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**Career Objective:**

To be part of a dynamic organization that constantly seeks to grow and diversify, and optimally utilize my education in management to deliver desired results and also provide a platform to carry out my research work.

Academic Record and Certifications:

| Exam/Certification | Year | School/Institute | University/Board | Percentage/CGPA |
|---|-------------|---|---|------------------------|
| PhD (Operations Management) | 2019 | Indian Institute of Technology Roorkee | Indian Institute of Technology Roorkee | 9.53 |
| M.E (Production & Industrial Engineering) | 2012 | Thapar University | Thapar University | 9.36 |
| B.Tech (Production Engineering & Management.) | 2009 | National Institute of Technology Jamshedpur | National Institute of Technology Jamshedpur | 8.32 |
| 12 th /SSC | 2005 | St. Peter's Higher Secondary School, Jammu | J. K.B.O.S.E. | 73.2% |
| 10 th /HSC | 2003 | S.D.Tara Puri School, Jammu | J. K.B.O.S.E | 81.8% |
| Lean Six Sigma Black Belt | 2019 | KPMG | KPMG | - |

Publications**Journals**

- Kusi-Sarpong, S., **Gupta, H.**, Khan, S.A., Jabbour, C. J. C., Rehman, S. T., & Kusi-Sarpong, H. (2019). Sustainable supplier selection based on industry 4.0 initiatives within circular economy implementation in sustainable supply chain operations. *Production Planning & Control*. (In press) (SSCI IF = 2.330 , ABDC – B Ranked)
- Gupta, H.** (2018). Assessing organizations performance on the basis of GHRM practices using BWM and Fuzzy TOPSIS. *Journal of Environmental Management*, 226, 201-216. (SCI IF = 4.005, ABDC – A Ranked)

- Kusi-Sarpong, S; **Gupta, H** & Sarkis, J. (2018). A supply chain sustainability innovation framework and evaluation methodology. *International Journal of Production Research* (in press). (SCI IF = **2.623**, ABDC – **A Ranked**)
- **Gupta, H.** (2018). Evaluating service quality of airline industry using hybrid best worst method and VIKOR. *Journal of Air Transport Management*, 68, 35-47. (SCI IF = **2.038**, ABDC – **B Ranked**)
- **Gupta, H.,** & Barua, M. K. (2018). A framework to overcome barriers to green innovation in SMEs using BWM and Fuzzy TOPSIS. *Science of The Total Environment*, 633, 122-139. (SCI IF = **4.610**)
- **Gupta, H.,** & Barua, M. K. (2018). A grey DEMATEL-based approach for modeling enablers of green innovation in manufacturing organizations. *Environmental Science and Pollution Research*, 25(10), 9556-9578. (SCI IF = **2.800**)
- **Gupta, H.,** & Barua, M. K. (2018). A novel hybrid multi-criteria method for supplier selection among SMEs on the basis of innovation ability. *International Journal of Logistics Research and Applications*, 21(3), 201-223. (SCI IF = **1.820**, ABDC – **B Ranked**)
- **Gupta, H.,** & Barua, M. K. (2018). Modelling cause and effect relationship among enablers of innovation in SMEs. *Benchmarking: an International Journal*. 25(5), 1597-1622. (ABDC – **B Ranked**)
- **Gupta, H.,** & Barua, M. K. (2017). Supplier selection among SMEs on the basis of their green innovation ability using BWM and fuzzy TOPSIS. *Journal of Cleaner Production*, 152, 242-258. (SCI IF = **5.651**)
- **Gupta, H.,** Prakash, C., Vishwakarma, V., & Barua, M. K. (2017). Evaluating TQM adoption success factors to improve Indian MSMEs performance using fuzzy DEMATEL approach. *International Journal of Productivity and Quality Management*, 21(2), 187-202. (ABDC – **C Ranked**)
- Gupta, P., Anand, S., & **Gupta, H.** (2017). Developing a roadmap to overcome barriers to energy efficiency in buildings using best worst method. *Sustainable Cities and Society*, 31, 244-259. (SCI IF = **3.073**)
- Raghuvanshi, J., Ghosh, P. K., Agrawal, R., & **Gupta, H.** (2017). Hierarchical structure for enhancing the innovation in the MSME sector of India. *International Journal of Business Excellence*, 13(2), 181-199. (ABDC – **C Ranked**)
- **Gupta, H.,** & Barua, M. (2016). Fuzzy AHP approach to prioritize enablers of green supply chain management practices: A case study of automotive component supplier. *Management Science Letters*, 6(7), 487-498. (SCOPUS)
- **Gupta, H.,** & Barua, M. K. (2016). Identifying enablers of technological innovation for Indian MSMEs using best–worst multi criteria decision making method. *Technological Forecasting and Social Change*, 107, 69-79. (SCI IF = **3.129**, ABDC – **A Ranked**)
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- Raj, Y., & **Gupta, H.** (2016). Systematic retrofit methodology for chemical batch processes to improve economic and production performance. *International Journal of Business Excellence*, 10(2), 190-208. (ABDC – **C Ranked**)
- **Gupta, H.,** & Nanda, T. (2015). A quantitative analysis of the relationship between drivers of innovativeness and performance of MSMEs. *International Journal of Technology, Policy and Management*, 15(2), 128-157. (ABDC – **C Ranked**)
- Manhas, V. K., Gupta, P., & **Gupta, H.** (2015). Developing and validating critical success factors of TQM implementation in MSMEs of Punjab in India. *International Journal of Indian Culture and Business Management*, 11(4), 405-421. (ABDC – **C Ranked**)
- Nanda, T., **Gupta, H.,** Kharub, M., & Singh, N. (2013). Diagnostics for pretesting questionnaires: a comparative analysis. *International Journal of Technology, Policy and Management*, 13(1), 67-79. (ABDC – **C Ranked**)

Conferences

- Presented a paper titled “Assessment of critical success factors for adoption of reverse logistic practices in Indian electronic industry” at ICRBS 2015 organized by Department of Management Studies, IIT Roorkee, during 4th -6th December 2015.
- Presented a paper titled “Evaluation of manufacturing organizations on the basis of internal green innovation capabilities” at 4th Management Doctoral Colloquium organized by VGSoM, IIT Kharagpur on 14th -15th March 2018.

Experience:

- Working as **Assistant professor (Operations Management)** at **Adani Institute of Infrastructure Management**, Ahmedabad, from October 2018 to till date.
- Worked as **Assistant Professor** (Industrial Engineering Group) at **Lovely Professional University**, Jalandhar, from July 2012 to May 2015.
- Worked as GET in **Suzuki Power Train India Limited** from August, 2009 to June, 2010.
- Working as **Teaching Assistant** at **IIT Roorkee** from July 2015 August 2018.
- Worked as **Teaching Assistant** for the course ‘**Project Management for Managers**’ organized by NPTEL, MHRD.
- Worked as **Teaching Assistant** at **Thapar University** from July 2011 to May 2012.

Reviewer & Editorial Assignments:

Editorial Board Member: International Journal of Intellectual Property Management

Reviewer of the following journals:

Journal of Cleaner Production; Technological Forecasting and Social Change; Renewable and Sustainable Energy Reviews; Science and Engineering Ethics; Resource Conservation and Recycling; International Journal of Logistics: Research and Applications; International Journal of Information technology and Decision Making; Expert Systems; International Journal of Industrial Engineering: Theory, Application and Practice; Iranian Journal of Management Studies; Public Transport; Transportation Research Part A: Policy and Practice; Journal of Small Business and Enterprise Development; Journal of Air transport Management; International Journal of Services and Operations Management; Evaluation and Program Planning; International Journal of Hospitality Management; Omega: The International Journal of Management Sciences; The International Journal of Entrepreneurship and Innovation; International Journal of Production Research

Seminars/Workshops Attended:

- Attended Seminar on “**IPR & Innovation Management in Knowledge Era**” held on 28 September, 2011 at **LM Thapar School of Management**, Patiala.

Dissertation Work:

Completed PhD thesis on “**Developing a framework for green innovation implementation in SMEs**” at IIT Roorkee.

Completed M.E thesis on “**A quantitative analysis of the relationship between drivers of innovativeness and performance of MSMEs**” at Thapar University.

Awards: Some recognition comes along

- Awarded ‘**Certificate of Merit**’ for Securing **2nd Rank** in M.E at Thapar University.
- Won **First Prize** in annual cultural fest UTKARSH 06 at N.I.T Jamshedpur.

- Won **Third prize** in ‘Fine Frenzy’ in annual cultural fest at I.I.T Kharagpur.
- Won **Third prize** in Painting Competition organized by Arty in 2001.
- Won **Third prize** in General intelligence test organized by Competition World at state level.

Areas Of Interest:

Supply Chain Management, Project Management, Sustainable Supply Chain Management, Green Innovation Management, Operations Management, Aviation Management, Energy Efficiency and Industrial Engineering

Strengths:

- Communication Skills, Analytical Skills,
- Ability to handle stress
- Ability to work in a group.
- Good organizational skills and leadership capabilities.

Extra curricular activities:

- Worked as **Coordinator** for Organizing two International Conferences on ‘**Research and Business Sustainability**’ at IIT Roorkee in the year 2015 and 2017.
- Coordinated as **HEAD PUBLIC RELATIONS** in **PRAVAH 2009** , annual Techno-Management fest at N.I.T Jamshedpur.
- Worked as **Co-ordinator** in the event ‘**B-Qmen**’ in **PRAVAH 2008** , annual Techno-Management fest at N.I.T Jamshedpur.
- Member of ‘**Society Of Automotive Engineers**’ i.e SAE.
- Participated in a ‘**Inter State Junior Red Cross Study-cum-Training Camp**’ held at Puri in 2002.
- Have been involved in organization of Medical camps and Flood Relief collections by Helpage India during school.
- Worked as **Joint Co-ordinator** in Event Management in **PRAVAH 2008** held at our college.
- Worked as a member of **Organizing committee** in ‘**VMCT 2008**’ inter college cricket tournament.

At leisure:

Reading, Social Networking, Watching Television.

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A supply chain sustainability innovation framework and evaluation methodology

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Sustainability is hinged on innovation. The importance of sustainable innovation management in sustainable supply chain management (SSCM) cannot be underestimated. Studies on SSCM have emphasised the need for sustainable innovation in achieving sustainability but none provide deep insights into sustainable innovation management in SSCM implementation. This lack of research depth stimulates this study to identify and investigate criteria for sustainable supply chain management innovation advancement. This paper proposes a sustainable innovation criteria framework for investigating sustainable supply chains in manufacturing companies. To exemplify the applicability and efficiency of the proposed framework, a sample of five Indian manufacturing companies are used to evaluate and prioritise the sustainable innovation management criteria, using the 'best-worst' multi-criteria decision-making (BW-MCDM) model. The criteria weights for all companies from BWM are aggregated, averaged and used for ranking. The respondent managers viewed 'financial availability for innovation' as the most important sustainable innovation sub-criteria. The results of the study will inform industrial managers, practitioners and decision-makers on which criteria to focus on during the implementation stage, to increase sustainability in manufacturing supply chains, and further advance corporate and supply chain sustainable development. The framework may also serve as a theoretical construct for a future empirical study on sustainable supply chain innovation in the manufacturing sector. This paper sets the stage for further research in sustainable innovation practices in the manufacturing sector and its supply chains.

Keywords: supply chain management; sustainability; innovation management; manufacturing; best-worst method; environment

1. Introduction

Environmental and human system damage, the consequences of industrial activities since the industrial revolution, is a rising global concern (Chen, 2008; Kusi-Sarpong et al. 2015). The debate on sustainable development has grown exponentially and received increasing attention in the sustainability and supply chain management arena (Seuring and Müller 2008; Fahimnia, Sarkis, and Davarzani 2015). Increasing public awareness, stricter government regulatory requirements, and market pressure have forced many firms to integrate sustainability into their supply chains (Kusi-Sarpong, Sarkis, and Wang 2016a, 2016b; Bai, Kusi-Sarpong, and Sarkis 2017). Several policy interventions have been implemented to remedy such damage, but these initiatives are unfortunately mostly internally focused; limiting the scope of addressing comprehensive industrial sustainable management concerns (Chen, 2008). Managing these sustainability issues effectively requires an extended perspective beyond a focal firm to include supply chain partners (Isaksson, Johansson, and Fischer 2010; Kusi-Sarpong et al. 2015). Sustainable supply chain management (SSCM) can be described as managing organisational supply chains to maximise profitability, improve the social well-being of its stakeholders and reducing negative environmental impacts (Hassini, Surti, and Searcy 2012).

For example, the manufacturing sector as a product system relates directly and indirectly to economic wealth creation, impact on the natural environment and social systems along the product's life cycle (Warren, Rhodes, and Carter 2001; Kusi-Sarpong et al. 2015). Responding to these multi-stakeholder pressures and concerns (Badri Ahmadi, Petrucci, and Wang 2017) is important for sustainable development progress.

Achieving sustainable development will require the implementation of sustainable innovations (Horbach 2005; Boons et al. 2013). Sustainable innovation can be defined as introducing novel, or modifications in, production processes, techniques, systems, organisations and products to lessen environmental damage. These innovations should also provide similar or greater value with improved economic, social and organisational performance (Hafkesbrink and Halstrick-Schwenk 2005;

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Research article

Assessing organizations performance on the basis of GHRM practices using BWM and Fuzzy TOPSIS



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ABSTRACT

Over the past few years, the need for sustainable environmental management has increased rapidly and green management has emerged as an important tool for the same. The role of Green Human Resource Management (GHRM) practices in environmental management and green management is widely known but still lesser discussed in academic literature. Thus, realizing the importance of GHRM in environmental management by organizations, this study attempts to identify the important practices of GHRM and evaluate the performance of manufacturing organizations using GHRM practices. A three-phase methodology is used for the same. The first phase involves identification of GHRM practices in manufacturing organizations through literature review and expert opinion. The second phase involves ranking of GHRM practices using Best Worst Method (BWM) and third phase methodology involves evaluating manufacturing organizations on the basis of GHRM practices using Fuzzy Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). This research can help managers to identify important practices of GHRM for their organization. This study also provides a framework for managers to evaluate their organization's performance on the basis of GHRM practices.

1. Introduction

Increased manufacturing facilities have caused a transformative change in the economic condition of the developing countries, these changes are greatly influenced by resource constraints and environmental challenges (Marquis et al., 2015; Ren et al., 2017). Also, pressure from stakeholders has forced the modern-day organizations to introduce environment-friendly processes and activities (Molina-Azorin et al., 2009). Organizations commitment towards saving the environment is an indicator of its environmental performance, the performance depends on the following criteria: ability of the organization to control the pollution, lesser discharge of waste in the environment, implementation of recycling and reuse practices at the organization and implementation of systems like ISO 14001 at the organization. All these activities and systems require direct involvement of Human Resource Management (HRM) department (Lober, 1996; del Brío et al. 2007). The success of these pro-environmental strategies is ensured only when they are well aligned with organizations HRM practices (Collins and Clark, 2003). For any new strategy to succeed, organizations require competent manpower and resources that are well trained in performing that task (Jiang et al., 2012). Similarly, implementing green practices in the organization for environmental protection is an arduous task which is largely dependent on the availability of right workforce and

managers. Thus, organizations need to develop a strong GHRM department that can recruit people with zeal towards environment protection and also train its current workforce to adopt and implement these activities through proper training programs or by luring them through rewards and special benefits (Mishra, 2017). Ren et al. (2017) have given a working definition of GHRM as “phenomena relevant to understanding relationships between organizational activities that impact the natural environment and the design, evolution, implementation, and influence of HRM systems”.

GHRM although being a very important area for organizations is still less researched and most of the studies are done in western context (Masri and Jaaron, 2017; Ragas et al., 2017; Tang et al., 2017). Almost all of these studies are based on either literature review or are focusing on investigating the relationship between GHRM and some other constructs like organizational performance. No study has been done to rank the practices of GHRM. With the aim to address these gaps, this study has following objectives:

- This study aims to identify practices of GHRM in Indian context through extensive literature review and expert opinion.
- This study aims to rank the practices of GHRM using a novel best – Worst methodology.
- This study aims to rank manufacturing organizations on the basis of

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Evaluating service quality of airline industry using hybrid best worst method and VIKOR



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ABSTRACT

Fierce competition and shrinking profits have impelled the airlines to stress upon improving the quality of the services being provided to the customers. Customers have become very specific about their service needs and often tend to shift to others that provide better services. Indian aviation industry is growing exponentially with customer base growing to 223.6 million in 2016 from 73.4 million in 2006. Service quality is an important research topic but the studies conducted so far have used basic SERVQUAL model and also there is limited studies in Indian airline context. So there is need to identify and then prioritize the service quality attributes for airline industry. Best worst method is used to rank and prioritize attributes of service quality that were identified through extensive literature review and VIKOR (VlseKriterijuska Optimizacija I Komoromisno Resenje) methodology is used to rank the best airline with respect to these attributes. Tangibility, Reliability, security and safety and Ticket pricing are found to be most important attributes of service quality and further analysis using VIKOR methodology suggests that airline 2 is performing well on these attributes among the five airlines taken for study. The service quality attributes identified through extensive literature review and results obtained through MCDM analysis are fruitful for airline managers to address service quality issues. Further, scope of future research work and implications for airline industry managers have been discussed at the end to conclude the paper.

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1. Introduction

Due to rapid industrialization and economic growth, spending power of people has increased manifold in past few decades. Also the working class prefers to travel through airlines to save their time (Jou et al., 2008). Airlines are competing fiercely to attract customers as attracting more customers is crucial to their business and growth in this cut throat competition (Park et al., 2005; Hussain et al., 2015). To sustain in this competitive environment and to retain their customers, providing superior service is considered as top priority for the airlines (Mustafa et al., 2005; Chow, 2014). Customers are also becoming very specific about their needs and tend to switch to other airline industry if one industry fails to satisfy their needs. The airline industry has changed over the period of time drastically according to customer needs, like competitive ticket pricing and providing quick response to their problems.

Demand for air travel depends mainly on the economic conditions and status of a country (Wu and Cheng, 2013). India has one of

the rapidly growing aviation industry, the number of passengers have increased from 73.4 million in 2006 to 223.6 million in 2016. India is aiming to become third largest civil aviation market by the year 2020 and largest by year 2030. The growth is mainly attributed to frequent low cost carriers and huge amount of investment in aviation sector (AAI, 2016). To achieve the goal of becoming number one aviation industry by 2030, airlines have to work towards continuously attracting new customers and retaining old customers by providing services beyond the expectations of the customers, and there can be numerous other attributes of measuring service quality for Indian context apart from those suggested by SERVQUAL model. The main reason for this difference is that India lies in low income group country and service requirement of people is different and mainly focused on price apart from tangible services. There only a few studies conducted to evaluate the service quality parameters for airlines in Indian context. This study has three fold contribution for readers and managers, it helps in identifying new attributes of service quality for airline industry, traditionally only SERVQUAL model has been used in most of the studies. Second, this study is one of the few studies conducted in Indian context (Prakash and Barua, 2016b; Raut et al., 2016), and will help airline managers to improve their service quality based on the preference

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A framework to overcome barriers to green innovation in SMEs using BWM and Fuzzy TOPSIS

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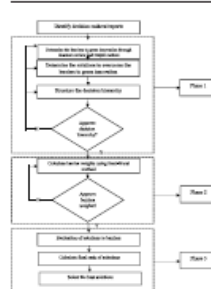
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HIGHLIGHTS

- Barriers to green innovation for SMEs are identified.
- Solutions to overcome these barriers are identified.
- Barriers and solutions to green innovation are prioritized.
- A novel hybrid methodology of BWM and Fuzzy TOPSIS is used.

GRAPHICAL ABSTRACT



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ABSTRACT

Recent years have witnessed a significant rise in exploring the barriers which obstruct adoption of green practices by SMEs. There is a constant need to innovate in terms of products, processes, and management so that we can overcome these barriers to green practices adoption and implementation. This study employs a three-phase methodology to identify barriers and solutions to overcome these barriers to green innovation in SMEs. Through extensive literature review and the opinion of selective manager's, seven main category barriers, thirty-six sub-category barriers, and twenty solutions to overcome these barriers were identified. BWM is used to rank these barriers and Fuzzy TOPSIS is used to rank solutions to overcome these barriers. Four Indian SMEs are taken to exemplify the proposed three phased model. To check the robustness of the model, a sensitivity analysis was also performed. The results of the analysis can act as a stepping stone for SME managers to eliminate and overcome barriers to green innovation in their firm and compete healthily in the market. The paper sets a framework for future studies in this area of research-work.

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1. Introduction

Today, customers are more conscious about their environment than ever before (Mumtaz et al., 2018). Also, the government is making stricter regulations to control the environmental pollution caused by

these organizations than ever before (Mathiyazhagan et al., 2014). Organizations irrespective of their size or structure are essential for growth of a country and also contribute substantially towards the degradation of the environment. Similarly, SMEs are the driving force behind the dynamic growth of any economy. But, being smaller in size their impact on environment goes unnoticed both at regional and national levels. It is often quoted that they accord to around 70% of the total industrial waste and pollution (Hillary, 1995; 2004). Consequently, due to surmounting customer awareness, calls by various stakeholders

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A grey DEMATEL-based approach for modeling enablers of green innovation in manufacturing organizations

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Abstract

Incorporating green practices into the manufacturing process has gained momentum over the past few years and is a matter of great concern for both manufacturers as well as researchers. Regulatory pressures in developed countries have forced the organizations to adopt green practices; however, this issue still lacks attention in developing economies like India. There is an urgent need to identify enablers of green innovation for manufacturing organizations and also to identify prominent enablers among those. This study is an attempt to first identify enablers of green innovation and then establish a causal relationship among them to identify the enablers that can drive others. Grey DEMATEL (Decision Making Trial and Evaluation Laboratory) methodology is used for establishing the causal relationship among enablers. The novelty of this study lies in the fact that no study has been done in the past to identify the enablers of green innovation and then establishing the causal relationship among them. A total of 21 enablers of green innovation have been identified; research indicates developing green manufacturing capabilities, resources for green innovation, ease of getting loans from financial institutions, and environmental regulations as the most influential enablers of green innovation. Managerial and practical implications of the research are also presented to assist managers of the case company in adopting green innovation practices at their end.

Keywords Green innovation · DEMATEL · Enablers · Grey theory · Decision making

Introduction

Compelled by deteriorating environmental condition due to rapid industrialization and market pressures, environmentalists, industrialists as well as academicians are concerned about incorporating green practices into the manufacturing processes (Zhu et al. 2013; Fahimnia et al. 2015). Efforts are being made to incorporate green practices at an internal level in the organization as well as the greening of upstream and downstream supply chain partners of the organization (Sarkis 2012; Zhu et al. 2013; Agi and Nishant 2017). Further, due to surmounting competitive pressure, organizations are dedicated to introducing products at a lesser price than their competitors; this objective can be achieved only through certain

innovations at their end. Green innovations which include product, process as well as marketing innovation is the solution for modern-day organizations whose goal is to produce environmentally friendly products at cheaper price. Further, UNEP (2016) in their agenda for sustainable development identified resource efficiency and sustainable production and consumption as a stand-alone goal for 2030, and to achieve this goal of sustainable production and consumption, one of the most important areas highlighted is green innovations throughout the supply chain of the product, this further strengthens the need to study about green innovations in manufacturing sector. The government is also formulating stringent policies for manufacturers so that environmental impact of the products produced by these manufacturers can be minimized. In order to comply with government regulations, manufacturers are adopting green practices and this they have to do without compromising on economic benefits of the products (Govindan et al. 2016); green innovations are necessary to accomplish this objective of producing green products and that too at economical price. Companies are constantly pushing towards green transition, but this transition is not easy and often marred by a lot of barriers; therefore, there is a need

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