

Guest Editorial Preface

Special Issue on Sustainable Innovation in Manufacturer-Supplier Networks

Surajit Bag, University of Johannesburg, Johannesburg, South Africa

Shivam Gupta, Indian Institute of Technology (IIT) Kanpur, Uttar Pradesh, India

V.G. Venkatesh, Waikato University, Hamilton, New Zealand

INTRODUCTION

Current volatility in commodity markets is having a negative impact on operational costs of every manufacturing company (Cancian, 2016). The major challenge is finding a suitable method to keep the costs low for customers at a time when the overheads vary so much (Bag, 2016a). Worldwide, every organization is emphasizing on cutting costs and trying to justify every single expense (Bag, 2016b). Eventually, the solution is to continuously evolve and drive sustainable practices in the organization i.e. Sustainable Innovation (De et al., 2018).

Sustainable innovation is about considering social, economic and environmental elements while making research and development related decisions. Focus should be given towards efficient and effective use of natural resources (Carter and Rogers, 2008).

Supply chains are constantly subject to unpredictable events that can adversely influence its ability to achieve performance objectives. In the past, we have seen that DaimlerChrysler, Toyota and Land Rover have faced major problems and losses due to failure in their supply networks. This clearly explains that disruption affecting an entity anywhere in the supply chain can have a direct effect on a company's ability to continue operations, get finished goods to market or provide critical services to customers. Sustainable innovation is a complex process and requires collaboration with suppliers and customers in order to ensure that eco-products are designed, produced and delivered in the right quantities, to the right place in a cost-effective manner (Foerstl et al., 2010). However, uncertainty in the supply chain is the killer element which may cause disruption in manufacturer-supply networks (Cavinato, 2004; Giunipero and Aly Eltantawy, 2004). There are limited studies available in existing literature and therefore interested researchers were invited to develop the theoretical background and further extend the knowledge base.

SYNOPTIC OVERVIEW OF SELECTED SPECIAL ISSUE PAPERS

This special issue on sustainable innovation in manufacturer-supplier networks has attracted several submissions. However, four articles were accepted finally for publication.

The first paper titled "The IoT research in sustainable agricultural supply chain management: A conceptual framework" proposes a conceptual model. Various barriers affecting the sustainability aspects have been highlighted in the study.

The second paper titled "Entrepreneurship success measures and factors for sustainable entrepreneurship". Entrepreneurship plays a critical role for the development of productivity and

economic growth. Authors have tried to explore and summarize criteria of entrepreneurship success measures. Understanding of these success measures will help organizations to adopt appropriate implementation strategies leading to success of entrepreneurship in small and medium enterprises.

The third paper titled “Performance improvement tool towards the medicines manufacturing pharmaceutical companies under sustainable practices. The pharmaceutical companies; reserve different type of drug stocks to be supplied to their partners in the chain. It is found that the patient’s death rates are increasing due to delay in timely drug delivery systems to hospitals by pharmaceutical companies. It is becoming necessary for pharmaceutical companies to map their own supply chain practices and reduce lead time so that the rate of death can be reduced by timely availability of emergency drugs. It is found that the pharmaceutical companies are gradually moving towards the decision support model with computing technique for sustainable development. The authors propose a sustainable model including dimensions such as green, service, agile, resilient, flexible delivery of medicines.

The fourth paper is titled “A critical study of paradigms and perspectives for advancement of E-entrepreneurship”. E-entrepreneurship refers to the process of creating, managing and continuously improving an e-firm or online venture for making money by utilizing information technology and digital network. There are several barriers and challenges involved in e-entrepreneurship practices which motivated authors for further investigation. In the paper, various flourishing and novel literatures have been critically overviewed for the sake of fulfilling the research objectives.

CONCLUSION AND FUTURE RESEARCH DIRECTIONS

This special issue will serve as a handbook for developing strategies for sustainable innovation and further adoption in the manufacturer-supplier network. The papers accepted for this special issue covers multiple dimensions of sustainable Innovations. However, there are still many emerging issues which need investigation by future researchers. Few of the future research directions are:

- Innovation and digital performance management;
- Innovations in the era of Industry 4.0: Measurement development and validation;
- Innovations in supplier relationship management;
- Role of Big data analytics in exploiting the E-entrepreneurship opportunities.

ACKNOWLEDGMENT

The Guest Editors express their appreciation to all the authors who submitted their manuscripts under this special issue and reviewers for their timely and critical feedback which helped to create a special issue on Sustainable Innovation in Manufacturer-Supplier Networks. This special issue would not have been a reality without the kind and generous support of Professor Charice Hayes, the Editor in-Chief of the International Journal of E-Entrepreneurship and Innovation (IJEEI).

Surajit Bag
Shivam Gupta
V.G. Venkatesh
Guest Editors
IJEEI

REFERENCES

- Bag, S. (2016a). Building Theory of Green Procurement using Fuzzy TISM and Fuzzy DEMATEL Methods. *International Journal of Applied Management Sciences and Engineering*, 3(2), 21–49. doi:10.4018/IJAMSE.2016070102
- Bag, S. (2016b). Green strategy, supplier relationship building and supply chain performance: Total interpretive structural modelling approach. *International Journal of Procurement Management*, 9(4), 398–426. doi:10.1504/IJPM.2016.077702
- Cancian, D. (2016). Innovation is crucial as manufacturing sector hits volatile market. *IB Times*. Retrieved from <http://www.ibtimes.co.uk/subbed-innovation-crucial-manufacturing-sector-hits-volatile-market-1558204>
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5), 360–387. doi:10.1108/09600030810882816
- Cavinato, J. L. (2004). Supply chain logistics risks: From the back room to the board room. *International Journal of Physical Distribution & Logistics Management*, 34(5), 383–387. doi:10.1108/09600030410545427
- De, D., Chowdhury, S., Dey, P. K., & Ghosh, S. K. (2018). Impact of Lean and Sustainability oriented innovation on Sustainability performance of Small and Medium Sized Enterprises: A Data Envelopment Analysis-based Framework. *International Journal of Production Economics*. doi:10.1016/j.ijpe.2018.07.003
- Foerstl, K., Reuter, C., Hartmann, E., & Blome, C. (2010). Managing supplier sustainability risks in a dynamically changing environment— Sustainable supplier management in the chemical industry. *Journal of Purchasing and Supply Management*, 16(2), 118–130. doi:10.1016/j.pursup.2010.03.011
- Giunipero, L. C., & Aly Eltantawy, R. (2004). Securing the upstream supply chain: A risk management approach. *International Journal of Physical Distribution & Logistics Management*, 34(9), 698–713. doi:10.1108/09600030410567478