

Cognitive Needs of ICT usage in Business Among Women Entrepreneurs

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Abstract: *The current technological explosion has contributed to the cognitive needs of ICT usage in business among women entrepreneurs. The Internet is becoming a new place for women entrepreneurs to do business and that has made ICT as one of the necessity for women entrepreneurs in doing their daily business. Communication through social media such as WhatsApp and Facebook has opened a new medium for women entrepreneurs to market their products. However, in the current technological era there are still some women entrepreneurs who lack the awareness about the importance of ICT as they lack the skills and knowledge about ICT and the technology. Thus, it has become the core of the research conducted by researchers to analyse the cognitive needs of ICT usage in the business among women entrepreneurs. The study was conducted using in-depth interviews with several women entrepreneurs around the state of Negeri Sembilan and Selangor. The findings have shown that the majority of the respondents use ICT in business and recognise the importance of the cognitive needs of ICT usage in business processes. The use of ICT is divided into two, which are through the social media and the technology systems used in the business.*

Keywords: *Cognitive needs, ICT usage, Social media, ICT knowledge, Women entrepreneurs.*

I. INTRODUCTION

Nowadays, various facilities can be utilised by many parties, especially entrepreneurs with the availability of various types of services online. Malaysia, for example, is one of the developing countries with the development of ICTs as a result of the Seventh Malaysia Plan, where ICT usage has become an important and growing issue (NurYuhainis Ab Wahab&Shuhymee, 2017). During the Tenth Malaysia Plan period, various ICT-related initiatives were implemented by the government in an effort to transform the country into an innovative digital economy nation (Economic Planning Unit, UPE 2015). According to UPE's strategy paper report (2015), Malaysia is currently in the Eleventh Malaysia Plan (2016-2020) where focus is geared towards driving ICT in a knowledge-based economy through innovation and productivity to enhance competitiveness and wealth generation. The government has encouraged the use of ICT among the people to help them become more informed through technology. ICT facilities, especially the internet, have facilitated the acquisition and dissemination of information among the public. Unlimited use of ICT helps facilitate daily activities. Community activities are no longer limited and have been made easier with the help of technology.

Revised Manuscript Received on May 28, 2019.

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The development of ICT has indirectly affected the country's economic development. The presence of an online e-commerce or business system, for example, had an impact on trading activity when it became the primary medium in the business activity.

Online business activities have provided an edge as they allow for continuous communication between traders and customers without having to face upfront. According to Nik Rahim (2009), e-commerce has facilitated business activities at all times irrespective of the place in parallel with the present-day change of human life. In fact, online business or e-commerce is one of the latest business mediums that is widely applied today (SitiHaniah, 2015). The entrepreneurs have made the most of the technology to help in doing business.

However, acceptance of ICT through social media applications in business is still low in women entrepreneurs. According to Ahmad Shahrul, SitiZobidah and Muhamad Sham (2012), the e-commerce system available in Malaysia is still regarded as a new medium for women entrepreneurs. This is because the community is more likely to engage in direct transactions and conduct transactions face-to-face without the help of technology. Only a handful of users are using e-commerce methods. However, it is limited to monetary applications such as online banking transactions and current billing payments.

The Malaysian Government has undertaken various initiatives to promote the use of E-commerce and ICT systems among women entrepreneurs. However, the effort is limited as there is a gap between the increasing number of internet users and the number of consumers using online trading (RuslanRamli&Norazuwa Mat, 2013). Among the efforts that have been done was to increase and to expand the role and capabilities of entrepreneurship institutions, empower the cooperative sector and enhance the assistance to the Small and Medium Entrepreneurs industry sector to remain competitive with the global industry.

II. ICT AND ENTREPRENEURSHIP

ICT advancement nowadays is helping the entrepreneurs to solve difficult problems and open new opportunities to strengthen their businesses. Additionally, ICT has also helped business relationships expand globally and marketing is not only concentrated domestically. As mentioned by Raja Yusof et al. (2002) entrepreneurs should look for new potential business opportunities and be prepared to face the challenges and risks in business.

Entrepreneurship process is also seen as an

innovation process involving four main dimensions which are individuals, organizations, environment and collaborative processes between networks in environmental diversity (Kuratko& Hodgetts, 2004).

The field of entrepreneurship is now synonymous with the use of ICT and technology, especially the internet and social media, that are becoming the product marketing platform. Thus, it has encouraged women entrepreneurs today to use social media and the internet as the basis for starting their businesses. This occasion has been acknowledged by GusniarNurdin et al. (2014) who states that internet usage is the basis for every women entrepreneur to start and continue their entrepreneurial activities. Now, women entrepreneurs are no longer just the producers of their products, but they are involved with the marketing process itself. This is seen as one of the internet usage revolution that has had a huge impact on everyday life, especially in entrepreneurship (GusniarNurdin et al., 2014).

ICT plays vital role in helping women entrepreneurs to develop their businesses and prepares to face vast competition with ICT assistance. The use of ICT in business also helps women entrepreneurs to reduce their business costs while increasing internal organisational processes. Additionally, with the help of technology, entrepreneurs are able to upgrade the quality of the product generated through feedback received from customers. ICT has changed the lifestyle of the people in the world and there is no exception for the people in Malaysia. The use of technology in business also benefits women entrepreneurs to cross - borders and approach the global market. This is because ICT has narrowed down the gap between countries around the world. Communication and interactions are becoming easier and quicker by using technology.

According to Faradillah and Samsudin (2016) there are several past studies that have been conducted by previous researchers on women entrepreneurship and the use of ICT. The migration of women to the world of career and entrepreneurs symbolises the upsurge in those who choose to own a business and work themselves (Bowen &Hisrich 1986). Women entrepreneurs according to Smith-Hunter (2006); Faradillah and Samsudin (2016) are individuals who carry on small businesses and businesses owned by individuals who establish and manage businesses with the principles and goals by the individuals themselves.

Today, entrepreneurship has become an important factor in the country's economic growth and women entrepreneurs are seen to play a big role in helping the nation's development and competitiveness. Therefore, the Malaysian government has implemented a strategic plan under the Ministry of Women, Family and Community Development (KPWKM Strategic Plan 2013-2017) which outlines the well-being of target groups such as women, families, children, senior citizens, communities and those in need. The plan is the government's initiative in ensuring that there are no marginalised groups in the government's efforts to transform Malaysia into a high income developed nation by 2020 (Faradillah&Samsudin, 2016). Hence, this plan is seen to assist the development and empowerment of women in Malaysia especially in socioeconomic matters as well as helping women achieve their potential.

Entrepreneurship is increasingly being pursued by women who are actively engaged in their own businesses. According to Faradillah and Samsudin (2016) the involvement of women in business increases rapidly as well as competition with male entrepreneurs. Women's businesses are also not limited to a single field such as clothing fashion. There are also women entrepreneurs who take the risk of working on the business fields that are often monopolised by men and Chinese entrepreneurs. This is supported by Faridah (2000) who states women entrepreneurs are more aggressive in terms of their thoughts, feelings and actions. Even entrepreneurship is seen as an economic forward move through creative and innovative actions (Mazaroll, 2011).

Globalization has contributed to the widespread development of ICTs globally. The use of technology is seen to help improve the quality and quality of life in Malaysia. There is an interest that is the priority of the Malaysian government in applying ICT in national development as Malaysia is one of the ASEAN countries. The ASEAN economic sector is based on free trade between regional countries. In order to make Malaysia one of the more developed countries, technology development in business must be emphasised so that Malaysia's efforts to compete globally receive recognition of the world.

This makes ICT applications in the business play a big role in advancing the country and to be able to compete among the world's advanced countries by the year 2020. The relations of ASEAN countries are also dependent on the use of ICT in business as ICT helps businesses take place in a short period of time involving high costs. It clearly shows that in the global market conditions, entrepreneurs will need technology and ICT. Hence, it is a necessity for entrepreneurs who want to develop their business at the international stage not to underestimate the importance of ICT.

ICT has changed business operations today and indirectly it has demonstrated ICT's importance in helping entrepreneurs to become more competitive and continue to grow. ICT offers a broad market to business entities and to those with products and services that they want to offer to ICT users. According to Shahizam (2006) with the help of technology, weaknesses in the daily business operation of using the manual method can be overcome.

III. COGNITIVE NEEDS

Today, it is vital to study the needs of ICT among women entrepreneurs such as cognitive needs, affective needs, social needs and others. By using Uses and Gratification Theory developed by Elihu Katz (1974), this study identified the cognitive needs of ICT usage among women entrepreneurs. Cognitive need is the individual's wish to have clear and right information. The need contradicts with information that characteristic vague and have meaning (Kruglanski, 1989) diversity. According to McQuail (1983) cognitive need is a need to find a condition that is relevant with surrounding affairs, society and the world in general.

In addition, cognitive need is a necessity which occupies someone's curiosity towards something. Knowledge allows a person to know



unknown things and have the knowledge that make one have information and feel safe with their own knowledge (McQuail, 1983).

Most of the studies about cognitive needs of ICT are related to learning and education (Flacked, 2002; Gabriel, 2007; Johnson, 2006; Vasile, 2012). Very few studies deal with this issue among women entrepreneurs. Thus, it is to

say that women entrepreneurs are also in need to have knowledge, skills, and interests in order to make themselves comfortable in using ICT for business purposes. The following is the framework of the study showing the relationship between cognitive need of ICT usage based on the Uses and Gratification Theory.

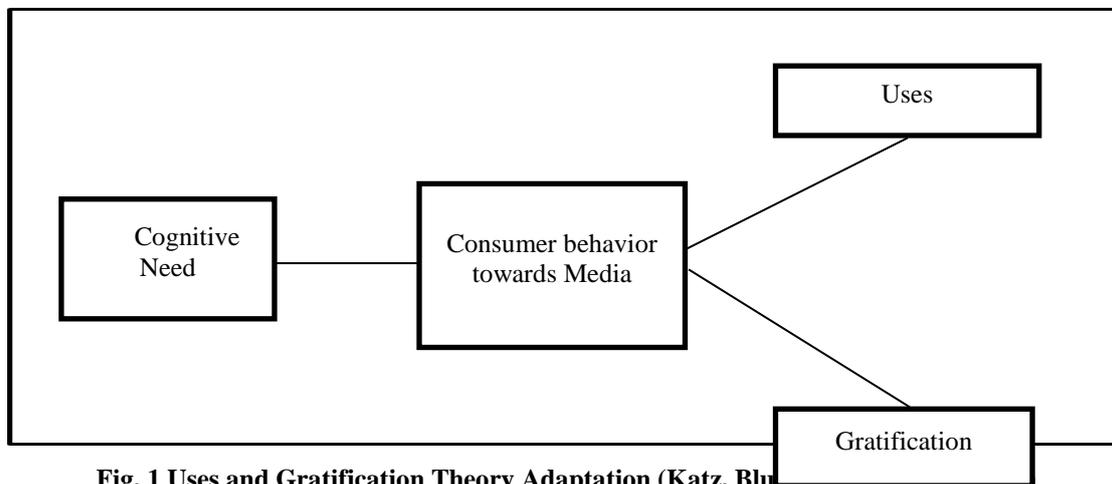


Fig. 1 Uses and Gratification Theory Adaptation (Katz, Blu

The cognitive needs element used by the researcher in the study is from the importance of having knowledge of the use of ICT in business. Basically, cognitive need is a requirement of information and knowledge to satisfy the curiosity of the environment. In the research conducted by the researchers, cognitive needs are seen through the need for ICT usage among women entrepreneurs today. The needs can be seen through the knowledge in regards to ICT which can be identified as ICT literacy and ICT usages.

ICT literacy can be defined as technology literacy where an individual know how to operate computers and the internet. However, ICT literacy in the 21st century is the ability to involve the use of digital technology, communication tools and technology networks that are appropriately used to solve the problem of acquiring information among the public. These include the ability to use technology as a research tool, compile, evaluate, disseminate information and provide a basic understanding of ethical or environmental issues and information usage (SitiZuraida et al., 2014; Katz, 2013). The cognitive needs of ICT, this study will further study the ability of women entrepreneurs to manage problem solving, basic ICT, analysis and production with ICT, related to their businesses. As part of the ICT literacy, basic ICT capabilities are an important component in today's business management.

IV. METHODOLOGY

The study has been done using the qualitative approach that is an in-depth interview with eight women entrepreneurs following the needs of the research. The selection of in-depth interview methods is aimed at obtaining detailed information on the use of ICT in doing business by respondents who women entrepreneurs. Women entrepreneurs are selected as the subject of study due to their

increasing number nowadays. They are actively doing business through social media sites such as *Facebook*, *Instagram* and others. The researchers have targeted respondents consisting of women entrepreneurs aged between 25 and 45 years. A total of 8 entrepreneurs from around major districts in the states of Negeri Sembilan and Selangor were chosen as research respondents. According to Tamam et al. (2010) respondent selection for each qualitative study is based on the relevance of the study topic.

V. RESULTS

The results have shown that the cognitive needs of ICT by women entrepreneurs are based on the use of social media such as WhatsApp, Facebook and Instagram while other ICT applications used E-mail. The majority of respondents say they have used Facebook and WhatsApp in their daily business activities. The study has found that most of the women entrepreneurs started with having social media as the main platform for their marketing tools. Social networking mediums such as Facebook, Instagram and so on are the first steps for women entrepreneurs in doing business. In conducting business, ICT usage is seen to play a big role and entrepreneurs need to be more competitive and aware with the current trends in doing business. The cognitive needs of ICT by respondents can be divided into two, namely social media and ICT systems that are applied in the business.

According to respondents, social media are part of ICTs used and they use *Facebook*, *Instagram*, e-mail for the advertising activities, marketing, customer relations and so on. In addition, according to one of the respondents, the use of ICT is also due to the ongoing development of technology.



(U1): “there is a need for ICT by using Facebook, Website, Instagram, and the latest is when we need to use email for marketing ..., Through the internet it is because .. Nowadays the number of people reading magazine and newspaper are getting lesser...”

(U2): “I only use two social media which are Facebook and Instagram, but my Facebook is not that active however in order for me to market my business I need to have a Facebook account for customers who are out my reach...”

(U3): “In the early stage of opening up my business, first ... for sales, we use the POST system... POST system makes the work easy, then we use the phone lines, for appliances ... computers, faxes ... The POST system is actually used for groceries, retail to record items that we buy from supplier ...”

According to the majority of respondents, the use of ICT is due to the importance of technology facilitating the business activities and the lifestyles of the current society and the trend that depends on ICT and social media. People in Malaysia are not left behind in applying ICT as part of their daily activities and this is a major catalyst for ICT usage by entrepreneurs.

(U1): “In fact, ICT is ... in Malaysia, we are now moving towards with the current trend in which are people are more active through online sites, like Facebook and website, so to get close to people, who are always with their smartphones, we need to aware of that trend and cope with the environment...”

(U2): “For me, it's important to know about ICT, at least know how to use the social media as people nowadays rely on social media to get their information. People just can Google out everything and the information is at the tips of their fingers...”

In addition, ICT usage is seen as helping entrepreneurs in competing with the global activities. According to the respondents, ICT is the main tools that help entrepreneurs to reach international markets and further expand their businesses. This can be seen through the following quotes:

(U3): "... Yes, it's really helpful, it's possible to go global market and as we move towards by opening branches we need systems that can help things to be organize, we need to have Standard Operation Procedure (SOP) like the POS system, so we can control our branches through the HQ. It's really important ... “

(U4): We have gone to Singapore but have not yet to go to China, there are a few times we try to get into China, but there are a few obstacles...China requirement keep on changing, so it's kind of tiring as when rules keep on changing, we need to follow, so it's quite hard to enter China markets... ”.

However, according to another respondent, she states that the need of marketing for the product to the international market is not really a big deal and she feels that the entrepreneurs should give more attention to the domestic market as the local market is quite wide. Rather than focusing globally, entrepreneurs should empower the domestic markets first.

(U7): “...As for myself.. I don't really want to go to international market, as I feel we still can focus more on our local markets because in Malaysia itself we have 14 states that can be our target markets and many people sometimes

do not focus in Malaysia but go a broad however the markets is not suitable. Hence, we should focus more in Malaysia because it is more profitable and reliable...”

Furthermore, respondents are also asked to share their views on the knowledge of ICT as being important for entrepreneurs at this time or the knowledge of ICT is only for specific individuals. The majority of respondents state that knowledge about ICT is important to entrepreneurs. The availability of ICT knowledge will facilitate all business processes. One of the respondent add that knowledge about ICT was no longer an individual's but had become a necessity in everyday life. The respondents' statements can be seen through the following passages:

(U2): "... It is very important because we are going towards to the technology trends, we can no longer rely on doing things manually, we need to get learn about ICT and make use of the technology...”

(U2): "... For me it is important, if not, it is really hard for me to do my work and complete my task. With the help of ICT, it does make my life easier...”

(U3): "... It is really important...that is why our country can escalate quickly with the help of technology; otherwise we will be left behind compare to other nations... if we don't accept the trends we are surely going to be left behind. However, if we want to growth with other nations, compete with them we do need ICT. Especially in doing business, thus getting knowledge on ICT is really important these days...”

However, according to one of the respondents interviewed by the researcher, knowledge of ICT is important but for those aspiring to become entrepreneurs, the basic skills that individuals need to succeed as entrepreneurs are their inner strength. Having strong resilience will help someone to be more competitive. If knowledge of ICT is owned but not applied then such knowledge does not give the individual an advantage. This can be seen through the following quote:

(U8):"...But still, having knowledge on ICT does not fulfilled one completely because we still need the basis needs which is endurance when having our own business that why the basic course that we should attend is endurance...we need to ensure our mentally is prepared before getting our hands into businesses...”

VI. FINDINGS

Through this study, the researcher has found that the cognitive needs of ICT in business have become an important skill in every entrepreneur. ICT plays a role in ensuring entrepreneurs are more competitive and strengthening businesses. The rapid development of mobile technology makes the entrepreneurs to be aware of the current trends to ensure they will not be left behind with the development of the technology. Studies show that ICT usage is important in business activities. But the changes in technology always occur and this requires future researchers to look at other factors that contribute to the use of ICT in business. Although technology and ICT are worthwhile but having basic qualities such as mental strength and internal resistance are needed to become an entrepreneur. High competitiveness in



entrepreneurs helps a person to be more stable and willing to take risks in business.

Mimi Mohaffyza et al. (2016) states that entrepreneurship is a process of creating a business and expanding it for community harmony and it helps the country's economic growth. Entrepreneurs who engage in business are faced with physical, financial, and business risks and attain personal satisfaction. In the face of various risks and challenges, entrepreneurs are also faced with technological advances that change the pattern of human life. Hence, women entrepreneurs should be aware of current technological developments and apply technology in business to be more competitive. The study has been successful in meeting the needs of the researchers. However, in an effort to help entrepreneurs who are increasingly involved in entrepreneurship, the researchers encourage future researches on ICT and entrepreneurship to continue to understand more about the level of ICT utilisation.

VII. CONCLUSIONS

In conclusion, the study found that there were three major factors contributing to the cognitive needs of ICT usage in business among women entrepreneurs namely, the importance of ICT, global markets and ICT knowledge. A respondent said the use of ICT is important because it facilitates business activities. It is supported by the study of GusniarNurdin et al. (2014) which states that the internet revolution has a huge impact on the lives of people.

ICT makes communication systems go across internationally and people stay connected even if they live in different parts of the world. Furthermore, knowledge of ICT makes it an important factor for entrepreneurs in applying technology in their businesses. The majority of respondents agree on the importance of knowledge towards ICT in order to facilitate business processes. Thus, if the understanding and skills on ICT usage are fully utilized by women entrepreneurs, they will have the opportunity to increase their income through online businesses (SitiMasayu, 2016). Hence through this article it is hoped that it will help women entrepreneurs to transform their businesses by implementing ICT. Additionally, the addition of new elements in other communication theories may provide different study findings and improve the existing researches.

ACKNOWLEDGMENT

This research was funded by Grant Nos. FRGS/1/2016/SS09/KUIS/03/1 of the Fundamental Research Grant Scheme.

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