Noor N. Kader Ali (Malaysia), Bin Y. Soon (Malaysia), Lee S. Goh (Malaysia), Nur A. Ahmad Razi (Malaysia)

Symptoms versus problems (SVP) in household high speed broadband (HSBB): regaining momentum for Unifi, Malaysia

Abstract

Problem identification is a talent and skill set required in all leaders. The objective of this study is to reveal an improved research method by integrating mixed-method research combined with problem identification method (using symptoms versus problems (SVP) framework) for telco service providers. The SVP framework discovers the primary causes to the decrease in revenue growth rates. Malaysia’s household broadband penetration rate grew from 15.2% (2007) to 67.1% (2013). Meanwhile, the growth rate for Unifi, offered by Telekom Malaysia (TM), decreased from 104% (2012) to 30% (2013). Why? There are eight causes, specifically; not prioritizing 4G LTE license; obligating social services to rural areas; providing 20-30 Mbps wireless broadband packages by the competitors; offering less competitive price; not covering all zones; offering less favorable service contracts; offering limited packages; and receiving customer complaints. The sequential methodology process began with semi-structured interviews, analysis of unpublished company data, customer survey on 164 respondents and field observation which were all summarized into a root-cause analysis tool called symptoms versus problems framework (SVP). The SVP indicates TM acquired Packed One to overcome HSBB issues; revamp its strategies to product content offering instead of head-on price war; establishing bureaucracy busting team, competitors busting teams on product innovation; collaborating with local broadcasting companies; and developing talent. Interestingly, this study discovers another framework on critical success factors for telco service providers through development of “House of Pillars for Rapid Growth” of TM in Malaysia.

Keywords: household broadband, high speed broadband, Unifi, growth, symptoms versus problems, house of pillars.

JEL Classification: D92.

Introduction

Telekom Malaysia Berhad (TM) is the largest integrated communication solutions provider in Malaysia and one of Asia’s leading telecommunication companies. It offers a comprehensive range of communication services solutions in fixed line, data and broadband.

On 6th December 2012, Malaysian Communication and Multimedia Commission (MCMC) awarded 4G Long Term Evolution (LTE) 2.6GHz spectrum license to eight companies beginning 1st January 2013, namely, Celcom, Digi, Maxis (the three major cellular providers in Malaysia), U mobile, P1, Redtone and Puncak Semangat (Francis & Hassan, 2012). Maxis took the fastest deployment by offering the 4G LTE service on the first day of 2013 (The Star, 2013). At the time of the award, the wireless 4G LTE service was perceived as mobile communication market in particular, mobile phones such as iPhone 5s, Samsung S5 and Sony Xperia Z2. However, as demand for mobility increases, 4G LTE is seen in both fixed and wireless household high speed broadband services (YES, 2014; Maxis, 2014). What looks more interesting is that the wireless broadband 4G LTE is seen capable to provide customers with higher band width at a faster speed.

Mr. Azhari, the General Manager for Northern Region of Telekom Malaysia (NRTM), is concerned since the 4G LTE is seen to be making a dent in the broadband industry in 2013 and 2014. Competitors are offering competitive products. 4G LTE, a high speed broadband (HSBB), is capable of providing a broadband speed around 30 Mbps for its customers (refer to Figure 1). Unifi home service, one of TM’s product, only offers its HSBB up to 20 Mbps (refer to Figure 1) for its fibre optic product, despite having capabilities up to 100Mbps. Whereas, TIME offers up to 100 Mbps for household consumers, but are slow on coverage (refer to Figure 1). By the end of 2013, TM only captured 39% of the total household broadband market (refer to Figure 2). “Why is this so?”, questioned Mr. Azhari.

Unifi financial report in 2013 shows a decrease in growth rate for Unifi subscriber, specifically, from 104% in 2012 to 30% in 2013 (Telekom, 2012; Telekom, 2013), while for Maxis subscribers, the growth rates increased to 170% in 2013 (Maxis, 2014).

The objective of this study to reveal an improved method by integrating mixed-method research approach combined with problem identification method (using symptoms versus problems (SVP) framework) for telco service providers. During the study, the improved SVP framework discovers the primary causes that allow TM to better understand why Unifi growth rates are decreasing, in comparison to its competitors (who are positioning their products in the household wireless broadband category). Should
TM change its strategic direction by focusing on the effectiveness of its content offering wireless broadband products, instead of competing on speed and price?

Source: refer to Appendix: Table 3 – sources.

**Fig. 1. Range of bandwidth offered by Telco/Celco**

1. Industrial analysis

In this millennium, constant deregulation around the world, creating a flush of new entrants is causing stiff competition, especially in developing and developed countries where citizens are connected to the internet. (ITU, 2013). According to the 2013 census, Malaysia has a total of 29.6 million populations comprising of 6.8 million households, of which 67.1% or, 4,558,100 private households are internet broadband subscribers (MCMC, 2013). Malaysia’s household broadband penetration rate was grown tremendously from 15.2% in 2007 to 67.1% in 2013.

Source: MCMC statistic for broadband.

**Fig. 2. Malaysia household penetration rate**

However, data gathered by “Malaysian Communication and Multimedia Commission” (MCMC) shown in Figure 2 indicate the growth momentum for household broadband is showing signs of slowdown, with the increase of only 1% of the total number of households in Malaysia, in 2013. The intensive growth between 2007 and 2012 was closely related to government initiatives accelerating HSBB infrastructure in Malaysia. TM in particular opens the door for Malaysians to enjoy HSBB with Unifi, as one of the early HSBB products offered in Malaysia. Out of the 67.1% broadband users, TM holds the biggest share with 39.4% of total country broadband subscribers (Figure 3). Currently, TM broadband is still the largest broadband provider in Malaysia. However, with technological advancement, out of the broadband users, 82% of households have one internet subscription, of which, 61.6% are mobile broadband users and 32.6% are users of ADSL, indicating a shift in market share where wireless access out numbered fixed line broadband players (MCMC, 2012). Thus, emerging of new entrant and substitute products are becoming a threat to the Unifi growth rate.
2. Methodology

In this study, structured interviews, review of company’s unpublished data, customer survey, field observations and literature review were conducted. The main issue was identified using a root-cause analysis tool called the symptoms versus problems (SVP) framework, introduced by Kader Ali et al. (2014).

Structured Interviews were conducted with the top management of NRTM, and Sales and Marketing Officer. Analysis of unpublished data was summarized in percentages and matched to TM’s annual reports published. Market analysis was conducted using published data in social media and literature reviews. Field observations were conducted at NRTM’s sales and services centres.

Quantitative survey on 164 broadband users as respondents was conducted using purposive and random sampling, while data were analyzed using cross tab method from SPSS statistical software. The findings from all the above methods were summarized structurally using a root-cause analysis tool called the symptoms versus problems (SVP) Framework. It is structured in columnar diagram that begins with identifying major signal of weakness classified as Tier 1 symptom. The causes based on facts are reflected in Tier 2 and 3 symptoms. There can be more than one cause under Tier 2 and 3 symptoms. Tier 4 symptoms or variables are supported from discussions, other sources and analysis that are direct and/or indirect influence in nature. Other tier symptoms before the problem are called elements derived from various methods stated in Methodology. The final root cause or the problem is the end root-cause (Kader Ali, Wilson & Mohammad, 2014).

In this study, Tier 1 symptom was derived from evidences in unpublished data of TM. Tiers 2 and 3 symptoms were supported by evidences from interviews, analysis of unpublished data, surveys and literature reviews. Tier 4 variables and all remaining Tiers or elements were supported by all the above methods and field observation. The deadlock or problems were labelled when causes to the elements reached the final root cause. In this study, the SVP were illustrated by showing the cause and effect relationships between the symptoms and problems, horizontally and vertically. Solutions are recommended to the deadlock problems based on analysis of the above findings, discussion with management and supported by literature review.

3. Case write up and case analysis

The symptom versus problem (SVP) framework has been used in this study to analyze the major signal of weakness, specifically, decrease in growth rate of Unifi subscribers, as Tier 1 Symptom shown in Figure 4 (see Appendix).

The SVP Framework analysis (Kader Ali, Wilson & Mohammad, 2014) in Figure 4 has summarized the facts showing a total of 8 causes under Tier 2 symptoms and 12 causes for Tier 3 symptoms. The causes are identified as follows.
4. Tier 4.1: 4G LTE license not a priority

TM does not see the need to invest in 4G LTE development, as the 2012-2013 dominance technology is fixed line broadband, as shown in Figure 3 analysis. Therefore, TM focuses on Fibre-to-the-Home (FTTH) and Fibre-to-the-Business (FTTB) growth, following its PPP agreement with the government, requires heavy investments in fibre optic cable infrastructure and expansion throughout the country (refer Figure 5). Meanwhile, competitors are taking advantage of 4G LTE license award by offering attractive HSBB mobile packages, leaving TM to deal with no wireless product offering problem in 2014 (Francis & Hassan, 2012).

5. Tier 4.2: a social obligation to suburban and rural areas

Analysis of unpublished data, interviews with management and pricing analysis (ITU, 2013) reveals that TM as a GLC has a social obligation to provide broadband services to suburban and rural areas, allocating its resources to install fibre optic infrastructure in the rural areas (MCMC, 2012; Telekom, 2013). Thus, it brings about incurring higher infrastructure and operating cost, and losing price competitiveness with its competitors in rural areas. Also, TM cannot enforce bandwidth cap on subscribers (refer Figure 6). Meanwhile, the ratio of the internet users between urban and rural area is 75.8% to 24.2%. Moreover, reasons for not using the internet include lack of skills (50.5%), lack of interest (27.9%), cost to high (13.3%), no device (11.3%), language barrier (4.3%), lack of perceived benefits (2.3%), disability (1.6%), and fear of technology (0.7%) (MCMC, 2012). This leaves TM with the problem to diversify its product plan for urban, suburban and rural areas (Telekom, 2014).
6. Tier 4.3: threat of new entrants and substitute products

Threat of new and substitute products entering the market providing wireless 20-30 Mbps ahead of TM fixed broadband offering packages at 5-20 Mbps has a significant impact on TM (Refer Figure 1 and Appendix). Market analysis and survey results indicate competitors provide more bandwidth choices and free calls for subscribers. Meanwhile, TM is focusing on changing customers’ perception from bandwidth offering to content offering. TM provides triple play service to consumers, which consists of Video (Internet Protocol Television, IPTV), Internet (Bandwidth), Phone (Voice over Internet Protocol, VoIP) or in short, VIP (Telekom, 2014). The idea of shifting customers’ focus to content offering instead of bandwidth offering allows TM to exit the price war in the future. However, customers’ perceptions are hard to change. Competitors are offering wireless products with higher bandwidth for the same price, making competitors’ products more attractive (ITU, 2013). TM’s challenge is on changing customers’ perceptions on bandwidth to content offering. Despite the new entrant competitor like TIME which provides 100 Mbps products (MCMC, 2014), evidence shows low demand for higher Mbps market performance. Huge number of existing users are using less than 1 Mbps packages and low sign up on VIP20 (20 Mbps) (MCMC, 2013). Thus, this leaves household broadband subscribers searching for options with better wireless HSBB services. In spite of this, there is no evidence of increase market share for more than 20 Mbps wireless products. Competitors require more time to convince customers on their product innovation. The challenge for TM is to develop dynamic solutions, and flexible strategic business plan for content offering and changing mind set of consumers (refer Figure 7).

Fig. 7. SVP – Tier 4.3 threat of new entrants

Fig. 8. SVP – Tier 4.4 less competitive pricing
The new entrant competitors with mobile 4G LTE HSBB are able to offer faster broadband Mbps speed (Francis & Hassan, 2012) at a lower price, due to the lower fixed investments as some of their HSBB were leased from TM wholesale. For example, Maxis fibre was purchased from TM HSBB wholesale (Maxis, 2014). Other competitors lease HSBB from TM, translating into higher returns on investment (ROI) for competitors (Axiata Group, 2014). Meanwhile, the high initial infrastructure costs mean higher product price to achieve appropriate ROI. Thus, Unifi pricing packages seem to be not attractive to potential subscribers in terms of cost per bandwidth. The problem is lack of dynamic and flexible pricing plan which could generate appropriate contribution margins with flexible amortization of the infrastructure costs (refer to Figure 8).

Coverage constraints where many urban areas are not Unifi ready could be another reason for the declining growth rate of Unifi subscribers. When new housing project developments are identified, TM requires time to resolve bureaucracy issues. Delays in approval from the state municipal councils to install fibre optic cables and interruptions from Public Works Department for optic cable layouts slow down the process. Furthermore long negotiation time between TM and housing developers to compromise sharing of expensive fibre optic layout costs, coupled with unknown number of new subscribers for Unifi in new housing area post higher risk for TM’s infrastructure investment in every housing development in the country (Sulaiman, 2014). Delays in approvals and cost absorption by the housing developers defer the HSBB services to new subscribers in residential areas. Furthermore, PPP agreement requires TM to prioritize Fibre-to-the-Business instead of Fibre-to-the-Home. As such, any Unifi expansion to residential area requires cost-benefit-analysis for each new housing area and top management approval prior to its implementation. Due to this, TM divided Unifi infrastructure installation into many phases, slowing the responsive time to customers’ demand which causes the loss of business opportunity (Sulaiman, 2014). The challenge to TM is overcoming bureaucracy and developers’ negotiation issues in expediting fibre optic expansion in housing area (refer to Figure 9).
7. Tier 4.6: unfavorable Unifi service contract terms to subscribers

The decrease in growth rate of Unifi subscribers is also caused by unfavorable service contract terms to consumers, as shown in survey analysis in this study. The 2-year legal contract with consumers creates a barrier for the internet users to sign up with Unifi. The survey showed majority of the consumers disagree to be bonded for 2 years. Furthermore, some competitors have started to contract free internet broadband subscription to attract consumers. The challenge here is for TM to create compelling value proposition to attract new subscribers (refer to Figure 10).

TM’s limited product package offering is also one of the tier symptom exhibited from the decrease in the growth rate of Unifi subscribers. As customers expect more varieties of offerings and packages from TM, TM only provides bundle VIP triple play package to the household customers. Although TM does have standalone Internet packages for its high speed broadband variant, it is only available for Business and Wholesale segment. A consumers’ segment does not have the flexibility to choose to opt out the consumers’ package.

From the survey conducted in this study, many of the existing customers are not keen to have the Hypp TV and DEC phone, if TM is able to provide cheaper Internet package. The reason is because the Hypp TV is lacking attractive channel and this is because Hypp TV does not have its own broadcasting channel such as Astro’s Ria, Primia, Oasis, Awani, Ceria, AEC, Vaanavil, Arena, TVIQ, etc. Localized channel is important to capture the local market because local channels are customized and tuned to local interests and needs. In 2013, TM signed agreement with Astro for the carriage of Astro Super Sport HD and Astro Super Sport 2 HD on TM’s IPTV (Astro, 2013). The reason TM does not venture into broadcasting industry is because TM does not have the field experts and nor it has partnership with local broadcasters (Sulaiman, 2014). On the other hand, Maxis started offering its “Maxis Fibre Internet” plan, in collaboration with Astro and has provided more attractive channels to consumers (Maxis, 2014). Again the problem TM faces is lack of attractive strategic business plan to attract more users to its content such as Hypp TV (refer to Figure 11).
8. Tier 4.8: slow response to customer complaints

Customers’ perception on TM Unifi is generally good since TM won The Brand Laureate Top Ten Master Awards 2012 for the Most Preferred Brand in ICT – Broadband and achieved a TRI*M index score of more than 72.0; which is above the global Telco average score of 68.0 (Telekom, 2012). However, the decline growth rate was due to the perceived slow response to customers’ complaints. Consumers’ survey showed subscribers perceive Unifi and Streamyx (TM broadband products) use the same; customer’s care’s central though Unifi poses less connectivity issues compared to Streamyx (Sulaiman, 2014). Complains will eventually be perceived as the same product issues because both are from TM (Ayu, 2014). Due to the insufficient training to outsource contractors and technical staff, customers’ relationship management (CRM) is not addressed appropriately (CSR1, 2014). Furthermore, the outsource contractors often face lack of manpower issues, causing a longer wait time than it is initially intended. Also, customers’ representatives sometimes show impatient attitude in handling customers’ complaints, which may be due to many unknown reasons, and representatives focus on structured SOP response on complainants (CSR1, 2014). Therefore, the challenge is for TM to develop a CRM roadmap to transform its customer service towards customers’ satisfaction (refer to Figure 12).

9. The recommendation

The solutions to the eight problems identified are shown in Figure 13 (see Appendix). Refer to explanation based on solution code listed.

10. Solution A – fastest way to enter wireless HSBB

TM’s acquisition to Packet One is completed in Q3 of 2014 (refer Figure 14), is the fastest way to enter wireless 4G LTE HSBB network market (Zainul, 2014). Packet One has the largest wireless household broadband market in 2013. The expertise and strong customers’ base from Packet One will help TM to gain significant ground in the wireless household market, since the survey analysis clearly shows that the number of mobile broadband network was grown significantly
compared to the fixed wired broadband in the years 2013 and 2014.

TM has aimed to have 100,000 new subscribers in its 4G LTE in 2014 and 1 million subscribers of 4G LTE in 2017 (Jayaseelan, 2014). TM can have options to provide dual package solutions plan of wired and wireless connectivity, making it more competitive, providing consumers with capabilities to connect to high speed broadband while they are away, with fixed lines in their homes. Other innovative products, and visible online, can be attached to this capability. For example, TM can integrate its mobile Hypp TV solutions with its dual wire and wireless package.

While the solutions help consumers stay connected for TV entertainment, CCTV for home security via TM’s seamless HSBB connectivity, they can also be monitored online on mobile phones. Car Wifi solutions (as provided by Celcom), can be an additional optional package with additional small fee charged to boost TM’s market share. “Smart” wireless solutions for cars, installing more electronic wireless devices and gadgets are the market of the future. Research on “Internet of Things”, are on-going for all possible devices. It has become clearer that cars will eventually come with built in wireless high speed broadband receiver module. TM’s opportunity is to provide attractive packages to car manufacturers, with build-in TM 4G LTE receivers for future car owners and subscribers.

The acquisition of P1 provides TM with the opportunity to wider its coverage for suburban and rural areas with both 4G LTE and 4G WiMax licenses. TM should be able to reduce the cost to provide broadband solutions in rural area by using 4G WiMax solutions. Although 4G WiMax is slower than 4G LTE, it provides wider coverage per station and it costs cheaper (Chang, Abichar & Hsu, 2010) WiMax is perceived easier to be maintained in rural area compared to wire infrastructure since the likelihood of cable thief in suburban and rural area is higher.

11. Solution B – revamp product offering

![Fig. 15. Solution B – revamp product offering](source: SK broadband residential service)

![Fig. 16. SK broadband single combo package](source: SK broadband residential service)

![Fig. 17. SK broadband family combo package](source: SK broadband residential service)
The high level strategy plan for exiting from the price war by offering additional content such as Hypp TV and DEC phone is a good approach (refer Figure 15). However, changing customers’ perception from price per bandwidth concept to content offering is a challenge.

Content offering using a single bandwidth across its HSBB products for household market was introduced by SK Broadband Inc., South Korea. It has successfully removed the impression on price war by providing consumers with fixed bandwidth of 100 Mbps throughout its household wired fibre optic product range. SK Broadband Inc. classified its Fibre-to-the-Home for household based on the content and contract with the consumers (Turnbull, 2011). TM’s opportunity is to help move its subscribers towards one single bandwidth solution stage by stage, at minimal fee to the existing subscribers, with the assistance of SK Broadband Inc., as their consultant (refer to Figure 16). Evidences of usage of content offering at relevant HSBB speed up to 100 Mbps by existing subscribers would boost consumers’ “word of mouth”, thus, increasing TM’s market share.

Bandwidth on demand concept is similar to video on demand, where an increase of broadband speed is provided for consumers on demand with additional charges. With this feature, it caters consumers’ needs, demanding higher broadband speed services at certain period of time, for usage of certain products when required, and differentiate TM from its competitors.

TM should use the similar bundling strategy by SK Broadband, Inc. such as single combo and family combo as shown in Figures 16 and 17 (SK Telecom, 2014).

12. Solution C – strategic bureaucracy busting team

Solution C is designed to resolve issues related to constraints in coverage expansion of TM Unifi. The challenge is for TM to develop specific task force to address bureaucracy issues with the local municipal councils and government agencies (Sulaiman, 2014). The team is required to identify new housing development project and establish creative solutions proposed to local state authorities and municipal councils ahead of time for TM to install the fibre optic cables underground and fixing of TM cabinets (refer to Figure 18).

This team is also responsible for developing a win-win proposals using Solution A, B and C to major housing developers for all their future development. This will reduce the negotiation time and if there is any disagreement on sharing of fibre optic installation costs they could provide new solutions of fixed and wireless HSBB at the new developing housing area. Hence, it enables a faster HSBB to roll out. TM’s opportunity is to package content offerings indicating “Unifi Every Where”, a win-win solution that housing developers cannot refuse. The “Unifi Every Where” plan would create a partnership agreement with developers providing sharing of profits with developers on earnings made from household subscribers.

13. Solution D – establish analysis team & product services

Fig. 18. Solution C – strategic bureaucracy busting team

Fig. 19. Solution D – establish analysis team & product services
TM to promote more effective campaigns with options to adopt a range of products based on the number of years on the contract with the same bandwidth (refer to Figure 19). For example, SK Broadband HSBB Internet service package from South Korea differentiates the monthly fee based on years of contract or without contract (refer to tables 1 and 2 below).

Table1. SK Telecom HSBB Internet service packages*

<table>
<thead>
<tr>
<th>Category</th>
<th>Without contract</th>
<th>1-year contract</th>
<th>2-year contract</th>
<th>3-year contract</th>
<th>40 months contract</th>
<th>4-year contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly fee</td>
<td>33,000</td>
<td>32,010</td>
<td>31,350</td>
<td>29,700</td>
<td>28,050</td>
<td>27,390</td>
</tr>
<tr>
<td>Installation fee</td>
<td>30,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *above SK Telecom currencies are in South Korea Won (SK Telecom, 2014).

Results from case analysis, and from the questionnaires show that participants prefer unbundling service if it is cheaper. TM can provide additional package options with unbundling services and bundle services similar to SK Telekom residential high speed broadband packages.

Table 2. SK Telekom bundle and unbundle packages*

<table>
<thead>
<tr>
<th>Category</th>
<th>Without contract</th>
<th>1-year contract</th>
<th>2-year contract</th>
<th>3-year contract</th>
<th>4-year contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>B tv</td>
<td>13,000</td>
<td>12,300</td>
<td>11,700</td>
<td>11,000</td>
<td></td>
</tr>
<tr>
<td>Set-top box rental</td>
<td>7,000</td>
<td>5,000</td>
<td>3,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>B internet + B tv</td>
<td>11,700</td>
<td>11,100</td>
<td>10,600</td>
<td>9,900</td>
<td></td>
</tr>
<tr>
<td>Set-top box rental</td>
<td>7,000</td>
<td>5,000</td>
<td>3,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>B internet + B phone + B tv</td>
<td>10,400</td>
<td>9,400</td>
<td>8,800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *above SK Telecom currencies are in South Korea Won (SK Telecom, 2014).

14. Solution E – collaboration with local broadcasting company

The results of survey analysis indicate the importance of having localized channel to the viewer. However, localized program in Hypp TV is limited because TM does not have broadcasting channel to localize its program (Ayu, 2014). Thus, it is an opportunity for TM to engage and collaborate with local broadcasting companies to broadcast in Hypp TV. Furthermore, TM should collaborate with terrestrial channel to enable High Definition (HD) format for Hypp TV (refer to Figure 20).

15. Solution F – response to customers

The slow customers’ response is due to insufficient technical staffs and inefficient outsource contractors (CSR1, 2014), thus, requiring improved manpower planning and qualified outsourcing. Furthermore, TM has opportunity to improve its call centre customer services. Data shows that these front liners
are perceived to be more concerned with addressing their standard operating rather than listening to the real needs of customers. Standard operating procedures for customer service call centres can be further improved to enhance its CRM qualities and fulfil customers’ needs. Training on quick listening skills to identify key issues faced by customers is a priority. By doing this TM will be able to build strong customers’ relationship with the consumers, and be able to increase its Unifi subscribers by retaining existing customers after their contracts are completed (refer to Figure 21).

**Fig. 22. Value add mapping for TM**

**Conclusion**

The recommendations provided in this article help TM not only regain its HSBB growth momentum, but also remain as the number one internet service provider in Malaysia. The value could benefit the consumers, stakeholders, societies, business, investors, education and the economy (refer to Figure 22).

P1 acquisitions create opportunities and values by offering packages with choices of new and flexible content (with flexible Mbps) that fulfils consumers’ needs, at lower prices (Jayaseelan, 2014). Furthermore, cheaper cost per bandwidth enables consumers to increase their productivity, efficiency and effectiveness use of TM’s variety of offered products. The types of single combo, family combo, bundle and unbundle packages integrated with other new product packages in cars, offices, mobile gadgets, LRTs, supermarkets, bus stations, etcetera, with variation of Mbps speed choices, making TM offerings a necessity for the remaining 33% of household HSBB users in Malaysia. The goal is “Unifi Everywhere”.

The government will be able to promote its country’s high speed broadband infrastructure and proclaim the country as a communication hub in South East Asia, as a competitive infrastructure is set in place for foreign investors to invest in Malaysia. The consumers’ demand will force MCMC to provide facilities of how to increase the current download (8 Mbps) /upload (21 Mbps) speed in Malaysia (OOKLA, 2014) in urban areas gradually to 100 Mbps. This is crucial as Malaysia is seen lagging behind from its counterparts like Bangkok.

Interestingly, Figure 23 shows the discovery of the “House of Pillars for Rapid Growth” that summarizes the critical success factors for TM, the largest telco service provider in Malaysia. Talents and skill sets development to strengthen the concrete of the house are the pivotal keys before the pillars can be effectively constructed to achieve reliable and effective marketing, systematic and efficient operations and agile leadership. Therefore, innovative leadership styles could change the existing situations and promote rapid growth in an organization.

Evaluating the society through improved and effective social media, enhancing various online and mobility services, providing flexible education system, monitoring health conditions, warning environmental hazards in time, providing safety transportation systems, and offering dynamic economic opportunities are supply chain effects and value added to the society through TM’s products offerings. These values are
opportunity for future research through “Internet of Things” related to the above subjects. Furthermore, e-communication in tourism industry and the demand for agile and dynamic connectivity in tourism, using local service providers for the internet connection on their existing mobile devices are also opportunities for future research.

Lastly, the impact of the above supply chain, creates a multiplier effect, thus, may yield higher GDP growth for Malaysia, not only at the growth in HSBB, but also the productivities generated by consumers, government, societies, educationist and direct investors in the country which provides an opportunity for future research.

Fig. 23. House of pillars for rapid growth

References


Appendix

Fig. 4. SVP – decrease in growth rate of Unifi subscribers (Tier 1 to Tier 3)
Table 3. Malaysian market for household broadband penetration, 2013

<table>
<thead>
<tr>
<th>Household</th>
<th>2013 ('000)</th>
<th>Percentage</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 4G</td>
<td>~0.7</td>
<td>0.02%</td>
<td>YTL Yes 4G LTE 0.7K Subscribers. Calculated based on RM430K Broadband revenue and Yes Monthly Plan RM48 (YTL Corporation, 2014).</td>
</tr>
<tr>
<td>Celcom</td>
<td>~1044.5</td>
<td>22.92%</td>
<td>Calculated based on 17.1% growth from 2012 reported in Celcom Financial Results (Axiata Group, 2014)</td>
</tr>
<tr>
<td>Digi</td>
<td>226</td>
<td>4.96%</td>
<td>Based on Digi Q4 2013 Financial Presentation report (Digi Berhad, 2013).</td>
</tr>
<tr>
<td>Packet One</td>
<td>543</td>
<td>11.91%</td>
<td>Based on Green Packet Berhad Q4 2013 Financial Result (Green Packet Berhad, 2014).</td>
</tr>
<tr>
<td>Others (Including Maxis BB /w Postpaid, Time, ABNxcess, etc.)</td>
<td>~786.2</td>
<td>17.25%</td>
<td>Remaining Broadband subscribers.</td>
</tr>
<tr>
<td>Total</td>
<td>4558.1</td>
<td>100%</td>
<td>Total of Household Broadband users reported in Q4 2013 MCMC Pocket Book of Statistic (MCMC, 2014).</td>
</tr>
</tbody>
</table>
Table 4. OOKLA broadband speed & price around the world, November 2014

South East Asia Broadband Speed

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Download Speed (Mbps)</th>
<th>Average Price (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>79.48</td>
<td>2.8</td>
</tr>
<tr>
<td>Singapore</td>
<td>67.75</td>
<td>2.98</td>
</tr>
<tr>
<td>South Korea</td>
<td>52.37</td>
<td>2.02</td>
</tr>
<tr>
<td>China</td>
<td>20.14</td>
<td>10.92</td>
</tr>
<tr>
<td>Vietnam</td>
<td>14.23</td>
<td>5.51</td>
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<tr>
<td>Cambodia</td>
<td>5.79</td>
<td>10.69</td>
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<tr>
<td>Malaysia</td>
<td>5.51</td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>5.24</td>
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