### **CHAPTER 1: INTRODUCTION**

#### **DEBIT CARDS IN MALAYSIA**

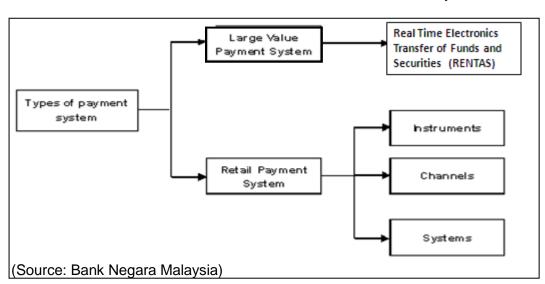
### Concept of Debit Card as a means of payments in Malaysia

The acceptance of electronic payment systems among Malaysian consumers has increased from year to year. In recent years, the value of cards transactions in Malaysia increased from RM 51.2 billion to RM 94.4 billion between 2006 and 2010. In terms of volume, electronic payments or card transactions have increased from 22.3 billion to 23.5 billion between 2006 and 2010. The main factor that increases the electronic payment instruments usage among consumers is its convenience (BNM Statistics, 2010).

Besides, one of the contributing factors to consumer willingness to use the electronic payments especially debit card, is the confidence conferred from security measures of electronic payment instruments implemented by all card issuers (Banks) that provide protection against theft and fraud. Besides data encryption methods used for all the debit card transactions, the security feature such as Bankcard; would require Personal Identification Numbers (PIN) to be keyed in on the EFTPOS terminals before the transaction to be sent for authorization and approved by the Banks. Central Bank of Malaysia or Bank Negara Malaysia (BNM) has listed debit card transactions as one of the retail payment instruments practiced in Malaysia.

Other types of retail payment instruments include:

1. Cheques 3. Charge cards



2. Credit cards

4. E-money

Table 1: Retail payment instruments practiced in Malaysia

# Retail payment systems

Retail payment systems include systems that process smaller-value payments such as cheques, electronic funds transfer, that is, the debit and credit transfers and Electronic Funds Transfer at Point of Sale (EFTPOS) transactions. While cash continues to be an important payment method, non-cash payments made via the various retail payment systems have increased significantly. This reflects a positive shift in consumer preferences towards payment methods which are largely driven by considerations of convenience, speed with which payments are processed, the reliability and security of the payment method and the fees charged by the financial institutions in providing the payment services.

Major Retail Payment Systems in Malaysia						
System	Description	Operator				
National Electronic Cheque Information Clearing System (eSPICK)	An image-based cheque clearing system where the cheque image and magnetic ink character recognition (MICR) code line data are captured and transmitted electronically to facilitate clearing.	MyClear				
Interbank GIRO (IBG)	An interbank funds transfer system that facilitates payments of up to RM500,000 per transaction.	Malaysian Electronic Payment System Sdn. Bhd. (MEPS)				
Shared ATM Network (SAN)	A network switch which enables bank customers to access their funds from any of the participating banks' automated teller machines (ATMs). There are currently two networks i.e. MEPS SAN and HOUSe. MEPS is owned by all domestic commercial banks, two Islamic banks and one development financial institution, while HOUSe is owned by four locally incorporated foreign banks.	MEPS and HOUSe				
e-Debit	A switching network which enables participating banks' ATM cards to be used to pay for purchases at point-of-sale (POS) terminals at all participating retail outlets.	MEPS				
Financial Process Exchange (FPX)	An Internet-based multi-bank payment platform that leverages on the Internet banking services of banking institutions to offer online payment for electronic commerce (e-commerce) transactions.	MEPS				
MEPS Direct Debit	An interbank collection service for regular and recurring payments enabling automated collection directly from a customer's bank account at multiple banks with a single authorisation.	MEPS				

Table 2: Major retail payment systems in Malaysia

(Source: Bank Negara Malaysia)

# Trends of debit card usage for retail payments in Malaysia

On average, 44 electronic payment transactions per capita were made in 2010 compared to 29 in 2006. The increase is mainly attributable to the usage of credit cards, electronic money (e-money) and Internet banking while the usage of ATM (excluding cash withdrawals), debit cards and IBG are increasingly gaining wider acceptance.

Credit card transactions continued to grow despite a 21% reduction in the number of credit cards in circulation in 2010, mainly due to the imposition of the Government service tax since 1 January 2010. Whilst the number and value of debit card purchases remained much lower than credit card, debit card usage has increased more than four-fold from 2006 to 2010, reflecting consumers' increased preference for the `pay now' method. The awareness and promotional activities rolled out by debit card issuers, such as reward programmes, cash rebates and discounts, had also believe contributed to the higher usage.

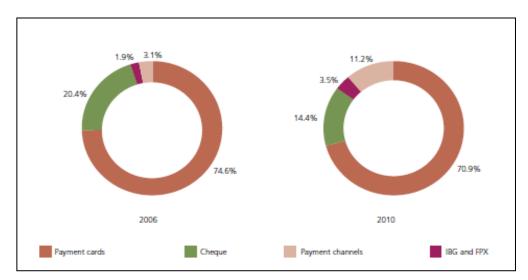


Figure 1: Share of non cash retail payments in Malaysia

(Source: Bank Negara Malaysia)

Generally, debit cards can be broadly categorized into two groups: PIN-based debit cards and signature-based debit cards. PIN-based debit cards allow cardholders to make payments or withdraw cash from their deposit accounts at

ATMs and EFTPOS terminals. The payment or cash withdrawal is effected through an online transfer of funds from the cardholder's account. Visa Debit card and the MasterCard Debit card are examples of signature-based debit cards in Malaysia.

In Malaysia, anyone that is having either saving or current account with local banks would be issued an ATM card either:

- 1. Serves only for transactions at ATM (account related transactions; withdrawal, balance inquiry, etc).
- Have MEPS e-Debit function (PIN-based debit card) that could be used (for retail purchase) on EFTPOS terminals in Malaysia that accepting edebit MEPS transaction.
- Serves as an international debit card (signature-based debit cards) which the ATM card is carrying Visa or MasterCard logo and it can be used (for retail purchase) on any EFTPOS terminals worldwide that accepting Visa or MasterCard transaction.

The ATM card that has MEPS e-Debit function and scheme debit card is basically a payment card where it could be used for retail purchase and payment at any merchants that displaying Bankcard or MEPS logo. Via the EFTPOS terminal, cardholder would need to key in their PIN number before the transaction amount (for retail purchase and payment) is deducted directly from the cardholder's bank account upon authorization by the card issuer (Banks). Once the transaction is approved, Banks would authorize the purchase and a transaction record (transaction receipt) would be printed and issued to the cardholder.

The primary benefits of debit card usage as a substitute of cash for purchase or payments are:

- 1. Cardholders can manage their outgoing cash more effectively and the cash expenditures could be easily tracked.
- 2. Cardholders need not worry about financial charges (credit interest), late payment penalties, and accumulative card debts that are associated with credit and charge card usage.

Since day one when debit card was introduced to Malaysian consumers; banks, merchants and payment industry player such as MEPS have continuously collaborating in order to improve and increase the acceptance of debit card as a means of payments by Malaysian. All parties also focus in providing the necessary support to each other in ensuring the debit card transactions are always meet the consumer expectation such as fast, reliable, secure and user friendly for a continuous adoption of this electronic payment by the consumers.

Positioning debit card as a convenient substitute for cash and as a more cost efficient payment instrument in Malaysia would facilitate government aspiration to play a lead role within the regions in the migration to electronic payments. The 15

result for these continuous initiatives is shown by the increase in the number of electronic payment transactions made per capita to 43.6 transactions in 2010 as compared to 14.3 in 2003, and that more than 80% of retail payment transactions are conducted electronically (BNM Financial Stability and Payment Systems Report, 2010).

### History of Debit Card in Malaysia

In early 1980s, Automated Teller Machines (ATM) cards were introduced in Malaysia. During late 1980s, Malaysians started using debit card for purchases and it only became a popular payment method among consumers in early 2000. To tighten the security and curbing the possibility of ATM card fraud; in October 2003, all magnetic stripe ATM cards were converted to chip based ATM card and known as Bankcard. Government agencies of Malaysia started using debit card for their payment transactions in 2004 and in 2005, the entire Malaysian banking industry migrated to chip based infrastructure for ATM and credit card.

#### Debit Card issuers in Malaysia

Payment cards remained the most popular retail payment method for Malaysians, accounting for 72% of the total number of non-cash retail payments as at the end of 2009. However, due to slower economic activity, the growth in total number of card payments recorded a marginal increase of 4.5% in 2009 as compared to 11.7% in 2008. Efforts to deploy more card terminals to provide

payment convenience and encourage the switch from cash to cards continued to be pursued, with an increase in the deployment of 16,998 terminals in the market during the year.

The main use of domestic PIN-based ATM card or MEPS e-Debit is for fuel purchases while the international debit card scheme (visa or MasterCard debit) is mainly used at retail outlets. More promotional programmes for the use of debit cards were rolled out by the financial institutions to encourage its usage as debit cards offer a significant opportunity for financial institutions to reduce cash withdrawals at the ATM which would in turn bring down ATM transaction related cost.

From all local banks and financial institutions in Malaysia, only 13 banks are issuing MEPS e-Debit cards and 9 banks are issuing the international debit cards for their account holders.

	Year	Year	Year	Year	Year
Card issuers	2006	2007	2008	2009	2010
ATM card	15	14	19	22	22
E-debit card	10	10	11	13	13
International debit card	7	6	8	8	9

Table 3: Debit card issuers in Malaysia from 2006 – 2010

(Source: Bank Negara Malaysia)

List of banks in Malaysia that issuing MEPS e-Debit card and International debit card:

No	MEPS e-Debit card issuers	International debit card issuers
1.	Affin Bank	Affin Bank
2.	Agro Bank	Agro Bank
3.	Bank Islam	Bank Islam
4.	CIMB Bank	CIMB Bank
5.	Alliance Bank	Alliance Bank
6.	Maybank	Maybank
7.	Public Bank	Public Bank
8.	RHB Bank	RHB Bank
9.	EON Bank Group	EON Bank Group
10.	Bank Rakyat	
11.	Bank Muamalat	
12.	AmBank	
13.	Hong Leong Bank	

Table 4: Current debit card issuers in Malaysia

It is believed that the decision for banks to introduce MEPS e-Debit card or international debit card or both to their account holders is based on the number of account holders that they have and its growth from year to year. Besides, the preference and background of account holders are also taken into consideration especially before the banks decide to issue an international debit card. Banks that are involved in merchant acquiring business such as Maybank, Public Bank and RHB Bank are also seen to be more aggressive in promoting the usage of their international debit card especially at their acquired retail outlets. These banks are introducing rewards program such as cash rebate and extra convenience to their cardholders such as cash back; cardholders could do cash withdrawal at selected retail outlets.

## Debit Card system in Malaysia

### MEPS' roles in Malaysia

The roles of Malaysian Electronic Payment System (MEPS) are to:

- a) Develop, implement and maintain the switching network for e-Debit payment services.
- b) Provide the shared infrastructure.
- c) Operate the e-payment clearing and settlement system.
- d) Ensure competitive and cost-based pricing for e-Debit switching and its related services.
- e) Govern adherence to the relevant standards.

Since 16 September 2011, the above roles have been given to a newly established subsidiary of Bank Negara Malaysia named; Malaysian Electronic Clearing Corporation Sdn. Bhd. or MyClear.

## **MEPS e-Debit Card**

MEPS application is a payment application residing in the ATM cards issued by banks in Malaysia. It enables cardholders to use the ATM card to make payment for purchases at participating merchants nationwide. All MEPS e-Debit transactions are made via an EFTPOS terminal or kiosk. Cardholders' savings or current account is linked to the ATM card would be debited online during the transaction on EFTPOS. No registration is required for the e-Debit service. All MEPS e-Debit transactions are online and require PIN verification (same ATM PIN). The requirement for the EFTPOS terminal to accept MEPS e-Debit cards is it has to be chip-enabled. The e-Debit service at MEPS is available 24 hours. There are 3 types of MEPS e-Debit transaction:

- a) Normal purchase transaction;
- b) Purchase cancellation; and
- c) Purchase with Cash Back

The simplified processes of MEPS e-Debit acceptance and transaction are as below diagram:

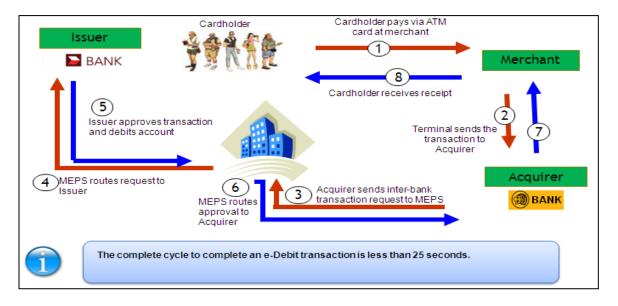


Figure 2: Simplified processes of MEPS e-Debit acceptance

# The key value propositions of MEPS E-Debit

The main intention of MEPS establishment was to enable the interbank payment facility in Malaysia. This company owned by the government is responsible in establishing the infrastructure that provides linkage between banks in Malaysia. The infrastructure would enable banks to make funds transfer seamlessly and in a secured environment. Security has always been the top priority in MEPS business. Since day one, there are multiple security features that have been made a mandate to banks to have the online payment transaction. The most prominent one is chip and pin acceptance on the EFTPOS as well as data and line encryption that protects the cardholders' data being compromised during any MEPS e-Debit transactions. The real time transaction of MEPS e-Debit has 21 made the payment is free from chargeback. This means that the exact amount of transaction being debited from cardholder's account right after the transaction being approved by the card issuer. The security features on the MEPS e-Debit card as well as the transaction has produce a fraud free transaction; which the cardholders are responsible to the usage of their own debit card and the transaction requires card and cardholder to be present when the transaction is initiated (credit card could be charged in non card present situation). The summary of key value propositions of MEPS e-Debit transaction is as diagram below:

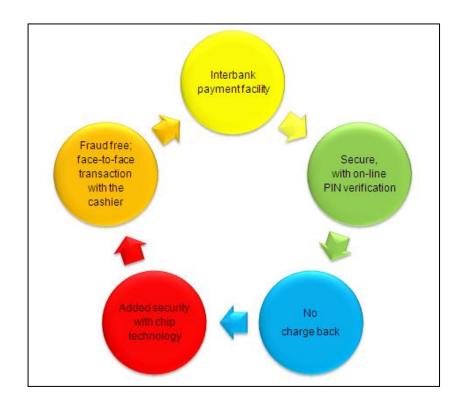


Figure 3: Key value propositions of MEPS E-Debit

## Benefits of using MEPS e-Debit transactions

There are several tangible and intangible benefits in using MEPS e-Debit transaction for merchants, consumers, issuing banks as well as the acquiring banks. The summary is shown as below:

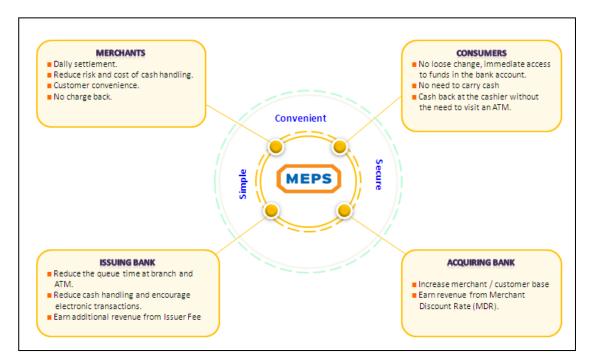


Figure 4: Benefits of using MEPS e-Debit transactions (Source: Malaysian Electronic Payment System Sdn Bhd (MEPS))

There are approximately 50,000 e-Debit merchants that could accept MEPS e-Debit transaction in Malaysia. Currently there are about 122,000 e-Debit terminals that have been deployed nationwide. The e-Debit terminals require the EFTPOS device equipped with PIN pad and SAM slots. ALL EFTPOS terminals 23 in Malaysia have already conformed to the requirements. According to MEPS, the average ticket size for e-Debit transaction is RM460 (MEPS presentation, 2011).

Most of the cardholders are using MEPS e-Debit facility to make purchases at Departmental stores, jewelers and gaming. Consumers that use "Purchase with Cash Back" application using their debit card would be charged a fee of RM1 for every Cash Back transaction. However, there is no additional charge to the customer for any e-Debit purchases. For banks in Malaysia that would like to be one of the MEPS members, the joining fee for Shared e-Debit Network is a onetime admission fees of RM350,000 and RM5,000 monthly subscription fee. At this point of time MEPS e-Debit cards can only be used domestically in Malaysia but they are moving forward for regional EFTPOS acceptance soon.

### International Visa/Master Debit Card

The card is open to all savings & current account customers. It is a signature based transaction card; similar to credit card. The cards are carrying or displaying Visa or MasterCard logo and can be accepted at any domestic & international retail merchant outlets that accept these card brands transactions.



Figure 5: International debit cards

In general, all cards have the maximum daily spend or purchase limit of RM 5, 000 but it can be changed via respective bank's ATM. Both cards are supporting any retail & online transactions. Besides, all transactions made using these cards could be tracked via respective bank's portal such as www.maybank2u.com.my. The difference between MEPS e-Debit card and international debit card are:

Features	MEPS e-Debit card	International debit card
Branding & Acceptance	BankCard (MEPS) via local EFTPOS terminals	Global acceptance
Branding & Acceptance	Over 120,000 locations	Over 29 million locations
Cardholder Verification	Pin Base – ATM & Point-of-Sale (POS)	Pin Base – ATM
Cardinoider vernication		Signature - POS
Card Expiry	Nil	7 Years
	Minimum RM0	Minimum RM0
Purchase Limit	Maximum RM5,000	Maximum RM5,000
	No Default	Default RM500
Card Eligibility	Masses	Masses
Cash Withdrawal	Maximum RM5,000/day	Maximum RM5,000/day
Other Features	ATM withdrawal (Local & Regional – MEPS; & International - PLUS	Dining/Retail Privileges
Other Features		Visa International Privileges

Table 5: Differences between MEPS e-Debit card and international debit card

Technically, the international debit card transaction is almost similar to credit and charge card. The simplified processes of international debit card acceptance and transaction are as below diagram:

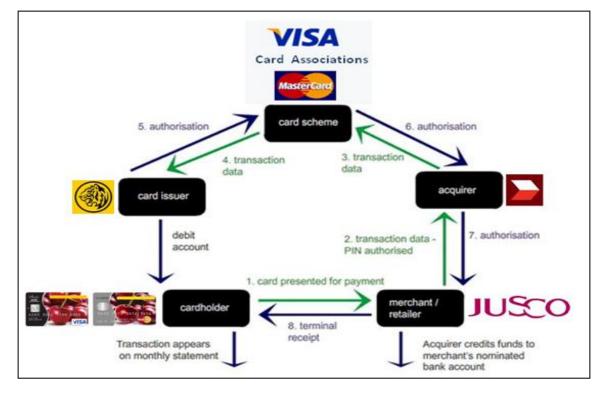


Figure 6: Simplified processes of international debit card acceptance and transaction

# Bank Negara Malaysia's statistics of Debit Card and its usage in Malaysia

In 2009, Malaysian consumers on average, made only 0.4 transactions via debit card as compared to 248 transactions respectively in Norway (BNM Deputy Governor, 2011). In other words, the usage of debit cards by Malaysians is still low. If we look at table below, the number of debit cards and its users since 2006

to 2010 seems to increase every year (BNM Financial Stability and Payment Systems Report, 2010).

Number of cards and	2006	2007	2008	2009	2010
users ('000)					
Credit card	8,833.0	9,901.0	10,812.0	10,818.0	8,547.0
Charge card	272.0	246.0	286.0	285.0	182.0
Debit card	18,861.0	21,887.0	24,437.0	30,092.0	33,533.0
- International debit	4,279.0	4,535.0	4,957.0	6,871.0	8,950.0
- MEPS e-Debit	14,582.0	17,352.0	19,480.0	23,221.0	24,583.0

Table 6: Number of debit cards and its users in Malaysia

However, in terms of increment percentage, there was some sort of 'fluctuations'. In 2007, there was 16% of increase in number of total debit cards from 2006 but the percentage dropped at 11.7% by comparing between 2008 and 2007. Same happened between 2009 and 2010.

Number of cards and users (% of increment)	2007	2008	2009	2010
Credit card	12.1	9.2	0.1	-21.0
Charge card	-9.6	16.3	-0.3	-36.1
Debit card	16.0	11.7	23.1	11.4
- International debit	6.0	9.3	38.6	30.3
- MEPS e-Debit	19.0	12.3	19.2	5.9

Table 7: Percentage of debit cards and its users in Malaysia

In terms of number of transactions, since 2007 the usage of MEPS e-Debit cards was almost at similar rate but international debit cards were increased significantly.

Number of transactions (Millions):	2006	2007	2008	2009	2010
Credit card	208.8	237.7	261.4	276.1	294.9
Charge card	6.0	5.6	5.6	5.2	5.0
Debit card	4.2	9.1	10.7	11.3	18.4
- International debit	2.4	4.5	5.4	6.3	13.3
- MEPS e-Debit	1.9	4.5	5.3	5.0	5.0

Table 8: Number of debit cards transactions in Malaysia

The number of EFTPOS terminals installed has been increased significantly due to the increasing demand by merchants to equip their outlets in accepting electronic payments. As at June 2011, there are more than 196 thousands of terminals being installed nationwide that could accept both types of debit cards:

Number of EFTPOS Terminals (Unit):	2006	2007	2008	2009	2010	June 2011
International debit	93,368.0	119,490.0	146,473.0	160,443.0	180,589.0	196,990.0
MEPS e- Debit	21,592.0	34,754.0	67,581.0	91,328.0	118,467.0	129,405.0

Table 9: Number of EFTPOS terminals in Malaysia

However, not all merchants that have the EFTPOS facilities are accepting MEPS e-Debit card and the number is still low compared to the number of merchants that are accepting international debit card. As usual, the usage of credit and charge card would always dominate the payments or transactions at merchant's outlets:

Number of merchants accepting payment cards (Unit):	2009	2010
Credit card	148,600.0	216,945.0
Charge card	158,269.0	168,166.0
International debit	109,424.0	125,528.0
MEPS e-Debit	72,257.0	84,590.0

Table 10: Number of merchants accepting payment cards in Malaysia

With more than 33 millions of debit cards in circulation, the value of debit card transactions is considered low compared to credit card and charge card. In 2010 for example, the average ticket size per transaction per card for debit card is only RM140.55 (Malaysian top debit card issuer, 2010).

Value of Transactions					
	2006	2007	2008	2009	2010
(RM million)					
Credit card	47,555.0	56,211.0	65,289.0	69,321.0	79,810.0
Charge card	2,340.0	2,419.0	3,060.0	4,144.0	5,177.0
Debit card	650.0	1,129.0	1,958.0	2,774.0	4,713.0
- International debit	344.0	545.0	748.0	1,198.0	2,208.0
- MEPS e-Debit	306.0	584.0	1,210.0	1,576.0	2,505.0

Table 11: Value of debit card transactions in Malaysia

Retail outlets are the most preferred place for debit cardholder to use their card for payment transaction. Using this 2010 data, the usage of debit card at petrol station, restaurant and to pay utilities were still low. The debit cardholder especially the international debit card may not prefer to use their card at petrol station due to the 'pre-authorization' mode that would deduct RM150 from their account regardless the exact amount of petrol purchased. The balance would be credited back after 1 or 2 days depending on the card issuer.

International Debit Card Purchase	2009		2010	
Transactions (% share of total at 5 Largest Business Activities):	Volume	Value	Volume	Value
Retail	48.9	35.2	49.2	34.7
Fuel/petrol	23.3	4.8	21.3	4.4
Professional and commercial services	6.8	9.2	8.1	10.8
Food and restaurant	6.5	2.9	6.2	2.9
Utilities	3.1	2.1	3.9	2.6
Others	11.4	45.8	11.2	44.8

Table 12: International Debit Card purchase transactions in Malaysia

The value and number of debit card transactions may seems increased for the last 6 years. However, with the fast growing number of account holders; it should contribute to a higher number of values and volume of transactions. Hence, banks are finding ways in increasing the average ticket size of spending for both MEPS e-Debit card and international debit cards since it is one the ways for banks to reduce the cash handling cost and improve the payment experience for their cardholders.

### **Research Purpose and Significance of the Study**

This research will study the behavioral intention of consumers in using debit card as a means for their payments or purchases besides the traditional way which is cash.

Technological development has led to the gradual installation of various Electronic Fund Transfer Systems (EFTS) worldwide (Simon, 1994). This EFTS facility is installed at retail merchant's outlets to accept electronic payments from consumers. The scenario has led to the increase in usage of electronic payments such as credit card, debit card, charge card, prepaid card and e-money from year to year. This is in line with the needs and awareness of consumers on the benefits of these payment methods such as better flexibility, convenience, fast and secure.

Although either cash or debit-card deposit can be used as a means of payment in pair wise trade, they are not exactly identical assets. The usage or holding of cash are subject to the risk of loss, theft, forgone interest income, and the inconvenience of carrying them around which incur disutility cost. On the other hand, a debit card deposit is free from the risk of loss or theft and there is negligible inconvenience of carrying a debit card (Kim, Y.S. and Lee, M, 2010). Currently, there are 13 local banks in Malaysia which are members of Malaysian Electronic Payment Systems (MEPS) that enables e-debit (domestic debit card) transaction via their ATM card. Besides, there are also banks that issue ATM card with Visa and MasterCard acceptance that is usually called; international debit card or scheme debit card (Steve, 2009). Cardholders or consumers can make payments or purchases at any authorized retail merchant outlets (that accept MEPS e-debit, Visa or MasterCard transactions) including petrol stations, restaurants, hotels and other places via an EFTS or Electronic Funds Transfer Point-of-Sale (EFTPOS) terminal using their ATM card together with Personal Identification Number (PIN); and no cash involved.

The usage of debit cards has risen from about 18% of households in 1995 to about 59% of households in 2004. This increasing trend is universal to all age and income groups. In 2004, around 41% of low-income households used debit cards, while that of upper-income households reached almost 70% (Mester, 2006).

From 2005 to 2010, the volume of debit card usage in Malaysia also increased however, with more than 57 million (BNM Financial Stability and Payment Systems Report, 2010) of these ATM debit cards issued including Visa and MasterCard debit cards in circulation, the usage of these cards for payment is considered relatively low compared to the volume of ATM cash withdrawals,

credit card and charge card (BNM Statistic, 2011). From the statistic of Central Bank of Malaysia or Bank Negara Malaysia (BNM), it seems that consumers prefer to pay using their debit card for low transaction value purchase. With the tightened policy for credit card's ownership in Malaysia, the usage of credit card would also decline. Hence, in order to increase consumers spending and obtaining the revenue of Merchant Discount Rate (MDR) from the installed Electronic Funds Transfer Point-of-Sale (EFTPOS) terminals, banks have to find ways of getting their debit card holders to utilize the card not only for cash withdrawals but for payments and purchases especially at their acquired To increase the usage of debit card among Malaysian merchant outlets. consumers, the identification and analysis on the factors that affecting the intention of Malaysian consumers to use their debit card is crucial. This would lead to the recognition of the extents for each factor so that Banks could strategize their marketing activities as well as plan on the issuing of their next debit card.

## **Research Objectives**

There are four objectives of this research:

- To identify the factors that affect Malaysian consumers' behavioral intention to use debit card as a means of payment.
- 2. To identify the extent of each factors to affect the usage intention of debit card as a means of payment.
- 3. To gain more insight into the reasons why consumers use their debit card.
- 4. To identify the effect on consumers' behavioral intention to use debit card as a means of payment when purchase amount varies and when cardholders are being offered a reward on their debit card usage.

## **Research Questions**

This research is proposing four research questions with regards to the behavioral intention of consumers in using debit card as a means of payment. Individually, each question is asking about the strength or the extent of two compared factors that contribute to consumer's intention to use debit card. Together, these four research questions would give a good overview of hierarchy on factors that most influencing consumers' behavioral intention to use debit card as a means of payment.

The four research questions are:

- 1. What is the main factor that significantly influences consumers' behavioral intention to use debit card as a means of payment?
- 2. Does performance expectancy has a stronger effect on consumers' behavioral intention to use it as a means of payment compared to effort expectancy?
- 3. Does transaction value of consumers' purchase has a stronger effect to consumers' behavioral intention to use debit card as a means of payment compared to social influence factors?
- 4. Does rewards program has a stronger effect on consumers' behavioral intention to use debit card as a means of payment compared to facilitating conditions factors?

## **Research Scope**

The scope of this research is the consumers' behavioral intention to use debit card as a means of payment. In this research, the consumers or cardholders are the cardholders and users of debit card (ATM card with MEPS e-Debit enabled and international/scheme debit card) that perform transactions that include purchase and payment (e.g. bill payments) via EFTPOS terminals. The payments or transactions via online are outside of research's scope.

### **Organization of Research**

This research is divided into two parts (theoretical framework and empirical study). The first part is an overview of the available literature and provides the theoretical framework of this research. It begins with defining basic concepts in this area: overview of debit cards in Malaysia, the system and acceptance of debit card in Malaysia. The theoretical part then continues with an insight into the most relevant adoption theory used for this research; Unified Theory of Acceptance and Use of Technology (UTAUT).

The empirical part begins by describing the research method and data collection. It includes a description of the factors that contribute to consumers' behavioral intention to use debit card as a means of payment. The empirical section continues with the results. The results are divided into four sections. The sections are divided according to the research questions. In chapter five, the results are discussed and suggestions are made. In the last two sections of the last chapter, future research questions are proposed and an evaluation of this research is made.