The Economics of Technological Diffusion

Paul Stoneman Warwick Business School

BLACKWELL

Contents

List of Figures	vii
List of Tables ",	viii
Preface <	х
Part I: Introduction and Empirical Observations on the Diffusion Process	1
1 By Way of an Introduction and Guide	3
2 Empirical Patterns in the Diffusion of Innovations	12
Part II: The Theory of Technological Diffusion	27
3 The Intertemporal Demand for Stand-Alone Technologies	29
4 Risk and Uncertainty	55
5 Multiple Technologies, Complementary Inputs, Network Externalities	
and General Purpose Technologies	67
6 The Supply Side	78
Part III: Empirical Analysis of the Diffusion of New Technology	93
7 Empirical Analysis: An Overview	95
8 Rank, Stock, Order and Epidemic Effects in the Diffusion of New Process	
Technologies: An Empirical Model	106
9 The Diffusion of Multiple Process Technologies	136
10 Testing Alternative Models of New Product Diffusion	148

Part	IV: Diffusion Policy	173
°11	Diffusion Policy: An Introduction	175
°12	Technology Diffusion and Public Policy	178
13	Technological Diffusion, Expectations and Welfare	190
X14	Adoption Subsidies vs Information Provision as Instruments of Technology Policy	210
15	The Role of Regulation, Fiscal Incentives and Changes in Tastes in the Diffusion of Unleaded Petrol	219
Part	V: Extensions, Applications and Implications	247
16	Diffusion Analysis: The Wider Implications	249
17	Technology Adoption and Firm Profitability	257
	•	-
18	Technology Adoption and Firm Profitability	257

307