Chapter 10
Practicing Circular Economy in India:
Insights of Business Models on the Three Paradigms – Reduce, Reuse, and Recycle

Namita Kapoor
https://orcid.org/0000-0001-9661-1700
Amity University, Noida, India

Sangeeta Jauhari
Rabindranath Tagore University, India

Deepti Maheshwari
Rabindranath Tagore University, India

ABSTRACT

Circularity concept is not just recycling. It is basically a system that is restorative in the industrial processes that treat waste as a resource. It implies that once a product reaches the end of life, attempts should be made to utilize them by creating a value out of it. The present study is an exploratory study that aims at exploring the lessons of circular economy, which India can share with others through the analysis of business models of companies for the three paradigms: reduce, reuse, and recycle. For understanding the take-make-dispose model to take-make-reduce model, the analysis of business model of El Rhino has been carried out. For take-make-recycle model, business model of Saahas Zero Waste and Goonj as unique business models displaying an outstanding effect of share-reuse-prolong model has been studied.

INTRODUCTION

Indian society has always practiced circularity involving repair, reuse, and recycling products. With the rise in consumerism and increase in affordability there has been frequent replacement of assets which has increased the waste as well as retarded the adoption of circular economy. At every stage of value chain

DOI: 10.4018/978-1-7998-8678-5.ch010

there is requirement of the application of 5Rs: Reduce, Recycle, Reuse, Refurnish and Re- manufacture. The success of adoption of circular economy depends largely on consumer's awareness, mindset, and readiness to participate in it.

The tradition growth model of India was basically predicted through the "linear Model" economic model which is functioning against the limited resources of our planet. Also, this model generated massive waste in every stage of the product life cycle. For the growth of manufacturing sector, it is required that we should not only use the scarce resources diligently but also substitute the primary resources with secondary through the efficient management of secondary resource. Circular Economy can help in achieving this through operating in a closed loop to minimize the leakage or wastage of resources as less as possible through Sharing, Leasing, Repairing, Refurbishing and Recycling.

Circularity concept is not just recycling it is basically a system which is restorative in the industrial processes which treats the waste as a resource. It implies that once a product's life ends, attempts should be made to utilize them by creating a value out of it (Ellen Mc Arthur 2015). The transition from tradition to circular requires the changes in the functioning of organizations and reshaping of the supply chain process by infusing the mindset of sustainability in product designers. Circular Economy is a "economic model aimed at the efficient use of resources through waste minimization, long-term value retention, reduction of primary resources, and closed loops of products, product parts, and materials within the boundaries of environmental protection and socioeconomic benefits" Morseletto (2020). The Circular Business Model is the rationale of how an organization, creates, delivers, and captures value with and within the closed material loops. The present study is an exploratory study that aims at exploring the lessons of Circular Economy which India can share with others through the analysis of Business Models of companies for the three traditional paradigms of circular economy: Reduce, Reuse and Recycle. The circular Business model requires that products and or service should decrease environmental impact, increase social and economic benefits. The product or service must be more aligned to customer needs. In terms of value creation there should be significant changes in the value chain, product design such that repairability, durability, upgradation is possible. It requires the relationship strong among stake holders-retailers, suppliers, producers and even consumers. In terms of value capture, the new offering should also have new cost and new revenue models. For developing the case studies, we have used a traditional reduce, reuse and recycle principles of circular economy which specifies Reduce in the use/ consumption of non-renewable energy sources/resource and toxic resources, Reuse of products/service through innovations in design, processes, and business models and Recycle of waste into new resource for manufacturing or consumption.

UNDERSTANDING PROCESSES IN CIRCULAR ECONOMY: LITERATURE REVIEW

Recycling is "the re- introduction of residual materials into production processes so that they may be re formulated into the new products" UN 2003. This definition implies that recycling should not only emphases on recovering materials but also should focus on utilization of these materials to the new life cycle. The main requisite to achieve the introduction of recycled material is that the recycling should be of high quality. Recycling should also be done to reduce waste. Recycling can benefit business in terms of reduction in cost / minimization of cost for businesses that depend on primary materials. The price volatility of primary raw materials can be reduced through recycling (WEF et al 2014). Petrochemical