Broadband Services Selection Criteria of Young Users: Exploratory and Confirmatory Factor Analytic Approach

1Muhammad Sabbir Rahman  
2Md. Nusrate Aziz  
3Murali Raman  
4Md. Mahmudul Haque  
5Abdul Highe Khan

Abstract

The purpose of this paper is to examine young users’ behavioral intention in selecting an internet broadband in Malaysia with a view of technical, functional quality and experience economy perspective. Survey methodology using questionnaires was adopted to solicit the required information from 400 existing and potential users and data were analyzed through exploratory as well as confirmatory factor analysis. Since a significant number of broadband customers are from young generation we therefore examine the choice of young generation in particular. This paper also attempts to provide fundamental information on young users’ perception about service quality as well as the experience economy on their buying intention. This study does not only identify the perceived attributes of quality and experience economy but also generalize the young consumers’ buying intention of an internet broadband service in Malaysian context. The results of the Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) suggest that the factors of young user’s behavioral intention in selecting a broadband connection were contributed by technical quality, functional quality and experience economy constructs.

Key Words: Young Consumers’, Technical and Functional Quality, Experience Economy, Malaysia

1. Introduction

Within the era of the 21st century to achieve the vision of 2020, the Malaysian government established a Malaysian Implementation of Communication and Multimedia Strategy (Malaysian Information, Communications and Multimedia Services 886- MOSTI, 2012) with the purpose of stimulating Malaysia to deliver advanced information, communication and broadband services from 2006 to till now. Malaysian broadband service providers play a crucial role in implementing the plan for the national development. Nowadays to attract a substantial amount of young consumers’, broadband service operators are facing numerous challenges to introduce a diversified and digital convergent services in a fast-changing multi-technology network environment. According to Noble et al., (2008) young consumers are being targeted as ‘special’ consumers which influence stakeholder’s policy implementation. Roberts and Manolis (2000) argued that, the young consumers do not want to conform to societal or group norms and they are individuals in their choice too. Since there is a significant research gap exists in Malaysia under young users perceive view in highlighting the significant factors which combine the attributes of service quality and experience economy in the selection of particular operator’s internet service, this research would make a useful contribution for the broadband industry players in Malaysia and it would add to the literature on young consumers’ behavioral research. Subsequently, this paper attempts to answer the following questions:

1,2,3Graduate School of Management, Multimedia University, Malaysia, Persiaran Multimedia, 63100 Cyberjaya, Selangor Darul Ehsan, Malaysia  
4,5Graduate Research Student, Faculty of Economics and Management Sciences, International Islamic University Malaysia

204
• **How the characteristics of technical qualities, functional qualities and experience economy variables explain the young consumers' purchase intention in selecting a particular operator?**

## 2. Literature Review

In this research we particularly looked into the behavior of Gen Y consumers who are active and potential users of internet broadband services in Malaysia. Based on the study conducted by Freestone and Mitchell (2004) this generation seems to be technology perceptive and willing to adopt new technology. Dwivedi et al. (2007) suggested that, internet broadband is a key enabling technology in the networked society. In addition report from the United States Government Accountability Office (2006) found that consumers’ with higher income and college degrees are proportionately more adopt the fixed broadband internet line services.

### 2.1 Service Quality and Consumer Perception

Perceived quality construct has received considerable attention in the marketing literature (Holbrook & Corfman 1985; Olshavsky 1985). Zeithmal (1988) defined perceived quality as a global assessment of a consumer’s judgment about the superiority or excellence of a product. Customer perceptions about a company’s service quality are traditionally measured immediately after the person has consumed the service (Plamer & O’Neill 2003, Crosby et al. 2003, Salustri, 2001).

Therefore the findings from the past empirical research revealed that not only various aspects of service quality but also experience are significantly related to consumers’ overall perception. However, consumers purchase intention referred to the subjective judgment by the consumers which is reflected after the general evaluation to buy a product or services (Blackwell et al., 2001; Shao et al., 2004). As a result the internet is nowadays considered a cost efficient, effective and very productive marketing platform (Kiang et al., 2000). This implication is even more strongly relevant for encouraging broadband internet service adoption in developing and emerging countries than developed countries (Yogesh et al., 2009). Considering the findings from previous studies this research assumes that if broadband internet service companies are having new technology to make the service faster it is more likely to have a strong behavioral intention to adopt broadband internet services by the consumers’ (Venkatesh & Brown, 2001; Taylor & Todd, 1995).

### 2.2 Technical Quality

Gronroos (1984) proposed two aspects of service quality for instance: technical and functional. In this model he described technical quality, functional quality, and company image can play a significant role to justify the service quality of a service firm. Functional quality focuses on issues such as the behavior of customer-contact staff and the speed of service, whereas technical quality focuses on issues as the end result of service provision. Santos (2003) explained that technical quality refers to the quality of evidence related to validity, reliability, and freedom from bias and sensitivity issues. Broadband internet service providers may fulfill their operation through arranging a proper technical quality attributes in their service delivery to determine their service quality for their users though previous scholars have already identified numerous determinants of technical quality which are significantly affected customers’ perceptions to rate the service quality of a particular company (Gronroos, 1982, 1990; Rust & Oliver, 1994, Richard & Allaway, 1993; Powpaka, 1996). This research proposes that to measure the service quality of a broadband service, a company should look on competence, reliability, responsiveness, security which are items of technical qualities in the formulation of the construct proposed by numerous researchers (Laforet & Li, 2005; Lehr. et al., 2012).

### 2.3 Functional Quality Issue

With respect to measure functional quality researchers have already utilized SERVQUAL items (Richard & Allaway, 1993; Powpaka, 1996; Brady and Cronin, 2001). In broadband internet service providers, it might be difficult for a customer to evaluate a service provider’s service quality only by technical quality aspects if they have a lack of ability to assess functional quality. In explaining functional quality the researchers proposed accessibility; communication and courtesy items which can be enhanced the level of functional quality to improve the overall service quality of a broadband internet service provider (Ruyter, et al. 2001; Zeithaml et al., 1990; Parasuraman et al., 1988; Vong, 2007; Mostafa, 2005; Nadiri & Hussain, 2005; Munusamy & Fong, 2008; Sharma and Patterson, 1999; Headley & Choi 1992; Zeithaml et. al., 1990, Munusamy & Fong., 2008; Andaleeb & Conway, 2006; Nadiri & Hussain, 2005).
2.4 Experience Economy

Davidson (1992) explored that experience economy is a process of building a sustainable competitive benefit. According to Barlow and Maul (2000) under experience economy philosophy customers expect every level of their transaction with the firm’s have positive, emotional and memorable event. O’Sullivan and Spangler (1998) refer to the experience economy as ‘individuals or organizations whose sole purpose is to create a differentiate experience for their clients’. The issue of the experiences remains debatable as consumers’ want more and more experiences because demand is always playing a key factor influencing the consumer’s decision making (Pikkemaat & Schuckert, 2004). Florida (2002) adds that life has become ‘scarce and precious commodity’ and the quality of their lives by the quality of experiences they consume. Hongxiang (2011) mentioned that the quality of experience is the most crucial determinant of customer perceived satisfaction. Meanwhile, one user may convey his or her dissatisfaction to 13 other users, which has negative impacts on the brand of broadband internet service providers. Quan and Wang (2004) propose two types of experiences – peak and consumer experience.

A peak experience is defined as a transformational experience that exceeds the usual level of intensity, meaningfulness, and richness, clear focus, complete absorption, and self-awareness, personal integration, awareness, spontaneity, freedom, and a sense of achievement capability in delivering the services to the customers (Privette & Bundrick 1991; Arnould & Price 1993; Celsi et al. 1993). Consumption is the experience derived from the interaction between the consumer and a product within a given context (Michela Addis, 2005; Van Der Wagen, 1994; Thompson, 1997; Edvardsson & Mattsson, 1993; Sandberg 1994, 2000, O’Neill & Palmer 2003).

3. Methodology

This study mainly covered the existing and potential young broadband users’ behavioral intention in Malaysia. The study employed a standard number of respondents (400) across the Klang Valley area in Malaysia. It is worth noting that SKMM (2012) reported that Klang Valley was the largest urban conurbation in Malaysia in terms of broadband services and there was a significant level of broadband penetration there. Primary data were collected through questionnaires by using convenience-sampling method. Data were collected by using the mall intercept procedure. A seven point rating scale with all points labeled was used for collection of data basically for two reasons. Firstly, this rating scale is widely used by market researchers and secondly it allows a degree of intensity and flexibility of respondents to express their opinions conveniently. It also makes the responses easy to administer code and adapt to statistical analysis (Burn & Bush 2000).

3.1 Measures

Measurement techniques which were used in this research was drawn from existing literature and adjusted for this research as required. 7-point scales with the anchors 1= strongly disagree to 7= strongly agree were used. Functional quality was measured with 20 item scale adapted from the Kang and James (2004) included with five subsets: reliability (4 items), assurance (4 items), tangibility (4 items), empathy (4 items), and responsiveness (4 items). This scale proved adequate reliability (Alpha= 0.90). Technical quality was operationalized by using 3 items adapted from the research of Kang and James (2004). These scales also proved to be adequately reliable (alpha = 0.91). In measuring the experience economy, 6 items were adapted from the works of Rahman et. al. (2012) measures (alpha = 0.87). Price and advertisement program were assessed using 3 items each adapted from Dwivedi et. al., (2006). These scales were also proved to be adequately reliable for the price the Cronbach’s alpha=0. 91 and advertisement promotion Cronbach’s alpha= .83. In measuring risk of purchase, price, promotion and willingness variables, 3 items were included in each variable’s adopted from the research works of Kunze and Maï (2007), Alvarez and Casielles (2005), Stoettinger and Pelz (2003). These scales also proved adequately reliable in the context of Cronbach’s alpha (Cronbach’s alpha for risk of purchase = 0.81, price promotion = 0.72, willingness = 0.81). In measuring buying intention this study adopted the measures of Dwivedi et al. (2006), Bhattacharjee (2001b), Devaraj et al. (2002). Buying intention was measured using 4 items (alpha=0. 81). Furthermore the decision to purchase was measured with 4 item scale adapted from the measures of Eisingerich and Bell (2007). These scale therefore was proved adequately reliable (alpha= 0.93).

3.2 Statistical Technique

We initially employed Exploratory Factor Analysis (EFA) to identify the factor structure for measuring the factors influencing young consumers’ behavioral intention in selecting broadband operator’s service. Subsequently, we utilized Confirmatory Factor Analysis (CFA) to confirm the factor structure.
According to Anderson and Gerbing (1988), measurement of a model can be tested on the complete data set using a confirmatory factor analysis (CFA). The fit indices included in the current investigation were the comparative fit indices (CFI), the goodness-of-fit index (GFI), the normed fit index (NFI), Tucker Lewis Index (TLI) and the root mean square error approximation (RMSEA) (Bentler & Bonett, 1980; Joreskog & Sorbom, 1996; Tucker & Lewis, 1973; Fornell & Larcker, 1981).

3.3 Demographic Profile
Among 400 completed questionnaires, 280 respondents were Malay, 100 were Chinese and the rest 20 individuals were Indian. It was found that out of the total number of young broadband users, 51.3 percent were male and 48.7 percent were female. The age group 20-24 was found to be the highest users of broadband followed by the group 15-19. It was revealed that university and college students were more interested in the internet compared to the school goings. We also found that the largest number respondents (28 percent) preferred the ‘Unifi’ broadband service while 15 percent users preferred Maxis, 22 percent users chose Celcom broadband and 14 percent of users selected Digi. In contrast, only 12 percent users choose ‘U-mobile’ for their internet use and only 9 percent users choose ‘P1’ broadband service system. Almost 80 percent of internet users expressed varying degrees of concern about security while they were on the Net. This included concern about identity thefts, spam, viruses, worms and Trojans. 20 percent respondents expressed no concern at all.

3.4 Exploratory Factor Analysis (EFA)
This research performed factor analysis which was identified in the structure of a set of variables as well as provided a process for data reduction on 42 items. The sample size in this research was 8:1 ratio of observations of variables, which falls within acceptable limits (Hair et al., 2006). In this research, the Bartlett’s test indicated that the correlations (collectively), were significant at the .0001 levels. In this situation, the overall MSA value falls in the acceptable range (above .50) with a value of .921 and the Bartlett’s test of sphericity was significant ($\chi^2 (N=400) = 8437.138, p < .000$). The diagonals of the anti-image correlation matrix were all over .6, supported the inclusion of each item in the factor analysis. Finally, the communalities of all the items were above .3 (See, Table 2). Principle components analysis was used because the primary purpose was to identify the factors underlying the young consumers’ behavioral intention in selecting an internet broadband service provider. Table 2 also contains the information’s regarding the five possible factors and their relative explanatory power as expressed by their eigenvalues. As we applied the latent root criterion of retaining factors with eigenvalues greater than 1.0, five factors were retained. The Scree test also indicated that five factors may be appropriate when considering the changes in the eigenvalues. The initial eigenvalues showed that the first factor explained 26.74 percent of the variance, the second factor 6.43 percent of the variance, and the third factor explained 4.03 percent of the variance (see, Table 1).

<table>
<thead>
<tr>
<th>Eigenvalues</th>
<th>Component</th>
<th>Total</th>
<th>% of variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.902</td>
<td>26.735</td>
<td>26.735</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3.343</td>
<td>6.429</td>
<td>33.164</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2.095</td>
<td>4.028</td>
<td>37.192</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1.676</td>
<td>3.223</td>
<td>40.415</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.626</td>
<td>3.127</td>
<td>43.542</td>
<td></td>
</tr>
</tbody>
</table>

During several steps, a total of 23 items were eliminated because they did not contribute to a simple factor structure and failed to meet a minimum criteria of having a primary factor loading of 0.4 or above. All items had primary loadings over 0.5. The factor loading matrix for this final solution is presented in Table 2.
Table 2: Factor loadings and communalities based on a principle components analysis for 29 items of the young consumer perception Scale (N = 400), M= Overall Mean; SD= Overall Standard Deviation

<table>
<thead>
<tr>
<th>Items</th>
<th>Functional Quality (FQ)</th>
<th>Technical Qualities (TQ) M (SD)- Alpha=</th>
<th>Experience Economy (EE) M (SD)- Alpha=</th>
<th>Young Consumer Perception (YCP) M (SD)- Alpha=</th>
<th>Young Consumers' Buying Intention (YCBI) M (SD)- Alpha=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides services as promised (rel1)</td>
<td></td>
<td>.658</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides services as it was promote (rel2)</td>
<td></td>
<td>.612</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees provide confidence to customers (ass 1)</td>
<td></td>
<td>.572</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling of safe and secure (ass 2);</td>
<td></td>
<td>.627</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers representative Employees professionalism (Tan 3)</td>
<td></td>
<td>.540</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use modern equipment (Tan 4);</td>
<td></td>
<td>.556</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand the needs of the customers (Emp 3)</td>
<td></td>
<td>.618</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dealing customers in a caring fashion (Emp 3)</td>
<td></td>
<td>.656</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt service to the targeted customers (Res 3)</td>
<td></td>
<td>.599</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to help customers (Res 4)</td>
<td></td>
<td>.508</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is successful and more than money to use my current broadband services (TQ1)</td>
<td></td>
<td>.549</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No service interruption during my current operator (TQ 2);</td>
<td></td>
<td>.681</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use broadband without any interruption (TQ3);</td>
<td></td>
<td>.676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeping customers informed about when services will be performed (Res 2);</td>
<td></td>
<td>.584</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I take my decision to choose a broadband service after measuring the economic value of the services (EE 1);</td>
<td></td>
<td>.403</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoyed a lot to use my broadband service (peak experience) (EE 3);</td>
<td></td>
<td>.522</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use my past experience to choose the current broadband service provider. (Consumer Experience) (EE5);</td>
<td></td>
<td>.674</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worst experience of service quality will lead me in the future to change my current provider. (The consumer experience) (EE6);</td>
<td></td>
<td>.515</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is not too costly for me to subscribe broadband at its current subscription fee (P2)</td>
<td></td>
<td>.643</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word of mouth can play an important role to advertise broadband services (AD3);</td>
<td></td>
<td>.651</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always think of having services with getting good value for money (risk 1);</td>
<td></td>
<td>.530</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive perception of service-based promotion Gift from my current broadband service provider (Prom 2);</td>
<td></td>
<td>.635</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not being financially tied down even if I use my current operator service (Risk 2)</td>
<td></td>
<td>.635</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to use (or intend to continue use) broadband internet service in the future (INT2);</td>
<td></td>
<td>.651</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My intention is to continue using broadband rather than use temporarily (INT4)</td>
<td></td>
<td>.561</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a willingness to purchase broadband at different offer of packages (Will2)</td>
<td></td>
<td>.631</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will do expenses more money to use broadband services on upgrade package in the future (RP1);</td>
<td></td>
<td>.659</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The likelihood of me trying other services is very high (RP3);</td>
<td></td>
<td>.632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effort to help my current operator to succeed (RP4);</td>
<td></td>
<td>.605</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each factor named based on the variables with significant loadings: Factor 1 Functional Qualities (FQ) with ten items, Factor 2 Technical Qualities (TQ) with four items followed by Factor 3 named as Experience Economy (EE) with four items, Factor 4 Young Consumer’s Perception (YCP) with five items and Factor 5 Young Consumer’s Buying Intention (YCBI) with six items (See Table 2). In fact internal consistency for each of the scales was examined using the Cronbach’s alpha. The result of alphas was acceptable for instance: 0.74 for functional qualities (10 items), 0.67 for Technical Qualities (4 items), 0.69 for the Experience Economy (4 items), 0.75 for young consumer’s perception (5 items) and 0.80 Young Consumer’s Buying Intention (6 items). Descriptive statistics are also presented in Table 2. Concerning the structure of the variables, clearly five separate factors and distinct dimensions of each factor regarding young consumers’ behavioral intention in the selection of a broadband service provider in Malaysia were revealed.

3.5 Analyzing the Measurement Model through CFA (Confirmatory Factor Analysis):

To study the generalisability of multidimensional measures of the concept of this study, CFA using AMOS 7 were employed. This research retained the items each factor having loading 0.6 or greater. Based on the statistical output none of the items initially loaded below 0.60. As a result, initially all items of each factor were kept. This research utilized three fitness criteria to examine the model fit. The three fitness categories are absolute fit, incremental fit and parsimonious fit. The following Table 3 highlights the index category and the levels of acceptance were used by default and revised model.

Table 3: Level of acceptance to test the fitness of the individual constructs

<table>
<thead>
<tr>
<th>Name of Category</th>
<th>Name of Index</th>
<th>Level of Acceptance</th>
<th>Comments</th>
<th>Literature Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fit</td>
<td>Chi square (Discrepancy Chi Square)</td>
<td>P&gt;0.05</td>
<td>Sensitive to sample size&gt;200</td>
<td>Wheaton et/al (1977)</td>
</tr>
<tr>
<td></td>
<td>RMSEA (Root Mean Square of Error Approximation)</td>
<td>RMSEA &lt;0.08</td>
<td>Range 0.05 to 1.00 acceptable</td>
<td>Browne and Cudeck (1993)</td>
</tr>
<tr>
<td></td>
<td>GFI (Goodness of Fit Index)</td>
<td>GFI&gt;0.90</td>
<td>GFI= 0.95 is a good fit</td>
<td>Joreskog and Sorbom (1984)</td>
</tr>
<tr>
<td>Incremental Fit</td>
<td>AGFI (Adjusted Goodness of Fit Index)</td>
<td>AGFI&gt;0.90</td>
<td>AGFI= 0.95 is a good fit</td>
<td>Tanaka and Huba (1985)</td>
</tr>
<tr>
<td></td>
<td>CFI (Comparative Fit Index)</td>
<td>CFI&gt;0.90</td>
<td>CFI= 0.95 is a good fit</td>
<td>Bentler (1990)</td>
</tr>
<tr>
<td></td>
<td>TLI (Trucker-Lewis Index)</td>
<td>TLI&gt;0.90</td>
<td>TLI=0.95 is a good fit</td>
<td>Bentler and Bonett (1980)</td>
</tr>
<tr>
<td></td>
<td>NFI 9 (Normed Fit index)</td>
<td>NFI&gt;0.90</td>
<td>NFI-0.95 is a good fit</td>
<td>Bollen (1989)</td>
</tr>
<tr>
<td>Parsimonious Fit</td>
<td>Chi sq/DF</td>
<td>Chi square/df&lt;5.0</td>
<td>The value should be less than 5.0</td>
<td>Marsh and Hocevar (1985)</td>
</tr>
<tr>
<td>Theoretical Construct</td>
<td>Model</td>
<td>$\chi^2$</td>
<td>d.f.</td>
<td>$\chi^2$/d.f.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------</td>
<td>---------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>Functional Quality (FQ)</td>
<td>Default (10 Items)</td>
<td>256.09</td>
<td>35</td>
<td>7.374</td>
</tr>
<tr>
<td></td>
<td>Revised (7 items)</td>
<td>26.695</td>
<td>14</td>
<td>1.906</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Qualities (TQ)</td>
<td>Default (4 items)</td>
<td>18.716</td>
<td>2</td>
<td>9.358</td>
</tr>
<tr>
<td></td>
<td>Revised (4 items)</td>
<td>3.258</td>
<td>1</td>
<td>3.258</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience Economy (EE)</td>
<td>Default (4 items)</td>
<td>5.392</td>
<td>2</td>
<td>2.696</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Consumers’ Perception (YCP)</td>
<td>Default (4 items)</td>
<td>21.649</td>
<td>5</td>
<td>4.329</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Consumer’s Buying Intention (YCBI)</td>
<td>Default (6 items)</td>
<td>39.259</td>
<td>9</td>
<td>3.917</td>
</tr>
<tr>
<td></td>
<td>Revised (5 items)</td>
<td>17.959</td>
<td>5</td>
<td>3.591</td>
</tr>
</tbody>
</table>

From EFA as shown in Table-2 we retained 10 measuring items for functional qualities (FQ) construct. From the result of default model for functional qualities (FQ), the modification indices for the covariance of measurement errors were: 35.14 between Rel1 and Rel2 items, 32.34 between Ass1 and Ass2 items and 55.32 Emp2 and Emp3 items. These three sets of measurement error were logically conceivable to be correlated. Based on the observation we therefore deleted items Rel2, Ass2 and Emp2 which almost explain the similar meaning. After deleting these three items testings, the revised measurement model was found to be fit sufficiently (see, Table 3). For technical qualities (TQ), the modification indices for the covariance between the measurement errors of Tq1 and Tq2 items were 15.23. The correlation of these errors was logically possible, and consequently, the model was revised to incorporate this path (see, Table 4). After adding these two parameters, the measurement model fit indices of technical qualities (TQ) showed sufficiently fit for further analysis. Among the four measuring items for Experience economy (EE) and five measuring items for Young consumers’ Perception (YCP) the fit indices from the default measurement model were found to be fit adequately for these two constructs (see, Table 4). In addition, for Young Consumer’s Buying Intention (YCBI) the modification indices exposed the covariance value 18.61 between Rp3 and Rp4 items. These pairs of measurement errors are rationally conceivable to be correlated as this research deleted one item (Rp4). Hence, the measurement model was revised. After the revision it seems that all indices represent an adequate fit of the model.
This research also tested CFA to confirm a theoretical pattern of factor loadings on prespecified constructs which represents the actual data. The model fit of the individual constructs indicated by the GFI, AGFI, RMSEA, CFI, NFI, TLI appears good (see, Table 4) which confirmed construct validity. The value of $X^2$ was found to be significant for individual construct’s with sample size (N=400), but the normed $X^2$ is within the suggested guidelines (see, Table 4). In fact, all of the loadings were found to be statistically significant, thus, provided initial evidence of convergent validity. All the estimates under each constructs fall within the acceptable loadings (see, Table 5). Besides, the reliability of Functional Quality (FQ) was 0.74; Technical Qualities (TQ) was 0.76, Experience Economy (EE) was 0.76, Young Consumers’ Perception (YCP) was 0.75 and Young Consumer’s Buying Intention (YCBI) was found to be 0.80. All the constructs AVE (Average Variance Extracted) reflects greater than or equal to 0.6 which confirms convergent validity. Furthermore, the correlation between each pair of latent constructs was less than 0.75 which confirmed discriminant validity. All the ranges of constructing reliabilities (CR) under each construct were found from 0.88 to 0.98 which confirmed the construct reliability (see, for example, Hair, 2006). This research was designed to address the research problems about the factors indicating young consumers’ behavioral intention in selecting an internet broadband operator’s service based on service quality and experience economy perspective. This study accomplished all of the objectives listed above. Furthermore, the findings also explored that majority of the young consumers were aware about the existing broadband operators services and select an operator based on the technical, functional and experience.

### Table 5: Distribution of Factor Loadings and CR, AVE

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor Loading</th>
<th>Cronbach Alpha</th>
<th>CR (Above 0.6)</th>
<th>AVE (Above 0.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional Quality (FQ)</td>
<td>Rel1</td>
<td>0.98</td>
<td>0.74</td>
<td>0.95</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Ass1</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tan3</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tan4</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emp3</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Res3</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Res4</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Qualities (TQ)</td>
<td>Tq1</td>
<td>0.98</td>
<td>0.763</td>
<td>0.92</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>Tq2</td>
<td>0.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tq3</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Res2</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience Economy (EE)</td>
<td>EE1</td>
<td>0.98</td>
<td>0.763</td>
<td>0.88</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>EE3</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EE5</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EE6</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Consumers’ Perception (YCP)</td>
<td>P2</td>
<td>0.98</td>
<td>0.751</td>
<td>0.98</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Ad3</td>
<td>0.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk1</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pro2</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk2</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Consumer’s Buying Intention (YCBI)</td>
<td>Int1</td>
<td>0.98</td>
<td>0.801</td>
<td>0.97</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Int4</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Will2</td>
<td>0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drp1</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drp3</td>
<td>0.89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This research also tested CFA to confirm a theoretical pattern of factor loadings on prespecified constructs which represents the actual data. The model fit of the individual constructs indicated by the GFI, AGFI, RMSEA, CFI, NFI, TLI appears good (see, Table 4) which confirmed construct validity. The value of $X^2$ was found to be significant for individual construct’s with sample size (N=400), but the normed $X^2$ is within the suggested guidelines (see, Table 4). In fact, all of the loadings were found to be statistically significant, thus, provided initial evidence of convergent validity. All the estimates under each constructs fall within the acceptable loadings (see, Table 5). Besides, the reliability of Functional Quality (FQ) was 0.74; Technical Qualities (TQ) was 0.76, Experience Economy (EE) was 0.76, Young Consumers’ Perception (YCP) was 0.75 and Young Consumer’s Buying Intention (YCBI) was found to be 0.80. All the constructs AVE (Average Variance Extracted) reflects greater than or equal to 0.6 which confirms convergent validity. Furthermore, the correlation between each pair of latent constructs was less than 0.75 which confirmed discriminant validity. All the ranges of constructing reliabilities (CR) under each construct were found from 0.88 to 0.98 which confirmed the construct reliability (see, for example, Hair, 2006). This research was designed to address the research problems about the factors indicating young consumers’ behavioral intention in selecting an internet broadband operator’s service based on service quality and experience economy perspective. This study accomplished all of the objectives listed above. Furthermore, the findings also explored that majority of the young consumers were aware about the existing broadband operators services and select an operator based on the technical, functional and experience.

### 4. Analysis and Implication

This research identified and empirically tested factors which were suggested by existing literatures in this area and portrays the characteristics of technical qualities, functional qualities and experience economy variables which play a vital role in explaining young consumers’ behavioral intention in terms of internet broadband operator selection. It could be noted that a numerous research suggested that the above mentioned attributes may have a significant impact on consumers’ purchase intention of a particular company (see, for example, Plamer & O’Neill 2003, 2001, Santos, 2003, Richard & Allaway, 1993; Pownpaka, 1996; Brady and Cronin, 2001, Barlow & Maul, 2000; Pikkemaat & Schuckert, 2004).
The findings from this research also provided significant managerial implications for academicians and business practitioners. Thus this research highly recommends that managers of existing and potential broadband operators should pay a great attention on technical, functional and experience economies attributes to influence young consumers’ purchase intention. Additionally, this research also reinforces the importance of reliability, assurance, tangibility, empathy and responsiveness, price and advertisement attributes in order to boost the performance of a broadband operator’s service. We also found that if consumers’ are satisfied with the broadband providers’ pre- as well as post-purchase service, the consumers’ are more satisfying to use the existing operator’s services and they recommend their friends/family members to choose the own broadband provider. This finding is in the line of the Tzeng & Yang (2005).

5. Limitations and Further research

The data collected from a convenience sampling procedure so that point and interval estimates cannot be generalized to the population. Future studies may expand the sample size and sample area to generalize the findings.

Due to time and cost constraints, this study could not cover ‘Sabah’ and ‘Sarawak’ states where a significant amount of young customers also exists. As a whole, by examining the holistic process by which technical quality, functional quality and experience economy attribute lead influencing the behavior of young consumers’ in Malaysia, this research specifically helps managers to know what should be done in order to retain existing customers and attract new consumers.

Acknowledgement

Special appreciation is given to the Research and Management Centre (RMC) under Multimedia University, Malaysia, for supporting this research project through a Mini Fund.

References

Blackwell, Roger D., Miniard,Paul W. and Engel,James F. (2001), Consumer Behavior, Publisher: Ohio, Mike Roche.
Hongxiang. T., (2011). Volumetric Heat Capacity Enhancement In Ultrathin Fluorocarbon Polymers For Capacitive Thermal Management”, Submitted in partial fulfilment of the requirements for the degree of Master of Science in Mechanical Engineering in the Graduate College of the University of Illinois at Urbana-Champaign.


