

Who Stays, Who Switches: Different Segments of Internet Service Customers

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Abstract

High-tech services providers such as Internet Service Providers (ISPs) are facing many challenges and high switching rates remain one of the top concerns. Despite significant research done in the area of switching intention in the marketing literature, customer segmentation and its relationship with switching intention appears to be overlooked. This study aims to fill this gap in the Telecommunication industry by exploring the switching intention and perceptions of different ISP customers. Data was obtained from 2,059 Internet users located in all regions of Thailand via an online survey. This study identified three major distinctive groups of ISP customers based on their Internet usage which were classified as light, medium and heavy users. This study also explored the differences among light, medium and heavy users in terms of age groups, employment status, gender and area of employment. The motivations associated with particular types of behaviour of each segment are also discussed.

Keywords: *Segmentation, Behavioural Intentions, Switching Intention, Internet Service Providers (ISPs).*

Introduction

Customer switching is considered a major issue for many businesses and in this respect, businesses providing high-tech services such as Internet Service Providers (ISPs) are not an exception. ISPs are organisations that provide services for Internet related access, usage, and participation (Heckmann, 2007). An example of an ISP is True Internet in Thailand, a leading information and communications technology company providing Internet solutions to businesses and home users (ETDA, 2013). The customers of ISPs are either businesses or individuals who purchase Internet services. This study is targeted towards individual customers who purchase Internet services for use in their homes.

As the customers become the main focus of many business operations, service providers have put considerable effort in acquiring and retaining their customers. They generally do this by providing their customers with superior service delivery and performance. Zeithaml, Berry, and Parasuraman (1996) articulated that service quality influences various behavioural intentions including complaining, recommendation and switching intentions. Zeithaml and Bitner (2003) demonstrated that superior service quality results in customers' recommendations. This in turn strengthens the relationships between customers and businesses and helps in acquiring new customers. Businesses are concerned that their customers are switching to their competitors. In the telecommunications market, customers generally display low levels of loyalty and are essentially price conscious (Marketline, 2014). Hence, they are more prone to switching between the available service providers. It is predicted that a decline in brand loyalty and an increase in churn rates are likely to be the norm in this market in the coming years (Marketline, 2014). As customer loyalty has been extensively investigated in the marketing literature (Aydin and Özer, 2005; Chiou, 2004; Thaichon, Lobo, and Mitsis, 2014), this study endeavours to examine the effects of service quality dimensions on customers' behavioural intentions including those associated with intention to switch.

Also, there is scant academic research relating to customers' characteristics in the residential Internet services market. As these customers have different needs, wants and desires, they are not a homogenous group; hence, it is necessary to segment the market in order to better service the target audience (Mazzoni, Castaldi, and Addeo, 2007). Segmentation enables service providers to maximise the use of their resources and capabilities to take advantage of existing opportunities and obtain more frequent customers (Weinstein, 1987). Despite the fact that the market segmentation concept has been reviewed comprehensively in the literature (Mazzoni et al., 2007; Wedel and Kamakura, 2003), there is scarce empirical evidence on how Internet service providers can effectively segment their target audience. In this study customers are categorised based on their Internet usage pattern, which is considered one of the most rational basis of segmentation (Mazzoni et al., 2007; Wedel and Kamakura, 2003). By allocating customers to different usage categories, service providers can develop effective and efficient marketing strategies for each segment. Such an approach is in line with Weinstein's (2001) findings which indicate that usage analysis can significantly support customer retention scheme.

The competition in Thailand among residential Internet service providers is intense. Currently there are three majors ISPs and sixteen smaller ones across the country

(Thaichon and Quach, 2013). In this highly competitive market, the churn rate of Internet users was approximately 12% in 2009 and is predicted to be above 20% by 2017. This scenario, therefore, poses a large challenge to ISPs especially in the area of customer retention.

This research aims to explore the characteristics and perceptions of customers of Internet Service Providers (ISPs) in order to provide a general picture of ISP subscribers and to enable more customer-focused marketing strategies, especially with regards to customer switching intention. In particular, the findings of this study can be utilised by ISPs to design effective customer retention strategies, which would increase their profitability.

Literature Review

Customer Switching Intention

The rising competition in the global market means that it becomes increasingly important for businesses to preserve their existing customers. Switching intention is considered a significant factor in all businesses, especially in the services sector. Switching intention in this research refers to the possibility that customers will change their current service provider. Understanding switching intention could help in retaining current customers (Wan-Ling and Hwang, 2006). As such, businesses are highly concerned with drivers of switching intention.

In the telecommunications industry, retaining existing customers is less expensive than recruiting new customers (Thaichon et al., 2014). Attracting new customers costs around five times more than retaining current customers (Christodoulides and Michaelidou, 2010). Spiller, Vlastic, and Yetton (2007) claim that a 1% increase in the customer retention rate could add approximately 5% profit to an ISP, which also eases the stress of finding and acquiring new customers. In addition, a 2% growth in the customer retention rate is equivalent to a 10% decrease in the cost of customer acquisition (Han, Lu, and Leung, 2012). Hence, it is essential for ISPs to investigate and understand customer loyalty and retention by examining consumption behaviour. This knowledge can help to maintain and even improve the company's market share and profitability.

A number of previous researchers have attempted to explain the causes of switching and switching intention. For example, Wen-Hua et al., (2010) claimed that switching costs and attractiveness of alternatives had a strong influence on switching intention. Saeed, Hussain and Riaz (2011) reported that price, perceived commitment and outcome quality could affect customers' intention to switch. Thaichon and Quach (2016) proposed that sales promotion had an impact on customer switching costs which lead to switching intention. Although many researchers have explored the switching intention literature, very limited research has explored different customer segments. This study aims to fill this gap in the telecommunication industry.

Segmentation

Customer relationships need to be maintained and strengthened over time (Cooil, Keiningham, Aksoy, and Hsu, 2007; Czepiel, 1990). Altman and Taylor (1973) state

that relationships develop from lower to more significant levels as interactive parties gain more experience. Previous studies assert that loyalty varies as a function of customer experience in the services context (Tracey, Dagger, and O'Brien, 2010). As experience accumulates, customers tend to have multiple interactions with the firm and the service, and gain more information, such as associated benefits and outcomes of the relationship. Hence an increase in experience has significant impact on customer behaviour (Larkin, McDermott, Simon, and Simon, 1980; Maheswaran and Sternthal, 1990).

One fundamental dimension of experience is usage (Dahlen, 2002). The attribute evaluability theory underpins the effects of experiences (Hsee, 1996). This theory posits that experts have more advanced conceptual knowledge and are in a better position to comprehend the meaning of service information as well as benefits obtained as compared to novice consumers (Alba and Hutchinson, 1987). Furthermore, novices and experts are more likely to assign different levels of importance to the same set of service attributes (Alba and Hutchinson, 1987; Dagger and Sweeney, 2007). In the context of Internet services, customers are generally segmented as heavy, medium and light users on the basis of their usage which is also an indicator of their experience with the ISP. Light users as novices are less familiar with technical issues and are often unable to fathom the implications of relevant information. Hence, they may pay more heed to attributes associated with convenience rather than actual importance (Dagger and O'Brien, 2010). This suggests that service quality dimensions that are important to light users might not be significant for more experienced customers (e.g. heavy users). As a result, the influence of these service attributes on customers' behavioural intentions is likely to vary across different Internet usage groups.

Segmentation is considered as an aid to customer retention strategies (Weinstein, 2002). As customers have different needs, wants and desires, they are not homogenous. Hence, it is necessary to segment the market in order to provide better services to the target audience (Mazzoni et al., 2007). Although the market segmentation concept has been reviewed comprehensively in the literature (Mazzoni et al., 2007; Wedel and Kamakura, 2003), there is scant empirical evidence of how Internet service providers can effectively segment their target audience. In this study customers are grouped based on their Internet usage patterns (Mazzoni et al., 2007; Wedel and Kamakura, 2003). By grouping customers into various usage categories, service providers can strategise effectively and efficiently for each segment and as a result, are able to enhance customer retention (Weinstein, 2001).

On average, an Internet user spends from 9 hours to as much as 20 hours per week online (ACMA, 2012). Heavy users are those who spend more than 29 hours on the Internet every week, whilst light users are those who use the Internet for less than 9 hours per week (Assael, 2005). The number of heavy users is envisaged to rise in the future as the role of the Internet is becoming increasingly important. A study by the Electronic Transactions Development Agency (ETDA, 2013) revealed that Thai Internet users who spend less than 11 hours per week online account for 35.7 per cent; those who spend between 11 – 20 hours per week online make up 25.8 per cent; 10.7 per cent of Thai users spend 21 – 41 hours on the Internet weekly; and 27.8 per cent spend more than 41 hours weekly. Adapting usage segmentation from previous research, this study identifies three main groups of Internet users including light (i.e.

less than 9 hours per week), medium (i.e. 9 – 29 hours per week), and heavy users (i.e. more than 29 hours per week).

Method

Data was collected from residential Internet users located in all regions of Thailand through an online survey. Thailand is ranked third in South East Asia by way of residential Internet usage with an estimated 17,483,000 Internet users in 2009 (CIA, 2013) and over 24 million Internet users in 2012 (IWS, 2013). The number in 2012 represented over one-third of the Thai population. A selective customer database of three well-established ISPs in Thailand were utilised as the sampling frame. The chosen corporations are the dominant players in the Internet services market in Thailand with nationwide coverage, and hold more than 90% market share in total. This database included customers throughout Thailand who were not locked into any fixed term contract with the ISPs. Therefore, they were free to act as they desired, and their behavioural intentions could be more accurately investigated. It was a requirement that the participants were over 18 years of age and had used home Internet services. The survey instrument was administered online using the university's Opinio survey platform. Opinio supports a full range of question types and surveys with skip logic and piping. The web link of the online survey was relayed to Internet customers in the sampling frame. The survey platform was kept live for a period of three months. A total of 8000 surveys were distributed in all geographical regions of Thailand. The final usable sample size was 2059. Table 1 depicts the demographic profile of the respondents.

Table 1: Demographic profile of respondents

Demographic profile	Number (N)	Percent (%)
<i>Gender</i>		
Male	1348	65.5
Female	711	34.5
<i>Age</i>		
18 and 28 years	465	22.6
29 and 39 years	797	38.7
40 and 49 years	510	24.8
50 years or older	287	13.9
<i>Household monthly income(Bath per month)</i>		
Under 10,000	92	5
10,001 to 30,000	537	26.1
30,001 to 50,000	484	23.5
50,001 to 100,000	503	24.4
Over 100,000	433	21
<i>Education</i>		
Secondary or below qualification	117	5.7
2 years college or associate degree	175	8.5
Bachelor's degree	1215	59
Postgraduate degree or higher	552	26.8
<i>Employment status</i>		
Full time	1302	63.2
Part time/casual/seasonal	48	2.3
Self-employed	506	24.6
Retired	146	7.1

Table 1: Demographic profile of respondents (Cont'd)

Demographic profile	Number (<i>N</i>)	Percent (%)
<i>Number of people in a household</i>		
1	118	5.7
2	396	19.2
3	399	19.4
4	557	27.1
5 or more	396	28.6

Analysis and Results

Usage Pattern of Internet Customers

The results show that 61.5% of the total respondents had used some other Internet service provider in the past. In terms of reasons for changing service providers, the result showed that 23% of total respondents switched due to promotional packages, 27% due to poor Internet service performance, 15.3% due to high price, 26.5% due to poor customer service; and 14.6% mentioned other reasons, for example poor aftersales service, inflexible payment method and lack of service coverage.

In terms of time spent on the Internet every week, 3.7% spent less than 2 hours, 24.9% spent 2 to 9 hours, 14.9% spent 10 to 19 hours, 8.1% spent 20 to 29 hours, and 48.5% spent more than 30 hours. A recent report indicated that the average time a person spends on the Internet is approximately 20 hours (Nielson, 2013), which is relatively consistent with the finding of this study. However, it is noticeable that almost half of the respondents in this study spent more than 30 hours on the Internet. This suggests that people tend to rely more on the Internet, which makes it a significant component of modern life.

Segmentation of Internet Customers

This study identified and examined three groups of customers: light, medium and heavy users. Heavy users (i.e. 48%) are those who spend more than 30 hours on the Internet every week (Assael, 2005). Spending significant amounts of time on the Internet, heavy users distinguish themselves from the other two groups. The numbers in this specific segment is expected to increase as the role of the Internet becomes increasingly more important in human life. Similarly, it is expected that users in the other two categories will either stay static or decrease. Light users use the Internet for less than 9 hours per week (i.e. 29%), and medium users (i.e. 23%) spend from 9 to 29 hours online per week.

Demographic Profile of Internet User Groups

Light users tend to be between 29 – 39 years (i.e. 36.4%) and 40 – 49 years old (i.e. 32.8%), who are employed full time (Table 2). The distribution of age among medium users does not show any significant pattern. Interestingly it was revealed that more than 60% of heavy users belong to the 18 - 28 age group. Besides, about 50% of the 29 - 39 age groups are classified as heavy users.

From the employment status perspective (Table 2), more than 40% of pensioners are light users. This can be explained by the fact that retired people are usually old and not familiar with the technology (i.e. Internet) especially in the Asian context. In terms of gender, females are more likely to be light users than their male counterparts. The distribution of gender is also relatively even in this group of users.

Noticeably in Table 2, more than 50% of respondents the from Education and Training sector are identified as medium users while approximately 50% of those in Administration and Office Support and Information Technology (IT) are identified as heavy users. This can be illuminated by the fact that office workers, especially IT and HR staff, often work with computers, engaging in frequent communications via emails as well as other online tasks.

Table 2: Age groups, employment status, gender and area of employment

Age group		18 - 28	29 – 39	40 - 49	50 >	
Light user	Count	89	214	193	92	
	% within Internet usage	15.10%	36.40%	32.80%	15.60%	
	% within Age group	19.10%	26.90%	37.80%	32.10%	
	% of Total	4.30%	10.40%	9.40%	4.50%	
Medium user	Count	94	165	129	85	
	% within Internet usage	19.90%	34.90%	27.30%	18.00%	
	% within Age group	20.20%	20.70%	25.30%	29.60%	
	% of Total	4.60%	8.00%	6.30%	4.10%	
Heavy user	Count	282	418	188	110	
	% within Internet usage	28.30%	41.90%	18.80%	11.00%	
	% within Age group	60.60%	52.40%	36.90%	38.30%	
	% of Total	13.70%	20.30%	9.10%	5.30%	
Employment status		Full time	Part time	Self-employed	Un-employed	Retired
Light user	Count	413	12	107	33	23
	% within Internet usage	70.20%	2.00%	18.20%	5.60%	3.90%
	% within Employment status	31.70%	25.00%	21.10%	22.60%	40.40%
	% of Total	20.10%	0.60%	5.20%	1.60%	1.10%
Medium user	Count	309	6	118	25	15
	% within Internet usage	65.30%	1.30%	24.90%	5.30%	3.20%
	% within Employment status	23.70%	12.50%	23.30%	17.10%	26.30%
	% of Total	15.00%	0.30%	5.70%	1.20%	0.70%

Table 2: Age groups, employment status, gender and area of employment (Cont'd)

Employment status		Full time	Part time	Self-employed	Un-employed	Retired
Heavy user	Count	580	30	281	88	19
	% within Internet usage	58.10%	3.00%	28.20%	8.80%	1.90%
	% within Employment status	44.50%	62.50%	55.50%	60.30%	33.30%
	% of Total	28.20%	1.50%	13.60%	4.30%	0.90%
Gender		Male		Female		
Light user	Count	357		231		
	% within Internet usage	60.70%		39.30%		
	% within Gender	26.50%		32.50%		
	% of Total	17.30%		11.20%		
Medium user	Count	317		156		
	% within Internet usage	67.00%		33.00%		
	% within Gender	23.50%		21.90%		
	% of Total	15.40%		7.60%		
Heavy user	Count	674		324		
	% within Internet usage	67.50%		32.50%		
	% within Gender	50.00%		45.60%		
	% of Total	32.70%		15.70%		
Area of employment		Agriculture	Education Training	Information Technology	Office Support	Hospitality Tourism
Light user	Count	4	42	75	202	93
	% within Internet usage	0.70%	7.10%	12.80%	34.40%	15.80%
	% within Area	21.10%	25.90%	22.70%	28.70%	33.20%
	% of Total	0.20%	2.00%	3.60%	9.80%	4.50%
Medium user	Count	8	82	86	158	61
	% within Internet usage	1.70%	8.00%	18.20%	33.40%	12.90%
	% within Area	42.10%	50.60%	26.00%	22.50%	21.80%
	% of Total	0.40%	4.00%	4.20%	7.70%	3.00%
Heavy user	Count	7	38	170	343	126
	% within Internet usage	0.70%	8.20%	17.00%	34.40%	12.60%
	% within Area	36.80%	23.50%	51.40%	48.80%	45.00%
	% of Total	0.30%	1.80%	8.30%	16.70%	6.10%

Switching Intention

This section examines the differences in customer retention of light, medium and heavy users. Kruskal – Wallis ANOVA tests were employed to examine switching intention of the three usage groups. The results in Table 3 indicate that there were statistically significant differences between light, heavy and medium users in their switching intention.

Table 3: Result of Kruskal – Wallis ANOVA tests Switching intention

Internet usage	Mean Rank	Chi-Square	Asymp. Sig.
Light user	970.95	$\chi^2(2) = 8.94$	0.011
Medium user	1042.16		
Heavy user	1059.03		

With regards to the switching experience and to the high churn rate experienced by this industry, it is not surprising that more than 50% of the respondents in this survey had used other ISPs before. However, it is noticeable that nearly 80% of heavy users agreed that they switched service providers previously, whereas only 63% of medium users and 58% of light users had experience with other ISPs. This confirms that heavy users are more likely to switch when compared with the other two segments. Moreover, the significance test (Table 3) also demonstrated that heavy users tend to exhibit higher intention to switch than light and medium users.

In terms of switching behaviour, more than 50% of heavy users chose poor service performance as the reason why they changed their service providers (Figure 1). The second reason was poor customer service followed by less promotional packages. Only 24% of heavy users switched because of price. It appears that customers belonging to this group of users focused more on the core performance of Internet service providers (i.e. 50.6%). They were less concerned with the monetary cost or the promotional packages.

On the other hand, medium users were most likely to switch when they perceived poor service delivery (i.e. 41.5%) or experienced bad customer service (i.e. 40.8%). Light users appeared to be equally concerned with customer service (i.e. 40.3%), poor Internet service performance (i.e. 39.1%) and promotional packages (i.e. 39.1%). It can be concluded that although heavy users related their switching decision making predominantly with Internet performance, all the three groups consistently considered poor Internet service performance, poor customer service, and less promotional packages as the top three reasons to switch (Figure 1).

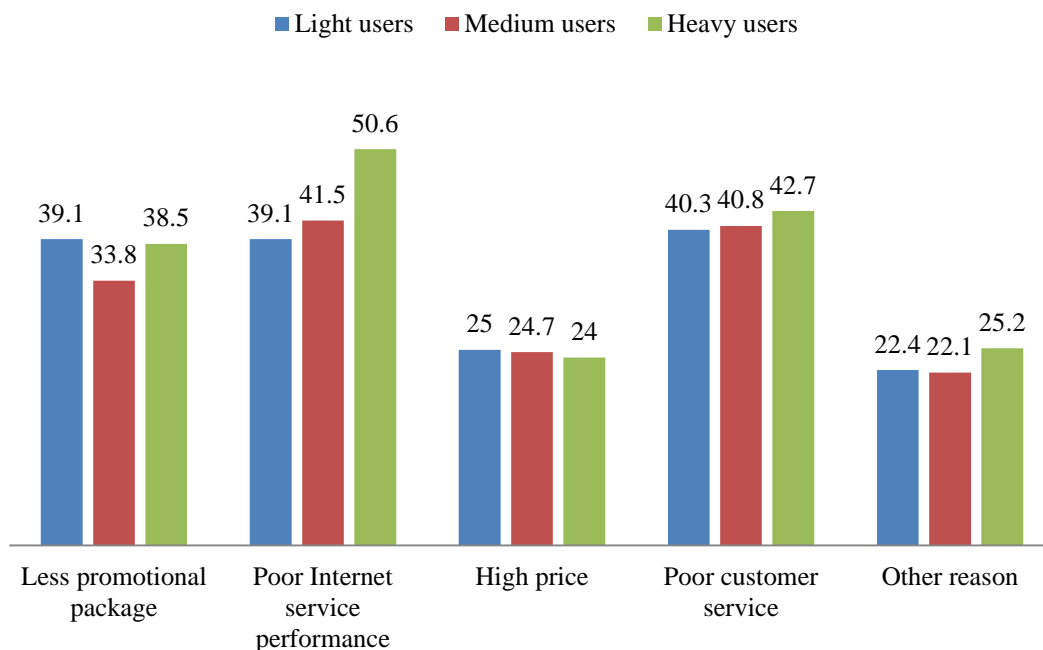


Figure 1: Reasons to switch

Four main factors of service quality are network quality, customer service, information support and security and privacy. Multiple regression analyses were used to confirm the effects of service quality factors on the criterion variables (i.e. switching intention) across different groups of Internet users. Results from regressing switching intention against four service quality aspects are shown in Table 4. For all participants, perception of network quality, customer service, information support, and security and privacy was negatively related to switching intention. The core ISP service offering, network quality, was predominant in determining the intent to switch, whereas customer service, security and privacy issues were least influential. As expected, the effects of all four ISP service quality aspects on customers' intention to switch were different among light, medium and heavy users. Network quality was the most important factor in determining both medium users and heavy users' switching intention. In contrast, information support had the most significant influence on light users' intention to switch. Furthermore, it is noticed that customer service was only significantly and negatively associated with switching intention of heavy users. Following Prentice (2014), further analyses were undertaken to test the effects of service quality by dropping the factors that were not significantly related to the criterion variable (i.e. switching intention). Removing the non-significant predictors makes the model fit that dataset better and a more parsimonious model can be achieved. In addition, using more variables may lead to over-fitting a model (Crown, 1998). The findings were confirmed in these additional analyses. The beta values for these variables are shown in Table 4.

Table 4: Results for the relationships between customer perceptions of service quality, and intention to switch, beta coefficients

	Intention to switch				Total	Intention to switch (after dropping insignificant factors)		
	Total	Light users	Medium users	Heavy users		Light users	Medium users	Heavy users
NQ	-.122***	-.088	-.197**	-.119**	-.122***		-.280**	-.159***
CS	-.066*	-.044	-.005	-.103*	-.066*			-.171***
IW	-.100**	-.168**	-.027	-.078	-.100**	-.294***		
SP	-.078**	-.079	-.109	-.063	-.078**			
Model summaries for switching intention					Model summaries for switching intention (after dropping insignificant factors)			
R ² (Total) = .092, F(4, 2054) = 51.979					R ² (Total) = .092, F (4, 2054) = 51.979			
R ² (Light Users) = .1, F (4,583) = 16.284					R ² (Light Users) = .086, F (4,583) = 55.416			
R ² (Medium Users) = .089, F (4, 468) = 11.426					R ² (Medium Users) = .078, F (4, 468) = 40.007			
R ² (Heavy Users) = .09, F (4, 997) = 24.572					R ² (Heavy Users) = .080, F (4, 997) = 44.450			

Notes: total = coefficient values for all participants, * p < .05, ** p < .01, *** p < .001

Hours spent on Internet per week: light users = under 9 hours; medium users = 9 – 29 hours; heavy users = more than 29 hours. NQ = network quality; CS = customer service; IW = information support; SP = security and privacy

Discussion and Implications

This research aimed to provide a holistic picture of customers in the home Internet services sector in Thailand. It has developed an understanding of consumption behaviour including customers' demographic profiles and switching behaviour with a view to achieving the foundation for customer retention strategies. It contributes towards a new body of knowledge with regards to the future potential of ISPs. This

study highlights the importance of segmentation, and in this regard customers' usage patterns were addressed as one of the important bases of segmentation. Practically, ISPs need to consider customer usage patterns to serve their customers better.

The findings demonstrate that ISP customers are not homogeneous. As such, it is vital to understand customer characteristics in order to retain them. For instance, heavy users tend to have higher expectations when evaluating service quality aspects. They are most satisfied with security and privacy practice of their ISPs whereas information support receives the highest rating from the other two groups. Moreover, the likelihood of switching to other service providers is greater for heavy users in comparison to light or medium users. The various effects of an ISP's service quality aspects (i.e. network quality, customer service, information support, privacy and security) on customers' intention to switch among the three segments of Internet users also deserve the ISPs' attention. The findings can be utilised to design marketing strategies targeting specific market segments. For example, in order to decrease the churn rate, companies need to ensure good network quality for medium and heavy users, whereas emphasis on information support should be given to light users.

Furthermore, the findings demonstrate that all of the three usage groups consider Internet service performance, customer service, and promotional package as the top three motivations for switching. However, each of the groups attaches different levels of importance to the three reasons. For example, while heavy users consider a failure of Internet service performance as the primary reason for changing service providers, poor Internet performance and customer service are almost equally chosen by medium users and light users as their rationale for switching.

In general, this study proposes that firms can build customer retention by providing outstanding Internet service performance, good customer service, and reasonable promotional packages, which are critical for an ISP's success and long term sustainability. As respondents in this study pay less attention to price, competing on price is not recommended for ISPs. Moreover, ISPs should address the issues that are relevant to specific customer segments in order to maximise the use of its resources and become more market oriented. For instance, promotion programs should target light users rather than heavy users who focus more on network quality. ISPs should leverage on these findings in order to enhance customer retention. Finally, it is highlighted that ISPs can achieve success by designing and implementing marketing strategies which place customers central in their day to day operations. Beneficiaries of this study are various stakeholders in Thailand, including consumers of ISPs, ISPs themselves, the government, and other commercial interests.

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