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Sustainability through Green E-commerce: A New Way

Dr. Pratibha Bhardwaj[1]
Associate Professor,
Department of Management,
MDU- Centre for Professional and Allied Studies,
Maharshi Dayanand University,
Rohtak, India.

Tamanna[2]
Research Scholar,
Department of Management,
MDU- Centre for Professional and Allied Studies,
Maharshi Dayanand University,
Rohtak, India.

Abstract: E-commerce is rapidly growing and does not appear to be slowing down. Sustainable E-commerce focuses on methods to make any type of online business more environmentally sound, no matter the industry or items being sold. Several proprietors of web-based retail outlets perceive sustainability as a core principle that shapes their entire spectrum of business decisions. The initial step entails making a deliberate determination to alter the approach to conducting business, which, in turn, leads to the adoption of transparency. A fundamental method for operating a more sustainable enterprise is by practicing transparency. The business can inspire both current and potential customers by implementing sustainability measures. Analyzing the effects of e-commerce and sustainability in India is the study's main goal. In addition, to suggest the green e-commerce policies with sustainability. The researcher's literature, as well as some other secondary research sources, are examined during the research. In the end, the investigation demonstrated that green e-commerce confers benefits upon all actors involved. As a result, customers are now able to procure environmental and ethically sound products via digital merchants. Utilizing resources sustainably has positive effects on the environment, reduces worker exploitation in nations with cheap labour, and keeps you as a retailer competitive.

Keywords: Green e-commerce, Sustainable e-commerce, Environment concern, Transparency.

I. INTRODUCTION

E-commerce provides a platform for businesses and consumers to buy and sell products or services over the internet or other electronic channels. It has transformed the way businesses are conducted, while also providing new prospects for entrepreneurs and customers alike. E-commerce allows businesses to reach a global audience and sell their products or services 24/7, making it convenient for consumers to shop from anywhere at any time. It encompasses a wide range of activities, including online shopping, online banking, online ticket booking, online auctions, and online marketplaces. It involves the use of various technologies such as mobile devices, electronic payment systems, and secure communication protocols to facilitate transactions. It has experienced tremendous growth in recent years and has become an integral part of the global economy. It has created new jobs and has opened up new markets for businesses of all sizes. As the use of mobile devices and internet connectivity continues to grow, e-commerce is anticipated to expand and develop in the coming years. Companies such as E-bay, Flipkart, Amazon, Pay TM, and Snapdeal are taking advantage of this growth in connectivity to establish their presence in the e-commerce market. India has also taken note of environmental concerns and increased awareness of global warming which has led to the emergence of Green E-commerce. As a result, organizations around the world are becoming increasingly conscious of sustainability factors (social, environmental, and financial) in order to satisfy rising expectations for environmental issues.

II. MEANING OF E-COMMERCE

"E-commerce refers to the conduct of commercial transactions involving the exchange of goods or services through electronic systems, particularly the internet". It refers to the exchange of goods and services between businesses and consumers, businesses and businesses, and consumers and consumers through electronic networks, including the internet.

E-commerce can take several different forms including consumer-to-business (C2B), business-to-business (B2B), consumer-to-consumer (C2C) and business-to-consumer (B2C). With C2C e-commerce, consumers sell products or services to other consumers through online platforms or classified ads. In B2B e-commerce, businesses offer products or services to other businesses. In C2B e-commerce, consumers sell their products or services to businesses. It is enabled by various technologies, including online payment systems, secure communication protocols, and mobile devices. It allows businesses to reach a global audience and sell their products or services 24/7, making it convenient for consumers to shop from anywhere at any time. By and large, electronic commerce has transformed the manner in which enterprises function and has spawned novel prospects for both businesspersons and customers. It has become an integral part of the global economy and is expected to continue to grow and evolve in the coming years.

III. MEANING OF GREEN E-COMMERCE

"Green e-commerce, which is also referred to as eco-friendly e-commerce, pertains to the implementation of sustainable and environmentally conscious methodologies in the electronic commerce sector". Green e-commerce is a way for companies to reduce their carbon footprint, minimize waste, and promote sustainability throughout their supply chain and operations. Green e-commerce can involve various practices, such as:

1. Using renewable energy sources, such as wind or solar power, to power e-commerce infrastructure and operations.

2. Reducing the use of packaging materials and promoting the use of sustainable packaging options, such as biodegradable or recyclable materials.

3. Encouraging the reuse and recycling of packaging materials, as well as implementing programs to reduce electronic waste.

4. Promoting sustainable transportation options, such as electric or hybrid vehicles, to deliver products to customers.

5. Encouraging customers to make environmentally conscious choices by offering eco-friendly products and providing information on sustainable practices.

6. Implementing sustainable sourcing practices, such as sourcing products from local or sustainable sources, and using eco-friendly materials.

By adopting green e-commerce practices, companies can minimize their impact on the environment, reduce their carbon footprint, and promote sustainability. Additionally, green e-commerce practices can appeal to environmentally conscious consumers who prioritize sustainability in their purchasing decisions.

IV. REVIEW OF LITERATURE

Mayank and Amit (2013) found that although consumers had a high level of awareness about green products, they were not aware of the initiatives taken by non-government organizations and government, suggesting that more efforts need to be made by these organizations to reach out to consumers. **Vinay Babbar and Girish Garg (2014)** examined the current situation in the Indian market, exploring the challenges and opportunities associated with green marketing. **Angeline et al. (2014)** proposed that either a legal regulatory framework or an independent self-regulatory body should be implemented to regulate green claims in advertisements in order to prevent greenwashing. **Rina (2016)** noted that factors such as increasing fulfillment costs, lack of last-mile connectivity in rural areas, and rising reverse logistics could lead to financial losses for e-commerce firms. **K.S. Kim (2017)** discussed how interactive media has pushed boundaries in terms of technological capability, services

offered, economic gain etc. **Umar, A., & Ijaz, A.(2021)** analyzed the factors that influence green online shopping behavior among consumers. The authors propose a green e-commerce adoption model that includes three main determinants: environmental concern, perceived value, and trust. The findings of the study suggest that e-commerce businesses can encourage green online shopping by emphasizing the environmental benefits of their products, providing high-quality and valuable green products, and building trust with their customers by providing accurate and reliable information about their green products and services.

V. OBJECTIVES OF THE STUDY

1. To study the impact of green e-commerce and its sustainability in India.

2. To suggest green-e-commerce policies for the sustainability of e-commerce.

VI. IMPACT OF GREEN E-COMMERCE AND ITS SUSTAINABILITY IN INDIA

The outlook for green e-commerce is positive, as more and more consumers are becoming environmentally conscious and seeking out sustainable products and practices. As a result, businesses that prioritize sustainability in their e-commerce operations are likely to see increased demand for their products and services. Today's customers are very aware of the longevity, fairness, and sustainability of products and are willing to pay more for them as it is an added value. This has a positive effect on the environment and creates a good connection with customers, potentially leading to new customers. According to research conducted by ECC Koln, the sustainability measures taken by online stores are particularly important to those surveyed.

Green e-commerce can have a considerable beneficial impact on the environment and can encourage sustainability in various forms:

1. **Reduced carbon footprint:** Green e-commerce can reduce business carbon footprint by using eco-friendly packaging materials, optimizing shipping routes, and using electric vehicles for delivery. These practices can help reduce greenhouse gas emissions and minimize the impact of e-commerce on the environment.

2. **Reduced energy consumption:** Green e-commerce reduces energy consumption through the use of energy-efficient warehouse lighting, heating, and cooling systems.

3. **Reduced waste:** Eco-friendly packaging materials, such as biodegradable or compostable materials, can help reduce waste and promote sustainable practices. Additionally, e-commerce businesses can encourage customers to reuse or recycle packaging materials, further reducing waste.

4. **Efficient use of resources:** Green e-commerce promotes efficient use of resources through the use of recycled and eco-friendly packaging materials.

5. **Promotes sustainable products:** Green e-commerce businesses can promote sustainable products, such as those made from recycled materials or those that are designed to be reusable or long-lasting. By offering these products, they can help reduce waste and promote sustainability.

6. **Potential cost savings:** Green e-commerce can result in cost savings through reduced waste, improved energy efficiency, and lower transportation costs.

7. **Encourages eco-friendly behaviour:** Green e-commerce businesses can encourage eco-friendly behaviour by promoting sustainable practices and educating customers about the environmental impact of their choices. This can help raise awareness about sustainability and encourage more people to adopt eco-friendly practices.

8. **Encourages sustainable practices:** Green e-commerce encourages sustainable practices such as recycling, reusing, and reducing energy consumption.

9. **Other impacts:**

- Green e-commerce raises awareness about environmental issues and encourages customers to take steps to reduce their environmental impact.

- Green e-commerce helps to create a positive brand image by showing a commitment to sustainability and social responsibility.

- Green e-commerce can support local businesses that produce eco-friendly products, promoting sustainability in local economies.

Overall, green e-commerce can have a considerable beneficial impact on the environment and improve sustainability. By adopting eco-friendly practices and promoting sustainable products, e-commerce businesses can help reduce waste, and greenhouse gas emissions, and promote a more sustainable future.

VII. POLICIES FOR GREEN E-COMMERCE SUSTAINABILITY

As the world becomes more aware of the urgent need for sustainability, e-commerce companies must also do their part in reducing their environmental impact. Here are some policies that e-commerce companies can adopt to promote sustainability:

1. **Use environmentally friendly packaging:** E-commerce companies can reduce their carbon footprint by using recyclable, biodegradable packaging materials. This will help to minimize the amount of waste that ends up in oceans and landfills.

2. **Promote sustainable shipping:** E-commerce companies can encourage customers to choose sustainable shipping options such as consolidating shipments, using fuel-efficient transportation methods or choosing a carrier with a sustainable approach.

3. **Encourage responsible consumption:** Companies can encourage responsible consumption by promoting products that are sustainable, eco-friendly, and durable, as well as providing information about the environmental impact of their products.

4. **Implement a recycling program:** Companies can implement a recycling program to encourage customers to return used products for recycling or provide information on how to dispose of them properly.

5. **Offset carbon emissions:** E-commerce companies can offset their carbon emissions by supporting renewable energy projects, reforestation efforts, or purchasing carbon credits.

6. **Partner with eco-friendly suppliers:** Companies can partner with suppliers who have a proven track record of sustainability practices.

7. **Invest in sustainable technology:** E-commerce companies can invest in sustainable technology to reduce their energy consumption and carbon footprint, such as using renewable energy sources to power their warehouses.

8. **Provide sustainability education:** Companies can provide education to their employees and customers about the importance of sustainability and ways to reduce their environmental impact.

9. **E-waste management:** Governments can establish regulations for the management and disposal of e-waste to reduce the environmental impact of electronic products and encourage e-commerce companies to take responsibility for the end-of-life of their products.

By adopting these policies, e-commerce companies can take meaningful steps toward promoting sustainability and reducing their environmental impact.

VIII. CONCLUSION

E-commerce, short for electronic commerce, refers to the buying and selling of goods or services over the internet or other electronic channels. It has revolutionized the way businesses operate and has created new opportunities for both entrepreneurs and consumers. E-commerce companies have a significant impact on the environment, from the resources used to produce and ship products to the waste generated by packaging and disposal of products. To address these challenges, e-commerce companies must adopt sustainable practices that reduce their environmental impact. This includes using eco-friendly packaging, promoting sustainable shipping, and investing in renewable energy and energy-efficient technologies. Governments can also play a critical role in promoting green e-commerce and sustainability by implementing policies and regulations that incentivize sustainable practices.

By working together, e-commerce companies, consumers, and governments can create a more sustainable future for all. This requires a shift in mindset and a commitment to taking action to protect the environment and preserve our planet for future generations.

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