

ABSTRACT

This decade has witnessed a notable increase in interest in the relatively new concept of the Circular Economy (CE) among academicians and practitioners. This momentum is attributed to the recognition of CE as an alternative to the existing 'take-make-use-dispose' model, commonly referred to as the Linear Economy (LE), which threatens planetary boundaries due to the over extraction of resources required to meet the needs of a growing population. Limited discussions have been observed in the literature on the diffusion and adoption (D&A) of the concept of CE in emerging economies, focusing on the identification of CE associates and their interactions within a framework for responsible production and consumption. This study aims to bridge the existing knowledge and empirical evidence gaps surrounding CE D&A in an emerging economy. The dissertation is organised as a multi-essay thesis, where four interlinked essays examine CE D&A from conceptual, practice-based, producer-consumer and product-review perspectives. The present study identifies 49 emerging CE associates based on a systematic review of 76 selected articles (from 2010 to 2019), thereby analysing 122 definitions of CE. Furthermore, they demonstrate their interactions and ranking by deploying bibliometric analysis, text mining, content and semantic analysis, utilising statistical tools such as VoSviewer and Tropes. Subsequently, a conceptual framework was developed to illustrate the ontological connections that enhance the understanding of CE D&A. Conversely, the study also examined the relevance of the conceptual framework to CE praxis through qualitative and quantitative analyses of 102 cases published in Young Global Leaders CE yearbooks, including content analysis, actor network analysis, and topic modelling. Additionally, the exploration of CE D&A among consumers and prosumers (producer-consumers) in India, an emerging economy, was conducted, with an analysis of 610 responses from primary data collection. In this context, the moderating and mediating effects of identified CE associates and their influence on R-imperatives were analysed through multidimensional analysis, which incorporated Partial Least Squares Structural Equation Modelling and uncertainty analysis. Lastly, the study investigated consumers' behaviour towards refurbished products by analysing 1986 ratings and reviews, applying tools such as the Shapley Additive ex-Planations and Multinomial Logistic Regression, proposing a consumer preference model. The summary of the four objectives of the study suggests that CE D&A depends on (a) understanding of interactions between CE associates within a framework for responsible production and consumption, (b) academic and practitioner consensus towards the concept for targeted policy implications and integrated CE system, (c) the complexity of CE system is highlighted, illustrating a need for systematic integrated approach. The design thinking embedded in innovative circular business models and processes tend to enable CE D&A complementarily with consumer behaviour leveraged by affordability inducing purchase of circular or green products (d) reveals that the combination of identified attributes impacts the positive and negative consumers' sentiments for preferential purchase decision making, for a high-value refurbishing CE strategy. Future studies can explore the inclusion of advanced modelling techniques within mixed-methodology approaches to investigate potential policy nudges for accelerating CE D&A. Additionally, conducting similar research in specific sectors, regions, technologies, and longitudinal studies can reveal potential localized strategies in the context of variations in CE D&A.

Keywords: Circular Economy, Associates, Diffusion and Adoption, Production and Consumption, Consumer Behaviour, Framework