

BEHAVIOR OF CELLULAR SUBSCRIBERS: DEMANDS AND SATISFACTIONS¹

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Abstract

Cellular subscribers' demands and satisfactions have been an issue to cellular operators in Malaysia. Moreover, the establishment of the Communications and Multimedia Commission is to ensure all operators are in compliance with the industry requirements. Further, this paper explores the factors that can meet the subscribers and subsequently improving satisfactions. Proactive actions must be adopted by cellular operators from the aspects of network services, operations services, and customer services.

Key words: Cellular industry, customer demands, customer satisfactions, cellular subscribers.

INTRODUCTION

Cellular business in Malaysia has been one of the fast moving service industry. The industry needs to keep up and cope with the demands from its subscribers. Nevertheless, cellular operators are striving with all of their resources in ensuring that every one of its subscribers was given the best service at all times.

Further, the establishment of Communication and Multimedia Commission (CMC) by the Ministry of Energy, Post and Multimedia is to ensure that each cellular operator is moving towards customer satisfaction. Further, customer satisfaction of cellular subscribers is considered as strategic parameter that will yield better long-term results

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that are critical to overall corporate success. Customer satisfaction factors will be discussed on contributions by network services, operations services, and customer services.

This paper will focus on the demand and satisfaction factors of which the cellular operators need to improve and give the best of its' service to their subscribers.

LITERATURE REVIEW

Background of Cellular Industry

In Malaysia, the cellular business had been pioneered by Telekom Malaysia as they launched their TM Atur450 by using the NMT-450 system. Further, due to the demands from subscribers and the opportunities given the industry, Celcom entered into the business with their Art900 service that based on E-TACS system. Both systems were analog.

As the nation moves into the millennium, the industry had changed as various operators were emerged and some were taken over by the other operators. Telekom Malaysia took over TMTouch (GSM-1800) and Mobifon 018 (AMPS-A and US TDMA-800). Meanwhile, Celcom introduced its digital service by using GSM-900 system through its Celcom GSM. Further, various digital cellular operators mushroomed such as Maxis (GSM-900), DiGi (GSM-1800), and Adam (GSM-1800).

In summary, there are eight types of cellular services, which can be chosen from. Further in terms of technology, cellular operators' systems can be grouped into digital, analog, or both. The digital group are consists of TMTouch, Maxis, Celcom GSM, Adam, and DiGi. Meanwhile, TM Atur450 and Celcom Art900 are analog. On the other hand, Mobifon has both systems – digital and analog.

Subscribers' Behavior

Consumer behavior as defined is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society (Hawkins et al., 2001). Moreover, demands and satisfactions of subscribers in the cellular industry can be discussed from the following perspectives: Network services, operations services, and customer services.

Network services

Network services function is one of the main pillars for a cellular operator in delivering their services. The network services can be discussed on call quality, coverage, and network.

From customers' perspective of call quality, any dropped calls, static and broken conversation during cellular phone calls can lead to their frustration and angry (Steward, 1993). Further, voice quality as customer experience the dramatically improved landline transmission quality of today's digital public switched telephone network (PSTN), with its better call clarity and reduced circuit noise, their expectation level of cellular performance is similarly raised (Shah, 1996). Most people just use the phone, but what a customer really wants is a good connection, a clear call, and coverage so they can take the phone wherever they go (Boney, 1997). The latest report from CMC (Utusan Malaysia, 2001), the most frequent complaints from cellular customers are due to call quality.

Coverage cells are vital for capturing customers but generally require tall base station antennas (Rappaport, 1996). As illustration, Telecom Mobile of New Zealand claimed its cellular coverage covers 96% of the New Zealand's population with its 400 cell sites, or transmitters, around the country (Kaye, 1996).

Network technologies and air interface standards are rapidly advancing and becoming more complex. Therefore, drop calls, rough handoff, static, or generally weak cellular signals can lead easily to subscriber discontent and churn (Steward, 1996). Cellular operators' success depends greatly on the design and management of the cellular network infrastructure. Strategic network management process should revolve around a system that recognizes the corporate mission that ultimately will allow the company to defend and increase market share and profitability (Burdiek, 1993). Shah (1996) stated that background noise is another factor. The echo canceller of today is at the center of very complex digital network that can assist network operators to deliver a better quality of service to their customers.

In summary, without the basic infrastructure of network services in the support of call quality, coverage, and network; the cellular operator is in no business of providing a cellular service. Therefore, it is vital and crucial that cellular operators to emphasize on its network services function.

Operations services

Operations services can be considered as the branch or outlet of cellular operators. Operators need to have substantial number of branches or outlets in order to reach and serve their customers. Customers need to be served, as they are lifeblood. Operations services can be discussed on price/value, corporate image, billing, and brand image.

Cellular companies need to stress value; do not promote price as anybody can beat by price (Spoor, 1994). Meanwhile, competition spurred attractive incentives for price-conscious subscribers to switch to other carriers. Further, the agent might lure them into another pricing plan with the same carrier by baiting them with a newer phone (Blake, 1997). Boney (1997) indicated that value is one of the most important aspects of service. Therefore, the key is offering a variety of choices, including features handsets,

technology, contract options, and pricing. Of these, pricing usually is the one most common related to value.

Meyers (1997) stated that building corporate image, those responsibilities include paying constant attention to the needs of customers in local markets while still maintaining a unified national whole, ensuring employee satisfaction, building brand recognition and equity, developing and adapting new technology platforms, and focusing on expansion by acquisition and creating new services.

Cellular operators need to upgrade their billing systems in order to continue crank out accurate bills. Billing system is the lifeblood of their business. If the operators cannot have the accuracy, or no ability to bill in a timely fashion, they could run into major cash-flow problems that could cripple or ultimately destroy their business (Ryan, 1995). Further, when the customer questions their first bill, it can determine whether or not that customer possibility of hopping to another carrier next month as they are not satisfied (Spoor, 1994).

Based on brand image, 81% of cellular users intend to repurchase the same brand of cellular phone that they currently use. Brands with the highest customer satisfaction were Motorola, AT&T, and Nokia (Anonymous, 1995). Further, handset features that properly packaged for the high- and low-end segments of the cellular and PCS markets, can promote greater customer loyalty. Features are the factor carrying the greatest weight in determining which handset subscribers buy. Handsets with feature-rich are best geared toward high-end customers, while phones accentuating voice telephony will go over better with low-end users (Murphy, 1998).

In summary, cellular operators need to focus their operations toward the perspective of cellular users. Further, price/value, corporate image, billing, and brand image need to be integrated in cellular operators marketing and promotional programs.

Customer services

Customer service and customer satisfaction in the cellular service has been critical success factors of the cellular industry. Moreover, none of the cellular operators in Malaysia can avoid providing customer service and subsequently working towards the customer satisfaction in delivering their services. Customer service is part of the branch functions that involved interactions between their staffs and customers. Further, customer service has been indicated as the only parameter that, if optimized in the short run, will yield better long-term results that are critical to overall corporate success (Burdiek, 1993). Also, Burdiek (1993) states that customer quality model for cellular service do not yet exist, despite the fact that a tremendous amount of industry capital has been allocated to model other network performance attributes. Further, customer services can be discussed on proactiveness, technology, training, salesperson, demand solutions, and survey.

Cellular operators need to be proactive in manning the customers' demands. Further, call centers do not want to wait until their customers have left to consider investing in quality. Call centers that did wait, and they are no longer in business (Garelis, 1996). Further, the industry needs to proactively invest in technology to improve the quality of customer service, and as a result have gained advantage over the competition. Garelis (1996) mentioned that by implementing a technology that provided our employees with the right tools, we enable them to take ownership of their jobs, and that improved the overall quality of service provided. Further, innovative software applications were used to improve quality of service to customers. Garelis (1996) stated the application provides better performance feedback to agents, helping them develop skills to improve the overall quality of the customer interaction.

Cellular operators need to ensure that they have a technology in ensuring customer service at best. Garelis (1996) stated that providing the high-quality customer interaction necessary today and for the future requires investment in people and in technology designed to help you provide the best service possible. Without these investments, you might be able to provide adequate customer service, but you will never surpass the increasingly higher levels of quality service offered by your competitors.

Spoor (1994) indicated that training is essential. Without the proper training, cellular operators couldn't effectively sell products and services. As more people become aware of the advantages of the cellular phone, more customers will walk through your door. However, getting these customers to buy a product or service from you is the important part. In training, a good training program is needed. Spoor (1994) considered the following elements in the sales tool kit: classroom type instruction, role-playing, on-the-job training, learn the business, follow-up training, continuous training, guest speakers, and videos and manuals.

Salesperson always will need to travel to new sites and drum up new business. The key to selling cellular to someone you have sought out is to begin by building rapport with the prospective client (Spoor, 1994). Further, cellular operators need to sell their commitment instead of overcoming the price issue. They need to call the customer for feedback and drop in or call the customer every month because his or her needs change. Meanwhile, Boney (1997) stated that one common ground that most carriers and customers agree on is that good customer service can have a key impact on how a customer views your services and company. Further, customers appreciate the valuable availability of personnel. As indicated by Stites (1997), the competitive climate had advanced the function and importance of customer service. More and more, companies realize that building strong relationships is a vehicle to increasing their customer base. The benefit is twofold: growth and intimacy. The result is increased sales, revenue growth and reduced operating costs.

A subscriber demands continue to grow, toll-free numbers are no longer viable as the only solution to meet customer requirements. An excellent example is Internet based solutions. They allow customer inquiries to be answered in a timely and complete manner and to avoid missed opportunities (Stites, 1997). Moreover, Stites (1997) indicated that

customer service is a critical component of the overall subscriber experience, as the technically innovative site encourages user interaction through games, sweepstakes and feedback forms.

Moreover as reported in Utusan Malaysia (2001), the CMC had instructed all cellular operators to conduct their own survey on customer satisfaction. The survey report must be submitted to the CMC, on quarterly basis, for their monitoring of the services provided and as input of feedbacks from the industry.

Therefore, a poor customer service is as good as a reason for the subscriber to churn from one cellular operator to another of which reflects the level of customer satisfaction.

DISCUSSIONS

Based on the literature review on network services, operations services, and customer services that constructed the structure of cellular operators. Meanwhile, subscriber demands will influenced their satisfaction. Cellular operators' need to strive their effort in all aspects of their business in full filling their subscriber demands. Therefore cellular operators may consider the following discoveries by various researchers in their strive for excellence towards customer satisfaction:

a. Network services:

1. proactively invested in technology to improve the quality of customer service (Garelis, 1996; JDPA, 1999 & 1998b).
2. improve call quality (JDPA, 1999, 1998b & 1996).
3. improve roaming/coverage (JDPA, 1998b).
4. adding digital capacity to the network (O'Keefe, 1998).
5. improve network services (Rappaport, 1996).

b. Operations services:

1. improve pricing options (JDPA, 1999 & 1998b).
2. improve corporate capability/image (JDPA, 1999, 1998b & 1996).
3. improve billing (JDPA, 1999, 1998b & 1996).
4. achieving competitive advantage by producing faster and cheaper service (Garelis, 1996).
5. segmented the customer based on service offerings tailored to their specific needs (Eastwood, 1996).
6. selection of handset models (JDPA, 1999 & 1998b).
7. reduce cost of roaming (JDPA, 1999, 1998b & 1996).
8. choose the right marketing strategy (JDPA, 1995).
9. flexibility of pricing plans (JDPA, 1998a).
10. pricing plans that calling party pays (JDPA, 1998b).

c. Customer services:

1. proactively preserving and improving relationships with customers (Stites, 1997).
2. improve credibility/customer communication (JDPA, 1998b & 1996).
3. increase flexibility to handle evolving customer needs and ensure customer
4. satisfaction levels (Ryan, 1995).
5. providing top-caliber customer service: action, attitude, and system (Merrill, 1992).

Further, the above discoveries by various researchers need to be considered in the strategic management of cellular operators in getting the best result of managing their customer demands and churn. Moreover, churn is the main concern of all cellular operators. Further, churn is considered as a phenomenon commonly attributed to cellular carriers, although the practice of switching to alternative providers initially was legitimized during the post-divestiture long-distance battles (Blake, 1997).

Key contributors to churn include the perception of weak coverage and changing subscriber expectations (Egolf, 1995). He stated that business users willing to pay a premium, subscribers now are looking for service that's comparable in price and quality – and even interchangeable – with their landline service. Proactive and a reactive customer retention tool to be used to build loyalty, to try too identify sources of potential customer dissatisfaction in advance. Further, Egolf (1995) indicated that his philosophy is proactive customer service is a must.

Moreover, today's sermon is on the evils of customer churn and its treacherous ways of bleeding the financial lifeblood out of a company (Blake, 1997). Therefore, companies become much more sensitive to areas that can have a positive effect on their bottom line. Churn stems completely from the relationship between the subscriber and the carrier. In reality, though, much of the fault lies hidden in the layers of management or mismanagement between carriers and their agents. Blake (1997) stressed that timing is another critical factor in sustaining a long lasting relationship with subscribers. More than 30% of customers churn within the first six months of service. He suggested that company to reward them at that point before they're likely to churn and keep them on the system.

Lonergan (1999) stated that churn remains a major challenge for cellular operators. Most common cause of churn among cellular customers is switching to another service/tariff plan offered by a different network. Moreover, almost 25% of customers left their previous service provider to take a promotional offer from another provider, and over a quarter of cellular users were ready to consider terminating their landlines service if the cost of using a cellular phone was the same as that for a landline service (Anonymous, 1999).

Stites (1997) indicated that various databases driven solution allows carriers to segment their subscriber base, target high-value customers most likely to churn and proactively

intervene. Further, the product allows a service provider to utilize a customized database to identify preferred customers most likely to churn by analyzing changes in subscriber behavior and existing rate plan components. Once behavior changes are identified, our customer service representative would initiate contact with these customers, address individual concerns and offer incentives to retain their business.

Happy subscribers are less likely to churn off their operators' network (Murphy, 1998). Therefore, it's the duty of the cellular operators in keeping their subscribers on their network.

CONCLUSION

Subscribers are the lifeblood to the cellular operators. Further, due to the present competition among the operators, they need to improve their services. Churn has been the major concern of cellular operators in Malaysia. Therefore, the industry players need to consider demands and satisfactions from their subscribers in ensuring them from churning to another operator. By reacting proactively towards the demands and strive for customer satisfactions, cellular operators can be competitive against their competitors.

For future research, an extensive survey needs to be carried out in assessing the subscribers' demands and satisfactions from their cellular operators.

REFERENCES

- Anonymous (1995). "Price Main Factor in Cellular Service; Customers Loyal to Phone Manufacturers," *Mobile Phone News*, Bethesda, April 10.
- Anonymous (1999). "New Cellular Users Spend Less Than Experienced Ones," *Telecomworldwide*, Coventry, May 18.
- Blake, Pat (1997). "Fire and Brimstone," *Telephony*, Chicago, November 17.
- Boney, Karissa (1997). "The Value Menu," *Cellular Business*, Overland Park, April, Vol.14, Issue 4.
- Burdiek, Michael (1993). "Strategic Network Management," *Cellular Business*, Overland Park, January, Vol.10, Issue 1.
- Eastwood, Margaret A. (1996). "Implementing Mass Customization," *Computers In Industry*, Amsterdam, October 15, Vol.30, Issue 3.
- Egolf, Karen (1995). "Cellular Carriers Confront Churn," *Telephony*, Chicago, Jul. 17, Vol.229, Issue 3.

- Garelis, Aaron (1996). "Quality in the Call Center Industry – What We Can Learn from History," *Telemarketing and Call Center Solutions*, Norwalk, February, Vol.14, Issue 28.
- Hawkins, Del I., Best, Roger J., and Coney, Kenneth A. (2001). *Consumer Behavior: Building Marketing Strategy*, Irwin/McGraw-Hill, New York.
- [JDPA] J.D. Power and Associates (1995). "Bell Companies Fare Well in Customer Satisfaction Study; Churn Facts Revealed," *Mobile Phone News*, Bethesda, December 4.
- [JDPA] J.D. Power and Associates (1996). "J.D. Power and Associates 1996 Wireless Customer Satisfaction Study: AT&T Wireless and Sprint Spectrum Make Major Strides," October 17.
(<http://www.jdpower.com/jdpower/releases/601017pho.html>).
- [JDPA] J.D. Power and Associates (1998a). "J.D. Power Survey Shows Higher Customer Satisfaction for PCS Over Cellular," *Communications Today*, Potomac, January 15.
- [JDPA] J.D. Power and Associates (1998b). "Fierce Competition in Wireless Market Causes Shift in Customer Satisfaction Leaders in the J.D. Power and Associates Fourth Annual Wireless Customer Satisfaction Study," September 22.
(<http://www.jdpower.com/jdpower/releaes/809022wir.html>)
- [JDPA] J.D. Power and Associates (1999). "J.D. Power and Associates Reports: Newer Wireless Telephony Entrants Make Dramatic Impact in the Wireless Marketplace," September 23.
(<http://www.jdpower.com/jdpower/releases/uswireless092399.htm>)
- Kaye, Marsha (1996). "Battle of the Cellphones," *Management*, March, Vol.43, Issue 2.
- Loneragan, Declan (1999). "90% of New Cellular Users Spend Less Than \$50 per month," *M2 Presswire*, Coventry, May 17.
- Merrill, Michael F. (1992). "The Truth About Customer Service," *Cellular Business*, Overland Park, November, Vol.9, Issue 12.
- Meyers, Jason (1997). "Circle of Friends," *Telephony*, Chicago, May 5, Vol.232, Issue 18.
- Murphy, Kara (1998). "Subscribers Still Resist Learning Handsets' Full Functionality," *Communications Today*, Potomac, November 18.
- O'Keefe, Susan (1998). "The Wireless Boom," *Telecommunications*, Dedham, November, Vol.32, Issue 11.

- Rappaport, Ted S. (1996). "Coverage & Capacity," *Cellular Business*, Overland Park, February, Vol.13, Issue 2.
- Ryan, Alan J. (1995). "Reaching Out to Touch You," *Informationweek*, Manhasset, March 13.
- Shah, Tushar (1996). "Putting a Quality Edge to Digital Wireless Networks," *Cellular Business*, Overland Park, September, Vol.13, Issue 9.
- Spoor, Dana L. (1994). "Selling Cellular 01," *Cellular Business*, Overland Park, January, Vol.11, Issue 1.
- Steward, Shawn (1996). "New Directions in Test Equipment," *Cellular Business*, Overland Park, September, Vol.13, Issue 9.
- Steward, Shawn (1993). "Testing Equipment Roundup," *Cellular Business*, Overland Park, September, Vol.10, Issue 9.
- Steward, Shawn (1995). "Single Number, Different Methods," *Cellular Business*, Overland Park, July, Vol.12, Issue 7.
- Stites, Elizabeth M. (1997). "Outsourcing the Customer Life Cycle," *Telemarketing & Call Center Solutions*, Norwalk, September, Vol.16, Issue 3.
- Utusan Malaysia (2001), "Pengendali telefon bimbit diarah serah laporan [Cellular operators are directed to submit report]," Saturday, May 25, 2001.

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