

Global Shifts: Commerce and Economics in the Age of Technology and Sustainability

(Volume-1)

Dr. Divya R. Panjwani

Faculty of Education, Integral University, Lucknow

Dr. Sheneela G.C

Coordinator and Assistant Professor, Department of B.Com
(Computer Applications) Loyola College -Chennai



No part of this publication may be reproduced, transmitted or stored in a retrieval system, in any form or by any means, electronic, mechanical, photocopying recording or otherwise, without the prior permission of the author.

Published by:- Book Rivers

Website: <https://www.bookrivers.com>

Email: publish@bookrivers.com

First Print Edition 2025

Copyright©: Editors

**Title: Global Shifts: Commerce and Economics in the Age of
Technology and Sustainability**

Editors: Dr. Divya R. Panjwani, Dr. Sheneela G.C

All Rights Reserved

ISBN: 978-93-6884-566-9

MRP: 399/- INR

[Printed in India]

CONTENTS

Chapter No	Chapters	Page No.
1.	Digital Trade: The Role of Blockchain and Cryptocurrencies in International Trade Payments <i>Dr. Nandini Katti</i>	1
2.	Sustainable Growth Through Green Economic Practices <i>Mr. Atul Krishna Ghadge</i>	13
3.	The Psychology of Money: How Emotions and Biases Shape Financial Decisions <i>Dr. Nazia Akhlaq</i> <i>Dr. Divya R. Panjwani</i>	26
4.	Beyond the Screen: How AR and VR Redefine Customer Interactions with Products <i>N. Balusamy</i>	34
5.	The role of english language proficiency for product visualization in AR/VR technologies <i>Dr. C. Priya</i> <i>Dr. R. Vijayalakshmi</i>	50
6.	Analyzing Consumer Engagement with Brands on Social Media Platforms <i>Dr. Harshita Sharma</i>	61
7.	Metrics and strategies to elevate customer satisfaction <i>Dr. K Selvi</i>	74
8.	The Evolution and Future of Digital Payments: Trends, Challenges, and Innovations <i>Dr. Swarnima Jaiswal</i>	86
9.	E-Commerce Fundamentals: Trends, Strategies,	96

	and Innovations <i>Dr. Suman Ramapati</i>	
10.	The Impact of Social Media Influencers on Consumer Purchase Decisions: A Study of Trust, Engagement, and Brand Loyalty in E-commerce <i>Dr. Saloni Bhasin</i>	107
11.	The Indirect Effect of Digitalization And E-Commerce On Air Pollution <i>Dr. Zia Afroz</i> <i>Aiman Siddiqui</i>	121
12.	Contemporary Shifts in Economic Policies and Practices <i>Mr. Haribhau Sama Kharat</i> <i>Mr. Atul Krishna Ghadge</i>	132
13.	Sustainability in E-Commerce <i>Dr. Pragya Dheer</i> <i>Alka Sharma</i>	142
14.	New Frontiers in Global Trade: Technology and Sustainability in Economic Transformation <i>Swati</i> <i>Satish Kumar</i>	154
15.	Social Media Shopping Trends in Urban vs. Rural Areas of India <i>Moses. J</i>	165
16.	Evolution of M-Commerce in India <i>Dr. Nazneen Chishti</i>	174
17.	Voice Assistants and Multilingual Support Bridging Communication Gaps <i>Dr. C. Priya</i> <i>Dr. R. Vijayalakshmi</i>	186
18.	A Study on Impact of Investment decisions among Individual Investors using Behavioral finance with special reference to Chennai City	203

	<i>Dr. S. Vijayalakshmi</i> <i>Dr. Nivedha V.</i>	
19.	The multifaceted influence of Social Media on Consumer Shopping behaviour <i>Dr. Jeya Hepsipa J.</i>	214
20.	The impact of Social Media on Shopping Behaviour of Consumers <i>Dr. Sunil Kumar</i> <i>Dr. Mustafa Hussain</i> <i>Dr. Aman Verma</i>	226
21.	The Impact of STEM Learning methodology and its Challenges and Opportunities in current education system <i>Dr. Sheneela G.C.</i>	239
22.	Innovations and Future Directions in Sustainable Agriculture <i>Dr. Sunil Kumar</i> <i>Dr. Aman Verma</i> <i>Dr. Mustafa Hussain</i>	249

Chapter-11

The Indirect Effect of Digitalization And E-Commerce On Air Pollution

Dr. Zia Afroz and Aiman Siddiqui

Assistant Professor and Research Scholar, Integral University

Abstract

Digitalization means 'use of online services or technology', and E-Commerce means 'online shopping'. People started using online services to save time, but the COVID-19 pandemic has pushed the sector even more. Buyers started purchasing through online portals, which created employment opportunities and increased vehicle use, which increased air pollution in urban areas. Secondly, the overuse of packaging material is also one of the causes of environmental degradation.

Vehicle pollution is more dominant among other air pollution factors due to particulate matter (PM). Particulate matter (PM) refers to air pollutants that come in various sizes, measured in micrometers (μm). These particles can pose significant health risks, especially those with smaller diameters like PM1, PM2.5, and PM10. This paper aims to study the indirect effects of digitalization and e-commerce on air pollution results from changes in transportation patterns, packaging, and consumer behavior.

Keywords: Digitalization, E-Commerce, Particulate Matter

Introduction

IQAir, 2023 report indicates that despite ongoing efforts to address air quality, India still retained 12 of Central and South Asia's 15 most polluted cities list. Approximately 60 percent of Indian cities had