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Abstract

In general, Business Intelligence (BI) is the sophistication of the gathering, integrating and utilizing data from various sources, and synthesizing results in a version that can enhance business sustainability. BI provides sufficient fundamentals for gear-up related process of business survivalability. Thus, nowadays, women entrepreneurs firm desire to use and apply their strategy into BI systems, which involve a precise evaluation to the business advantages. This paper describes the fact that competitive advantage can be gained through BI as survivability strategy for women entrepreneurs in the small and medium sized industry in Malaysia. Secondly, this paper aimed to evaluates the impact of BI on improving business strategy to evaluating the accurate of the women entrepreneurs firm in competitive market environment. Thus, the need to strengthening Malay women entrepreneur competitive level is a vital important to fostering the greater capacity of them, especially for achieved global standard of technological and innovation. Finally, some aspect of business strategy is discussed for establish good integration with business intelligent.

Keywords: Business intelligent, survivalability strategy, women entrepreneurs, small and medium sized industry, Malaysia

Introduction

In the era of globalization, and with the increasing competition in all the fields around the world, the power to aggregate, store, mine, analyzes and summarize data can construct or crush an entire organization. Business competitive (BI) advantages have been transferred from those with expertise in how to implement new technologies, through those who know how to use technology to improve business processes, increase sharing required information, which leads to increase the level of knowledge (Karim, 2011). The current trends of business are that have significant relation with competitive advantages because the latest trends will affect the entrepreneurs on how to decide and replicate the decision from one place to one place, to make the entrepreneurs closer to the new environment. With regard to fact as mention above, Bohari (2008) discussed that there are sixth current trends that the women

entrepreneurs must considers into their business sustainability, such as the ones stated below:

- Increasing awareness toward environmental issues as well as air and water pollutions, global warming, acid rains, and so on.
- Changing pace and location of people's real life as well as migration of rural people to urban areas, changing of physical, geographical, life styles, and many more.
- Changing household composition and family values, such as tendencies toward luxury products, increase in income, decrease of nuclear family, and so on.
- Growing health consciousness around the world and many people are well aware of healthcare problems and solutions.
- Expanding worldwide market, in local-based demands surrounding the world.
- Increasing diversity of workforce, market and societal norms. These even will create

new cultural norms accepted by various people.

Basically, BI is the sophistication of the gathering, integrating and utilizing data from various sources, and synthesizing results in a version that can enhance business sustainability. BI provides sufficient fundamentals for gear-up related process of business survivalability. According to Karim (2011) competitive Intelligence is a systematic process of knowing what the competition is up to and staying one step ahead of them, by collecting, processing, analyzing, and distributing to the high level managers and decision makers the most required information about an organization's external environment. It aims to assure the availability on a timely basis of credible information about the capabilities of key competitors, and determine the manner of which actions of key competitors might affect current organizational interest. In fact, BI was the most significant key areas for the last twenty years, where organizations were investing a large amount of money as mention in Computer Economics (2008). Meanwhile, Gangadharan and Swami (2004) coined out that the impact of earlier access to related and extensive information on business decision making is demanding process, especially when it evaluates and measures this impact on business results as a total.

In case of women entrepreneurs, Malaysia has a vibrant entrepreneurial base with a huge potential to become a global player. Indeed, past and current policies to create a class of entrepreneurs have succeeded in the sense that there are more Bumiputeras involved in business and entrepreneurship now compared to before. Non-Bumiputera (mainly Chinese) companies are spreading their reaches overseas, proving that Malaysian companies can succeed in the global arena. Nevertheless, as evidenced by the drastic decline in Bumiputera businesses and corporate equity following the economic crisis, the quality and level of competitiveness of the majority of Bumiputera companies could be improved so that they are more resilient to the ups and downs of economic cycles (Ariff and Yanti, 2004). Considering the effect of global issues and current state of BI sophistication as mention above, perhaps the

time is ripe to begin to expand the new hope of Malay women entrepreneurship to become successfully, by utilizing the BI as survivalability strategy. Hence, there is a need for utilizing the BI sophistications as a solution for strengthening their position in the local and global marketplace.

Issues of women entrepreneurs in Malaysia

In general, the development of women entrepreneurship, as well as important to other business sector, has been growing rapidly in Malaysia. The significant importance of women entrepreneurship especially women entrepreneurship to the growth of overall Malaysia's economy is proved by the variety of initiatives, policies and organization that established for women entrepreneurs. These are including venture capital, financial funding, training, physical infrastructure such as entrepreneur incubator and laboratory, business consultant, an organization of National Women Entrepreneurs, USAHANITA's, and so on. Sarri and Trihopoulou (2005) identified that entrepreneurship is a decisive factor in order for today's economy of knowledge to attain its competitive and dynamic character. It is the driving force for the achievement of economic development and job creation, contributing at the same time to personal development and effectively dealing with numerous pathogenic social phenomena. Similarly, Thurik and Wennekers (2004) claimed that in today's world small businesses, and particularly new ones, are seen more than ever as a vehicle for entrepreneurship, contributing not just to employment and social and political stability, but also to innovative and competitive power. Besides that, women entrepreneurship in Malaysia should utilized BI to enhance the competitive advantages. This is because of reason as mention by Karim (2011) that the BI is the core of the entire enterprise system which is based on series of strategic and tactical management steps implemented by technology that supply data input and use the analytical output to speedily generate high effective and efficient business decision making process. While many corporations attempt to rummage huge of data, it is obviously that BI is as much about missed opportunities as about the ones

companies utilizing it. Selecting and manipulating data needs a vigorous infrastructure, efficient data collection pools, and ingenious tool for data mining and data analytics. So therefore it will be feasible to detect hidden trends, purchaser relationships and behavior, selling and opportunities and other essential information.

In the case of Women entrepreneurs of Malaysia, specifically on skills and entrepreneur development, training programs have been established to enable women to improve themselves and take advantage of the opportunities in the job market. In this regard, courses in areas such as business and organizational and financial management were implemented. Skills training programs provided by the Center for Instructor and Advanced Skills Training were expanded and resulted in an increase of 19.4 percent in the female enrolment between 1995 and 2000. Measures were also undertaken to facilitate the involvement of women in business through the provision of easy access to capital. The Women's Entrepreneurs Fund was established in 1998 with an allocation of RM 10 million. A total of 12 projects amounting to RM 9.5 million were approved under the Fund. Through the Small Entrepreneur Fund, a total of 6,000 women entrepreneurs obtained loans amounting to RM 65 million (approximately US\$171,052) (EPU 2001). However, ironically, the role of the government is very important in fostering private sector entrepreneurship in Malaysia. Nevertheless, although there are many programs and financial support systems for entrepreneurs, they have not been as effective as they should be. Here, the paper is suggest to women entrepreneurs of Malaysia to used BI as one of solution for strengthening them self for faced the current challenges of business pressures, both in the local and global landscape. This is in a line with Teo and Choo (2001) stated that competitive intelligence is a set of practices or formalized processes in organizations aiming to gather relevant information about competitors to stay one step ahead in middle and long range planning. In fact, Hermel (2001) indicated that information about competitors is just one part of all the relevant information, thus scanning must also identify technology, success of competitors'

products in the market and the whole environment, including economic, legal, cultural and demographic background.

Starting a new firm is a very important decision to an individual, which is become the focal point in the investigation of entrepreneurship regarding individual's qualities as an entrepreneur. According to Davidson and Burke (2004) firms that has owned by women entrepreneurs are growing phenomenon around the world today. For instance, in 1992 women accounted for 38 percent of small business ownership in the USA, double the number of women entrepreneurs found in the same country in the early 1980s. McKay (2001) cited that in 1999 women accounted for almost half of all small businesses in the USA. Similarly, Still and Timms (2000) discussed that women have played a major part in this growth in the number of small business in Australia. Furthermore, by the mid-1990s, Fielden *et al.* (2003) was estimated that women-owned firms in the UK accounted for between a quarter and a third of all business. In France, women represent 26 percent of entrepreneurs as cited by Orhan and Scott (2001) and in Greece about one in every two women participates in the country's work force and 21.3 percent are self-employed as well as published in Eurostat (2001). With refers to studies as above, an opinion of Karim (2011) raise that the significant business intelligence literature revealed that this system is needed to answer the following essential questions: what is the crucial strategy of the competitor(s) in the market? How do these strategies intimidate our existing market position? The reviewed literature has revealed that applications of Business Intelligence systems are very extensive and can be customized to different organizational requirements. In the daily business market, the key provider to advantageous leverage efforts is typically as follow; anyone who is more knowledgeable about beforehand and reacts based on this knowledge on time will come first.

Objective of the paper

This paper describes the fact that competitive advantage can be gained through BI as survivability strategy for women entrepreneurs in the small and medium sized industry in

Malaysia. Secondly, this paper aimed to evaluate the impact of BI on improving business strategy to evaluating the accurate of the women entrepreneurs firm in competitive market environment.

Business intelligent resources of winning the competition

Strategically, this paper is focused on business intelligent (BI) resources as information technology strategy for strengthening women entrepreneurs' to positioning them into competitive advantages on the marketplace. BI is not really explored to apply in contact of women entrepreneur strategy because of some limitations. In fact, the women entrepreneurs firms need to think about capability of information system resources as well as business intelligent resources that potentially to apply in their organization. BI has capabilities support the strategy implementation and make our strategy more effective to them. However, women entrepreneurs' must know what capabilities of BI that businesses must have to survive in the knowledge age? For that, the BI must also be reliable and user friendly to every party and be updated from time to time. The needs of BI for winning the competition in the marketplace are cited in many works such as by Markarian, Brobst and Bedell (2007) believed that BI leveraging information assets within key business processes to achieve improved business performance. From the technological perspective, BI is believed as an extensive type of tools, software, solutions, and technologies that facilitate decision makers to find, accumulate, organize, and access a wider range of information from disparate data sources.

In this knowledge age, women entrepreneurs' must realize that an information system by itself can rarely provide a sustainable competitive advantage for those who know how to use an IT strategy in the right way, place and time. Besides that, a competitive advantage provided by BI is rarely sustainable because most information systems can be duplicated by our competitors and there is no guarantee that an advantage will last indefinitely. One of the best ways to settle this problem is by establishing BI department in the firm. Similarly, from a

business point of view, BI will help the women entrepreneurs' manager to perform better in environmental scanning, and make the process be more systematic and precise. This will happen because BI deals with strategic factors getting to corporate and business level planners and then, directly to decision makers in a timely manner. For a particular purpose, McGonagle and Vella (2002) mention that competitive intelligence are vital where function as a formalized, yet continuously evolving process by which the management team assesses the evolution of its industry and the capabilities and behavior of its current and potential competitors to assist in maintaining or developing a competitive advantage. With regard to works above, Laudon and Laudon (2007) synthesized that BI can help the entrepreneurs' firm in decision making process and establish or strengthen the competitive advantages by integrating the external and internal information into a whole set of knowledge based information

The BI is an extensive category of methods, technologies and software for collecting, storing, structuring, analyzing, and accessing the data with the object of making better business decisions. We also can define business intelligence as business processes for accumulating and analyzing the business data from databases and data warehouses. Main business intelligence goal is to provide sufficient information for making business decisions. Depending on the aim of the business decision, business intelligence methods can provide information about company customers, market trends, effectiveness of marketing campaigns, company's competitors, or even predict future activities (Estarad, 2010). Similarly, BI is computer-based techniques used in spotting, digging-out, and analyzing 'hard' business data, such as sales revenue by products or departments or associated costs and incomes (Business Dictionary 2010). In fact, BI permits different business units to share information in the firm of women entrepreneurs' core competencies (O'Brian, 2007). The information is retained and stored in the systems and so, by establishing certain systems designs, the business intelligent will react and function as well as a human. It means that the BI system will have similar

characteristics and thinking systems such as how the humans think and act in the real life (Turban *et al.*, 2007). In addition, Karim (2011) noted that competitive BI systems can be assumed to contain different kinds of activities proposed at observing competitors, and collecting different types of information such as human resource, marketing policies, and operation management. Additionally, competitive BI may contain activities that aim to collect information, process it, analyze it, and transfer it and display it in the required format to decision makers to enhance decision making process.

They are four major advantages of applied the BI in business operation which finally contributes to the performance of today's business operations:

- BI is more permanent than other systems such as executive information systems, decision support systems, marketing information systems, and so on (Laudon and Laudon, 2007; Stir and Raymond, 2005).
- BI is less expensive than other information systems. BI is a man-based system and the entire human knowledge, experience, and expertise are channelled to the 'body' of this system design (O'Brian, 2007; Parson, Oja and Low, 1999).
- BI is consistent and thorough. This is because BI is a system based, controlled by instructions, and can be programmed as what it requires to be. This means that this system will have consistency in actions, decision, thinking, and executions (Turban, McLean and Wetherbe, 2007; Hogg, 2002).
- BI can be duplicated easily. With a BI system, users such as managers, executives, support staff, and many more will transfer the information and knowledge into the system (Bohari, 2008; Laudon and Laudon, 2007).

In addition, BI market is in the state of high growth as retailers keep reporting significant profits and the Business Intelligence applications have become known as the highest spending precedence for various top managers and continue as the essential technologies to be utilized (Gartner Research, 2009). Therefore, Karim (2011) noted that competitive intelligence is considered as a critical part of the contemporary organization, however, it cannot

be judged as an innovative concept, as it has been applied by many glittering organizations for decades.

Technically, BI offers a way to navigate through data to generate information typically by using Online Analytical Processing (OLAP) which provide a way to use querying, analyzing and reporting. Business intelligence is more than being a different phrase of data. It is a system uses various kinds of functions that convert data into something tangible, clear, true and realistic as possible and relied upon in decision-making process (Karim, 2011). Therefore, BI has major advantages when the firm decided to use it in the organization, as below:

- BI does only what it is programmed to do and it does not allow for creativity and new ideas when the users need it immediately (Bohari, 2008; Laudon and Laudon, 2007). This process will take more time such as initiating of building new information systems in the organization.
- BI helps individuals to recognize relationships between things, objects well than what humans can do (Laudon and Laudon, 2007; Stir and Raymond, 2005).
- BI allows for input from a limited broader focus unlike a very broad focus for humans. For humans, inputs are generated and restored for every second, time and day. (Turban, McLean, and Wetherbe, 2007; Stir and Raymond, 2005).
- BI are increasing organizations competitive strength, enhancing adaptability and productivity of business activities, and enabling organizations to respond rapidly to changes on market, in financial conditions and customer demands. By improving the efficacy of business decisions, BI improves the overall performance of the company (Estart, 2010).

To date, Watson (2011) in particular, BI has been used as an umbrella term to describe the technologies..., processes..., and applications for supporting decision making. Today, the word analytics is often used as an umbrella term. Some people think of analytics as the data analysis component of BI, and that BI is a larger environment that includes everything needed to support analytics, such as a data warehouse. As implication, Karim (2011) noted

that organizations that have not handled competitive BI system accurately will soon or later lose its position in the competitive market. Nowadays, although implementing BI system is an advance step for any organizations wanted to be survived in the market competition, there is still a high need to strategic plan for gaining accurate information about competitors, analyze it, share it using advanced tool, and accessed by managers who are professional enough to make right decision at the right time

Business intelligent as survivalability strategy

Basically, there are at two major types or levels BI used within an organization: strategic and tactical. "A strategic use of BI, which is BI deployed across a functional department that can give a holistic view of the organization and can help the firm to identify trends and growth opportunities" (Afolabi and Gorla, 2005). This strategic focus of BI looks at company-wide goals, the company vision and long-term market and business strategies. Meanwhile, tactical BI is focused on a single, specific business process need specific to a defined and restricted group of individuals. Tactical BI also tends to generate silos of information that may never be reconciled with a corporate system, incorporated into the corporate data mart, or mesh common corporate definitions (Shankar, 2009; Sircar, 2009). Overall, when companies are trying to determine the best use of business intelligence within their organizations, they have to decide how they are going to design and implement the business intelligence system and which relevant analytics systems and methods are most likely to directly improve the efficiencies of their company and their business processes (Cooper, 2006).

In perspective of ICT, BI refers to the use of technology to collect and effectively use information to improve business effectiveness (Nadeem and Jaffri, 2004). Bohari (2008) explains that BI systems will have a special ability and are well designed for supporting the process of managing in organization. Ultimately, this BI system will facilitate the managers to cope with the human based issues, phenomenon and any situations that needed for better information and advice. One specific tool

of BI systems is the voice-activated interface agent that can function to reduce the burden on the users of having to explicitly command the computer. So here, BI systems could be a real time application to modelling the expertise, knowledge and information and then make it widely available for every level of management. Besides that, some people delineate the levels of business intelligence as strategic, tactical and operational, but from the information perspective and a user's ability to access data, tactical and operational BI can be merged (Nadeem and Jaffri, 2004; Quinn, 2006).

Recently, Adamala and Cidrin (2011) highlight the success factors across all the dimensions with the highlight of the most important points:

- (a) Organizational dimension includes committed management support and sponsorship and clear vision and well-established business case.
- (b) Process dimension includes business-centric championship and balanced team composition, business-driven and iterative development approach, and user-oriented change management.
- (c) Technological dimension includes business-driven, scalable and flexible technical framework, and sustainable data quality and integrity.

In addition to Adamala and Cidrin, some aspect of success factor of BI as survivalability strategy are need to discuss before the women entrepreneurs' established the business intelligent within their firms. It is needed to understand that key success factors of business intelligent implementation in started from strategy planning point of view (Abdul Manaf Bohari, 2008). Adamala and Cidrin (2011) noted that BI can bring critical capabilities to an organization, but the implementation of such capabilities is often plagued with problems. The success of BI initiatives undertaken by companies depends on various factors. Because BI implementation depends on the successful use of IT resources, some of those factors are undoubtedly technological. However, Information Technology is merely a tool in implementing a BI solution. BI success depends chiefly on organizational and process factors

that business administration focuses on. In fact, Alter (2005) found that a CIOInsight research study of 290 company executives show that close to 50% of the respondents believe that better aligning the business intelligence systems with their business strategy would be the most effective way to improve the value their companies receive from their business intelligence systems.

Conclusion

Finally, new economy paradigm shift encourages the women entrepreneurs firm's to move faster than the old economy era, as discussed in early stage. The women entrepreneurs firm's must learn how to utilize the learning of scale, operational excellence, and global infrastructure to increase their future performance. They can constitute hard-to-duplicate competitive advantages that allow them to capture the rents on their innovation and research. Many have been trained to think that there is such a thing as a sustainable competitive advantage and they have been trained to think about innovation in products and technology, and no longer in innovation in BI models. This is because of new requirements of business competition will change from time to time, without any announcements or signals.

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