Credit Card Holders in Malaysia: Customer Characteristics and Credit Card Usage

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ABSTRACT

As an effort to profile credit card users in Malaysia, this study seeks to examine the relationship between credit card users' characteristics (demographics and socio-economic factors) and credit card usage. Using a convenient sampling method, a survey was conducted on 350 credit card holders in the Klang Valley, Malaysia. Customer background includes gender, age, occupation, and monthly gross income. The credit card usage was measured by items constructed specifically for this research which is adopted from past studies on credit card. Descriptive analysis is used to describe the customers' background and credit card usage, while the relationship between consumer characteristics and credit card usage is being assessed empirically using cross tabulation/chi-square and ANOVA. The findings of this study revealed that there are significant differences in credit card usage among credit card holders of different personal background. However, simple t-tests showed there is no significant difference in credit card usage among users of different gender. This study has significance in terms of providing useful information for developing customer profile and revising credit card promotional strategies.

Keywords: Credit cards, credit card usage, customer characteristics, customer profile

INTRODUCTION

Several studies have related the various dimensions of customer profiling and their impacts on credit card usage. The study by Henry, Weber, and Yarbrough (2001), for example, found that women are more likely to report having a budget than men. Conversely, others have found that women have more credit cards than do

men (Armstrong and Craven, 1993), that men score higher on a test of financial knowledge (Goldsmith, Goldsmith, and Heaney, 1997), and that women have higher levels of debt (Davies and Lea, 1995). Kaynak and Harcar (2001) investigated consumer attitudes and intentions towards credit card ownership in Turkey and found that the age group of between 36 and 45 is more likely to own credit cards than any other group. Barker and Sekerkaya (1992) reported that the middle age group is the most likely to hold and use credit cards. Income is also identified as having a strong positive relationship with credit card usage, where higher income groups are found to possess a large number of credit cards and spend more on different product categories than lower-income groups (Barker and Sekerkaya, 1992; Kaynak and Hancar, 2001).

Slocum and Mathews (1970) tested whether social class and income can be considered as indicators of consumer credit behavior by using data obtained from 2,032 commercial bank credit card holders in the USA. The study found that members of different income segments exhibits different credit card usage patterns. In particular, income level is a better indicator of consumer credit card behavior than social class. In their studies, Mathews and Slocum (1969) and Slocum and Mathews (1970) observed that cardholders with low income and socioeconomic status use credit cards to generate revolving credit more frequently than respondents who are rich and have high status.

Sumarwan and Hira (1993) found that younger individuals are more optimistic about their financial futures, thus are more willing to take on debt because they expect to be able to repay it. Several researchers showed that age factor has significant influence on credit card usage. For example, Barker and Sekerkaya (1992) document more extensive usage of credit card by middle-aged person. Lanchance, Beaudoin, and Robitaille (2006) note the increase in credit card usage among young adults in the recent period. Meanwhile, Norvilitis *et al*. (2006) finds that older credit card holders would opt for gold card for its higher credit limit and privileges. Past studies also identified the number of years an individual is using a credit card or the length of credit card ownership as an age or time related variable (Kaynak and Harcar, 2001).

Occupation and income are generally accepted as one of the most popular indicator that explained and significantly correlates with the usage of credit card (Mansoor, 2009). Meanwhile, Mandel (1972) found that primary determinants of credit card usage were family income and education. Higher income and better educated families were more likely to use credit cards than lower income families. In fact, income also acts as a factor in determining of how much the purchasing power of consumers will be spent on goods or services (Allvine, 1987). This is because of high income consumers might have more favorable attitudes towards

credit use because they are less likely to be credit constrained and have more ability to pay off their debts than low income consumers. Kinsey (1981) found that high income is the most important determinant for increasing the number of credit card accounts. Syed Sharaf (1998) in his study on credit card usage among consumers in Penang, Malaysia found that there were significant differences in credit card usage according to several demographic variables such as marital status, educational level, sector of employment, and race. Nevertheless, there are no differences in credit card usage between males and females.

In a study about Singaporean credit card holders, the number of credit cards was found to be significantly influenced by income and gender as well as perceptions that include "credit card leads to overspending", "savings as payment source", "unreasonable interest rates", "credit card as status symbol". The number of credit cards was also affected by credit card-related variables such as missing payments sometimes, frequency of use, entertainment expenditures, and petrol purchase (Gan, Maysami, and Koh, 2008).

This study aims to explore the profile of credit card holders in Malaysia, covering data on customer demographic and socio-economic background and its relation with credit card usage. In achieving these objectives, the study embarks on the following research questions: (i) What are the characteristics of current credit card holders in Malaysia? (ii) What are the usage patterns of Malaysian credit card holders? (iii) Are there any significant differences in customer characteristics and credit card usage pattern among different groups of credit card users?

MATERIALS AND METHODS

The study adopts a quantitative research approach based on the data gathered from a survey using self-administered questionnaires. In analyzing the credit card usage patterns, questions on card possession, usage frequency, spending amount and usage motivation are designed following Kara, Keynak and Kucukemiroglu (1994) and Hussin, Kassim and Jamal (2011). Credit card usage was measured by (a) Q1: I always ensure that I will bring along my credit card(s) whenever I go for shopping; (b) Q2: I purposely leave my credit card at home when I do not have shopping plans; (c)Q3: Describe your credit card repayment preferences; (d) Q4: How frequent do you use your credit card(s) in a month?; and (e) Q5: When I have my credit card with me, I do feel it is easier to decide on purchasing even if I do not think that there is a necessity for it earlier. An initial list of survey questionnaires was developed based on the literature review on credit card usage and marketing strategies. These questionnaires were then tested for reliability by conducting a pilot study of 44 participants, while the content validity was assessed by experts

in the field. Based on these feedbacks, the items in the scale were later improved in terms of wordings/language, sequence of questions and omitting redundancy.

Customers currently having credit cards are asked to participate in this survey. The survey was conducted based on a voluntary basis. Respondents are of various socio-economic background and are expected to well represent the credit card market in Malaysia. Respondents for the study was selected among credit card holders in Klang Valley. The selection of Klang Valley as the sample to represent the credit card population is reasonable since Klang Valley is the financial centre of the country. In addition, most credit card providers offer their services to customers with regular income whom can be seen concentrated in Klang Valley. A total of 350 card users participate and respond to the self-administered questionnaire. All 350 completed questionnaire are usable and being analysed in this study. Data from the questionnaires were analyzed using statistical analysis (SPSS software package) with the major form of analysis as follows: descriptive analysis, independent sample t-test and ANOVA.

In line with the objective of identifing the relationship between profile of credit card users and their usage, the following hypotheses are being tested:

H_O: *There are no differences among credit card holders with different personal background regarding their usage of credit cards.*

H_A: *There are significant differences among credit card holders of different personal background regarding their usage of credit cards.*

To further probe into this relationship, the importance of various indicators of credit card usage to different profile of credit card holders is analyzed. Hence, the following specific hypotheses are being tested:

H_{01}:   *There are no differences among credit card holders with different personal background regarding their usage of credit cards (bring along credit card when shopping).*

H_{A1}:   *There are significant differences (bring along credit card when shopping).*

H_{02}:   *There are no differences among credit card holders with different personal background regarding their usage of credit cards (leave credit card at home when shopping).*

H_{A2}:   *There are significant differences among credit card holders of different personal background regarding their usage of credit cards (leave credit card at home when shopping).*

H_{O3}:   *There are no differences among credit card holders with different personal background regarding their usage of credit card (credit card repayment).*

H_{A3}:   *There are significant differences among credit card holders of different personal background regarding their usage of credit cards (credit card repayment).*

H_{O4}:   *There are no differences among credit card holders with different personal background regarding their usage of credit cards (frequency of credit card usage).*

H_{A4}:   *There are significant differences among credit card holders of different personal background regarding their usage of credit card (frequency of credit card usage).*

H_{O5}:   *There are no differences among credit card holders with different personal background regarding their usage of credit cards (assist in purchasing decision).*

H_{A5}:   *There are significant differences among credit card holders of different personal background regarding their usage of credit card (assist in purchasing decision).*

RESULTS AND DISCUSSIONS

For this study, a reliability coefficient ranging from .80 and above was used as a standard to accept the items used in the questionnaire. The internal consistency reliability of the items was determined by using the Cronbach-alpha analysis. The Cronbach-alpha coefficients were computed based on the total number of subjects involved in the study (Table 1). The subscale for Marketing Strategy in product dimension has 0.803 Cronbach-alpha values, 0.822 for pricing dimension, 0.888 for promotion dimension and 0.822 for availability dimension. The overall reliability analysis coefficient for measurement of overall marketing strategy level is 0.927. The reliability analysis values of the pilot testing for overall the satisfaction section is presented in 0.882.

Table 1 Internal consistency and reliability of survey items

Sub-scale item	Cronbach-alpha values
Product Dimension	0.803
Pricing Dimension	0.822
Promotion Dimension	0.888
Availability Dimension	0.822
Overall Marketing Strategy Level	0.927

Customer Background

Almost equal percentage of male and female customers own credit cards. Majority of the respondents are between 21 to 40 years old. Almost equal percentage (40%) of the respondents have income less than RM3,000 or between RM3,000 to RM 5,000. Only 15% respondents have gross monthly income of between RM5,000 to RM10,000, and only around 5% has income greater than RM10,000 per month. About 53% of the respondents own 1 credit card, while 33% have two credit cards. It is also important to note that about 14% of the respondents have 3 or more credit cards. Majority of respondents (75%) do not have supplementary card, while 18% have 1 supplementary card. Only 5% have 2 supplementary cards. Majority (55%) of the respondents own conventional credit cards compared to 20% respondent who own Islamic credit cards, while about 25% have both types of cards. Table 2 shows the detailed characteristics of the credit card holders involved in the survey.

Table 2 Characteristics of credit card holders

Items	Frequencies (n)	Percentage (%)
Gender		
Male	152	43.4
Female	198	56.6
Age		
Below 20	5	1.4
21-30	181	51.7
31-40	108	30.9
41-50	37	10.6
Above 50	19	5.4
Occupation		
Private Institution	171	48.9
Government	149	42.6
Others	30	8.6

Table 2 (*Cont'd*)

Monthly Gross Income		
< RM3000	142	40.6
RM3000-RM5000	131	37.4
RM5000-RM10,000	54	15.4
> RM10,000	19	5.4
Others	4	1.1
How many credit cards do you have?		
1	118	53.7
2	28	33.7
3	16	8.0
>3		4.6
How many supplementary cards do you have?		
None	265	75.7
1 card	66	18.9
2 cards	19	5.4
How long have you been using this card(s)?		
Less than 1 year	79	22.6
1-3 years	101	28.9
3-5 years	91	26.0
More than 5 years	79	22.6
Type of credit card(s) that you have:		
Conventional	193	55.1
Islamic	71	20.3
Both	86	24.6

Credit Card Usage

Table 3 shows the frequency of credit card usage based on credit card holders' purchase transactions. Respondents were asked about their usage patterns in terms of purchase transactions. Findings show that, 82.6% of the respondents used their credit card for fuel or petrol, 84.6% for retail (off-line), 51.1% for retail (internet/mail purchases), 25.4% for utilities purchase transactions, 40.0% for health services purchase transactions, 34.3% use for transportation, 35.4% use for education, 55.1% use for clothing and only 18.0% use their credit card for donation transactions.

Table 3 Usage pattern – Purchase transaction

	Items	Y (%)	N (%)
a.	Fuel/petrol	82.6	17.4
b.	Retail (off-line)	84.6	15.4
c.	Retail (Internet/mail purchases)	51.1	48.9
d.	Utilities	25.4	74.6
e.	Health services	40.0	60.0
f.	Transportation	34.3	65.7
g.	Education (books/fees)	35.4	64.6
h.	Clothing	55.1	44.9
i.	Donation (Makna, WWF)	18.0	82.0

Note: Y= Yes; N = No.

As for usage pattern in, terms of retail/offline purchase, 71.1% of them said that credit card is used for accommodation or hotel, 46.9% of respondents stated that they use their credit cards for purchase of groceries, 49.4% said it is for dining/food/restaurant, 34.6% said that it is for entertainment, and 38.0% of respondents stated that they use credit cards for health services. The details of the usage pattern of credit cards for retail (offline) purchases are shown in Table 4 below.

Table 4 Usage pattern – Retail/off line purchases

	Items	Y (%)	N (%)
a.	Groceries	46.9	53.1
b.	Accommodation/hotel	71.1	28.9
c.	Dining/food/restaurants	49.4	50.6
d.	Entertainment (e.g. cinema, bowling, karaoke)	34.6	65.4
e.	Health services	38.0	62.0

Note: Y= Yes; N = No.

Personal Background-gender and Credit Card Usage

Chi-square analyses were conducted to compare the differences in the five indicators of the dependent variable for all credit card usage and the two gender groups, male and female (Table 5).

Table 5 Gender and usage indicators

Variable	χ2	Sig-χ2
Q1. I always ensure that I will bring along my credit card(s) whenever I go for shopping;	3.173	.075*
Q2. I purposely leave my credit card at home when I do not have shopping plans;	3.342	.068*
Q3. Describe your credit card repayment preferences;	1.797	.407
Q4. How frequent do you use your credit card(s) in a month?	4.843	.184
Q5. When I have my credit card with me, I do feel it is easier to decide on purchasing even if I do not think that there is a necessity for it earlier.	5.032	.025**

Note: ** and * denote significant at the $p \leq 0.05$ level and $p \leq 0.1$ level respectively

Based on Table 5, gender has significant influence on several credit card usage indicators. First, there is a significant relationship between gender and Q1: I always ensure that I will bring along my credit card(s) whenever I go for shopping. In particular, our post hoc analysis reveals 54% of the female respondents would bring along their credit card whenever they go shopping as opposed to 46% of male respondents.

Second, gender also has significant influence on Q2: I purposely leave my credit card at home when I do not have shopping plans. Nearly 70% of the total respondents disagree with this statement. Interestingly, out of the total respondents who disagreed, 60% female credit card holders disagreed with this statement, while only 40% male disagreed. This may reflect that female credit card holders are less discipline in terms of spending using credit card.

Lastly, for the fifth usage indicator, Q5: When I have my credit card with me, I do feel it is easier to decide on purchasing even if I do not think that there is a necessity for it earlier, the results show that there is a significant difference in the p-value .

In general, this study finds that gender matters when it comes to unplanned purchases. In particular, out of the total respondents who agree to the statement that credit card allows them to do unplanned purchases, 51% are female, while 49% are male.

Personal Background - Age and Credit Card Usage

As for age, there seems to be a significant influence of age with two of the usage indicators (Table 6). In particular, results of the study shows that age is significantly related to Q2: I purposely leave my credit card at home when I do not have

shopping plans, again, there is no significant difference in usage, and Q3: credit card repayment preferences. The rests of the usage indicators are not significantly related to age.

Overall, the findings point towards a weak relationship between age and credit card usage among the Malaysian credit card users. However, credit card users of different age group differ in terms of their decision to bring credit card when they do not have shopping plans. Additionally, credit card users of different age group have different preferences for credit card repayments. From these findings, there seems to be different levels of financial discipline among card users of different age group.

Table 6 Age and usage indicators

Variable	χ^2	Sig-χ^2
Q1. I always ensure that I will bring along my credit card(s) whenever I go for shopping;	1.045	.384
Q2. I purposely leave my credit card at home when I do not have shopping plans;	2.633	.034*
Q3. Describe your credit card repayment preferences;	1.993	.095*
Q4. How frequent do you use your credit card(s) in a month?	1.622	.168
Q5. When I have my credit card with me, I do feel it is easier to decide on purchasing even if I do not think that there is a necessity for it earlier.	1.533	.192

Note: * significant at p≤0.05 level

Personal Background – Occupation and Credit Card Usage

Two usage indicators are shown to show significant relationships with occupation (Table 7). In particular, occupation has significant influence on Q1: I always ensure that I will bring along my credit card(s) whenever I go for shopping and Q5: When I have my credit card with me, I do feel it is easier to decide on purchasing even if I do not think that there is a necessity for it earlier.

In general, this result indicates that those who work in different types organizations (public sector versus private sector) tend to differ in terms of their credit card usage.

Table 7 Occupation and usage indicators

Variable	χ^2	Sig-χ^2
Q1. I always ensure that I will bring along my credit card(s) whenever I go for shopping;	3.339	0.037
Q2. I purposely leave my credit card at home when I do not have shopping plans;	1.399	0.248
Q3. Describe your credit card repayment preferences;	2.263	0.106
Q4. How frequent do you use your credit card(s) in a month?	0.607	0.546
Q5. When I have my credit card with me, I do feel it is easier to decide on purchasing even if I do not think that there is a necessity for it earlier.	6.401	0.002*

Note: * denotes significant at p≤0.05 level

Personal Background – Monthly Gross Income and Credit Card Usage

Lastly, there seems to be significant influence of monthly gross income on repayment preference (Q3) and frequency of credit card usage (Q4). While the rests of the usage indicators show no significant relationships with monthly gross income, the significance of repayment preference and frequency of credit card usage reflect the different ability and willingness of card users according to their income (Table 8).

In addition, results of post-hoc comparisons reveal a significant difference in repayment preference and frequency of credit card usage between those who have less than $3000 and those having monthly income of more than $10,000.

Table 8 Monthly gross income and usage indicators

Variable	χ^2	Sig-χ^2
Q1. I always ensure that I will bring along my credit card(s) whenever I go for shopping;	1.796	0.129
Q2. I purposely leave my credit card at home when I do not have shopping plans;	0.335	0.854
Q3. Describe your credit card repayment preferences;	5.736	0.000***
Q4. How frequent do you use your credit card(s) in a month?	2.906	0.022**
Q5. When I have my credit card with me, I do feel it is easier to decide on purchasing even if I do not think that there is a necessity for it earlier.	0.912	0.457

Note: *** and ** denote significant at p≤0.01 level and p≤0.05 level, respectively

CONCLUSION

Credit card providers may be more successful in capturing customers' needs and preferences into their marketing strategies once they identify credit card users' characteristics and understand their usage pattern. Different usage indicators measured in the study show that customers have utilize credit cards for different purposes.

In general, based on the credit card users profiling, gender may not be a good segmentation base as there is no significant difference between male and female customers with regards to credit card ownership. When credit card holders are grouped according to their gross monthly income, majority of the card holders are earning between RM3,000-RM5,000 and below RM5,000 per month, and a niche market for those customers having more than RM10,000 per month.

In terms of owning multiple cards or supplementary cards, supplementary card seemed not that popular in this part of the market or customers do not see the need for supplementary card. Morever, with the recent government policy of charging $50 for every credit card owned may credit card holders may opt to limit the number of card ownerships.

On the other hand, credit card is used in different purchase situations. Credit card holders seemed to use credit card for purchases of basic needs such as fuel/petrol, clothing and health services. As for retail purchases, users seemed to use their credit cards mostly for accommodation/hotel, dining and groceries shopping. The findings of the this study concurs well with the findings of Ahmed (2010) which essentially document significant relationship between customer profile and credit card usage level among credit card holders in Malaysia. Similarly, the findings of this study are also consistent with those of Gan *et al*. (2008) for the case of credit card users in Singapore.

The credit card providers may take into consideration the differences in usage pattern among credit card holders based on users' characteristics. In general, this study finds that gender matters when it comes to unplanned purchases. In particular, female credit card users seemed to be less disciplined in terms of spending using credit card. Customers of different occupation differ in their credit card usage in terms of having the card available in assisting purchase at the point of sale. Customers with different monthly gross income differ in their credit card usage in terms of repayment preferences and frequency of credit card use. Older card holders (age 50) and younger card holders (between 21 and 30 years old) differ in their credit card usage in terms of whether they bring the card or not if they do not have shopping plans. These findings may be useful in developing specific product offers and promotional strategies to effectively cater to the different needs of the

credit card holders. Future studies can determine the relationship between credit card holders with purchase pattern on specific product categories (shopping products, convenience products or specialty products) or specific shopping behaviour (high involvement purchase or low involvement purchase).

There are several limitations of the study that may provide further extension of the research. The study considers limited customer profile variables. More enriching findings are possible by considering other personal characteristics variables such as religion, education level and psychographics factors (such as lifestyle and brand loyalty). The findings of this study are based on a cross-sectional analysis of the customers' profiles. Future study should include the possibility of considering a longitudinal study to capture the changes in consumer credit card usage as their profile changes over time.

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