THE RELATIONSHIP BETWEEN DIGITAL INCLUSION AND SUPPORT SYSTEM TOWARDS THE EMPOWERMENT OF WOMEN ONLINE ENTREPRENEURS

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ABSTRACT

Cyberspace with various Internet applications has provided opportunities to women online entrepreneur to increase their social contact with others which eventually became their patrons, agents or suppliers. The purpose of this study was to determine the extent to which digital inclusion and support system affect the empowerment of online women entrepreneurs in Malaysia. Further, the objective of the study was to identify the relationship between the factors of digital inclusion and support system towards the empowerment of women online entrepreneurs. The respondents of the study included 402 women online entrepreneurs between the ages of 18 to 50, who were involved in online business. This study employed quantitative approach for collecting data, in the form of online survey and face-to-face interviews. Using the Statistical Package for Social Sciences (SPSS) to analyze the data, the result revealed that 76 % of the participants used WhatsApp frequently as the main Internet application in running their business. They were also actively communicating with their customers and suppliers via online. By using the multiple regression analysis, the study found that the communication bonding was the main contributor to the empowerment of women online entrepreneurs. Besides, the result also revealed there was a significant relationship between support system and empowerment of women online entrepreneurs and it has contributed about 19 percent to the variant. Therefore, the results of this study showed that digital inclusion and support system had a significant relationship towards empowerment of women online entrepreneur.

Keywords: Digital inclusion, support system, empowerment, women online entrepreneurs

Introduction

Internet gives a big impact towards community life. The rapidity of Internet application through smartphone and social media have influenced communication system today. The uses of technologies speed up and facilitate communication matter and various aspects which encompasses social, economy and political generally. Presently community life had been dominated by technology and mostly this technological development revolution that transformed or has the potential to change lifestyle. Earlier, according to Digital Inclusion Team (2007), digital participation has a few intents that differ according to different organization. Among Them 1) give basic skill society in ICT so that able to be involved in knowledge economy, 2) shrink digital divide namely gap among those capable to engage in society based on information and knowledge compared to those who helpless, 3) make technology and electronic services used by society that is helpless, and 4) prevent alienation social among society.

Digital inclusion enables cluster of society, business and institution to have access on technology and content that enable them to have information in the 21st century. With digital inclusion, the internet access speed is fast and can be accessed physically. It has also invented bigger opportunity for economic growth with ICT usage. Thus, technology use aims to strengthen social contact, education and job opportunity, access to health, welfare, civic involvement, innovation and make government service more efficient (ICMA 2012).

This article discusses the relationship between digital inclusion and support system towards the empowerment of online women entrepreneurs. This study will also discuss in particular the extent of digital inclusion as measured by the ratio of the Internet as a source of information, means of communication and e-transaction activities together with the support system that has empowered the online women entrepreneurs in Malaysia.

LITERATURE REVIEW

Consequently, entrepreneurs are catalysts in the process of economic development of a country. They are considered to be those who are willing to take risks and always seek to innovate (Nor Aini 2003). Thus, entrepreneurs in this study refer to women entrepreneurs who are likely to be competitive in line with technological developments. This is because women also play a big role when they dabbled in professional occupations as well as homemakers. Women are not spared from dealing with the disclosure of new technology and this really is an opportunity for women to be developed in the future in various fields, especially entrepreneurship. In general, most studies are beginning to look to the purpose of individual participation in Internet and benefit derived (Hazura et al. 2012).

Obviously, we can see that the potential of ICT actually has brought society a step forward in terms of communication, increasing productivity, generating economic, search without corresponding information, develop skills, empower women and youth, encouraging participation at various levels (Seo et al., 2009), According to the Minister of Digital Inclusion, the Rt Hon

Paul Murphy (HM Government, 2008), digital inclusion has two bond; first to ensure that all communities have the opportunity to enjoy the direct benefits (of who was absent) offered by the digital technology through access and technology skills, motivation and confidence to enhance their quality of life. Second, to ensure that indirect benefits (of opportunity) offered by technology are to improve all aspects of planning and deployment services to be fully utilized by the society.

In accordance with that, Walton et. al (2013) explores current need, challenge and e-inclusion interest in Australia in making digital technology benefited to achieve daily duties. They had placed three principal dimension in measuring e-inclusion namely awareness, capacity, availability and accessibility. Dimension of awareness measured using instrument acceptance (adoption) and digital literacy (looking to skills use digital equipment). Meanwhile, capacity and ability seen from price angle and infrastructure can be used and owned and information can be reached. Accessibility dimension on the other hand is how far digital accessibility all individuals regardless of difference in digital era. This measurement carried out aim to pioneer need, challenge and digital inclusion interest in Australia and can introduce conceptual framework that subtler in deciding and handle digital equity.

On the other hand, Muhamad Asri et al. (2012) finds that self-initiative, family encouragement and religion was the main factors that motivate them engage in entrepreneur field while self-background factor, management skills, network skills and support are factors that significantly influence business performance. Thus, entrepreneurial skill that is existing in entrepreneur's self-need to be raised parallel to new millennium communications development like Internet. This also include skill from technical aspect like Internet usage and communication aspect like language skill other than specific skills in entrepreneurial field. Additionally, a good support from family member also vital to continue enthusiastic in various business world challenge. This is in line with a study by Syed Shah Alam et al. (2011) which found that there is relationship that is significant between family support with the successful entrepreneurs. Thus, with social contact and online discussion achieved by entrepreneur enable them to share idea, widen market together and to enrich information source.

Globally, the issue of empowering women has been talked and discussed in many ways. Cooperative for Assistance and Relief Everywhere (CARE) is one of the organizations that actively carrying out study and gather relevant information woman empowerment. This theory talks about women's rights especially the poor class that fight continues their life. Clearly, empowerment is a change needed by women to get their rights fully. Report from CARE (2005) finds that there is 3 dimensions that measurable in empowering women namely 1) Individual - meaning woman's self itself which encompasses skill, knowledge, confidence and their ability to be independent; 2) Structure - including social environment in woman's life also included cultural aspects, tradition, sex and social class; 3) Relation - referring to relationship power (family, society, government agency and authorities). Change that might be happening towards each dimension only did not giving big impact towards empowerment, while two-dimensional combination seen bring rather big change but still imperfect and finally combination all three dimensions will be more meaningful in bringing changes and empowerment. Apart from that too, CARE (2005) giving explanation on empowerment scope which encompasses economic aspects, social, political, psychology and legislation.

Due to this, this study uses all three dimensions in measuring woman empowerment through Internet's entrepreneurial involvement carried out by online businesswoman in Malaysia. Interaction of all three dimensions allegedly carried bigger impact towards empowerment.

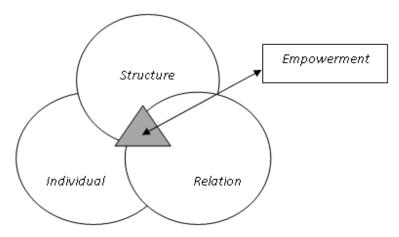


Figure 1: Woman Empowerment Dimension Source: CARE 2005

The above statement clearly shows that the empowerment needs the aspect of ICT involvement and support from individual or social agents. Thus, this article will determine the relationship of digital inclusion and support system towards the empowerment of online women entrepreneurs in Malaysia.

DIGITAL INCLUSION

- Internet as a source of information
- · Communication network
- E-transaction

Figure 2: Relationship of Digital Inclusion and Support System towards the Empowerment of Online Women Entrepreneurs

METHODOLOGY

This study employs a quantitative method which is survey by using questionnaires to obtain data. Data collection was conducted in two stages, face-to-face and online surveys. The population in this study consisted of women entrepreneurs who run online business in Malaysia. For the face-to-face survey, the data collection was gathered at the entrepreneur carnivals held in several places in Klang Valley (Kuala Lumpur and surrounding areas). As for online survey, a set of questionnaire was administered using Google Drive with specific terms automatically where a respondent is only allowed to answer once to ensure no repetition of data. Data were analyzed using descriptive (percentage, frequency) and inferential statistical (multiple regression) analysis. Several constructs were used in this study and measured as follows:

Digital Inclusion

Digital inclusion in this study was measured by three dimensions that are (1) the Internet as a source of information refers to the type of information sought by the respondent through the Internet, (2) the Internet as a medium of communication refers to the frequency of response to feedback from customers and advertise the products in the web site and (3) the Internet as e-transaction activities refers to the frequency of respondents see financial transaction activity either receiving payment or making payment through Internet banking. All three of these dimensions has 15 items measured by Likert scale of (1) 'very infrequent' up to (5) 'very often'. Test shows the Cronbach Alpha reliability for variable digital inclusion is $\alpha = .90$.

Support System

Entrepreneur's friend support is a dimension for support system variable that explain about social contact in entrepreneur's network. This dimension also are taken apart by Nurdin et al. (2014) in its study that explained on social contact interest and support achieved in facilitating success of an entrepreneur. A total of 5 item was used to survey entrepreneur friend support towards entrepreneurship being performed by respondent. For every answer, score will be given to determine whether respondent's answer given having frequency that is high or low. Answer category to assess this variable is based on 5 scales following that is (1) 'very not often', (2) 'not often, (3) 'once in a while', (4) 'frequently' and (5) 'very often'. To scale mentioned, highest composite score is totaled 25 and lowest composite score is 5. Assumed respondent with highest score have support level that is high compared to score that is lowest show respondent have support level that is low.

Empowerment

In this study, woman empowerment surveying several aspects that can ascending online women entrepreneurs to rank their status through entrepreneurship that they carried out. Women empowerment in this study refers to independent ability, make a business decision, idea sharing, network social relationship and personal passed through. The categorical answer given to respondents is based on 5 scales started from (1) 'low' until (5) 'very high'. Cronbach Alpha's value for variable this is a = .92.

RESULTS

The result of the study is presented in two parts, descriptive and inferential data. The descriptive data comprise of the demographic background of the respondents and their business. The inferential data on the other hand consist of reliability and multiple regression analysis. The test of multiple regression is the main test of this study as to determine the relationship and influence between variables.

I. DESCRIPTIVE STATISTICS

Demographic Background

Table 1 shows majority of respondents were among women entrepreneurs between the ages of 27-33 years (46%), while respondents aged 18-21 (5%) represent a minority group. In terms of marital status, the findings show that the majority of respondents are married women entrepreneurs (63%). The study also found 62% of respondents doing business individually and 24% of the respondents share with a friend or even a family business with a small member of the partnership. Meanwhile, 11% of respondents do business with the opening of private limited companies and only a small minority of 2% does business with other ways such as being dropship agents.

Table 1 Demogra	phic Profile of Res	spondents (N=402)

	Demographic Profile of Respondents (N		
Demographic	Frequency	Percentage	
Age		_	
18 - 21	20	5	
22 - 26	119	30	
27 - 33	185	46	
34 - 39	52	13	
40 and above	26	7	
Marital Status	·		
Single	142	35	
Married	254	63	
Single mother	6	2	
Status of Organization			
Individual	250	62	
Enterprise	98	24	
Company	45	11	
Others	9	2	
Types of Business			
Apparel and Accessories	223	56	
Headscarf and Hijab	32	8	
Children items	19	5	
Cosmetics	17	4	
Health and Beauty Products	38	10	
Gadget	4	1	
Services	8	2	
Food and Drinks	41	10	
Others	20	5	
Trading Period			
Less than 1 year	108	27	
1-3 years	228	57	
4-6 years	49	12	
7 – 9 years	10	3	
More than 9 years	7	2	
Income (per month)			
Less than RM1000	109	27	
RM1001 – 3500	80	21	
RM3501 – RM9000	50	12	
RM9001 - RM15,000	100	25	
More than RM15,001	58	14	

From the aspect of business, apparel and accessories (shoes, perfume and pin) is a type of business that preferred by respondents with a share of 52 percent. This shows that interest in apparel and accessories business is high. In addition, it is assumed that demand for clothing and accessories are also high in the market. Health and beauty products as well as food and beverages recorded a 10 per cent respectively. 8 percent of respondents also have a business of headscarf and hijab. Hence, there are 5 percent of respondents do business selling items for babies and children, including clothes, shoes, toys, books, baby daily necessities and the like. Respondents also do business with cosmetics such as make-up 4 percent of the total. There are also among the respondents (2 per cent) who are involved with business services such as driver's license and a wedding planner. In addition, a small number of respondents also sell gadgets that 1 percent. The remaining 5 percent of respondents have business as diverse as decorations and crafts. The findings show that respondents engage in a variety of business categories based on the interests and their abilities.

With regard to the period of doing business, the study found that the majority of respondents (57 percent) were involved in business between 1 to 3 years. 27 percent of respondents have just familiarized with the world of business with less than 1 year of age of their business. Additionally, 12 percent of respondents have been in business for about 4 to 6 years, and 3 per cent were in business between 7 to 9 years. Only 2 percent of respondents only been in business for over 9 years.

II. INFERENTIAL STATISTICS Relationship Between Digital Inclusion and Women Empowerment

The multiple regression test results using the step-wise method show that only 2 dimensions namely Internet as a source of information and communication bonding had significant relationship with women empowerment (F = 67.275, p < 0.05; Adjusted $R^2 = .25$).

Literally, the result shows there is two-dimensional digital participation namely communications bonding (β = .37, p < 0.05) and Internet as a source of information (β = .21, p < 0.05) giving significant contribution towards women empowerment. Increase in communication bonding per unit will contribute as much as .37 units in women empowerment. Likewise, with increase in Internet search per unit as a source of information will contribute as much as .21 units in woman empowerment. Overall, communications bonding is a major contributor that influence women empowerment. Thus, more interaction and communication related to business advertising, updating company profile, products and services as well as launching new products over the Internet is very important in empowering women in the entrepreneurship sector.

Table 2 Relationship between Digital Inclusion and Women Empowerment

Variable	Adjusted R ²	R ² Change	Beta	t	Sig
Communication bonding	.22		.37	7.610	.000*
Internet as resources	.25	.03	.21	4.258	.000*

^{*}At the significant level of 0.05 (F = 67.275, p < 0.05; R^2 adjusted = .25)

The Relationship Between Support System and Women Empowerment

The regression test result by using enter method shows the support system having significant relationship with woman empowerment. Retrieval research showed that support system having significant relationship and also contributed a total of 19 percent to variance of women empowerment overall (F = 92.467, p < 0.05; Adjusted $R^2 = .19$).

Regression coefficient shows Internet entrepreneur friend dimension (β = .43, p < 0.05) giving significant contribution towards women empowerment. Increase in support system per unit contribute as much as .43 units to increase in women empowerment. This explained that support system is very important and needed by entrepreneur in strengthen themselves. Entrepreneur supporters' role is seen indirectly can help in promoting products or service being performed by women entrepreneurs with more extensive. Thus, support system greatly needed and should be viewed from angle that is significant. This support system also showed a meaningful contribution in strengthening respondent independent ability.

Table 2 Relationship between Support System and Women Empowerment

Variable	R ² Adjusted	R ² Change	Beta	t	Sig
Support System	.19	-	.43	9.616	.000*

^{*}At the significant level of 0.05 (F = 92.467, p < 0.05; R^2 adjusted = .19)

RECOMMENDATIONS AND CONCLUSION

In conclusion, the research findings clearly showed that there is a significant relationship between variables that have been used in the theoretical framework. Result of the study also found that only Internet as a source of information and communication bonding had a significant relationship towards women empowerment. The findings also clarified that communication bonding was the main factor contributing towards women empowerment. Therefore, it can be concluded that all communication aspects that revolve around business, like company profile, new product advertising and feedback with customers are important aspects in helping to strengthen the business from independent ability aspects, social and personal relationships. This means that the entrepreneurs can stand by themselves and strengthen their relationships socially and personally whenever the business that is being performed has developed well base on interaction and communication through the powerful Internet access. Recommendations for future studies can be extended by making comparisons between genders who run online business. In addition, further study can also be done by expanding the scope of research to entrepreneurial factors that impact online business as well as the transformation of the women entrepreneurs.

REFERENCES

Choudhury, N. (2009). The question of empowerment: women's perspective on their Internet use. Gender, *Technology and Development*, 13 (3), 341-363.

Faradillah Iqmar Omar & Samsudin A.Rahim. (2015). Penyertaan digital dan ciri keusahawanan dalam empowerment usahawan wanita di Malaysia. *Jurnal Komunikasi*, 31 (1), 241-256.

Global Internet Report. (2014). http://www.Internetsociety.org/doc/global-Internet-report. [20 Mac 2015].

Hazura Mohamed, Hairulliza Mohamad Judi, Siti Fadzilah M. Noor dan Zawiyah M. Yusof. (2012). Jurang digital dan pendidikan di luar bandar: tahap literasi teknologi maklumat dan komunikasi pelajar. *Jurnal Teknologi Maklumat dan Multimedia Asia-Pasifik*, 1 (2).

HM Government. (2008). Delivering Digital Inclusion: An Action Plan for Consultation.

Internet World Stats. (2014). http://www.Internetsociety.org/doc/global-Internet-report?gclid=CK2h OvS8MUCFVcUjgoddDcA9w [20 Mac 2014].

Jalaluddin Abdul Malek, Norizan Abdul Razak, Ali Salman, Fariza Mohd Nor & Mohd Yusoff Abdullah. (2012). Digital inclusion society in Malaysia Felda Agricultural area. Wseas Transactions on Information Science and Applications, 9 (4) 115-124

Mazmalek Mohamad. (2009). Web 2.0 Mudahkan Komunikasi Manusia. Aspirasi Digital.

Nor Aini Idris. (2003). Daya saing usahawan wanita Melayu menghadapai cabaran globalisasi. *Prosiding Persidangan Kebangsaaan Pusat Pembangunan Sosial dan Persekitaran*, hlm. 7 – 16.

Prodnik, J.A. (2014). Digital inclusion and user (dis)empowerment: a critical perspective. Info, 16 (6).

Van Dijk, Jan A.G.M. (2005). The Deepening Divide Inequality in the Information Society. London: Sage Publication, Inc.

Rahmah Ismail & Nor Aini Idris. 2006. The impact of information and communication technology utilization on firm performance: a case study of women entrepreneurs. *Malaysian Management Journal*, 10 (1&2), 19-32.

Seo, H.-J., Lee, Y. S., Hur, J.-J., & Kim, J. K. (2010). The impact of information and communication technology on skilled labor and organization types. *Information Systems Frontiers*, (Oecd 2004), doi:10.1007/s10796-010-9276-7

Tan, K.S. & Eze, U.C. (2008). An empirical study of Internet-sased ICT adoption among MalaysianSMEs. *Communication of the IBIMA*, 1: 1-12.

Tan, K.S., Chong, S.C., Lin, B. & Eze, U.C. (2010). Internet-based ICT adoption among SMEs demographic versus benefits, barriers, and adoption intention. *Journal off Enterprise Information Management*, 23 (1), 27-55.

Wanyoike, D.M., Mukulu, E. & Waititu, A.G. (2012). ICT attributes as determinants of e-commerce adoption by formal small enterprises in Urban Kenya. *International Journal of Business and Social Science*, 3 (23), 65-74.

Warschauer, M. (2003). Technology and Social Iinclusion: Rethinking the Digital Divide. The MIT Press.

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