

THE INFORMATION AGE:
ECONOMY, SOCIETY, AND CULTURE
VOLUME I

THE RISE OF THE NETWORK SOCIETY

SECOND
EDITION



WITH A NEW PREFACE

Manuel Castells

 WILEY-BLACKWELL

Contents

List of Figures	xii
List of Tables	xiv
Preface to the 2010 Edition of <i>The Rise of the Network Society</i>	xvii
Acknowledgments 2000	xliv
Acknowledgments 1996	lv
Prologue: the Net and the Self	1
Technology, Society, and Historical Change	5
Informationalism, Industrialism, Capitalism, Statism:	
Modes of Development and Modes of Production	13
<i>Informationalism and capitalist perestroika</i>	18
The Self in the Informational Society	21
A Word on Method	25
1 The Information Technology Revolution	28
Which Revolution?	28
Lessons from the Industrial Revolution	33
The Historical Sequence of the Information Technology	
Revolution	38
<i>Micro-engineering macro-changes: electronics and</i>	
<i>information</i>	39
<i>The creation of the Internet</i>	45

<i>Network technologies and pervasive computing</i>	51
<i>The 1970s' technological divide</i>	53
<i>Technologies of life</i>	54
<i>Social context and the dynamics of technological change</i>	59
Models, Actors, and Sites of the Information Technology Revolution	61
The Information Technology Paradigm	69
2 The New Economy: Informationalism, Globalization, Networking	77
Productivity, Competitiveness, and the Informational Economy	78
<i>The productivity enigma</i>	78
<i>Is knowledge-based productivity specific to the informational economy?</i>	80
<i>Informationalism and capitalism, productivity and profitability</i>	94
<i>The historical specificity of informationalism</i>	99
The Global Economy: Structure, Dynamics, and Genesis	101
<i>Global financial markets</i>	102
<i>Globalization of markets for goods and services: growth and transformation of international trade</i>	106
<i>Globalization versus regionalization</i>	110
<i>The internationalization of production: multinational corporations and international production networks</i>	116
<i>Informational production and selective globalization of science and technology</i>	124
<i>Global labor?</i>	130
<i>The geometry of the global economy: segments and networks</i>	132
<i>The political economy of globalization: capitalist restructuring, information technology, and state policies</i>	135
The New Economy	147
3 The Network Enterprise: the Culture, Institutions, and Organizations of the Informational Economy	163
Organizational Trajectories in the Restructuring of Capitalism and in the Transition from Industrialism to Informationalism	164

<i>From mass production to flexible production</i>	166
<i>Small business and the crisis of the large corporation: myth and reality</i>	167
<i>"Toyotism": management-worker cooperation, multifunctional labor, total quality control, and reduction of uncertainty</i>	169
<i>Inter-firm networking</i>	172
<i>Corporate strategic alliances</i>	174
<i>The horizontal corporation and global business networks</i>	176
<i>The crisis of the vertical corporation model and the rise of business networks</i>	178
<i>Networking the networks: the Cisco model</i>	180
<i>Information Technology and the Network Enterprise</i>	184
<i>Culture, Institutions, and Economic Organization: East Asian Business Networks</i>	188
<i>A typology of East Asian business networks</i>	189
<i>Japan</i>	190
<i>Korea</i>	191
<i>China</i>	193
<i>Culture, organizations, and institutions: Asian business networks and the developmental state</i>	195
<i>Multinational Enterprises, Transnational Corporations, and International Networks</i>	206
<i>The Spirit of Informationalism</i>	210
 4 The Transformation of Work and Employment: Networkers, Jobless, and Flex-timers	 216
<i>The Historical Evolution of Employment and Occupational Structure in Advanced Capitalist Countries: the G-7, 1920-2005</i>	217
<i>Post-industrialism, the service economy, and the informational society</i>	218
<i>The transformation of employment structure, 1920-1970 and 1970-1990</i>	224
<i>The new occupational structure</i>	232
<i>The maturing of the informational society: employment projections into the twenty-first century</i>	237
<i>Summing up: the evolution of employment structure and its implications for a comparative analysis of the informational society</i>	243

Is There a Global Labor Force?	247
The Work Process in the Informational Paradigm	255
The Effects of Information Technology on Employment: Toward a Jobless Society?	267
Work and the Informational Divide: Flex-timers	281
Information Technology and the Restructuring of Capital-Labor Relations: Social Dualism or Fragmented Societies?	296
Appendix A: Statistical Tables for Chapter 4	303
Appendix B: Methodological Note and Statistical References	338
5 The Culture of Real Virtuality: the Integration of Electronic Communication, the End of the Mass Audience, and the Rise of Interactive Networks	355
From the Gutenberg Galaxy to the McLuhan Galaxy: the Rise of Mass Media Culture	358
The New Media and the Diversification of Mass Audience	365
Computer-mediated Communication, Institutional Control, Social Networks, and Virtual Communities	371
<i>The Minitel story: l'état et l'amour</i>	372
<i>The Internet constellation</i>	375
<i>The interactive society</i>	385
The Grand Fusion: Multimedia as Symbolic Environment	394
The Culture of Real Virtuality	403
6 The Space of Flows	407
Advanced Services, Information Flows, and the Global City	409
The New Industrial Space	417
Everyday Life in the Electronic Cottage: the End of Cities?	424
The Transformation of Urban Form: the Informational City	429
<i>America's last suburban frontier</i>	429
<i>The fading charm of European cities</i>	431
<i>Third millennium urbanization: mega-cities</i>	434
The Social Theory of Space and the Theory of the Space of Flows	440
The Architecture of the End of History	448
Space of Flows and Space of Places	453

7 The Edge of Forever: Timeless Time	460
Time, History, and Society	461
Time as the Source of Value: the Global Casino	465
Flex-time and the Network Enterprise	467
The Shrinking and Twisting of Life Working Time	468
The Blurring of the Life-cycle: Toward Social Arrhythmia?	475
Death Denied	481
Instant Wars	484
Virtual Time	491
Time, Space, and Society: the Edge of Forever	494
Conclusion: the Network Society	500
Summary of the Contents of Volumes II and III	510
Bibliography	512
Index	566