

THE ROLE OF E-COMMERCE IN PROMOTING SUSTAINABLE CONSUMPTION (SDG 12)

Dr. K. R. Abarna

Assistant Professor, Department of Commerce, S.A. College of Arts & Science,

Mail Id: abarnaravi1991@gmail.com

Mrs. A. Sathya

Assistant Professor, Department of Commerce, S.A. College of Arts & Science,

Mail Id: sathyakamu87@gmail.com

Abstract

E-commerce can help strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development, in line with Goal 17. According to experts, the most significant contribution of e-commerce is achieving goals 12 and 13, related to each other. Achieving sustainable development goals is the task of all countries, both developed and developing. At the same time, almost all countries are moving to a digital economy, with the core of e-commerce. E-commerce is the marketing, purchase, and sale of goods and services on the Internet. E-commerce growth is observed in all countries without exception, but it is growing especially rapidly in developing countries. In recent years, China has been the leader in e-commerce turnover in the world [3]. E-commerce includes the distribution and sale of goods and services over the Internet. The backbone of e-commerce is distributing goods, but today an increasing number of services are also provided online.

Keywords: E-commerce, sustainable economy, environmental impact, Digital Innovations.

Introduction:

Sustainable consumption and production (SDG 12) is one of the most pressing global challenges of the 21st century. The growth of **e-commerce** has dramatically reshaped global trade, but it has also raised concerns about its environmental impact, such as packaging waste, carbon emissions from transportation, and overconsumption. However, e-commerce also holds great potential to promote more **sustainable consumption** through innovative practices, technologies, and business models.

This article explores how the e-commerce sector can play a pivotal role in driving the transition toward a more sustainable economy.

1. Promoting Eco-Friendly Products

E-commerce platforms are uniquely positioned to support the promotion and distribution of **eco-friendly products**.

- **Product Transparency:** Online retailers can provide detailed information about the environmental impact of products, such as materials used, carbon footprints, and ethical sourcing.
- **Sustainability Certifications:** By highlighting products that meet sustainability standards (e.g., Fair Trade, organic, or cruelty-free labels), e-commerce platforms can encourage consumers to make environmentally responsible purchasing decisions.

Example: Online platforms like **Amazon** and **Etsy** have dedicated sections for eco-friendly products, making it easier for consumers to find sustainable alternatives to conventional products.

2. Reducing the Carbon Footprint of Physical Stores

One of the environmental benefits of e-commerce is its ability to reduce the need for **brick-and-mortar stores**, which often require significant energy for lighting, heating, cooling, and waste disposal.

- **Online Shopping vs. Physical Stores:** E-commerce can reduce the number of trips consumers need to take to physical stores, which in turn reduces emissions from transportation.
- **Efficient Warehousing and Logistics:** Many e-commerce platforms are adopting **advanced logistics solutions** such as optimized delivery routes, autonomous vehicles, and the use of **electric delivery trucks**, which can significantly reduce carbon emissions from transportation.

Example: Companies like **Patagonia** and **REI** emphasize sustainable shipping options and use of renewable energy in their fulfilment centres, thus contributing to lower emissions.

3. Waste Reduction through Efficient Packaging

Packaging waste is a significant contributor to the environmental impact of e-commerce. However, there are several ways in which e-commerce can promote more sustainable packaging:

- **Minimal and Recyclable Packaging:** E-commerce companies can adopt practices that reduce the use of plastic and other non-recyclable materials, focusing instead on biodegradable or recyclable packaging.
- **Reuse and Return Systems:** Some e-commerce businesses encourage customers to return packaging or use it for other purposes, further minimizing waste.

Example: Ikea has launched a new program to encourage customers to bring back their packaging, reducing the overall waste generated by e-commerce deliveries.

4. Facilitating the Circular Economy

E-commerce platforms can play an important role in the **circular economy** by enabling the reuse, refurbishment, and recycling of products.

- **Second-Hand and Refurbished Products:** Many online marketplaces, such as **ThredUp** (for clothing) and **eBay**, focus on reselling second-hand goods, which not only reduce waste but also minimize the demand for new products.
- **Product Repair and Upcycling:** E-commerce platforms can also create markets for products that have been repaired or upcycled, promoting sustainability through the extension of product lifecycles.

Example: eBay encourages the resale of second-hand electronics and other goods, contributing to a circular economy by extending the useful life of products.

5. Promoting Local and Sustainable Products

E-commerce platforms can also help reduce the environmental footprint of shipping by promoting local goods and sustainable production practices.

- **Local Sourcing and Delivery:** E-commerce platforms can emphasize local sourcing, which reduces transportation emissions and supports local economies.

- **Ethical Consumerism:** E-commerce businesses can encourage consumers to support local artisans, sustainable food producers, and other ethical businesses through the use of targeted advertising and curated listings.

Example: Platforms like **Etsy** and **Farmdrop** provide consumers with access to local artisans and organic food producers, helping reduce the carbon footprint of shipping while supporting local economies.

6. Digital Innovations for Sustainability

The rapid growth of digital technologies offers opportunities for e-commerce to promote sustainable consumption in new ways.

- **AI and Big Data for Efficient Operations:** AI-driven tools can help e-commerce companies optimize inventory management, reduce overproduction, and minimize waste.
- **Virtual Try-Ons and Experiences:** Technology like augmented reality (AR) allows customers to virtually try on clothes, furniture, or other products before making a purchase, reducing the return rates that often lead to additional transportation and waste.

Example: Companies like **L'Oréal** and **IKEA** use AR technology to provide virtual try-ons and product visualizations, helping consumers make more informed purchasing decisions that can reduce returns and waste.

7. Encouraging Sustainable Delivery and Logistics

E-commerce companies can promote **sustainable logistics practices** to further reduce their environmental impact:

- **Carbon-Neutral Shipping:** Many e-commerce platforms are starting to offer customers the option to choose carbon-neutral shipping, either by offsetting emissions or through the use of green logistics.
- **Consolidated Shipments:** By consolidating shipments into fewer deliveries or offering options like "slow shipping," e-commerce businesses can help reduce emissions associated with transportation.

Example: Amazon has committed to achieving carbon neutrality by 2040 and is investing in electric delivery vehicles and renewable energy to help meet that goal.

8. Raising Awareness and Educating Consumers

E-commerce platforms can be key players in **educating consumers** about sustainable consumption.

- **Sustainability Campaigns and Content:** Through blogs, newsletters, and social media, e-commerce businesses can raise awareness about the environmental impacts of consumption and provide consumers with tips for making more sustainable choices.
- **Promoting Eco-Friendly Alternatives:** Online platforms can feature educational content, such as “how-to” guides or product comparisons, helping consumers make informed, sustainable decisions.

Example: The Body Shop uses its e-commerce platform not only to sell sustainable beauty products but also to educate customers on ethical consumerism and environmental responsibility.

Conclusion:

E-commerce, while traditionally associated with the rise of consumerism, holds significant potential in **promoting sustainable consumption** (SDG 12). Through the adoption of more sustainable practices, such as eco-friendly products, reduced packaging, the promotion of the circular economy, and local sourcing, e-commerce can help lead the charge toward a more sustainable and responsible global economy. As technology continues to advance, e-commerce platforms are well-positioned to provide consumers with better choices and drive systemic change in the way products are consumed, produced, and disposed of, ultimately making sustainability a key part of modern commerce.

Reference:

Transforming our world: the 2030 Agenda for Sustainable Development, Department of Economic and Social Affairs, <https://sdgs.un.org/2030agenda>

[1] Transforming our world: the 2030 Agenda for Sustainable Development, Department of Economic and Social Affairs, <https://sdgs.un.org/2030agenda>

[2] T. Tokar, R. Jensen and B. Williams. Business Horizons, 64(3), 323 (2021)

[3] D. Lazarevic, L. Švadlenka, V. Radojicic, M. Dobrodolac. Sustainability, 12 (2020).