

Digital Transformation and Sustainable Investment: Emerging Trends and Practices in Modern Business

For Researchers, Doctoral Scholars, Postgraduate Students
and Practitioners

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Digital Transformation and Sustainable Investment: Emerging Trends and Practices in Modern Business

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Preface

The contemporary business environment is being reshaped by two powerful and closely connected forces: digital transformation and the growing demand for sustainable investment. Digital technologies have altered the way firms operate, customers interact with businesses, financial institutions deliver services, and investors obtain and evaluate information. At the same time, environmental pressures, social expectations, governance concerns and regulatory developments have expanded the meaning of long-term value creation. Investment decisions are increasingly expected to consider not only financial return and risk, but also the sustainability characteristics of the activities financed.

This book examines the intersection of these developments. It treats digital transformation not merely as the adoption of software or electronic channels, but as a strategic capability involving data, analytics, artificial intelligence, platforms, organisational change and governance. Sustainable investment is considered as a broad family of practices that includes ESG integration, green finance, climate-oriented investment, impact investment and sustainability-linked financial instruments. The central proposition is that digital capabilities can strengthen sustainable investment by improving information quality, analytical capacity, transparency, accessibility and monitoring. At the same time, technology can introduce new risks, including algorithmic bias, cybersecurity threats, privacy concerns, digital exclusion, greenwashing and the environmental footprint of computing.

The book is designed for researchers, doctoral scholars, postgraduate students, faculty members, financial professionals, managers and policy makers. It combines conceptual discussion, recent literature, practical examples, theoretical perspectives, a proposed conceptual framework and a research agenda. The evidence base has been updated with recent 2026 studies, including systematic reviews of digital finance and sustainable development, AI in sustainable green finance, FinTech and ESG, and regulatory conditions affecting digital-finance sustainability outcomes. These studies show that the field is developing rapidly and that the effects of digital finance depend strongly on institutional and regulatory conditions.

The manuscript should be professionally copy-edited and similarity-checked before commercial publication. Readers should also verify current regulations, standards and market statistics because digital finance and sustainability disclosure requirements evolve quickly.

Authors

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Abstract

Digital transformation is changing the architecture of modern business and financial markets, while sustainable investment is redefining how capital allocation is evaluated. This book develops an integrated perspective on the relationship between digital technologies and sustainable investment. It examines artificial intelligence, machine learning, big data analytics, FinTech, blockchain, Internet of Things applications, robo-advisory, digital investment platforms, cloud computing and regulatory technology, and considers how these tools influence ESG assessment, climate-risk analysis, green finance, investor decision-making and corporate sustainability. The book argues that digital transformation can improve sustainable investment through better information quality, faster analytics, broader access, lower transaction costs, enhanced transparency and continuous monitoring. However, digitalisation does not automatically produce sustainability. Algorithmic bias, data quality problems, cybersecurity, privacy risks, digital exclusion, greenwashing, regulatory fragmentation and the energy requirements of advanced computing can weaken or reverse positive outcomes. Recent reviews support this balanced position: digital finance has potential to contribute to sustainable development, while AI can strengthen risk analytics, investment management and ESG evaluation but requires responsible governance. The book proposes a conceptual framework in which digital transformation capability influences sustainable investment through information quality, analytical capability, accessibility, transparency and investor confidence, with governance and regulatory support acting as moderating conditions. It concludes with managerial implications, policy recommendations, research gaps and directions for future empirical research.

Keywords: digital transformation; sustainable investment; sustainable finance; FinTech; ESG; artificial intelligence; big data; blockchain; green finance; investor behaviour; digital platforms; governance.

Table of Contents

Preface.....	iii
Abstract.....	iv
Chapter 1: Introduction to Digital Transformation and Sustainable Investment.....	1
1.1 Concept and Scope	1
1.2 Evolution and Current Context	1
1.3 Key Components	2
1.4 Strategic Importance	3
1.5 Applications in Business and Investment.....	3
1.6 Opportunities and Value Creation.....	4
1.7 Risks and Governance.....	5
1.8 Evidence from Recent Research	5
1.9 Managerial Interpretation.....	6
1.10 Chapter Synthesis and Questions	6
Chapter Summary.....	7
Review Questions.....	7
Chapter 2: Digital Transformation in Modern Business.....	8
2.1 Concept and Scope	8
2.2 Evolution and Current Context	8
2.3 Key Components	9
2.4 Strategic Importance	10
2.5 Applications in Business and Investment.....	10
2.6 Opportunities and Value Creation.....	11
2.7 Risks and Governance.....	12
2.8 Evidence from Recent Research	12
2.9 Managerial Interpretation.....	13
2.10 Chapter Synthesis and Questions	13
Chapter Summary.....	14
Review Questions.....	14
Chapter 3: Sustainable Investment: Concepts, Evolution and Principles	15
3.1 Concept and Scope	15
3.2 Evolution and Current Context	15

3.3 Key Components	16
3.4 Strategic Importance	17
3.5 Applications in Business and Investment.....	17
3.6 Opportunities and Value Creation.....	18
3.7 Risks and Governance	19
3.8 Evidence from Recent Research	19
3.9 Managerial Interpretation.....	20
3.10 Chapter Synthesis and Questions	20
Chapter Summary.....	21
Review Questions.....	21
Chapter 4: The Relationship Between Digital Transformation and Sustainable Investment ..	22
4.1 Concept and Scope	22
4.2 Evolution and Current Context	22
4.3 Key Components	23
4.4 Strategic Importance	24
4.5 Applications in Business and Investment.....	24
4.6 Opportunities and Value Creation.....	25
4.7 Risks and Governance	26
4.8 Evidence from Recent Research	26
4.9 Managerial Interpretation.....	27
4.10 Chapter Synthesis and Questions	27
Chapter Summary.....	28
Review Questions.....	28
Chapter 5: Emerging Digital Technologies in Investment	29
5.1 Concept and Scope	29
5.2 Evolution and Current Context	29
5.3 Key Components	30
5.4 Strategic Importance	31
5.5 Applications in Business and Investment.....	31
5.6 Opportunities and Value Creation.....	32
5.7 Risks and Governance	32
5.8 Evidence from Recent Research	33

5.9 Managerial Interpretation	34
5.10 Chapter Synthesis and Questions	34
Chapter Summary.....	35
Review Questions.....	35
Chapter 6: ESG and Sustainable Investment	36
6.1 Concept and Scope	36
6.2 Evolution and Current Context	36
6.3 Key Components	37
6.4 Strategic Importance	38
6.5 Applications in Business and Investment.....	38
6.6 Opportunities and Value Creation.....	39
6.7 Risks and Governance	40
6.8 Evidence from Recent Research	40
6.9 Managerial Interpretation.....	41
6.10 Chapter Synthesis and Questions	41
Chapter Summary.....	42
Review Questions.....	42
Chapter 7: Digital Transformation and Investor Decision-Making.....	43
7.1 Concept and Scope	43
7.2 Evolution and Current Context	43
7.3 Key Components	44
7.4 Strategic Importance	45
7.5 Applications in Business and Investment.....	45
7.6 Opportunities and Value Creation.....	46
7.7 Risks and Governance	47
7.8 Evidence from Recent Research	47
7.9 Managerial Interpretation.....	48
7.10 Chapter Synthesis and Questions	48
Chapter Summary.....	49
Review Questions.....	49
Chapter 8: Emerging Trends in Sustainable Investment.....	50
8.1 Concept and Scope	50

8.2 Evolution and Current Context	50
8.3 Key Components	51
8.4 Strategic Importance	52
8.5 Applications in Business and Investment.....	52
8.6 Opportunities and Value Creation.....	53
8.7 Risks and Governance	53
8.8 Evidence from Recent Research	54
8.9 Managerial Interpretation	55
8.10 Chapter Synthesis and Questions	55
Chapter Summary.....	56
Review Questions.....	56
Chapter 9: Benefits of Digital Transformation for Sustainable Investment	57
9.1 Concept and Scope	57
9.2 Evolution and Current Context	57
9.3 Key Components	58
9.4 Strategic Importance	59
9.5 Applications in Business and Investment.....	59
9.6 Opportunities and Value Creation.....	60
9.7 Risks and Governance	60
9.8 Evidence from Recent Research	61
9.9 Managerial Interpretation	62
9.10 Chapter Synthesis and Questions	62
Chapter Summary.....	63
Review Questions.....	63
Chapter 10: Challenges, Risks and Ethical Issues	64
10.1 Concept and Scope	64
10.2 Evolution and Current Context	64
10.3 Key Components	65
10.4 Strategic Importance	66
10.5 Applications in Business and Investment.....	66
10.6 Opportunities and Value Creation.....	67
10.7 Risks and Governance	67

10.8 Evidence from Recent Research	68
10.9 Managerial Interpretation	69
10.10 Chapter Synthesis and Questions	69
Chapter Summary.....	70
Review Questions.....	70
Chapter 11: Theoretical Perspectives.....	71
11.1 Concept and Scope	71
11.2 Evolution and Current Context	71
11.3 Key Components	72
11.4 Strategic Importance	73
11.5 Applications in Business and Investment.....	73
11.6 Opportunities and Value Creation.....	74
11.7 Risks and Governance	74
11.8 Evidence from Recent Research	75
11.9 Managerial Interpretation	76
11.10 Chapter Synthesis and Questions	76
Chapter Summary.....	77
Review Questions.....	77
Chapter 12: Conceptual Framework	78
12.1 Concept and Scope	78
12.2 Evolution and Current Context	78
12.3 Key Components	79
12.4 Strategic Importance	80
12.5 Applications in Business and Investment.....	80
12.6 Opportunities and Value Creation.....	81
12.7 Risks and Governance	81
12.8 Evidence from Recent Research	82
12.9 Managerial Interpretation	83
12.10 Chapter Synthesis and Questions	83
Chapter Summary.....	84
Review Questions.....	84
Chapter 13: Managerial and Policy Implications.....	85

13.1 Concept and Scope	85
13.2 Evolution and Current Context	85
13.3 Key Components	86
13.4 Strategic Importance	87
13.5 Applications in Business and Investment.....	87
13.6 Opportunities and Value Creation.....	88
13.7 Risks and Governance	88
13.8 Evidence from Recent Research	89
13.9 Managerial Interpretation.....	90
13.10 Chapter Synthesis and Questions	90
Chapter Summary.....	91
Review Questions.....	91
Chapter 14: Research Gaps and Future Research Directions	92
14.1 Concept and Scope	92
14.2 Evolution and Current Context	92
14.3 Key Components	93
14.4 Strategic Importance	94
14.5 Applications in Business and Investment.....	94
14.6 Opportunities and Value Creation.....	95
14.7 Risks and Governance	95
14.8 Evidence from Recent Research	96
14.9 Managerial Interpretation.....	97
14.10 Chapter Synthesis and Questions	97
Chapter Summary.....	98
Review Questions.....	98
Chapter 15: Conclusion.....	99
15.1 Concept and Scope	99
15.2 Evolution and Current Context	99
15.3 Key Components	100
15.4 Strategic Importance	101
15.5 Applications in Business and Investment.....	101
15.6 Opportunities and Value Creation.....	102