CHAPTER 6 CONCLUSIONS

The stiff decline in the growth rate in 1998 has triggered the mobile operators to reevaluate their operation strategies and to take a proactive approach in reducing churning and improving its retention ratio. Operators have been practicing price discrimination by offering different plans to cater to the various groups of consumers. It is crucial to maintain a stable subscriber base when acquisition cost has been increasing steadily. Thus, the focus of this paper is to identify the determinants of churning in the Malaysian mobile telecommunications industry.

We here review some of our central findings. We find that customer demographic characteristics exert very limited influence on subscribers’ churning decision except gender, marital status and occupation. Males and single subscribers are less prone to churn. Those who work as salesperson are more likely to have less brand loyalty and more incline to churn mobile service providers. The overall effects of customer characteristic variables on churning are limited. Subscribers who use mobile services for a longer time are negatively correlated to the probability of churning. Those who have fixed line phone at home are less likely to churn mobile phone service providers.

Upon the segmented data, postpaid users who use voicemail and IDD services, or those who settle the bill charges by themselves are less likely to churn mobile service providers. The magnitude of the influence varies across plans, races and the individual mobile phone service providers. Thus, we believe there are significant cultural factors and firm specific attributes that affect users’ churning decision. If we assume that consumers are rational, they are going to opt for the lowest price when
products are identical. However, market has imperfect information. Subscribers' satisfaction and utility levels depend on their initial perception on the actual network and service qualities provided by the individual service provider. Thus, firm specific attributes of the service providers are significant in influencing the churning decisions.

From the summary statistics, we found that firm specific qualities are of concern to the subscribers when selecting the mobile phone service providers. On the other hand, age is only significant in affecting users' decision in selecting either the postpaid or prepaid services.

**Policies for Improving Qualities of Networks and Services**

The ability to catch up with the technological development critically affects the quality of networks and services. The number of main digital access lines and the amount of fiber optic cables deployed by the operators reflect the enhancement of capabilities by operators. Some argue that low capacity results in congestion, thus potential users are made to wait for the next available line. Those impatient users will voluntarily churn to other networks to avoid congestion. This is going to increase churning and results in a falling subscribers' base. Thus, it is the duty of the operators to determine the optimal capacity to invest into and to continuously keep abreast of technological developments in the industry and update their services. However, as investment in technology and equipment incur huge costs, the authority concerned should regularly evaluate the market performance and its competitiveness; design and formulate policies to promote effectiveness. Besides, policies to encourage research and development between industry, research institutions and universities to generate innovative products and services should be strengthened in the future.
Limitation of the Study

One aspect that the study does not cover deeply is the network size effect\footnote{"The larger the network is, the more likely consumers are to choose it.", Kim and Kwan (2003). They studied the Korean mobile market and claimed that the network size does have a significant influence on carrier selection.}. Further investigation to network effects (the value of a network increases with the number of users) taking into account the captured market share of a respective service provider will be of great interest.

Studies on the level of price and coverage that induced subscribers to switch will also be beneficial. Another short-coming of the study is that our paper overlooks the effects of customer contracts, which will double or triple the switching cost due to the violation of contracts. To some consumers, a change of a mobile phone number might result in or involve huge switching cost.

Besides that, our data might result in ‘geographical bias’ as it is collected in the central region of Malaysia. A better sampling framework might produce better results that reflect the current market structure and the market competitiveness. It should be noted that the development of mobile telecoms has been very rapid, the present findings may be rendered as inaccurate in other situations, especially when the merging and consolidating activities come to a final settlement.

In addition to the above, there are very few studies that evaluate the regulatory and policy implications of the telecommunications industry. A deeper study into this sector will definitely be helpful.