

Methods and Techniques for Studying Virtual Communities

Paradigms and Phenomena

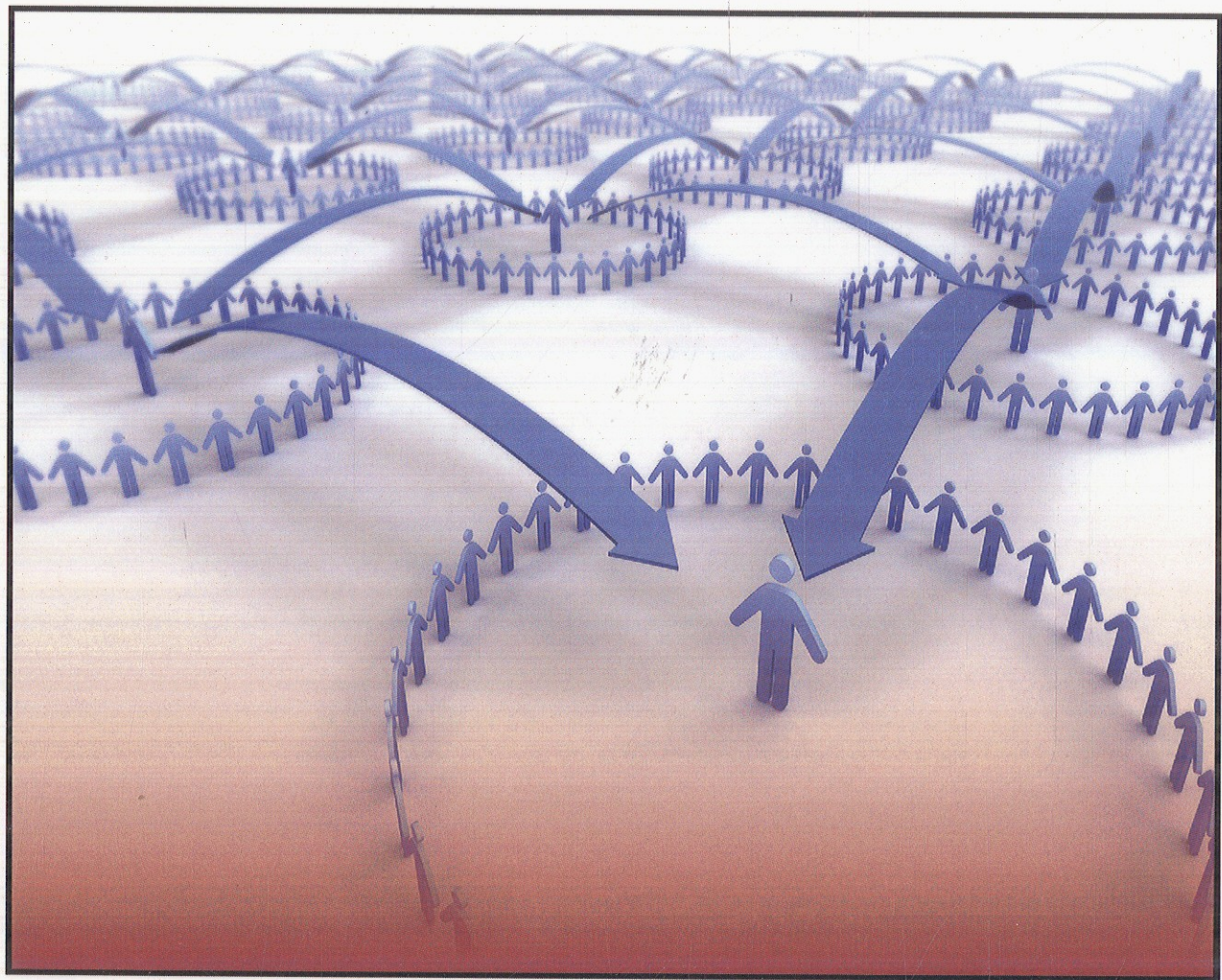


Table of Contents

Foreword.....	xxxii
Preface.....	xxxiv
Acknowledgment.....	xxxvi

Volume I

Section 1 Introduction to Virtual Communities

Chapter 1

Introduction to this Volume.....	1
<i>Ben Kei Daniel, University of Saskatchewan and Saskatoon Health Region, Canada</i>	

Chapter 2

GEEK: Analyzing Online Communities for Expertise Information.....	10
<i>Lian Shi, Parque Científico Tecnológico de Gijón Edificio Centros Tecnológicos, Spain</i>	
<i>Diego Berrueta, Parque Científico Tecnológico de Gijón Edificio Centros Tecnológicos, Spain</i>	
<i>Sergio Fernández, Parque Científico Tecnológico de Gijón Edificio Centros Tecnológicos, Spain</i>	
<i>Luis Polo, Parque Científico Tecnológico de Gijón Edificio Centros Tecnológicos, Spain</i>	
<i>Iván Mínguez, Parque Científico Tecnológico de Gijón Edificio Centros Tecnológicos, Spain</i>	
<i>Emilio Rubiera, Parque Científico Tecnológico de Gijón Edificio Centros Tecnológicos, Spain</i>	
<i>Silvino Fernández, Parque Científico Tecnológico de Gijón Edificio Centros Tecnológicos, Spain</i>	

Chapter 3

Recurrent Interactions, Acts of Communication and Emergent Social Practice in Virtual Community Settings	34
<i>Demosthenes Akoumianakis, Technological Education Institution of Crete, Greece</i>	

Chapter 4

Toward Diversity in Researching Teaching and Technology Philosophies-in-Practice in e-Learning Communities	61
<i>Gale Parchoma, Centre for Studies in Advanced Learning Technologies (CSALT) & Lancaster University, UK</i>	

Section 2

Social Networks and Data Mining

Chapter 5

Data Mining Techniques for Communities' Detection in Dynamic Social Networks	88
<i>Céline Robardet, Université de Lyon, France</i>	

Chapter 6

A Methodological Approach for Blended Communities: Social Network Analysis and Positioning Network Analysis.....	103
<i>Susan Annese, University of Bari, Italy</i>	
<i>Marta Traetta, University of Bari, Italy</i>	

Chapter 7

Semantic Social Network Analysis: A Concrete Case	122
<i>Guillaume Erétéo, Orange Labs, France</i>	
<i>Freddy Limpens, EDELWEISS, INRIA Sophia-Antipolis, France</i>	
<i>Fabien Gandon, EDELWEISS, INRIA Sophia-Antipolis, France</i>	
<i>Olivier Corby, EDELWEISS, INRIA Sophia-Antipolis, France</i>	
<i>Michel Buffa, University of Nice Sophia Antipolis, France</i>	
<i>Mylène Leitzelman, University of Nice Sophia Antipolis, France</i>	
<i>Peter Sander, University of Nice Sophia Antipolis, France</i>	

Chapter 8

Using Social Network Analysis to Guide Theoretical Sampling in an Ethnographic Study of a Virtual Community	157
<i>Enrique Murillo, Instituto Tecnológico Autónomo de México – ITAM, Mexico</i>	

Section 3

Tools and Techniques for Analysis and Building of Virtual Communities

Chapter 9

Graphically Mapping Electronic Discussions: Understanding Online Conversational Dynamic	176
<i>Jennifer Howell, Australian Catholic University Limited, Australia</i>	

Chapter 10

A Tool to Study the Evolution of the Domain of a Distributed Community of Practice 192

Gilson Yukio Sato, Federal University of Technology - Paraná, Brazil

Hilton José Silva de Azevedo, Federal University of Technology - Paraná, Brazil

Jean-Paul Barthès, Université de Technologie de Compiègne, France

Chapter 11

Exploring Virtual Communities with the Internet Community Text Analyzer (ICTA) 205

Anatoliy Gruz, Dalhousie University, Canada

Chapter 12

Making the Virtual Real: Using Virtual Learning Communities for Research in

Technical Writing 224

*Reneta D. Lansiquot, New York City College of Technology of the City University of New York,
USA*

Chapter 13

Virtual Communities as Tools to Support Teaching Practicum: Putting Bourdieu on Facebook 233

Rebecca English, Queensland University of Technology, Australia

Jennifer Howell, Australian Catholic University Limited, Australia

Chapter 14

Conversation Analysis as a Tool to Understand Online Social Encounters 248

Aik-Ling Tan, Nanyang Technological University, Singapore

Seng-Chee Tan, Nanyang Technological University, Singapore

Section 4

Data and User Modelling

Chapter 15

Modeling the Diversity of User Behavior in Online Communities 268

Tad Hogg, Hewlett-Packard Laboratories, USA

Gabor Szabo, Hewlett-Packard Laboratories, USA

Chapter 16

Context and Explanation in e-Collaborative Work 285

Patrick Brézillon, University Paris 6 (UPMC), France

Chapter 17

Intelligent LMS with an Agent that Learns from Log Data in a Virtual Community 303

Maomi Ueno, The University of Electro-Communications, Japan

Chapter 18

- A Computational Model of Social Capital in Virtual Communities 318
Ben Kei Daniel, University of Saskatchewan and Saskatoon Health Region, Canada

Section 5

Methods, Measurements and Matrices

Chapter 19

- A Beginner's Guide to Geographic Virtual Communities Research 333
Brent Hecht, Northwestern University, USA
Darren Gergle, Northwestern University, USA

Chapter 20

- A Theoretical Method of Measuring Virtual Community Health and the Health of
their Operating Environment in a Business Setting 348
Brent Robertson, Sancor, Canada

Chapter 21

- Building Web Communities: An Example Methodology 359
Jan Isakovič, Artesia, Slovenia
Alja Sulčič, Artesia, Slovenia

Chapter 22

- Virtual Geodemographics: Consumer Insight in Online and Offline Spaces 370
Alex D. Singleton, University of Liverpool, UK

Chapter 23

- Development of Cellular Phone Software to Prompt Learners to Monitor and
Reorganize Division of Labor in Project-Based Learning 381
Toshio Mochizuki, Senshu University, Japan
Kazaru Yaegashi, Ritsumeikan University, Japan
Hiroshi Kato, The Open University of Japan, Japan
Toshihisa Nishimori, The University of Tokyo, Japan
Yusuke Nagamori, Tsukuba University of Technology, Japan
Shinobu Fujita, Spiceworks Corporation, Japan

Chapter 24

- Mathematical Retrieval Techniques for Online Mathematics Learning 394
Le Van Tien, Hochiminh City University of Technology, Vietnam
Quan Thanh Tho, Hochiminh City University of Technology, Vietnam
Hui Siu Cheung, Nanyang Technological University, Singapore

Chapter 25

- Online Ethnographic Methods: Towards a Qualitative Understanding of Virtual
Community Practices 410
Jörgen Skågeby, Linköping University, Sweden

Volume II

Chapter 26

- Understanding Online Communities by Using Semantic Web Technologies..... 429
Alexandre Passant, National University of Ireland-Galway, Ireland
Sheila Kinsella, National University of Ireland-Galway, Ireland
Uldis Bojars, National University of Ireland-Galway, Ireland
John G. Breslin, National University of Ireland-Galway, Ireland
Stefan Decker, National University of Ireland-Galway, Ireland

Chapter 27

- Understanding and Using Virtual Ethnography in Virtual Environments 457
Robert Hancock, Southeastern Louisiana University, USA
Mindy Crain-Dorough, Southeastern Louisiana University, USA
Becky Parton, Southeastern Louisiana University, USA
Jeff Oescher, Southeastern Louisiana University, USA

Chapter 28

- Participant-Observation as a Method for Analyzing Avatar Design in User-Generated
Virtual Worlds 469
Jeremy O. Turner, Simon Fraser University Surrey, Canada
Janet McCracken, Simon Fraser University Surrey, Canada
Jim Bizzocchi, Simon Fraser University Surrey, Canada

Chapter 29

- Participatory Design Experiment: Storytelling Swarm in Hybrid Narrative Ecosystem..... 482
Kai Pata, Tallinn University, Estonia

Chapter 30

- Researching Community in Distributed Environments: Approaches for Studying
Cross-Blog Interactions 509
Vanessa P. Dennen, Florida State University, USA
Jennifer B. Myers, Florida State University, USA
Christie L. Suggs, Florida State University, USA

Chapter 31

- Methods for the Measurement and Visualization of Social Networks in
Multi-User Virtual Worlds 530
Devan Rosen, Ithaca College, USA

Chapter 32

Online Multi-Contextual Analysis: (Re)connecting Social Network Site

Users with Their Profile 542

Alyson Young, University of Maryland, Baltimore County, USA

David Gurzick, University of Maryland, Baltimore County, USA

Anabel Quan-Haase, The University of Western Ontario, Canada

Chapter 33

Participant Observation in Online Multiplayer Communities 555

Marko Siitonen, University of Jyväskylä, Finland

Chapter 34

Proposed Techniques for Data Collection and Analysis in the Study of News-Oriented

Virtual Communities 568

William J. Gibbs, Duquesne University, USA

Joseph E. McKendrick, McKendrick and Associates, USA

Chapter 35

Challenges of Analyzing Informal Virtual Communities 585

Nancy Poon, University of Saskatchewan, Canada

Ben Kei Daniel, University of Saskatchewan and Saskatoon Health Region, Canada

Chapter 36

Research Methods for Studying Virtual Communities 594

Nana Adu-Pipim Boaduo, University of the Free State, South Africa

Chapter 37

Methodological Considerations for Quantitative Content Analysis of Online Interactions 611

Seng-Chee Tan, Nanyang Technological University, Singapore

Hyo-Jeong So, Nanyang Technological University, Singapore

Ching-Sing Chai, Nanyang Technological University, Singapore

Chapter 38

Measuring Brand Community Strength 631

Hikaru Yamamoto, Seikei University, Japan

Yutaka Matsuo, University of Tokyo, Japan

Chapter 39

An Approach for Analysing Interactions within Virtual Learning Communities 654

Manuela Repetto, Institute for Educational Technology, National Research Council, Italy

Section 6

Online Phenomena and Case Studies

Chapter 40

- The Sense of e-Learning Community Index (SeLCI) for Computer Supported
Collaborative e-Learning (CSCeL)..... 672
Niki Lambropoulos, London South Bank University, UK

Chapter 41

- Tracer Studies: A Concrete Approach to a Virtual Challenge..... 699
Nancy Brigham, Rosenblum Brigham Associates, USA

Chapter 42

- Digital Museums in 3D Virtual Environment..... 713
Kingkarn Sookhanaphibarn, Ritsumeikan University, Japan
Ruck Thawonmas, Ritsumeikan University, Japan

Chapter 43

- Weaving the Social Fabrics: Recognizing Social Signals to Support Awareness and
Group Interaction in Online Games..... 731
Tiffany Y. Tang, Konkuk University, South Korea
Pinata Winoto, Konkuk University, South Korea

Chapter 44

- Studying Social Capital in the New Communitarian Horizon: A Multi-Method
Research Strategy..... 753
José Luis López Aguirre, Universidad Panamericana, México

- Compilation of References** 766