

The University and College Sector's Collective Response to the Global Goals





Integration of SDGs in

□ Institutiona	I governance,	/strategic	level
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- □ SDGs in research
- ☐ SDGs in campus operations
- ☐ SDGs in curriculum development
- ☑ SDGs in student engagement activities
- ☐ SDGs into community activities
- ☐ SDGs at a whole-institution level

Focus on

- ☐ Goal 1 No poverty
- ☐ Goal 2 Zero hunger
- ☐ Goal 3 Good health and wellbeing
- ☐ Goal 4 Quality education
- ☐ Goal 5 Gender equality
- ☐ Goal 6 Clean water and sanitation
- ☐ Goal 7 Affordable and clean energy
- ☐ Goal 8 Decent work and economic growth
- ☐ Goal 9 Industry, innovation and infrastructure
- ☐ Goal 10 Reduced inequalities
- ☐ Goal 11 Sustainable cities and communities
- ☑ Goal 12 Responsible consumption and production
- ☐ Goal 13 Climate action
- ☐ Goal 14 Life below water
- ☐ Goal 15 Life on land
- ☐ Goal 16 Peace, justice and strong institutions
- ☐ Goal 17 Partnerships for the goals

Summary:

The selected theme was implemented within the Goa Institute of Management (GIM) through a project on circular economy in smartphones as part of institute's service-learning initiative called GiveGoa. A team comprising five students and a faculty member worked on a project that focused on the potential utility and feasibility of setting up repair cafes as a sustainable solution for smartphone e-waste management in the state of Goa, India. A repair cafe is a community-based initiative where people come together to fix broken items, such as electronics, appliances, and clothing, to promote repairability and reduce waste.

Qualitative data was collected from three distinct sets of respondents: consumers, repair shop owners, and officials from bodies involved in e-waste management. Data from consumers were collected through structured online surveys, while semi-structured personal interviews were conducted with the other respondent groups. The online consumer survey provided insights into their attitudes towards repairability and electronic device repair. Interviews with repair shop owners covered aspects related to repair services, challenges faced, competition, and market dynamics. Interviews with officials from bodies involved in e-waste management focused on e-waste procedures, regulations, and future plans. The chosen locations for interviews provided diverse representation of the repair ecosystem in Goa.

The analysis of the collected data suggested that repair cafes can provide affordable repair services, raise awareness about the importance of repairing and extending the lifespan of electronic devices, create employment opportunities, and promote a circular economy by reducing e-waste and promoting responsible e-waste management practices. However, challenges such as finding suitable locations, securing funding, and overcoming resistance from existing repair shops may need to be addressed through collaborative efforts among stakeholders. The study concluded that setting up repair cafes can be a potential and feasible solution for e-waste management, with significant social, economic, and environmental benefits.

Outline the 3 key benefits of integrating this theme:

- 1. The students were exposed to the often-overlooked impact of smartphone manufacturing on the environment
- 2. The students were exposed to the different aspects and considerations involved in implementing circular economy for smartphones
- 3. The interactions with the stakeholders helped spread awareness about the importance of repair and reuse while educating them about the concept of repair cafes

Outline the barriers or challenges encountered in integrating this theme and how you overcame these:

1. Motivating the students to understand the concept of repair cafes, identify relevant stakeholders and outline the study objectives was challenging.

This challenge was overcome by educating the students regarding the importance of repair and reuse of smartphones. The students were made aware of the various minerals and rare earth elements that are required for the manufacture of smartphones which are not reclaimed from e-waste despite of the difficulties in extracting them from their ores.

2. The concept of repair cafes was looked at as a threat to their livelihoods by some of the repair shop owners. It was challenging to get them to understand the benefits of setting up repair cafes in Goa.

This challenge was overcome through perseverant efforts of the students in clarifying the benefits of Repair cafes and convincing the stakeholders in looking at this concept as an opportunity.

3. The major stakeholders identified were classified into three different groups: consumers, repair shop owners, and officials from the bodies involved in e-waste management. As these respondents were geographically scattered it was a challenge to obtain their responses.

The study was designed to use online as well as offline modes for collection of data. While the consumer responses were obtained through online survey forms, the other respondents were interviewed in person. Further, five different locations in Goa were identified for conducting interviews such that they provided a fair representation of the repair ecosystem in Goa.

Outline your conclusions and recommendations to others:

The findings from the conducted surveys and interviews highlighted the importance of increasing consumer awareness and education regarding the benefits of repairability, the challenges faced by repairmen, and the need for better e-waste collection methods and product design standards. Repair cafes are seen as potential solutions to address these challenges by promoting repairability, providing standardized repair services, and contributing to the circular economy by reducing e-waste. Repair cafes can also help create employment opportunities, and raise awareness about responsible e-waste management practices, thereby contributing to sustainable e-waste management. However, there can be challenges in establishing and sustaining repair cafes, necessitating collaborative efforts among stakeholders. Further research and planning are required to ensure the successful establishment and operation of repair cafes, considering the local context and challenges. Some limitations of the study include possibility of biases on behalf of the respondents and confinement of the study to the northern part of Goa. Future research can consider exploration of the other parts of India while taking measures to overcome the limitations of this study.