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Measuring Intention to Purchase Innovative Personal Health Assistant Services of Hypertension Patients in A Private Hospital in Bangkok

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Abstract

Purpose: This research examines the influencing factors of purchase intention on innovative personal health assistant services of hypertension patients of Bumrungrad Hospital. The conceptual framework contains five variables: brand image, perceived service quality, patient satisfaction, word of mouth, and purchase intention. **Research design, data, and methodology:** The data collection is to distribute questionnaires to 500 participants who are hypertension symptoms. The researcher applied probability and nonprobability sampling techniques, including purposive, stratified random, and convenience samplings. Before the data collection, content validity was reserved by the index of item objective congruence (IOC), and Cronbach's Alpha approved a pilot study of 50 samples. The data were analyzed using descriptive statistics, confirmatory factor analysis (CFA), and structural equation modeling (SEM) methodology. **Results:** All five hypotheses are supported in this study. Brand image has a significant impact on perceived service quality. Perceived service quality has a significant impact on patient satisfaction. Patient satisfaction has a significant impact on Word of mouth. Furthermore, word of the Mount significantly impacts brand image and purchase intention. **Conclusions:** Healthcare service providers can enhance the purchase intention of digital healthcare technology where it could be remarkably beneficial to patients to track and monitor their health conditions.

Keywords: Perceived Service Quality, Word of Mouth, Patient Satisfaction, Purchase Intention, Health Assistant Services

JEL Classification Code: E44, F31, F37, G15

1. Introduction

The healthcare service industry in Thailand has 38,512 facilities (Bureau of Policy and Strategy, 2017). State-funded is around 35%. Private ventures are about 65% which include private clinics and hospitals. According to the range and the size, the offered medical services are around 98.3% of primary healthcare providers, public health and district health promotion centers at 9,800, and private clinics at 24,800. The secondary and tertiary healthcare providers are 664 (1.7%), encompassing 294 (0.8%), with the government management, Ministry of Public Health, local administrative bodies, state enterprises or Bangkok Metropolitan Administration, and 370 private hospitals (0.9%) (Ninkitsaranont, 2020).

To enforce digital literacy among the Thai population, Thailand aims to tap into the digital economies and society's rising potential. Digital technology is a key factor in facilitating workers and can enhance people's quality of life.

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Digital transformation involves structure and infrastructure to improve technologies, production, procedure, services, trade, and other social connections. Digital technology is key to enhancing economic growth and a sustainable society in Thailand. The epidemic of coronavirus and the lockdown have damaged Thai and foreign spending power since 2019. The revenue of the private hospital sector has decreased from around 10% to 12.%. The healthcare industry in Thailand is expected to recover in 2021-2022 in response to the societal changes in Thai demographics, including an aging society, urbanization, a growing middle class, and rising health awareness worldwide as individuals take a greater interest in personal health and wellness (Ministry of Public Health, 2017).

Personal health assistant services are the compilation of system technologies, including wearable devices, mobile applications, etc., which have been viewed as a novel approach. Healthcare professionals tend to embrace the significance of digitalization to find a new way for the best service and satisfy the need of their patients during the world's pandemic. Consequently, blood pressure tracking and home health monitors are the best examples to help patients closely monitor bodily functions without needles, appointments, and invasive processes. Therefore, this research examines the influencing factors of purchase intention towards innovative personal health assistant services for hypertension patients of Bumrungrad Hospital. The conceptual framework contains five variables: brand image, perceived service quality, patient satisfaction, word of mouth, and purchase intention.

2. Literature Review

2.1 Brand Image

Dobni and Zinkhan (1990) added that brand image "is a set of recognition about a brand, as associated with the consumers' memories." Hsieh and Li (2008) noted that a brand's image is vital for most organizations to develop a marketing strategy and sales performance. Brand image can be built from attributes, symbolic logos, differentiation, pleasantness, and accessibility of a specific product or service. In forming an image, branding can be shaped through inductive implications. Several social and marketing studies have focused on the customer's journey to create inductive procedures and instill the brand image in customers' minds (Riezebos, 2003).

Brand image is an incentive vital marketing aspect for strategic management and organizational performance which associates with the perceived service quality among customers (Riezebos, 2003). Brand image and perceived service quality are social and marketing features to be examined in various industries (Cham et al., 2021). Perceived service quality as the cognitive measurement of customers toward a total service experience has been explored (Zeithaml, 1988). Therefore, this study hypothesizes:

H1: Brand image has a significant impact on perceived service quality.

2.2 Perceived Service Quality

Service quality is generally considered SERVQUAL (Parasuraman et al., 1988). In the literature on healthcare service, influencers driving service quality are varied and complex (Hasin & Seeluangsawat, 2001). The SERVQUAL scales grant essential instruments in the consumers' perception of service quality received from service providers (Andaleeb, 1998). Perceived service quality in healthcare has been investigated by numerous scholars (Azizan & Mohamed, 2013; Donabedian, 2005; Duggirala et al., 2008; Zineldin, 2006).

Perceived service quality positively impacted patient satisfaction, as proven in the sample group of 232 patients, according to the report of Gotlieb et al. (1994). Supported by Tucker and Adams (2001), who examine patient satisfaction as an outcome of perceived service quality at public hospitals, have confirmed the positive and significant relationship between these two variables. According to Badri et al. (2009), the examination of a significant impact between perceived service quality and patient satisfaction was approved among patients at United Arab Emirates public hospitals. Thus, the hypotheses are set:

H2: Perceived service quality has a significant impact on patient satisfaction.

2.3 Patient Satisfaction

Customer satisfaction is conceptualized in marketing research to explain a favorable attitude toward the product/service consumption experience (Kotler, 2015). In healthcare, patients are customers of a medical care service, including a clinic and hospital, where they expect to have a consultation or a treatment following their health conditions. Most healthcare organizations seek ways to serve their patient more efficiently and sustainably (Kay, 2007). The higher level of satisfaction, the higher chance for the patients to use and reuse the service of a clinic or hospital (Kashif et al., 2016).

Siripipatthanakul (2021) stressed that patient satisfaction signifies the patient's evaluation of the total medical service experience received from healthcare. Patient satisfaction involves customer relation services, medical care, nursing care, etc. Maintaining a high standard of service to elevate patient satisfaction returns to healthcare organizations as

financial benefits and other organizational performance (Cham et al., 2015). Hence, the researcher adopted these two variables in the research model to propose a hypothesis below:

H3: Patient satisfaction has a significant impact on word of mouth.

2.4 Word of Mouth

Word of mouth (WOM) is a primary factor in marketing communication strategy and sales development. WOM can onboard prospective customers to new products/services, which can be received from the perception of quality and variety of choices (Ruswanti et al., 2020). Word of mouth (WOM) is "verbal communications between the actual or potential consumer and others, such as the product or service provider, independent experts, family, and friends." Chaniotakis and Lymperopoulos (2009) presented that WOM is both positive and negative. The researcher signified word of mouth (WOM) as "verbal communication between patients and another social network such as family and friends about a healthcare service provider or hospital."

Brand image is conceptualized as recognition according to a brand within the cognitive awareness of customers (Dobni & Zinkhan, 1990), composed of several aspects such as logo, experience, and favorable or unfavorable attitude toward products or services (Hsieh & Li, 2008). Therefore, word of mouth can be derived from a brand image as customers would consider spreading either positive or negative opinions about the brand to their close acquaintances (Kotler, 2015). Especially word of mouth is considered very important because social media would speed up and spread more widely about how people like or dislike the brand (Jones, 2010; Miller & Lammas, 2010; Scott & Orlikowski, 2012).

Numerous influential factors have been discussed to predict purchase intention on products and services, including product quality, price, and features (Chen, 2016). In order to deliver those qualities to prospective customers, trustworthy sources significantly affect customers' purchase intention. Word of mouth plays a strong motivation in driving willingness to buy a particular product or service of customers (Bickart & Schindler, 2001). It is a persuasion via an unofficial communication channel about the brand (Gelb & Sundaram, 2002). Thus, the proposed hypotheses are set:

H4: Word of mount has a significant impact on brand image.

H5: Word of mount has a significant impact on purchase intention.

2.5 Purchase Intention

The definition of purchase intention is the probability that customers will be strongly willing to buy a product or service offered by a company (Schiffman & Kanuk, 2005). In brief, purchase intention is "the customer's willingness to buy a specific product or service" (Athapaththu & Kulathunga, 2018), commonly associated with individuals' awareness, behavior, attitudes, and perceptions. Purchase intention denotes a chance of a customer buying a product or service (Wijayaningtyas et al., 2019). Spears and Singh (2004) signified that purchase intention is also an act of a person towards a brand. Pakapatpornpob et al. (2017) cited that purchase intention is important in determining consumer purchase behavior. In the context of online products or services, Pavlou (2003) explored online buying behavior, which can be different from an offline.

3. Research Methods and Materials

3.1 Research Framework

The study adopted four previous theoretical models to construct a proposed conceptual framework for the study of influencing factors of purchase intention towards innovative personal health assistant services for a hypertension patient. As recommended by Cham et al. (2021), it examined brand image (BI) influence on the perceived service quality (PSQ) of healthcare services. Furthermore, Azizan and Mohamed (2013) reasoned that perceived service quality (PSQ) presented the strongest impact on patient satisfaction (PS) in the study of the public hospital in Pahang, Malaysia. Next, the theoretical model of Siripipatthanakul (2021) resulted that patient satisfaction (PS) being highlighted to predict word of mouth (WOM) in a dental clinic context. Lastly, based on a social study by Lee et al. (2017), word of mouth (WOM) significantly impacts brand image (BI) in healthcare services in Taiwan and Mainland China. As a result, a conceptual framework and hypotheses are proposed in Figure 1.

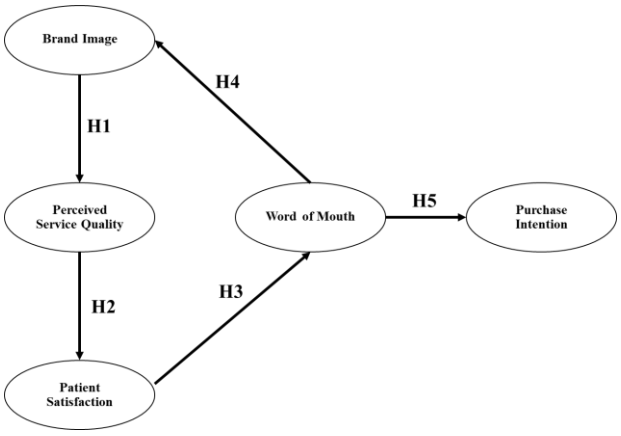

Figure 1: Conceptual Framework

H1: Brand image has a significant impact on perceived service quality.
H2: Perceived service quality has a significant impact on patient satisfaction.
H3: Patient satisfaction has a significant impact on word of mouth.
H4: Word of mount has a significant impact on brand image.
H5: Word of mount has a significant impact on purchase intention.

3.2 Research Methodology

The researcher applied probability and nonprobability sampling techniques, including purposive, stratified random, and convenience samplings. Before the data collection, content validity was reserved by an item objective congruence (IOC) index, and Cronbach's Alpha approved a pilot study of 50 samples. The survey consists of three parts. First, two screening questions are designed: "Are you the hospital patient with hypertension?" and "Are you 40 years old and above?" The second part of the questionnaire examines the influencing factors of purchase intention towards innovative personal health assistant services for hypertension patients of Bumrungrad Hospital. Five-point Likert scale involves Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), and Strongly Agree (5). Third, this study explores the demographical profiles, including gender, nationality, age group, and education. The data were analyzed using descriptive statistics, confirmatory factor analysis (CFA), and structural equation modeling (SEM) methodology.

3.3 Validity and Reliability

Instrument validity and internal consistency reliability are vital statistical assessments in every research. Validity offers the degree and quality of the instrument of each construct in a questionnaire used in the data collection. The questionnaire is the most accepted method in quantitative research to build up relevant and valid information for the analysis and results (Taherdoost, 2016). In this research, IOC has four experts for content validity. The first and second experts have Ph.D. titles, proving their research experience. The third and fourth experts are the C-Level in the healthcare industry, with relevant knowledge and expertise per the research topic. All experts were requested to provide the score via an online format. The final results showed that all 21 items had been reserved at a score of 0.5 and above. As a result, no measuring items are required to be revised. Pilot testing is vital in examining each construct's reliability in most studies. After the validation by the IOC procedure, the pilot group is recommended to be between 25 to 100 people to be involved in piloting the survey before the full examination (Cooper & Schindler, 2011). This study invited 50 participants in this step. Cronbach's Alpha evaluated it for five latent variables, which recommended that the acceptable value of CA's result should be equal to or above 0.70 (Robinson, 2009). In the pilot study, CA's results of brand image, perceived service quality, patient satisfaction, word of mouth, and purchase intention.

3.4 Population and Sample Size

According to Salman et al. (2015), hypertension is explained as a "high blood pressure condition when the pressure of the blood caused by the pumping of the heart goes much beyond normal values." Hypertension patients are those who have high level of blood pressure is 140-159 and/or 90-99, very high level is 160-179 and/or 100-109, and extreme level is <180 and/or >110. Therefore, the target population of this study is hypertension patients of Bumrungrad Hospital. Soper (2022) has developed online statistical software based on parameter values of SEM to find the minimum sample size for the study. This study has five latent variables and 21 observed variables. In the setting, the anticipated effect size is 0.2, the desired statistical power level is 0.8, and the probability level is 0.05, thus; the result of the minimum sample size is 376 samples. As a result, 500 participants who are hypertension symptoms are an efficient amount to perform SEM.

3.5 Sampling Technique

Data collection is the heart of research which can help researchers to achieve the research objectives and contribute to a better understanding of the theoretical framework (Bernard, 2002). Sampling techniques for the data collection are purposive, stratified random, and convenience samplings. For purposive sampling, the researcher assessed hypertension patients of Bumrungrad Hospital. Stratified random sampling is based on four groups of generations; 40-49 (Generation Y), 50-59 (Generation X), 60-69 (Baby Boomer), and 70 and Up (Senior Citizen), as shown in Table 1. In this research, all subjects were conveniently sampled. The researcher will distribute electronic questionnaires to the existing BH patients in the target group, interview them during a visit, and update the electronic questionnaires (MS Form).

Table 1: Stratified Random Sampling

Year-Old Range	Total number of Hypertension and Potential to have Hypertension Symptoms Patients	Hypertension Symptoms	Population Size of existing patients in Hyper-Tension
Generation Y	7,473	4,832	102
Generation X	7,980	6,124	130

Year-Old Range	Total number of Hypertension and Potential to have Hypertension Symptoms Patients	Hypertension Symptoms	Population Size of existing patients in Hyper-Tension
Baby Boomer	6,683	6,025	128
Senior Citizen	6,822	6,633	140
Total	**28,958**	**23,614**	**500**

Source: Constructed by Author (Based on the data from Bumrungrad International Hospital).

4. Results and Discussion

4.1 Demographic Information

From Table 2, the demographic results from 500 participants show that males are 51.2 percent and females are 48.8 percent. Thai patients are 79 percent, and non-Thai patients are 21 percent. Most respondents are 70 years old and up at 28 percent, 50-59 years old at 26 percent, 60-69 years old at 25.6 percent, and 40-49 years old at 20.4 percent. Bachelor's degree takes the largest group of 62.6 percent, and the smallest proportion is Doctor degrees at 9.4 percent.

Table 2: Demographic Profile

Demographic and General Data (n=500)		Frequency	Percentage
Gender	Male	256	51.2%
	Female	244	48.8%
Nationality	Thai	395	79.0%
	Non-Thai	105	21.0%
Age	40-49 Years Old	102	20.4%
	50-59 Years Old	130	26.0%
	60-69 Years Old	128	25.6%
	70 Years Old and Up	140	28.0%
Education	Below Bachelor's Degree	51	10.2%
	Bachelor's degree	313	62.6%
	Master's degree	89	17.8%
	Doctor's degree	47	9.4%

4.2 Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) is "a statistical process for testing hypotheses and commonalities among constructs." Hair et al. (2006) suggested the validation of CFA's results, determining factor loadings are equal to or above 0.50 and a p-value lower than 0.05. For five latent variables, Cronbach's Alpha recommended that the acceptable value of CA's result be equal to or above 0.70 (Robinson, 2009). Additionally, Fornell and Larcker (1981) indicated that the Composite Reliability (CR) is greater than the cut-off point of 0.6, and Average Variance Extracted (AVE) is higher than the cut-off point of 0.4, as demonstrated in Table 3.

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Brand Image (BI)	Cham et al. (2021)	3	0.770	0.712-0.744	0.771	0.529
Perceived Service Quality (PSQ)	Cham et al. (2021)	5	0.850	0.653-0.795	0.851	0.535
Patient Satisfaction (PS)	Leppäniemi et al. (2016)	5	0.825	0.618-0.775	0.827	0.490
Word of mount (WOM)	Cham et al. (2021)	5	0.803	0.622-0.713	0.806	0.455
Purchase Intention (PI)	Schivinski and Dabrowski (2014)	3	0.882	0.822-0.871	0.883	0.715

According to Schermelleh-Engel et al. (2003), the fit indices have been applied in structural equation models. These indices can detect the conflict of summarization whether or not a model matches the observed data. In Table 4, the goodness of fit indices of the measurement model in the CFA is an acceptable fit, including CMIN/DF = 1.643, GFI = 0.947, AGFI = 0.931, NFI = 0.936, CFI = 0.974, TLI = 0.969, and RMSEA = 0.036.

Table 4: Goodness of Fit for Measurement Model

Index	Acceptable Values	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	294.180/179 = 1.643
GFI	≥ 0.90 (Hair et al., 2006)	0.947
AGFI	≥ 0.90 (Hair et al., 2006)	0.931
NFI	≥ 0.90 (Arbuckle, 1995)	0.936
CFI	≥ 0.90 (Hair et al., 2006)	0.974
TLI	≥ 0.90 (Hair et al., 2006)	0.969
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.036
Model summary		**Acceptable Model Fit**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index, and RMSEA = Root mean square error of approximation
Source: Created by the author.

Discriminant validity is the extent to which latent variable A discriminates from other latent variables (Fornell & Larcker, 1981). According to Table 5, the value of discriminant validity is larger than all inter-construct/factor correlations. Therefore, the discriminant validity is supportive. The convergent and discriminant validity were proved; Accordingly, the evidence is sufficient for establishing construct validity.

Table 5: Discriminant Validity

	WOM	BI	PSQ	PS	PI
WOM	**0.675**				
BI	0.642	**0.727**			
PSQ	0.232	0.224	**0.731**		
PS	0.648	0.540	0.220	**0.700**	
PI	0.631	0.542	0.251	0.487	**0.846**

Note: The diagonally listed value is the AVE square roots of the variables
Source: Created by the author.

4.3 Structural Equation Model (SEM)

SEM is an influential and innovative statistical tool that prepares the researcher to comprehensively evaluate and modify theoretical models (Anderson & Gerbing, 1988). Based on Table 6, the results show the structural model fit in this study with CMIN/DF = 1.710, GFI = 0.943, AGFI = 0.929, NFI = 0.931, CFI = 0.970, TLI = 0.966, and RMSEA = 0.038.

Table 6: Goodness of Fit for Structural Model

Index	Acceptable Values	Statistical Values
CMIN/DF	< 3.00 (Hair et al., 2006)	314.586/184 = 1.710
GFI	≥ 0.90 (Hair et al., 2006)	0.943
AGFI	≥ 0.90 (Hair et al., 2006)	0.929
NFI	≥ 0.90 (Arbuckle, 1995)	0.931
CFI	≥ 0.90 (Hair et al., 2006)	0.970
TLI	≥ 0.90 (Hair et al., 2006)	0.966
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.038
Model summary		**Acceptable Model Fit**

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = Goodness-of-fit index, AGFI = Adjusted goodness-of-fit index, NFI = Normed fit index, CFI = Comparative fit index, TLI = Tucker-Lewis index, and RMSEA = Root mean square error of approximation
Source: Created by the author.

4.4 Research Hypothesis Testing Result

This research analyzes the relationships between correlated constructs to classify genetic factors as independent observations, identifying the level of a significant relationship and its effect, determined by the standardized path coefficient value (β) and t-value. P-value <0.05 is a measure of the significant effect.

Table 7: Hypothesis Results of the Structural Equation Modeling

Hypothesis	(β)	t-value	Result
H1: BI→PSQ	0.164	2.502*	Supported
H2: PSQ→PS	0.153	2.397*	Supported
H3: PS→WOM	0.710	9.701*	Supported
H4: WOM→BI	0.674	10.049*	Supported
H5: WOM→PI	0.661	10.956*	Supported

Note: * p<0.05

According to Table 7, all five hypotheses are supported in this study and can be further indicated:

H1 shows that brand image significantly impacts perceived service quality, reflected in the standardized path coefficient value of 0.164 (t-value = 2.502). Brand image and perceived service quality are significantly related as the patients' minds would estimate the quality of hospitals' service with the brand image (Cham et al., 2021).

H2 presents a standardized path coefficient value of 0.153 (t-value = 2.397), which supports the relationship between perceived quality service and patient satisfaction. The results align with previous studies that perceived service quality positively impacted patient satisfaction (Badri et al., 2009; Gotlieb et al., 1994; Tucker & Adams, 2001).

H3 approves that patient satisfaction significantly impacts word of mouth, revealing the standardized path coefficient value of 0.710 (t-value = 9.701). The results support the earlier statement that the higher level of satisfaction, the higher chance for the patients to use and reuse the service of a clinic or hospital (Kashif et al., 2016).

H4 validates the significant impact of the word mount and brand image, representing a standardized path coefficient value of 0.674 (t-value = 10.049). It has been indicated that word of mouth can be derived from a brand image as customers would consider spreading either positive or negative opinions about the brand to their close acquaintances (Kotler, 2015).

H5 supports the significant relationship between word of mount and purchase intention, resulting in a standardized path coefficient of 0.661 (t-value = 10.956). Word of mouth plays can predict the willingness of patients to purchase a hospital's services (Bickart & Schindler, 2001; Gelb & Sundaram, 2002).

5. Conclusions and Recommendation

5.1 Conclusion and Discussion

The research objectives have been met to determine the significant impact of brand image, perceived service quality, patient satisfaction, and word of mouth on the purchase intention of innovative personal health assistant services for hypertension patients of Bumrungrad Hospital. All five hypotheses are supported in this study. Brand image has a significant impact on perceived service quality. Perceived service quality has a significant impact on patient satisfaction. Patient satisfaction has a significant impact on word of mouth. Furthermore, word of mount has a significant impact on brand image and purchase intention.

Brand image has a significant impact on perceived service quality. As supported by Riezebos (2003), brand

image is an incentive vital marketing aspect for strategic management and organizational performance, which associates with customer-perceived service quality. Perceived service quality has a significant impact on patient satisfaction. Badri et al. (2009) provide evidence of the significant impact between perceived service quality, and patient satisfaction was approved among patients at United Arab Emirates public hospitals. Patient satisfaction has a significant impact on word of mouth. Siripipatthanakul (2021) and Cham et al. (2015) addressed that patient satisfaction signifies the patient's evaluation of the total experience of medical service received from healthcare, such as medical care, nursing care, etc.

Furthermore, word of mount has a significant impact on brand image and purchase intention. Brand image is a recognition that can be derived from how other significant persons voice out about a specific healthcare provider (Dobni & Zinkhan, 1990; Hsieh & Li, 2008; Kotler, 2015). Chen (2016) also supported that word of mount is an influential factor in determining the purchase intention of patients. In conclusion, healthcare service providers can enhance the purchase intention of digital healthcare technology, which could remarkably benefit patients in tracking and monitoring their health conditions.

5.2 Recommendation

Based on the findings, the recommendations are dedicated to healthcare service providers and technology developers to measure the level of purchase intention for better design innovative tools to serve patients' health-conscious needs. In the competitive environment of the healthcare industry, the firm seeks ways to improve service quality to build a strong brand image in customers' or patients' minds. Hospitals and other healthcare service providers must consistently improve service quality through personnel training, upgrade facilities and deployment of innovative technology.

Service quality can determine the level of patient satisfaction. Higher service quality can greatly enhance patient satisfaction. Digital healthcare technology can be an add-on value proposition to provide health conditions and data for hospitals for accurate diagnosis. Various technology can be deployed in the healthcare industry, such as medical tools, wearable devices, health record applications, etc. The healthcare service providers should also regularly measure the patient's satisfaction level and promptly deal with complaints. Because the satisfaction level of patients can impact how patients spread the word of mount about medical and other related service, it can determine the credibility and sustainability of the organization.

With the diverse service offering, healthcare providers should closely monitor how patients feel and talk about the firm. In the social media era, product/service reviews are very important. Positive words of the mount can be spread through the internet quickly and virally, as well as negatively. Therefore, word of mount is a critical factor that can endorse or harm the firm's image. Additionally, word of the mount can attract and sustain the purchase intention of new and existing customers. Healthcare providers should design interactive communications for inquiries and complaints with their patients to respond quickly to and solve problems.

5.3 Limitation and Further Study

The limitations of this study can be discussed. Firstly, this research merely examined patients of a private hospital, which is the group where it has a different purchasing power from the public hospitals. Hence, the different groups of customers' characteristics would be different. Secondly, the conceptual framework is limited to five variables: brand image, perceived service quality, patient satisfaction, word of mouth, and purchase intention. Thus, future studies can investigate more variables like trust and social influence. Thirdly, the future study should extend to the qualitative or mix-method methodology for a better interpretation of the findings.

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