# De La Salle University Animo Repository

Center for Business Research and Development

5-2015

# Accounting information systems for mSME survivability

Alger Tang De La Salle University, Manila

Follow this and additional works at: https://animorepository.dlsu.edu.ph/res\_cbrd

Part of the Accounting Commons, and the Business Administration, Management, and Operations Commons

## **Recommended Citation**

Tang, A. (2015). Accounting information systems for mSME survivability. *DLSU Business Notes and Briefings*, *3* (3) Retrieved from https://animorepository.dlsu.edu.ph/res\_cbrd/32

This Article is brought to you for free and open access by Animo Repository. It has been accepted for inclusion in Center for Business Research and Development by an authorized administrator of Animo Repository.



# Accounting information systems for mSME survivability

#### Introduction

According to the International Finance Corporation (2012), small and medium enterprises (SMEs) represent a substantial percentage of businesses globally (about 90%). Moreover, they are directly responsible for more than half of employment worldwide. As such, governments and economists consider the SME sector to be a key factor in national growth (Pollard & Hayne, 1998). In the Philippines, micro, small and medium enterprises (MSMEs) already account for almost all (99.6%) of the businesses in the country (Department of Trade and Industry, 2011). Furthermore, it provides employment to 63% of the Philippine labor force.

#### Micro, small and medium enterprises

MSMEs are defined as any business enterprise with an asset size, excluding land, of no more than P100,000,000 and employing less than 200 employees (Senate of the Philippines, 2012).

MSMEs are crucial in the economic development of a country as well as in the overall improvement of the standard quality of life for a vast amount of These businesses are responsible for an estimated 35.7% of the country's output (Senate of the Philippines, 2012). Moreover, the Asian Development Bank (ADB) indicated that 50% of innovations were actually attributable to smaller and newer firms. Smaller firms can facilitate development of entrepreneurial skills and innovations as well as develop contemporary products and provide additional supply of ideas, skills and innovations (DTI, n.d.).

According to the DTI, MSMEs play a huge role in economic development of the country, especially in more rural areas and in the dispersion of new industries. With the importance of MSMEs in the economy, it is very important for society to protect these small firms. One way of protecting

Written by:

ALGER TANG Accountancy Department De La Salle University



the welfare of the MSMEs is through research.

Competitive advantages can be generated by a number of ways. According to the theory of dynamic capabilities (Teece et al. 1994; Banker et al. 2006), leveraging on information technology such as Accounting Information System (AIS) can help a company develop unique, change-oriented capabilities. AIS investment is particularly important for MSMEs in order to be able to obtain the necessary information required to handle a higher degree of uncertainty in the competitive market (El Louadi, as cited in Grande et al. 2011).

# **Benefits of AIS adoption**

In theory, AIS adoption can improve the firm-level performance of a business. Increased competition in the market due to globalization and technological innovations created the need for companies to invest in different accounting information systems (such as ERP) in order to meet changing needs of the business as well as improve on current operations. Grande et al. (2011) noted that the key benefits for SMEs in using AIS are: better adaptive capability to changing conditions, better management of transactions, and a higher degree of competitiveness.

A positive effect of AIS on performance was supported by Hamilton & Asundi (2008) who found that IT adoption resulted to an increase in sales and inventory turnover after three to six years. This supported the findings of Devaraj and Kohli (2003) that there is a positive link between IT usage and spending of firm-level performance. However, it is worthy to note that it would take several years for firms to realize the benefits from adoption of AIS (Wah, 2000). Moreover, one cannot simply rely heavily on AIS. As indicated by Akkermans et al. (2003), AIS (e.g. ERP systems) can still be insufficient and has several shortcomings that the company must be able to address. This shows that the adoption of AIS is not an end in itself but rather, only part of the means to achieve business objectives. It can be considered as a subsystem that is heavily dependent on other subsystems of the business in achieving the main goals of the company.

However, not all studies focused on the end result of

a business (i. e., profit). Sajady et. al. (2008) focused more on the enhancement of capabilities or facilitation of processes of the business. In their study, they found that AIS improved overall decision-making as well as internal control mechanisms of the business. Moreover, financial transaction processes were better facilitated through the use of AIS. IT can also improve businesses in terms maintaining and improving their competitive advantage, as well as, reduction cycle time and improve collaboration between members of the value chain (Gunasekaran & Ngai, 2004). Gunasekaran & Ngai (2004) also noted that IT facilitates the establishment and development of virtual enterprises which significantly improved information sharing between members of a virtual enterprise. Focus on enhancement of capabilities instead of performance was further supported by Banker, et al. (2006) wherein they found that information systems allowed companies to improve on their firm-level performance, in terms of quality, efficiency and timeto-market, through the mediation of firm capabilities.

# **Challenges for AIS adoption**

MSMEs face a huge challenge in adopting or implementing AIS in their businesses. Despite the myriad benefits indicated by past researches on IT implementation on the and AIS business performance, most MSMEs are unable to take advantage of this opportunity. Edison et al. (2012) stated that the AIS adoption among SMEs is low. De Guinea et al. (2005) noted that this may be attributable to resource poverty. They noted that IT and AIS require a large investment, which most MSMEs do not access to or are not willing to commit a large proportion of their capital to. According to the Philippine Institute for Development Studies (PIDS) (as cited in Lopez, 2014), MSMEs have poor access to technology mainly because of deprived access to various sources of finance and capital. PIDS further noted that higher interest rates, lack of acceptable collateral and a short repayment period offered by various financial institutions make it extremely difficult for MSMEs to tap into the benefits of AIS (as cited in Lopez, 2014). Moreover, the benefits that can be derived from IT and AIS would take several years before materializing (Wah, 2000). By constraining resources into IT and AIS, working



capital management of an MSME would become extremely difficult. Wang (2004) further asserts that the low adoption rate may be due to the businessspecific reasons such as weak technological capability, poor credit reputation as well as marketoriented reasons such as low development and economic backwardness.

Some authors note that the main reasons for nonadoption of AIS is not focused on firm-specific and market-oriented factors but rather on a psychological level (Edison et al., 2012; Davis, 1989; Legris et al., 2003). Perception of different users (e.g. perceived usefulness and perceived ease of use) plays an important role in determining whether MSMEs adopt AIS (Davis, 1989). Legris et al. (2003) indicated that the Technology Acceptance Model (TAM) should be integrated to a new model which considers both human and social change processes.

Most small business owners have a particularly difficult time in determining whether or not to invest in AIS because of the various uncertainties that they have with technology (Rogers, 2003). Small businesses have the tendency to be risk-averse because they simply do not have enough excess finances to support them if the risky investment fails. As noted by Wah (2000), the act of AIS adoption is not simply an IT change, but rather a business change. Therefore, Gibson et al. (2000) indicated that a strong managerial support as well as strategic competencies is required in order to achieve the best fitting system for the business. However, Edison et al. (2012) noted that both factors indicated by Gibson et al. (2000) were not found in most MSMEs.

#### Where to go from here

Despite success in the prior years, small business owners cannot simply rely on their legacy systems and dinosaur processes to help them survive in the future. The business landscape is changing at a faster rate than ever. Increasing globalization, as evidenced by the looming integration of the members of the Association of Southeast Asian Nations (ASEAN), created a bigger need for small businesses to be more competitive. As indicated earlier, leveraging on IT and AIS may provide the competitive advantage these entities need in order to face the increasingly competitive business environment. However, the challenges must first be addressed before a widespread adoption will occur.

In order to address the challenges in adopting AIS, the government, together with suppliers of AIS, should be able to create awareness of the different types of AIS that MSMEs can adopt through conducting seminars and providing publications. This will help MSME owners become aware of the different benefits of AIS, improve their acceptance of the various innovations in information systems and have an idea on which AIS will work best for their respective firms. Existing users of AIS can also provide their feedback on how AIS affected their businesses in order to decrease psychological resistance of non-users. Owners of MSMEs can also apply the framework of Kapurubandara (2009) allowing them to identify the requirements in gradually adopting AIS.

To address the lack of resources of MSMEs, financial institutions can create and offer better packages to these MSMEs in order to address the high interest rates and short repayment periods. Furthermore, the government can provide subsidies for investing in AIS. Aldaba (2011) suggested several ways to improve MSME access to increased finances. She suggested the implementation of a central credit system to reduce dependence on secure credit facitilities, development of a non-traditional approach by banks to MSME lending as well as improving the financial literacy of owners. Suppliers of AIS can also produce AIS that is tailored to the needs of MSMEs which is cheaper than the AIS packages used by larger players. Finally, members of the academe can further research on the topic of competitiveness and IT of MSMEs.

## References

- Akkermans, H. B. (2009). The Impact of ERP on a Supply Chain Management: Exploratory Findings from a European Delphi Study. European Journal of Operational Research, 146, 284-301.
- Aldaba, R. M. (2012). Small and Medium Enterprises' (SMEs) Access to Finance: Philippines. *Philippine Institute for Development Studies* (No. DP 2012-05).
- Banker, R. D., Bardhan, I. R., & Chang, H. (2006). Plant Information Systems, Manufacturing Capabilities and Plant Performance. *MIS Quarterly*, 30 (2), 315-337.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease



of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13* (3), 319-340.

- de Guinea, A. O., Kelley, H., & Hunter, M. G. (2005). Information Systems Effectiveness in Small Businesses: Extending a Singaporean Model in Canada. *Journal of Global Information Management*, *13* (3), 55-70.
- Department of Trade and Industry. (2011). *Micro, Small and Medium Enterprises*. Retrieved February 24, 2014, from Department of Trade and Industry Web site: http://www.dti.gov.ph/dti/index.php?p=321
- Devaraj, S., & Kohli, R. (2003). Performance Impacts of Information Technology: Is Actual Usage the Missing Link? *Management Science*, 49 (3), 273-289.
- Edison, G., Manuere, F., & Joseph, M. (2012). Evaluation of Factors Influencing Adoption of Accounting Information System By Small to Medium Enterprises in Chinhoyi. *Interdisciplinary Journal of Contemporary Research in Business*, 4 (6), 1126-1141.
- Gibson, N., Holland, C. P., & Light, B. (1999). Enterprise Resource Planning: A Business Approach to Systems Development. 32nd Hawaii International Conference on System Sciences (pp. 1-9). Maui: IEEE Computer Society Press.
- Grande, E. U., Estebanez, R. P., & Colomina, C. M. (2011). The impact of Accounting Information Systems (AIS) on Performance Measures: Empirical Evidence in Spanish SMEs. *International Journal of Digital Accounting Research*, 11, 25-43.
- Gunasekaran, A., & Ngai, E. (2004). Information Systems in a Supply Chain Integration and Management. *European Journal of Operational Research*, 159, 269-295.
- International Finance Corporation. (2012). *IFC Issue Brief* / *Small and Medium Enterprises*. International Finance Corporation.
- Kapurubandara, M. (2009). A framework to e-transform SMEs in developing countries. *The Electronic Journal of Information Systems in Developing Countries*, 39.
- Legris, P., Ingham, J., & Collerette, P. (2003). Why Do People Use Information Technology? A Critical Review of the Technology Acceptance Model. *Information and Management*, 40 (3), 191-204.
- Lopez, E. (2014, February 9). *Priority Measures to Address Competitiveness - PIDS*. Retrieved February 25, 2014, from Manila Bulletin: http://www.mb.com.ph/priority-measures-to-addresscompetitiveness-pids/
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th Edition ed.). New York: NY: Free Press.

Sajady, H., Dastgir, M., & Nejad, H. H. (2008). Evaluation

of the Effectiveness of Accounting Information Systems. *International Journal of Information Science and Technology*, 6 (2), 49-59.

- Senate of the Philippines. (2012, March). *The MSME Sector at a Glance*. Retrieved June 2015, from Senate of the Philippines Web Site: http://www.senate.gov.ph/publications/AG%202012-03%20-%20MSME.pdf
- Teece, D. J., & Pisano, G. (1994). The Dynamic Capabilities of Firms: An Introduction. *Industrial and Corporate Change*, *3* (3), 537-556.
- Wah, L. (2000). Give ERP a Chance. *Management Review*, 89 (3), 20-24.
- Wang. (2004). Determinants of the Adoption of E-Business Technologies. *Telematics and Informatics*, 22.



Published by the De La Salle University Ramon V. del Rosario - College of Business, Center for Business Research and Development (CBRD)

Volume 3 No.3 May 2015

#### EDITORIAL BOARD

Dr. Raymund B. Habaradas email: <u>raymund.habaradas@dlsu.edu.ph</u>

> Ma Cresilda M. Caning email: crescane@qmail.com

Secretary: **Ms. Julie Ann P. Sebastian** For comments and suggestions, call (+632) 303 0869 (+632) 524 4611 loc. 149 or email *julie.pentecostes @dlsu.edu.ph* 

Visit our website: http://www.dlsu.edu.ph/research/centers/cberd https://www.facebook.com/DlsuCenterForBusinessRe searchAndDevelopment