An Analysis on the Effect of Computer Literacy and Attitude Towards Internet Amongst Generation Y

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Abstract

The Internet continues to change and evolve against a backdrop of unrelenting growth The Internet developed a ground-breaking open model for its own growth and governance that included all stakeholders. Generation Y has been recognized as a new market segment that will bring change in the platform of the internet in an enormously connected world. The aim of this study is to analyze the attitude and the Internet usage among the generation. This study was carried out via a questionnaire involving 432 working professionals who live around Kuala Lumpur Federal Territory and Selangor State, more precisely the author has selected MSC (Multimedia Super Corridor). It can be concluded that their attitude toward the internet played a significant role in their e-commerce activities and was a predicted factor. It is apparent that attitudes toward the internet and e-commerce practices have a major relationship.

Keywords: Internet, Generation Y, attitude, e-commerce, MSC, Kuala Lumpur, Selangor

1. Introduction

It's remarkable that fixed broadband connections only surpassed dial-up access in 2004, that the number of users only surpassed one billion in late 2005, and that the first smartphone was only released in 2007. Mobile broadband has exceeded fixed broadband, developing country users have surpassed developed country users, video traffic has surpassed all other forms of traffic, and the number of users is approaching four billion in early 2017 (Lachman & Bret, 2013).

The Internet has altered the course of history. The way individuals communicate and collaborate, entrepreneurs and companies conduct business, and governments and people connect has all changed as a result of open Internet access. Simultaneously, the Internet developed a ground-breaking open model for its own growth and governance that included all stakeholders.

According to a survey conducted by Miniwatts Marketing Group (2012), the total number of internet users in the world is 2.405.518.376, with Asia accounting for 44.8 percent, Europe for 21.5 percent, and Australia for 11.4 percent. As compared to data obtained in 2000, the total population of internet users was just 360.985.492, indicating a 566.4 percent increase in internet users between 2000 and 2012.North America has the largest percentage of internet users, with 78.6 percent of the population of 340.280.154. The improved telecommunication infrastructure has had a significant effect on the region's higher internet penetration.

Research Objective

This objective of the study is to analyze the attitude and the Internet usage among the generation Y. The research objective are as follows:

1. To analyze generation Y attitude towards internet in their e-commerce activities

2. To examine the relationship between the role of computer literacy and attitude towards internet among generation Y.

3. To examine the moderating effect of the role computer literacy in its relationship with attitude towards internet

2. Literature Review

Gen Y

Millennials are members of Generation Y, who were born between the late 1970s and the late 1990s. Every generation has its own distinct characteristics, as well as similarities and differences that can be used to gauge how they behave. Obviously, it is important for a marketer or even a researcher to be aware of this potential customer. The generation Y is one of the most populous. Generation Y, also known as the Millennials, is a group of people who are known for their diversity (Hawkins & Mothersbaugh, 2010)

The majority of the "Echo Boomers" have reached the workforce. They are also technologically savvy, communicating through e-mail, cell phone, and SMS. More than 90% of people between the ages of 18 and 29 use the internet, which is higher than the previous generation. MTV, Maxim, American Idol, Big Brother 4, and CSI are among the radio and television programmes that cater to this generation (Hawkins & Mothersbaugh, 2010). Generation Y has earned better education than previous generations (Kaifi, et al, 2012). This generation has grown up with technology and considers it second nature to them (D'Netto, 2011).

Attitude towards technology

Modernization has greatly shaped and changed the world and how people live their lives today. Advance technology is rapidly evolving, and people are becoming more reliant on it. People's attitudes toward technology, on the other hand, are not uniform. There are many variables that contribute to this imbalance, one of which is age (Kubiatko, 2013).According to American Express Business Insight (2012), boomers are less comfortable with technology than previous generations, but they are trying to keep up with the new technology. The millennial generation, however is young, intelligent, and outspoken. Millennials or generation Y, unlike their predecessors, walk at a breakneck speed; they are both high-performing and high-maintenance since they were born with technology (Armour, 2005). In comparison to previous generations, this generation considers itself to be technologically savvy. They believe that technology is critical to their success (American Express, 2012).

Attitude towards Internet

Almost all humans today is aided by computer technology. There is no other technology that has had as much of an impact as computer technology and the internet. The information age was ushered in by information and communication technologies such as mobile phones, email, and instant messaging. The word "digital divide" refers to the disparity between those who have effective access to information technology and those who have restricted access or are not even using it. Poverty, class, gender,

socioeconomic status, cultural differences, and age group are all factors that contribute to this inequality (Schiller, 1996).

According to Norman in his book Cybersphology, we live in a world where the rich seem to get richer and the poor seem to get poorer, and many baby boomers are among the richest, wealthy, and trained people on the planet, but the majority of this generation is unable to keep up with the rapid pace of digital and information technology. Individuals from the baby boomer generation have the most discretionary income to spend on IT, but they are also on the cusp of the digital divide (Norman, 2008).

3. Methodology

A total of only 432 set of questionnaires collected out of 450 set were distributed. The research focused on working professional who live around Kuala Lumpur Federal Territory and Selangor State, more precisely the author has selected MSC (Multimedia Super Corridor) landmark such as Cyberjaya, Selangor, TPM (Technology Park Malaysia) and Kuala Lumpur City Centre, since there are lots of office spaces and many local and multinational (MNC) companies were established in Multimedia Super Corridor (MSC) landmark. In the initial stage the researcher obtains several procedures to get legal permissions from 10 IT companies in the Kuala Lumpur and Selangor state. Secondly, the researcher is not allowed to circulate the questionnaire by himself. Subsequently the human resource and general affair department circulated the questionnaire to respective respondent in particular companies.

4. Result

Demographic Profile of Respondent

Demographic	Categories	Total	Percentage (%)
Gender	Male	208	52
	Female	192	48
Age	25 and under	296	74
	26-33	80	20
	34-40 years	52	6
Education	High school or equivalent	48	12
	Diploma	28	7
	Bachelor Degree	248	62
	Master Degree	72	18
	Doctoral Degree	4	1
Income	0 – MYR 2000	216	54
	MYR 2001- MYR 4000	132	33
	MYR 4001- MYR 6000	52	13
Frequency using internet	Several times a day	380	95
	About once a day	12	3
	Every few days	8	2
Wireless utilization	Using wireless	388	97
	Don't use wireless	12	3

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
AI	400	3.00	7.00	5.0413	.86712
CL	400	2.83	7.00	4.9151	.69533
Ecomm	400	3.24	6.15	4.6997	.64516
Valid N (listwise)	400				

Model summary Generation Y Attitude towards Internet on their E-commerce

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879[a]	.687	.683	.58475

a. Predictors: (Constant), AI
b. Dependent Variable: Ecomm

R square value is 0.687 ($R^2 = 0.687$). It means that 68.7 percent of e-commerce activities are predicted by attitude towards internet, in the meantime, the rest 31.3 percent were predicted by other factors which are not conducted in this research.

ANOVA Generation Y Attitude towards Internet on their E-commerce

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.989	1	29.989	87.704	.000[b]
	Residual	136.089	398	.342		
	Total	166.078	399			

a. Dependent Variable: Ecomm
b. Predictors: (Constant), AL

The result shows that there is a significant relationship between attitude towards internet and e-commerce with prediction equation (F = 87.704, p < 0.05).

Coefficient of Attitude towards Internet on E-commerce

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.665	.252		2.638	.000
	AI	.836	.058	.829	14.507	.000

a. Dependent Variable: Ecomm

The result is positive significance between attitude towards internet and e-commerce activities.

Model Summary Computer Literacy and Attitude towards Internet

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.618[a]	.473	.457	.84739

a. Predictors: (Constant), CL

b. Dependent Variable: AI

R value is 0.618, and it is indicating positive value, therefore the relationship between two variables is positive relationship and strong correlation.

ANOVA Computer Literacy and Attitude towards Internet

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.214	1	14.214	19.794	.000[b]
	Residual	285.793	398	.718		
	Total	300.007	399			

a. Dependent Variable: AI

b. Predictors: (Constant), CL

The result shows that there is a significant relationship between computer literacy and attitude towards internet with prediction equation (F = 19.974, $p < 0.05$).

Coefficient of Computer Literacy and Attitude towards Internet

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.774	.288		13.104	.000
	CL	.717	.071	.618	4.449	.000

a.   Dependent Variable: AI

Result is positive and there is significant relationship between computer literacy and attitude towards internet.

Model Summary Computer Literacy and Attitude towards Internet

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.496[a]	.246	.244	.56105
2	.593[b]	.351	.348	.52099

a. Predictors: (Constant), CL

b. Predictors: (Constant), CL, AI

   b. Dependent Variable: Ecomm

R square value is 0.246 ($R^2 = 0.246$) which means 24.6 percent e-commerce activities can be predicted by their computer literacy.

ANOVA Computer Literacy Moderate Attitude Towards Internet and E-commerce Activities

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.796	1	40.796	129.601	.000[b]
	Residual	125.282	398	.315		
	Total	166.078	399			
2	Regression	58.321	2	29.161	107.434	.000[c]
	Residual	107.757	397	.271		
	Total	166.078	399			

a. Dependent Variable: Ecomm

b. Predictors: (Constant), CL

c. Predictors: (Constant), CL, AI

The result indicated there is a significant relationship computer literacy moderating attitude towards internet and e-commerce activities with prediction equation, (F = 129.601, p < 0.05) & (F = 107.434, p < 0.05).

Coefficient of Computer Literacy Moderate Attitude towards Internet and E-commerce Activities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.553	.191		13.387	.000
	CL	.537	.047	.496	11.384	.000
2	(Constant)	1.618	.212		7.638	.000
	CL	.459	.045	.423	10.217	.000
	AI	.248	.031	.333	8.035	.000

a. Dependent Variable: Ecomm

The result is computer literacy have significant influence toward e-commerce activities because the significant level scores 0.000.

5. Discussion

The psychological state of Y generation consumers in light of online shopping is represented as their online shopping attitudes (Li & Zang, 2002). The attitude of customers toward online shopping is thought to be the most important factor influencing e-shopping potential (Michael, 1998). Benefits derived from characteristics are referred to as perceived benefits, and they may be physiological, psychological, or material in nature (Gutman, 1982). The aggregate advantages or satisfactions of online shopping that meet the needs or wants of consumers are represented as Y generation consumers perceived benefits in the sense of online shopping (Shwu-Ing, 2003). As a result, extrinsic benefits include a diverse product offering, attractive pricing, quick access to information, and low search costs (Delafrooz & Khatibi, 2009). The strongest linear relationship between attitude toward online shopping and perceived benefits of online shopping has been discovered in previous research (Delafrooz & Khatibi, 2009).

Jusoh and Ling (2012) found that people's attitudes toward the internet have a huge impact on their e-commerce practises. Finally, consumer or customer perceptions of the internet, its use, and e-commerce have a huge effect on their e-commerce activities. According to a previous study conducted in Turkey (2005), there is a strong high and optimistic association between respondents' attitudes toward computers and their computer literacy. However, there was no connection found between their attitude toward the internet and their computer literacy skills; this may be due to a lack of Internet access, which may explain why this relationship was weaker than the others in the study (Yalcinalp, 2005). Another study conducted in Australia in 2008 found a clear connection between the frequency at which people use the internet and their perception of their computer skills. The more they understand it, the more effectively they use it. This link was critical for the online application. Rather than doing conventional computing, the young generation spends the majority of their computer time online.

According to the results of the survey, there is a substantial gap between those with high computer literacy and those with low computer literacy. Those with a moderate level of computer literacy have an insignificant relationship between computer literacy and attitude toward the internet, whereas those with a high level of computer literacy have a substantial relationship between attitude and computer literacy. This result is backed up by Yanik (2010), who claims that those with higher computer literacy are more likely to enjoy internet usage, and vice versa. The researchers discovered a connection between computer literacy and people's attitudes toward the internet. A previous study conducted in Singapore in the year 2000 backs up this conclusion. Liao and Cheung (2000) attempted to investigate the importance of computer literacy and e-commerce in their research. They found out that people who are computer literate have a better attitude toward the internet and are more likely to be interested in e-marketplace opportunities. Furthermore, Dillon and Reiff (2004) discovered that users with more computer knowledge or who are computer literate have a more optimistic attitude toward the internet and online shopping.

Respondents in this study were working professionals from service companies who mostly deal with IT-related tasks; as a result, the majority of the respondents have a high level of computer literacy, with only a few having a low level of computer literacy. As a result, they had a favourable attitude toward internet and e-commerce practises. Data literacy skills moderate attitudes toward the internet and e-commerce, according to hypothesis testing.

6. Conclusıon

The study had gained a better understanding of generation Y attitudes toward the internet and e-commerce. The primary goal of this research is to examine the attitudes of Generation Y toward the internet. The findings revealed that their attitude toward the internet played a significant role in their e-commerce activities and was a predicted factor. It is apparent that attitudes toward the internet and e-commerce practises have influenced Generation Y significantly.

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