

Contents

<i>List of Case Illustrations</i>	<i>xiii</i>
<i>Preface</i>	<i>xv</i>
Chapter 1 ELEMENTS OF DIFFUSION	1
WHAT IS DIFFUSION?	5
FOUR MAIN ELEMENTS IN THE DIFFUSION OF INNOVATIONS	10
1. <i>The Innovation</i>	11
2. <i>Communication Channels</i>	17
3. <i>Time</i>	20
4. <i>A Social System</i>	24
SUMMARY	34
Chapter 2 A HISTORY OF DIFFUSION RESEARCH	38
THE BEGINNINGS OF DIFFUSION RESEARCH IN EUROPE	40
<i>Gabriel Tarde and The Laws of Imitation</i>	40
<i>The British and German-Austrian Diffusionists</i>	41
THE RISE OF DIFFUSION RESEARCH TRADITIONS.	42
<i>Paradigms and Invisible Colleges</i>	43
<i>The Anthropology Research Tradition</i>	46
<i>Early Sociology</i>	50
<i>Rural Sociology</i>	51
<i>Education</i>	62
<i>Public Health and Medical Sociology</i>	65
<i>Communication</i>	72
<i>Marketing</i>	74
<i>Geography</i>	77
<i>General Sociology</i>	78

A TYPOLOGY OF DIFFUSION RESEARCH	79
SUMMARY	85
Chapter 3 CONTRIBUTIONS AND CRITICISMS OF DIFFUSION RESEARCH.....	87
THE CONTRIBUTIONS AND STATUS OF DIFFUSION RESEARCH TODAY	88
CRITICISMS OF DIFFUSION RESEARCH	91
<i>The Pro-Innovation Bias of Diffusion Research</i>	92
<i>The Individual-Blame Bias in Diffusion Research</i>	103
<i>The Recall Problem in Diffusion Research</i>	112
<i>The Issue of Equality in the Diffusion of Innovations</i>	118
GENERALIZING ABOUT DIFFUSION VIA META-RESEARCH	126
<i>Relating Theory and Research at the Middle Range</i>	128
<i>The Oversimplification of Two-Concept Generalizations</i> ..	130
<i>The Reliability of Diffusion Generalizations</i>	131
SUMMARY	133
Chapter 4 THE GENERATION OF INNOVATIONS ...	134
THE INNOVATION-DEVELOPMENT PROCESS.....	135
1. <i>Recognizing a Problem or Need</i>	135
2. <i>Basic and Applied Research</i>	138
3. <i>Development</i>	139
4. <i>Commercialization</i>	143
5. <i>Diffusion and Adoption</i>	144
6. <i>Consequences</i>	149
SOCIOECONOMIC STATUS, EQUALITY, AND INNOVATION DEVELOPMENT	153
TRACING THE INNOVATION-DEVELOPMENT PROCESS	155
<i>Shortcomings of the Tracer Studies</i>	157
<i>Questions for Future Research</i>	157
CONVERTING RESEARCH INTO PRACTICE.....	158
<i>The Agricultural Extension Model</i>	159
<i>Decentralized Diffusion Systems</i>	160
SUMMARY	161

Chapter 5 THE INNOVATION-DECISION PROCESS .. 163

A MODEL OF THE INNOVATION-DECISION PROCESS 163

KNOWLEDGE STAGE..... 164

Which Comes First, Needs or Awareness of an Innovation? 164

Types of Knowledge about an Innovation 167

Early Versus Late Knowers of Innovations 168

PERSUASION STAGE 169

DECISION STAGE 172

IMPLEMENTATION STAGE..... 174

The End of Implementation 175

Re-Invention 175

CONFIRMATION STAGE..... 184

Dissonance..... 185

Discontinuance 186

ARE THERE STAGES IN THE PROCESS?..... 191

Evidence of the Stages 192

Variance and Process Research 194

COMMUNICATION CHANNELS BY STAGES IN THE INNOVATION-DECISION PROCESS 197

Categorizing Communication Channels 197

Mass Media Versus Interpersonal Channels 198

Cosmopolite Versus Localite Channels 200

COMMUNICATION CHANNELS BY ADOPTER CATEGORIES 201

THE INNOVATION-DECISION PERIOD 202

Rate of Awareness-Knowledge and Rate of Adoption 202

Length of the Period by Adopter Category 203

SUMMARY 206

Chapter 6 ATTRIBUTES OF INNOVATIONS AND THEIR RATE OF ADOPTION 210

ATTRIBUTES OF INNOVATIONS 211

RELATIVE ADVANTAGE..... 213

Economic Factors and Rate of Adoption 214

Status Aspects of Innovations..... 215

<i>Relative Advantage and Rate of Adoption</i>	217
<i>Effects of Incentives</i>	219
COMPATIBILITY	223
<i>Compatibility with Values and Beliefs</i>	223
<i>Compatibility with Previously Introduced Ideas</i>	224
<i>Compatibility with Needs</i>	225
<i>Compatibility and Rate of Adoption</i>	226
<i>Technology Clusters</i>	226
<i>Naming an Innovation</i>	227
<i>Positioning an Innovation</i>	228
COMPLEXITY	230
TRIALABILITY	231
OBSERVABILITY	232
EXPLAINING RATE OF ADOPTION	232
THE DIFFUSION EFFECT	234
OVERADOPTION	236
SUMMARY	238
Chapter 7 INNOVATIVENESS AND ADOPTER CATEGORIES	241
CLASSIFYING ADOPTER CATEGORIES ON THE BASIS OF INNOVATIVENESS	242
<i>The S-Curve of Adoption and Normality</i>	243
<i>The Method of Adopter Categorization</i>	245
ADOPTER CATEGORIES AS IDEAL TYPES	247
<i>Innovators: Venturesome</i>	248
<i>Early Adopters: Respectable</i>	248
<i>Early Majority: Deliberate</i>	249
<i>Late Majority: Skeptical</i>	249
<i>Laggards: Traditional</i>	250
CHARACTERISTICS OF ADOPTER CATEGORIES	251
<i>Socioeconomic Characteristics</i>	251
<i>Personality Variables</i>	257
<i>Communication Behavior</i>	258
<i>A Summary of the Characteristics of Adopter Categories</i>	259
<i>The Innovativeness-Needs Paradox</i>	263
PREDICTING INNOVATIVENESS WITH MULTIPLE CORRELATION TECHNIQUES	265

COMPUTER SIMULATION OF INNOVATION
 DIFFUSION..... 267
 SUMMARY 268

**Chapter 8 OPINION LEADERSHIP AND
 DIFFUSION NETWORKS 271**

MODELS OF MASS-COMMUNICATION FLOWS 272
 Hypodermic Needle Model 272
 The Two-Step Flow Model 272
 HOMOPHILY-HETEROPHILY AND THE FLOW OF
 COMMUNICATION 274
 Homophily-Heterophily 274
 Homophily as a Barrier to Diffusion 275
 MEASURING OPINION LEADERSHIP AND
 NETWORK LINKS 277
 CHARACTERISTICS OF OPINION LEADERS 281
 External Communication 282
 Accessibility 282
 Socioeconomic Status 282
 Innovativeness 284
 *Innovativeness, Opinion Leadership, and
 System Norms*..... 284
 MONOMORPHIC AND POLYMORPHIC OPINION
 LEADERSHIP..... 288
 DIFFUSION NETWORKS..... 293
 Communication Network Analysis 294
 The-Strength-of-Weak-Ties 295
 Who Is Linked to Whom in Networks? 299
 SOCIAL LEARNING THEORY 304
 Contrasting Social Learning and Diffusion..... 305
 Horizons for Social Modeling..... 307
 SUMMARY 307

Chapter 9 THE CHANGE AGENT 312

CHANGE AGENTS AS LINKERS..... 313
 THE SEQUENCE OF CHANGE AGENT ROLES 315

FACTORS IN CHANGE AGENT SUCCESS	317
<i>Change Agent Effort</i>	317
<i>Change Agency Versus Client Orientation</i>	318
<i>Compatibility with Clients' Needs</i>	319
<i>Change Agent Empathy</i>	321
HOMOPHILY AND CHANGE AGENT CONTACT	321
<i>Change Agent Contact with Lower-Status Clients</i>	323
<i>Paraprofessional Aides</i>	325
<i>Change Agent Credibility</i>	328
<i>Inauthentic Professionalization of Aides</i>	331
OPINION LEADERS	331
CLIENTS' EVALUATIVE ABILITY	332
CENTRALIZED AND DECENTRALIZED DIFFUSION SYSTEMS	333
<i>The Classical Diffusion Model</i>	333
<i>Comparing Centralized Versus Decentralized Diffusion Systems</i>	334
<i>Advantages and Disadvantages of Decentralized Diffusion</i>	337
SUMMARY	343
Chapter 10 INNOVATION IN ORGANIZATIONS	347
ORGANIZATIONS	348
ORGANIZATIONAL INNOVATIVENESS	355
<i>Shortcomings of Organizational Innovativeness Studies</i>	356
<i>Size and Organizational Innovativeness</i>	358
<i>Structural Characteristics and Organizational Innovativeness</i>	359
STAGES IN THE INNOVATION PROCESS IN ORGANIZATIONS	361
<i>A Model of the Innovation Process in Organizations</i>	362
<i>Time Sequence of the Stages in the Innovation Process</i>	365
SUMMARY	370
Chapter 11 CONSEQUENCES OF INNOVATIONS	371
A MODEL FOR STUDYING CONSEQUENCES	375
WHY HAVEN'T CONSEQUENCES BEEN STUDIED MORE?	375

CLASSIFICATIONS OF CONSEQUENCES.....	379
<i>Desirable Versus Undesirable Consequences</i>	380
<i>Direct Versus Indirect Consequences</i>	384
<i>Anticipated Versus Unanticipated Consequences</i>	387
EQUALITY IN THE CONSEQUENCES OF INNOVATIONS.....	391
<i>The Issue of Equality in Development Programs</i>	392
<i>The Communication Effects Gap and the Consequences of Diffusion</i>	394
<i>Gap-Widening Consequences of the Adoption of Innovations</i>	398
<i>Social Structure and the Equality of Consequences</i>	401
<i>Strategies for Narrowing Gaps</i>	403
<i>Wider Gaps Are Not Inevitable</i>	408
SUMMARY AND CONCLUSIONS.....	410
<i>Bibliography</i>	414
<i>Name Index</i>	441
<i>Subject Index</i>	447