

Proposed Conceptual model for Business Intelligence Tools on Business Sustainability

Ramesh kumar Moona Haji Mohamed^{1,a*}, Peramjit Singh Balbir Singh^{2,b}, Premkumar Nadarajan^{3,c}, Ninderpal Singh Balwant Singh^{4,d}, Ku Nur Ilyani Ku Abd Aziz^{5,e} Amutha Arockiasamy^{6,f} and Adi Wira Mohd Zin^{7,g}

^{1, 2, 3, 4,5,6,7} Universiti Tunku Abdul Rahman, Malaysia

^arameshk@utar.edu.my, ^bperamjit@utar.edu.my, ^cpremkumarn@utar.edu.my, ^dninderpal@utar.edu.my, ^enurilyani@utar.edu.my, ^famutha@utar.edu.my, ^gadiw@utar.edu.my

*Corresponding author, Ramesh kumar Moona Haji Mohamed

Keywords: Knowledge management, Organizational support, strategic planning, Technological innovation system, Business Intelligence, Business Sustainability

Abstract. This document explains and demonstrates the proposed conceptual model for business intelligence tools on business sustainability. The qualitative literature analysis method was used to analyze the proposed model for Business Intelligence Tools on Business Sustainability. Past studies have been collected for each variable to come up with an appropriate conceptual model for solving Business Sustainability problems within an organization. The implications of this study will be used to conduct an empirical study in the future

1. Introduction

The following contents shall unveil the in-depth research on the core research problem as well as the various variables that exist of certain vital relationships among each other which might affect the progression of the research in a positive or negative way and benefit the researchers in understanding theories and certain dimensions under covered within the variables as well as gaining helpful knowledge's on research solutions.

2. Underlying Theories

This current research model is based on Resource-Based View Theory (RBV). This theory is to be found perfectly match with the four factors (IV) and the business sustainability (DV). In 1991, in Barney's article in the special issue, Barney argued that sustained competitive advantage gets from the resources and abilities a firm control that are profitable, uncommon, defectively imitable and not substitutable. These resources and abilities can see as packs of tangible and intangible assets, including an association's board abilities, its authoritative procedures and schedules, and the data and learning it controls [1]. According to [2], the resource-based view gives a clarification of competitive heterogeneity dependent on the reason that close competitors vary in their resources and capabilities in significant and durable ways. These differences in tum influence competitive advantage and disadvantage. For the firm, resources and products are cut out of the same cloth. Most products require the services of several resources and most resources can be utilized in a few products. By indicating the size of the firm's movement in various products markets, it is possible to infer the base fundamental resource commitments. Then again, by determining a resource for a firm, it is possible to locate the ideal product advertise exercises [3].

Organizational support is the important element that can be defined as one's commitment to one's organization and its acknowledgment by the organization. It is likewise considered as one's observations about the organization. Employees want their organizations' support as they might use their knowledge and skills at top level to be benefit their organizations after they had been supported [4]. Since organization support for the employees can be classify into financial and non-financial and

these two types of support are using the resources of the organization. By using the resources as the support to employees can meet their expectations, then they will work significant and interesting.

Additionally, according to [5], knowledge management (KM) is a good practice for an organization to improve organization effectiveness. The management of knowledge has created extensive interest in business and management circles because of its ability to convey to organizations, key outcomes identifying with benefit, competitiveness and capacity enhancement. Because of KM has been described as a key driver of organizational performance, therefore the successful organizations currently understand why they should manage knowledge, develop plans as to the most effective method to achieve this target and dedicate time and energy to these efforts. Once again, to enhance this KM practice in an organization, they need to spend time and energy to manage it. In this case, time and energy are also the resources of the organizations.

[6] had stated that strategic planning is a set of concepts, procedures and tools used by organizations when need to determine their overall strategic direction and the resources need to achieve strategic objectives. Strategic planning can help the organizations to identify long-term goals, current status and future plans through identifying the root cause of problems in all levels of the entire organization [7].

At last, based on [8], technological innovation also an important factor of business intelligence that can be defined as a system that is composed of at least two components and a relation that hold between the two components and at least one other element in the set. By directly or indirectly, each of the components is connected to every other component. A technological innovation system (TIS) can be defined as the network of actors, rules and material antiquities that impact the speed and bearing of technological change in the certain technological area. A faster growing literature applying the TIS to study sustainability transition processes like the transformation of the energy system in the recent years [9]. An organization plan to go through KM and technological innovation, they need a lot of resources to run its. Therefore, by using the resources, the organizations may become more sustainable.

3. Literature Review

3.1 Business Sustainability

[11] Outcomes demonstrate the CRM capabilities significantly and positively influence business performance from marketing and financial standpoints. In any case, the impact of CRM capabilities on marketing performance was observed to be more grounded than the impact on financial performance and marketing performance was found to in part intercede the relationship between CRM capabilities and financial performance in the telecommunication industry. While [12] gives important data on the odds and the conceivable outcomes of Business Intelligence applying in associations with three speculations—the Resource-Based View, Maturity Models, and Critical Success Factors—were utilized to examine Business Intelligence issues. They gave a far-reaching perspective on Business Intelligence.

3.2 Strategic Planning

[13] Studies outcomes likewise feature the principle key courses that Italian MNOs have available to them to confront the fierce aggressive occasions. In spite of the fact that the particular issues announced identifying with the Italian setting, it tends to have contended that they are sensibly illustrative of most Western markets. Furthermore, [14] demonstrate the information examination was performed utilizing the basic condition displaying and the outcomes showed the noteworthy and positive effect of the usage of the balanced scorecard on the sustainable in telecommunication industry

3.3 Organizational Support

[15] study was designed to test the influence of one of the key indicators of organizational support on two aspects of performance effectiveness while [16] empirical Studies found that perceptions of

organizational support are positively associated with positive work towards organizational comorbidity.

3.4 Knowledge management

The results of [17] study can guide the organization in planning and determining the direction of knowledge management specific to aspects of organizational performance improvement.

3.5 Technological innovation system

[18] study aims to examine the influence of individuals, organizations and technologies on knowledge sharing practices among employees and their relationship to organizational innovation and performance. Their research shows that knowledge sharing practices have a significant relationship with innovation and that innovation technology has a significant relationship with organizational performance.

3.6 Business Intelligence

Like big data, business intelligence systems have always kept large companies with high IT budgets. But thanks to additional competition and technological advances such as cloud computing and software as a service, more and more small firms are taking advantage of the affordable options offered today as mentioned by [19] in their research.

3.7 Proposed conceptual model



The Knowledge management, Organizational support, strategic planning, Technological innovation system has been identified as a major factors that contribute towards Business Intelligence to enhance Business Sustainability by most past researcher. Therefore this current model have been proposed

4. Summary

In a nutshell, if the organization able to manage the resources in a correct way such as give more organizational support, do well in knowledge management, having more strategic planning and develop more in technological innovation. Therefore, the organization will increase the business sustainability and in order to minimize the negative impact on the global or local environment.

References

- [1] Barney, J., Wright, M. and Ketchen Jr, D.J., 2001. The resource-based view of the firm: Ten years after 1991. *Journal of management*, 27(6), pp.625-641.
- [2] Helfat, C.E. and Peteraf, M.A., 2003. The dynamic resource-based view: Capability lifecycles. *Strategic management journal*, 24(10), pp.997-1010.
- [3] Wernerfelt, B., 1984. A resource-based view of the firm. *Strategic management journal*, 5(2), pp.171-180.
- [4] Gündüz-Öğüdücü, Ş. and Etaner-Uyar, A.Ş. eds., 2014. *Social Networks: Analysis and Case Studies*. Springer Vienna.
- [5] Omotayo, F.O., 2015. Knowledge Management as an important tool in Organisational Management: A Review of Literature. *Library Philosophy and Practice*, 1(2015), pp.1-23.

- [6] Elbanna, S., Andrews, R. and Pollanen, R., 2016. Strategic planning and implementation success in public service organizations: Evidence from Canada. *Public Management Review*, 18(7), pp.1017-1042.
- [7] Toklu, M.C., Erdem, M.B. and Taşkın, H., 2016. A fuzzy sequential model for realization of strategic planning in manufacturing firms. *Computers & Industrial Engineering*, 102, pp.512-519.
- [8] Coccia, M., 2018. An introduction to the theories of institutional change. *Journal of Economics Library*, 5(4), pp.337-344.
- [9] Reichardt, K., Negro, S.O., Rogge, K.S. and Hekkert, M.P., 2016. Analyzing interdependencies between policy mixes and technological innovation systems: the case of offshore wind in Germany. *Technological Forecasting and Social Change*, 106, pp.11-21.
- [10] T. Kim, Y. Hong, and S. Y. Chang, Joint economic procurement--production-delivery policy for multiple items in a single-manufacturer, multiple-retailer system, *Int. J. Production Economics*, vol.103, pp. 199-208, 2006.
- [11] Al-Duwailah, F., Ali, M. and Al-Debei, M.M., 2015, May. The Impact of CRM Infrastructural and Cultural Resources and Capabilities on Business Performance: An Application of the Resource-based View in the Mobile Telecommunications Industry. In *ECIS*.
- [12] Olszak, C.M., 2016. Toward better understanding and use of Business Intelligence in organizations. *Information Systems Management*, 33(2), pp.105-123.
- [13] Ghezzi, A., Cortimiglia, M.N. and Frank, A.G., 2015. Strategy and business model design in dynamic telecommunications industries: A study on Italian mobile network operators. *Technological Forecasting and Social Change*, 90, pp.346-354.
- [14] Hakkak, M. and Ghodsi, M., 2015. Development of a sustainable competitive advantage model based on balanced scorecard. *International Journal of Asian Social Science*, 5(5), pp.298-308.
- [15] Oelze, N., Hojmosse, S.U., Habisch, A. and Millington, A., 2016. Sustainable development in supply chain management: The role of organizational learning for policy implementation. *Business Strategy and the Environment*, 25(4), pp.241-260.
- [16] Noe, R.A., Hollenbeck, J.R., Gerhart, B. and Wright, P.M., 2017. *Human resource management: Gaining a competitive advantage*. New York, NY: McGraw-Hill Education.
- [17] Hörisch, J., Johnson, M.P. and Schaltegger, S., 2015. Implementation of sustainability management and company size: a knowledge-based view. *Business Strategy and the Environment*, 24(8), pp.765-779.
- [18] Tidd, J. and Bessant, J.R., 2018. *Managing innovation: integrating technological, market and organizational change*. John Wiley & Sons.
- [19] Hazen, B. T., Skipper, J. B., Ezell, J. D., & Boone, C. A. (2016). Big Data and predictive analytics for supply chain sustainability: A theory-driven research agenda. *Computers & Industrial Engineering*, 101, 592-598.