Sustainability through e-Learning

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Abstract - Lack of awareness and information always has been a predicament to the sustainability adoption. Many authors have argued that proper information sharing among companies can boost the intensity of sustainability adoption by the firms. To overcome this problem E learning has been taken as the instrument as it provides good platform for spreading knowledge across wide area. E learning is always been treated as the cost effective and swift mode of transferring knowledge and developing learning, if implemented well. Various e-learning examples can be seen in the companies like video conferencing, online competitions for employees, e classes and so on.

This paper focus upon the traces from the literature which support that relationship management can play an important role in the sustainability across the supply chain. E learning has been taken as a tool for relationship management. A model has been proposed in the paper which describes the relationship between the e learning activities and its impact on the barriers to sustainability, relationship quality, and with the intention to adopt sustainability. Author has proposed research methodology from the literature test the conceptual model.

Keywords - Adoption, E-Learning, Supply Chain, Sustainability

I. INTRODUCTION

Research in the area of sustainability is getting importance from the last decade. Many authors have tried to define sustainability in various ways. Elkington (1994) defined three pillars of sustainability as: environmental, social and economical. The consideration of economic, environmental and social activities together is in the heart of sustainability. Most of the researches in the area of sustainability were remained company focused. From last some year it has been directed towards the whole supply chain. Mahler (2004) said sustainability can be achieved when it is adopted across whole supply chain, which provides new direction in the supply chain research.


E learning includes all the activities which are based on the internet. Evidences shows that companies are adopting video conferencing, online training courses, and other activities to share the information, knowledge and experience with other companies.

II. RELATIONSHIP MANAGEMENT THROUGH E-LEARNING

Information sharing across organizations is related to the cooperation (Vachon and Klassen, 2006, Ageron et al, 2011Elkington, 1994), increasing trust (Carter and Jenning, 2002, Ageron et al, 2011) and coordination (Bommel, 2010, Carter and Rogers, 2008). Information sharing has been found to be better deal with the barriers to sustainability adoption like lack of education (Zutshi and Sohal, 2004), poor demand forecasting (Carter and Roger, 2008), failure to coordinate (Carter and Rogers, 2008), Lack of awareness about sustainability and related processes (Rao and Holt, 2005). Various online softwares can be used for the proper monitoring and controlling of supply chain partner’s operations. Information sharing, training, knowledge sharing will develop mutual trust among supply chain partners. Some author also argued that commitment increases with the increase in trust. Hence it can be concluded various relationship management activities are directly related to the quality of relationship. Helping and understanding partners need and fulfilling it with the e learning activities is one of the strategies for relationship management. It is also found in the literature that relationship is taken as collaboration, coordination, and joint development, integration, aligning activities, trust, involvement and influence on each other. Hence quality of relationship should be checked in taking in consideration of all the key words related to the relationship in supply chain.

III. BENEFITS OF RELATIONSHIP MANAGEMENT THROUGH E-LEARNING ACTIVITIES

E learning through different activities is beneficial to different supply chain partners as it creates knowledge, help in training, and various online demonstrations provide the real time working of various operations. It helps in creating awareness among employee about new processes, which will directly help in developing the intention to adopt sustainability. E learning can help in communicating benefits of sustainability among the supply chain partners. Some of the benefits discussed by authors are cost reduction, reduced negative impact on environment, high corporate reputation, customer satisfaction, legal fulfillment, new market opportunity, competitive advantage. These benefits, if communicated t the company will motivate the supply chain partners towards the sustainable operations.

Cost of information sharing can also be minimized by the use of online facilities. Some author argued that various relationship management activities like information sharing, providing knowledge, training to supply chain partners help in rapid uptake of the new technologies and processes. Many authors emphasized on barriers like lack of knowledge, training and awareness, lack of fund, poor integration among supply chain partners and many other industry specific barriers. In summary most of the barriers can be handled by the proper relationship management and e learning can be used as relationship management strategy.

IV. CONCEPTUAL MODEL WITH PREPOSITIONS

Based on the literature following conceptual model has been developed. In this model e learning has been taken as a tool for the relationship management. Prepositions have been developed:
P 1: E learning activities have positive impact on the supply chain partner’s relationship.
P 2: E learning activities have negative impact on the barriers to the sustainability adoption
P 3: E learning activities directly develop intention to adopt sustainability.
P 4: Quality of relationship is negatively related to barriers to sustainability adoption
P 5: Quality of relationship is directly related to the intention to adopt sustainability.
P 6: Decrease in the intensity of barriers is directly related to the intention to adopt sustainability.

V. PROPOSED RESEARCH METHODOLOGY

Rigorous literature survey has been done to select the appropriate methodology. In previous related studies universe has been selected from the group of companies listed in some association, industry specific, and combination of the industries. Most of the previous research has been done in automobile industry. Sample size varies with the number of companies in the universe. The sample size has been taken at the different rate of the sample like 10%, 15% and 20% of the universe. A proper questionnaire is to be developed with the help of literature and experts from the universe of the study. Statistical tools for the validation and reliability check was CFA. Most of the research used CFA for the checking the reliability of the questionnaire and reduction of factors after the pilot testing. For the hypothesis testing various types of regression has been used in literature like multiple regressions, logistic regression and other. In recent studies use of SEM has been increased to test the proposed model.

VI. CONCLUSION

This paper provides the new direction for the research in the area of sustainable supply chain management. E learning as a relationship tool for sustainable supply chain has been attempted first time. This paper proposed a model for the verification with the proposed methodology. This paper touched only one aspect of relationship management. More relationship management strategies can be taken in the future studies which can be identified from the literature.

REFERENCES


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