

CHAPTER 5

RECOMMENDATIONS AND CONCLUSION

This chapter firstly and essentially presents the overview of the study and the summary of the research results, major findings as well as its implications for the decision on mobile market segmentation and formulation of marketing strategy. Finally, the possible areas for further research are also discussed.

5.1 Overview of the Study

The study attempted to examine the mobile phone usage dependencies underlying mobile phone user attitude and perception towards mobile phone and relative mobile services, in turn to profile mobile phone users into two user groups, namely dependent and non-dependent mobile phone users. In addition, the study intended to identify the demographic and psychographic variables as a proxy for mobile phone usage dependencies, which distinguish the two groups of users. In terms of the relationship between demographic profiles and lifestyle segments, the study aimed to validate whether demographic characteristics could be related to specific lifestyle segments to improve the description and enrichment of the target market.

Specifically, the study helped to determine which market segmentation base is feasible and applicable to profile local mobile phone users by using the mobile phone user perception, lifestyle and demographic characteristics, in which would be able to enhance an overall superior outcome to another. When a mobile operator is armed with this useful market information, it would be able to have his finger at the pulse of the industry.

A review of past studies by Haddon (1997), Heinzmann *et al.* (1997) and Wareham *et al.* (1998), done on the usage of ICTs equipments in some Western countries, such as European countries and United States, indicated that there were differences in terms of demographic profile of the different user groups of ICTs with different adoption rates.

This paper is one of the first few attempts to examine the lifestyles and demographics of mobile phone users in Malaysia. It could contribute to the general understanding of these various constructs potentially relevant to mobile phone usage dependencies as well as the usage of mobile services. Based on the marketing implications of the study, we shall then make recommendations to Malaysian mobile operators as an input to segment Malaysian mobile market effectively and to formulate appropriate marketing strategies for the soon rolling out 3G technologies mobile services in the burgeoning and upturn Malaysian mobile market in the near future.

In this study, 426 respondents who are mobile phone users from urban Klang Valley have been analyzed through an instrument of six-page self-administered questionnaire. In general, the respondents were predominantly young respondents under age group of 20 to 29 years old with high education level of professional qualification or university degree. In terms of occupation, majority of the respondents were executives and managers.

The study is only confined to urban consumers residing in the Klang Valley areas. Seven demographic and seven lifestyle dimensions were identified for analysis, evaluation and comparison. The seven lifestyle dimensions were extracted from 28 lifestyle statements through the application of factor analysis.

5.2 Summary of the Research Findings

The study pursued a rather new but similar concept undertaken by some studies done on the adoption of ICTs including mobile phones, to segment the respondents into two mobile phone user groups, based on the result of the ranking of eight ICTs equipments in term of its importance to respondents' daily personal and business related activities. Generally, a majority of the respondents had ranked mobile phone as the most important ICT equipment in their daily activities, with the mean of 2.07, followed by computer with Internet access, television set, traditional phone, CD player, video games, digital camera and DVD/VCD player, at ascending ranking scores, as minimum score of 1 for the most important equipment perceived by respondents while a maximum score of 8

for the least important equipment perceived by respondents, in their daily personal and business related activities.

The study then profiled the respondents into dependent and non-dependent mobile phone user groups. Respondents were categorized as dependent mobile phone users, if they ranked mobile phone the most important ICT equipment in their daily personal and business related activities. On the other hand, respondents ranked mobile phone the second or above important ICT equipment in daily activities were categorized as non-dependent mobile phone users.

Out of the 426 valid respondents analyzed, the findings revealed that in total there was 52.3 percent of respondents are dependent mobile phone users and 47.7 percent are non-dependent mobile phone users. Apparently, the study showed that a majority of urban Malaysian mobile phone users tend be dependent mobile phone users. The study also revealed that in general the Malaysian mobile phone user segment by demographic (predominantly middle aged respondents with moderate education level, worked as a sales personnel with moderate monthly personal income level) and lifestyle characteristic (Family Oriented) as in the sample, may relatively exhibit high mobile phone usage dependency and the existing and future mobile services would be extremely important in their lives.

In terms of mobile phone usage patterns, the results showed that type of mobile phone services comprised postpaid and prepaid services were significantly different in the two mobile phone user groups. In this regard, a majority or 55.6 percent of the dependent mobile phone users was subscribed to postpaid service while majority or a 56.6 percent of the non-dependent mobile phone users was subscribed to prepaid service. Furthermore, it is remarkable that the study found both the dependent and non-dependent user groups were spent much higher mobile phone expenses on personal usage instead of business related usage.

The study found that the dependent and non-dependent mobile phone users were different demographically and psychographically in a number of areas. Demographically, the survey results revealed that in general dependent mobile

phone users were most likely aged between 30 to 39 years old, working as sales personnel and were college diploma holders. In terms of gross monthly personal income, dependent mobile phone users were likely to be in the moderate income group.

The result also showed there were significant relationships between four of the seven demographic variables and mobile phone usage dependencies, namely, age, education level, occupation and gross monthly personal income level. Contrary to expectations, the dependent and non-dependent mobile users did not differ significantly in the demographic variable, namely gender, ethnicity and marital status. This demographics information of mobile phone users undoubtedly could be utilized as a solid base for market segmentation and for recommending appropriate mobile service offerings to appeal the target market accordingly.

In view of the present study would be considered exploratory in nature, it is not unreasonable that the findings of the study showed that out of the seven lifestyle dimensions adopted in the study which were deemed applicable and relevant to urban Malaysian mobile phone users, there was only one lifestyle dimension was significant different in the two groups of mobile phone users. In other words, The said lifestyle construct, namely Family Oriented, had significant difference in mobile services usage dependencies. The t-test group means analysis indicated significantly that dependent mobile phone users in Malaysia were more family oriented than the non-dependent users. In other words, individuals with such lifestyle dimension were more likely to be dependent mobile phone users.

On the other hand, Brand Conscious dimension was marginally significant in the two mobile phone user groups while the non-dependent users showed there were more brand conscious than dependent users. Besides, the other six dimensions namely, Self-Confident, Variety Seeking, Impulsive, Economizer and Home Oriented showed no significant difference in the two mobile phone user groups. Hence, these dimensions did not appear to be important distinguishing characteristics in market segmentation as well as formulation of marketing strategy for mobile services.

With regards the relationship between demographic and lifestyle characteristics, the findings showed support to the association between demographic characteristics and psychographics. It revealed that age variable was significantly differentiated in lifestyle constructs for six of the seven constructs. Besides, marital status and occupation variable were significantly differentiated in four of the seven lifestyle constructs while other demographic variables namely ethnicity, highest education level and monthly personal income were significantly differentiated in three of the seven lifestyle constructs, and gender profile was significant differentiated in only one lifestyle construct.

Generally, the results obtained from relevant statistical tests, ANOVAs with Scheffe contrasts and t-tests, indicated significantly that the male respondents possessed higher self-confidence than the female respondents. Besides, it was remarkable that the younger respondents were found more brand conscious and impulsive while elder respondents tend to exhibit higher degree of self-confidence, while were more family oriented and home oriented. These findings tally with previous result that the non-dependent mobile phone users were likely to be younger generation.

On the other hand, the Malay respondents were more impulsive and family oriented than the other race groups while the Indian respondents tend to exhibit higher degree of self-confidence, than their other counterparts. Apart from that, in terms of marital status, single respondents were more brand conscious and variety seeking while married respondents were more home oriented and family oriented. Additionally, it is not surprisingly that the respondents possessed higher education level such as professional qualification or an university degree were more confident and variety seeking than respondents in other corresponding groups while respondents with lower education level were found more impulsive than those had higher education level. On top of that, as expected, respondents who were working as manager or professional or lecturer tend to exhibit higher degree of self-confidence, than respondents in other occupation groups while clerical or production staff showed that they had lowest self-confidence than others in the corresponding groups. Nevertheless, clerical or production staff showed they were more variety seeking than respondents in other occupation

groups while not working or retired respondents were the least variety seeking individuals. Lastly, not contrary to speculation, the respondents had higher monthly personal income were found more confident with own self than those respondents who were earning lower monthly personal income while these respondents who were earning lower monthly personal income showed they were the least family oriented individuals.

In short, the demographic variables adopted were significant different in numerous mobile phone users' lifestyle constructs, such as Self-Confident, Impulsive, Variety Seeking and Family Oriented in particular. In other words, the respondents in sample were likely the self-confident, impulsive, variety seeking and family oriented individuals. Finally, the summarization and conclusion of the findings are as represented and condensed in Table 5.1 and Table 5.2.

Table 5.1: Profiles of Urban Malaysian Mobile Phone Users in Terms of Mobile Phone Usage Tendencies

	Mobile Phone Usage Dependencies of Urban Malaysian Mobile Phone Users	
	Dependent users	Non-Dependent users
Demographic Who are they?	<ul style="list-style-type: none"> ▪ Likely to be individuals aged between 30 to 39 years old ▪ Likely to have medium education level ▪ Likely to be in sales jobs ▪ Likely to be with medium income level 	<ul style="list-style-type: none"> ▪ Likely to be individuals aged below between 20 years old or above 40 years old ▪ Likely to have lower education level ▪ Likely to be in student, retired or not working individuals with lower income level
Psychographics What are they like?	<ul style="list-style-type: none"> ▪ Family Oriented 	

Table 5.2: The Relationship Between Demographic Profiles and Psychographic Segments

Demographic Profile	Psychographic Segment which was statistically significant to the Demographic Profile
Gender	<ul style="list-style-type: none"> ▪ Self-Confident
Age	<ul style="list-style-type: none"> ▪ Self-Confident ▪ Brand Conscious ▪ Home Oriented ▪ Variety Seeking ▪ Impulsive ▪ Family Oriented
Ethnicity	<ul style="list-style-type: none"> ▪ Self-Confident ▪ Impulsive ▪ Family Oriented
Marital Status	<ul style="list-style-type: none"> ▪ Brand Conscious ▪ Home Oriented ▪ Variety Seeking ▪ Family Oriented
Highest education level	<ul style="list-style-type: none"> ▪ Self-Confident ▪ Variety Seeking ▪ Impulsive
Occupation	<ul style="list-style-type: none"> ▪ Self-Confident ▪ Brand Conscious ▪ Variety Seeking ▪ Impulsive
Gross monthly personal income	<ul style="list-style-type: none"> ▪ Self-Confident ▪ Impulsive ▪ Family Oriented

5.3 Marketing Implications of the Study

In mid 1990s, the shift towards more open and competitive telecommunications market had become a world phenomenon, not least because of the extreme rapid spread of mobile telephony and hefty investments on relevant infrastructures are involved. In many economies, mobile services emerged as the first important aspect of the telecommunications market. In view of that, many mobile market operators are attempted to keep the pace of growth on track in order to attain sizeable and profitable market expansion in years to come. Following the fast growing pattern of telecommunications industry worldwide, Malaysia has since 1996 embarked on a radically new path towards an open and competitive market in telecommunications and multimedia services (Ure, 2000).

While the mobile market in Malaysia is expecting the major 3G mobile services rollouts in 2004, it could be foreseen that this would lead to a climax of renewed interests in the mobile services usage and new demand for higher value-added multimedia services among mobile phone users. It is anticipated the type of new mobile services to be launched would be driven by consumer needs vis-à-vis higher capacity, speed, more cost-efficiency and exclusiveness. As such, mobile market operators are eager to see a whopping proliferation of mobile market size with the emergence of lucrative business environment to capture a lion's share of market, with more intense competition though.

As derived from the research result, numerous implications for marketing have been gained. Among the most significant implications emerged from this study was the fact that being dependent or non-dependent mobile phone user is very much a direct function of personal circumstances. As noted, the dominant demographic elements were age, education background, occupation and gross monthly personal income level while the dominant psychographics element were Family Oriented and Brand Concious characters. It could delineate that the influence of demographic and psychographic characteristics on mobile phone usage behaviour among Malaysian mobile phone users played an important role in determining the feasibility selection of target market segments and recommending future service offerings as well as relevant marketing plans.

Finally, by extrapolation of the findings on demographic and psychographic profiles, the marketers would be able to embrace clearer picture of the size and composition of existing and potential market segments. Mobile marketers may use this information to segment the market accordingly and hence different marketing strategies could be formulated associate with appropriate marketing efforts to reach and to communicate effectively to the two different groups of mobile phone users.

Based on the results of the study, it showed critical elements of the dependent mobile phone user group identified. The dependent mobile phone users, were emerged as a target market segment comprising mainly middle-aged individuals, possessed medium education level and working as sales executives with medium monthly personal income. Besides, in view of the general results showed that the dependent mobile phone users were family oriented and marginally brand conscious, this target market segment might be those in the modern generation and confident individuals working class who are concern most about the general well-being of their family and career perspective, at the same time, they might keen to seek pleasure from the pride and joy associated with the consumption of divergent branded items.

This findings offer an implication for mobile marketers in determining and planning for future mobile service offerings which are commercially viable which cater to fulfill the target market's commercial and work-related needs as well as their exclusive family oriented personal lifestyle desires, in which would eventually enhance the quality of their personal, family and professional lives. As noted, the dependent users including sales personnel who have spend more on mobile phone expenses for personal use of mobile phone instead of business related use, which might be due to the availability of other communications alternatives, hence, mobile operator should enlarge the subscription base, postpaid service in particular, of this existing market segment and keeping the churn rates stabilized as well as enhance customer loyalty by offering more value-added services to this target market.

The proposed mobile service offerings should incorporate services such as mobile commerce services such as multimedia booking and reservation; mobile infor-service such as map-based traffic information and map-based location; mobile communications services such as multimedia messaging, video-base or streaming video, Internet navigation; mobile services such as control of household devices, video surveillance, machine-to-machine communications, as well as mobile office services such as video conferencing, and so forth, along with excellent technical quality and reliability as well as network capacity, coverage, connectivity and globalism.

The relevant advertising message must acknowledge also the lifestyle patterns of the target market who were family oriented and marginally brand conscious. The mobile services promotional strategy should dedicate specific campaign efforts on special attributes of mobile services emphasizes on the reflection of personal values, such as lower charge fee for supplement an existing mobile phone for their family members.

On the other hand, from the result of the study, it was found that individuals who were classified as non-dependent mobile phone users dominantly were young urban males who possessed lower level of education and had lower level of gross monthly personal income. These individuals were likely to spend considerable time, efforts and money engaging with other ICT gadgets and equipments such as computer with Internet access, video games, and so on, which perhaps could deliver fulfillment to their interests and needs as well as more reflective the norms of lifestyle pattern of this particular generation. In view of the Internet usage is expected to be eventually augmented the mobile phone usage of these non-dependent users, they would gradually be dependent on mobile phones for information, entertainments and enjoyments that they used to obtain from the Internet when Internet interface-enabled services are launched. These findings hence offered an implication that marketers should incorporate this group of mobile phone users in the potential market portfolio as an echo to the nation's thrust towards an ICTs-driven economy as well as the remarkable mobile Internet growth momentum despite their current low mobile phone usage dependency.

In addition, as the study showed that the usage of mobile services of student respondents with lower monthly personal income were comparatively lower than the other individuals. In view of future establishment of this segment in the job market and the tendency of increased affluence among Malaysians upon the upside of a buoyant economy in the country, chugging along the global economy recovery in years to come, mobile operators should emphasize the attractiveness and affordability of priced packages to tap further demand and to boost up mobile phone usage of this market segment as well.

In view of the young mobile phone users were also brand conscious, variety seeking and impulsive individuals, with regards to services offerings to be proposed, this implication signals mobile operators should pursue continuing rejuvenation of its cost-effective service offerings so as to obtain a stronghold in this market segment and entrench its position by building up brand name that symbolizes the service offerings are variety innovative, content rich, Internet interface-enabled, availability of infortainment, online games and so on, at affordable rate while targeting this market segment.

Besides, younger individuals should be included in the potential target market portfolio, when determining message content, message design, and delivery channels, and the marketers should acknowledge the related lifestyle patterns such as Brand Conscious, Variety Seeking and Impulsive. The mobile services promotional strategy should dedicate specific campaign efforts on rejuvenation marketing and deliver effective message whereby rational consideration has to be drawn on related aspects of this sub-segment's desires.

In general, the findings also conveyed an implication for mobile services positioning. The mobile marketers should capitalize on the target market's mindset and their favourable impressions by highlighting the distinguishing features of mobile services and its value which come along with its brand name in the advertising and promotions activities. Relevant advertisements should incorporate the most appropriate message, themes and copy contents to be directed at the target market who were family oriented and somewhat brand

conscious as well as the self-confident, variety seeking and impulsive lifestyle patterns of other sub-segments. Hence, the communication strategy will be weighted more on creativity of the message stresses valued-added, innovative, technology advanced, forefront, exclusive, and yet still trendy service offerings which would appeal to the target markets. Besides that, the brand positioning and communication plans should exhibit the endeavor of a mobile operator to project its positive corporate image of being forward thinking, innovative and flexible mobile services providers given the brand promising would be translated into brand experience, this is because after all brand building is also building an identity that pervades every element of the business.

Apart from that, as the result of study showed that there were relationships between respective demographic profiles and respective lifestyle segments, some practical implications also emerged for marketers. It was observed, there were significant relationships between dominant demographic variables such as age and occupation with common lifestyle patterns such as Self-Confident, Brand Conscious, Variety Seeking and Impulsive. Again, the findings rendered to an implication for relevant product planning as well as communication strategy when targeting a particular demographic segment, as lifestyle criteria of individual demographic group will in turn help in the selection of message and media.

Recognizing the diverse lifestyles of corresponding demographic categories in which some sub-segments will be defined, thus, relevant mobile services should suggest a lifestyle image or lifestyle branding. For instance, in order to target senior mobile phone users effectively, mobile marketers could explore this user group's lifestyle and needs which may impact the mobile phone usage, as in this case, mobile services related to home and family like intelligent home services would certainly have its appeal.

Furthermore, marketers when targeting a particular segment may then select most appropriate media with current profiles and incorporate lifestyle information in effective message development to gain attention, hold interest, arouse desire and elicit action, of the target markets. For example, market operators should stress their services' affordability and emphasize messages directed towards

young urban individuals in the country in view of their current low level of mobile phone usage might be caused by their financial dependency; while slice-of-life messages directed towards males as well as sales personnel and traveling personnel would stress self-confidence to reflect their self-esteem. Apart from that, aspirational messages should be selected to target professionals who seek to appeal to the ideal self, emphasizing on self-confidence enhancement from the use of mobile services as the study showed the respondents were generally self-confident and brand conscious.

Besides, in view of Malaysia is a multiracial country, ethnic membership might have implications for determining message content, message design, and delivery channels. This message must acknowledge also the customs and values of different ethnic groups. For instance, the result showed Malay respondents were found family oriented and impulsive. The mobile services promotional strategy should therefore dedicate specific campaign efforts on ethnic marketing that are in-language and in-culture with an emphasis on the reflection of local cultural and sub-cultural values.

The implications of using this research technique may be applied to other lifestyle dimensions, to profile segments in a similar manner. By describing lifestyle characteristics that are relevant for mobile services, marketers may then describe how those segments compare to demographic variables commonly reported in mass media summaries. If a mobile operator possess a demographic profile of their target market, descriptions of probable lifestyle characteristics should become the next goal especially for telecommunications industry which operating in the dynamic business environment with rapid changing of consumer needs, wants and preferences, as well as competitors' actions.

The local telecommunications industry albeit has been streamlined into a comfortable three-player market while two are granted with the 3G mobile broadband spectrum license by Malaysian government, however, in view of the transition of the threshold of an era of 3G technology mobile services, each player is enthusiastically seeking to get much of the cream in future mobile market. The managerial implications derived from the study expose the

marketers with important market information as well as knowledge of mobile phone users which further provide insightful inspirations to develop a winning formula in the marketing plan for the official launch of 3G mobile killer-services in the country.

5.4 Recommendations for Future Research

The study results showed important and interesting characteristics that distinguish dependent mobile phone users and non-dependent mobile phone users. However the study is exploratory in nature and therefore possessed a number of limitations. These limitations should provide more comprehensive direction for future research.

Firstly, the study was only confined to the residents of urban Klang Valley which was unlikely to demonstrate that these respondents are representative of the overall population as some researchers believe that regional differences do affect consumer behaviour (Assael, 1992; Md. Nor and Ong, 1994). Hence, the future studies should not be restricted to urban Klang Valley only, but to include a larger sample covering a broader area or nation wide sampling which is more representative and greater generalizability of research findings could be obtained.

Secondly and most importantly, there were only seven lifestyle dimensions selected and analyzed in this study, may not be the most appropriate for this particular business applications. Moreover, there might be other lifestyle variables would able to differentiate the two mobile phone user groups. Hence, additional studies need to be conducted on more lifestyle dimensions which were not identified and tested in this study. Apart from that, although lifestyle data are very useful in market segmentation and in developing international marketing strategy, Wells (1975) suggested that marketers have to be cautious when choosing lifestyle variables in their studies, as these variables are not as stable as demographic variables. Furthermore, the lifestyle statements adopted in the study were developed mainly in Western context may not be suitable and applicable to the local context. Hence, the selection of the lifestyle dimensions in the study may not have accurately reflected the Malaysian multi-racial context. In

other words, locally developed lifestyle statements need to be initiated and verified on its reliability and validity for future research.

Thirdly, due to the fast pace of technology changes and transformation in type and nature of mobile services in the market, as well as rapid changing consumers' behaviour and habits, replicating this study overtime is extremely essential and useful. In view of the study was cross sectional that reflects the opinion of the respondents at the time of data collection, perhaps, a longitudinal study would have been a better research design with regards to the drawing of conclusions about the Malaysian mobile phone users.

Finally, future study should also address the relationships between other characteristics which would direct mobile phone user attention and perception towards mobile services, consequently influence their attitudes to mobile phone usage as well as their decisions to adopt new services to be launched. For instance, motivation to use mobile services and leisure activity dimensions may exert influences on the mobile phone usage tendencies among Malaysian mobile phone users. Likewise, product or service attributes such as variety, speed, accessibility, essential, cost-effectiveness, perceived usefulness, readability and reliability of mobile phone service offerings to examine services selection criteria, should be included in future research to further identify the needs and wants of different market segments.