
5	Samsung	Ŭ	FCB, New York	24.7	49.9	6.1

Source: Company Report (sales); CMR (media); Total Research, (2002)

However, business practices have changed from the total sales and quality performance approach to social and environmental performance concerns. The increasing use of electronic equipment has already impacted on the decreasing quality of life because of

waste (Nnorom and Osibanjo, 2008). It is motivated by social and environmental concerns; ethical aspects are already considered as an important issue in business performance appraisal. One illustration is the increasing use of electronic office equipment which resulted in the emergence of environmental and social issues because of the waste. Therefore, today, best ethical quote score, best ethical quote progress and best reported performance becomes the standard to evaluate brand ranking (Covalence, 2007).

The method used by Covalence's ethical quotation system is: 'A reputation index based on quantifying qualitative data, which are classified according to 45 criteria of business contribution to human development such as Labour standards, Waste management, Product social utility or Human rights policy. It is a barometer of how multinationals are perceived in the ethical field. The system integrates thousands of documents found among media, enterprise, NGO and other sources, for producing the Ethical Quote curves. These curves measure the historical evolution of the reputation of companies regarding ethical issues' (Covalence, 2007; p. 6).

Therefore, Covalence (2007) recorded some product categories of electronic equipment to perform brand ranking according to customer evaluation. The following table portrays the ethical brand ranking:

Table 2.3 The Electronic Equipment the Ethical Brand Ranking

Electronic Equipment Brand						
Rank	Best Ethical Quote Score	Best Ethical Quote Progress	Best Reported Performance			
1	Hewlett-Packard	Dell	Dell			
2	Intel	Intel	IBM			
3	Dell	IBM	Hewlett-Packard			
4	IBM	Hewlett-Packard	Siemens			
5	Xerox	Ricoh	Toshiba			

Source: Adapted from Covalence Ethical quotation system (2007)

## 2.7 CONCLUSION

The growth of a company that invests in the electronics industry significantly increases, which in turn provides a good contribution to the country's manufacturing output. However, the increasing use of electronic office equipment results in the emergence of environmental issues because of the waste. Consequently, business practices have changed from the total sales and quality performance approach to the social and environmental performance concerns. It is motivated by not only economic, but also social and environmental concerns as ethical aspects of branding are already considered as an important issue in business performance appraisal. On the other hand, the term the ethical brand is a new value, and concerns environmental responsibility. Therefore, it is important to conduct this study to identify what the components of the ethical brand are and to investigate its relationships based upon buyers' responses in the context of business to business as an outcome of this study.

The next chapter will present the clarification and justification of this study's conceptual framework as the literature review of this study.