



# **Trust and New Technologies**

Marketing and Management on the  
Internet and Mobile Media



**Edited by**  
**Teemu Kautonen and Heikki Karjaluo**

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*Edited by*

**Teemu Kautonen**

*University of Vaasa, Finland*

**Heikki Karjaluo**

*University of Jyväskylä, Finland*



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# Trust and New Technologies

# Contributors

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**D. Selcen O. Aykac**, Ozyegin University, Turkey

**John W. Bakke**, Telenor R&I, Norway

**Michael Becker**, iLoopmobile, USA

**David W. Birchall**, Henley Business School, UK

**Kirsimarja Blomqvist**, Lappeenranta University of Technology, Finland

**Michael Bourlakis**, Brunel University, UK

**Ana Cristina Costa**, Delft University of Technology, Netherlands

**Pedro Cruz**, Instituto Superior de Gestao, Portugal

**Semir Daskapan**, Delft University of Technology, Netherlands

**Alison M. Dean**, University of Newcastle, Australia

**Hanna-Kaisa Ellonen**, Lappeenranta University of Technology, Finland

**G. Scott Erickson**, Ithaca College, USA

**Matthias Fink**, Vienna University of Economics and Business Administration, Austria

**Helen Fox**, University of Newcastle, UK

**Genoveffa Giambona**, University of Reading, UK

**John Gill**, Independent Consultant and Researcher, France

**Sonja Grabner-Kräuter**, University of Klagenfurt, Austria

**Michael Hanley**, Ball State University, USA

**Marianne Horppu**, Lappeenranta University of Technology, Finland

**Chanaka Jayawardhena**, Loughborough University, UK

**Tom Erik Julsrud**, Norwegian University of Science and Technology, Norway

**Taina Kaapu**, University of Tampere, Finland

**Ewald A. Kaluscha**, Hilti, Austria

**Heikki Karjaluoto**, University of Jyväskylä, Finland

**Teemu Kautonen**, University of Vaasa/Epanet, Finland

**Ronan de Kervenoael**, Sabanci University, Turkey and Aston Business School, UK

**Marke Kivijärvi**, University of Kuopio, Finland

**Sascha Kraus**, University of Liechtenstein, Liechtenstein

**Andreas Kuckertz**, University of Duisburg-Essen, Germany

**Olli Kuivalainen**, Lappeenranta University of Technology, Finland

**Tommi Laukkanen**, University of Joensuu, Finland

**Malliga Marimuthu**, Universiti Sains Malaysia, Malaysia

**Shintaro Okazaki**, Autonomous University of Madrid, Spain

**Minna-Kristiina Paakki**, Rovaniemi University of Applied Sciences, Finland

**Savvas Papagiannidis**, University of Newcastle, UK

**Kyösti Pennanen**, University of Vaasa/Epanet, Finland

**Dietmar Roessl**, Vienna University of Economics and Business Administration, Austria

**Helen N. Rothberg**, Marist College, USA

**Fahri Unsal**, Ithaca College, USA

## Preface

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The body of academic literature on trust has expanded enormously over the past years and, in particular in the social sciences, trust has become a key concept in dealing with contingencies, uncertainty and the imponderables of people's attitudes and behaviour. At the same time, new technologies, including management information systems, the Internet and mobile communication technologies, have transformed many aspects of modern business management and marketing. It seems only natural that recent studies have begun to address the role of trust in the particular context of new technologies. Indeed, trust has been attributed a paramount role in this context, for example in reducing the perceived risk of Internet and mobile transactions and in facilitating long-term customer relationships. Even though significant advances have been made in understanding the role of trust in applying new technologies in business, the knowledge base is scattered and thus lacks transparency.

The idea behind this book was to collect a versatile sample of research articles that address and illuminate the different roles that trust plays in the context of new technologies and their business applications. The book consists of 16 chapters divided into three thematic sections. Part one contains seven chapters that address trust issues related to consumer marketing in online environments. The topic is addressed from a whole range of angles, including conceptual treatises of consumer trust in online environments, trust building in online auctions, online brand building, online banking, virtual identities and retailing, and grey market e-shopping in the growing Chinese market. Part two comprises four papers devoted to the very much under-researched topic of trust in mobile media. Here, the topics include the effects of trust on mobile advertising campaigns, the impact of trust and privacy, as well as different sources of trust, on the consumer's willingness to participate in mobile marketing initiatives in different countries, and the implications for interpersonal trust of the use of mobile communication technologies in distributed work teams. Part three focuses on the application of new technologies and its consequences on trust in relations within and between organizations. The five chapters in this section deal with such diverse issues as the role of trust in virtual teams and knowledge management, the development of pre-relational trust in technology service providers, how trust works in the information systems of globally operating

business enterprises, and the role that trust and uncertainty play in the introduction of new technologies in the market.

Before letting you delve into the actual content of the book, we would like to express our gratitude to a whole number of people without whom this book could not have been realized. First of all, we would like to thank the contributors for their hard work, expertise and enthusiasm in writing the chapters. In addition to the usual editorial review, all chapters have been reviewed by at least one external referee in a double-blind process. The contributors, the editors and you as readers have certainly benefited from the commitment of these people, without whom this extensive and fruitful feedback process would not have been possible (in alphabetical order): Maria Antikainen (VTT, the Technical Research Centre of Finland), Kirsimarja Blomqvist (Lappeenranta University of Technology, Finland), Astrid Dickinger (MODUL University Vienna, Austria), G. Scott Erickson (Ithaca College, USA), Chanaka Jayawardhena (Loughborough University, UK), Marko Kohtamäki (University of Vaasa, Finland), Andreas Kuckertz (University of Duisburg-Essen, Germany), Tommi Laukkanen (University of Joensuu, Finland), Guido Möllering (Max Planck Institute for the Study of Societies, Germany), Seppo Pahnla (University of Oulu, Finland), Jari Salo (University of Oulu, Finland), Craig Standing (Edith Cowan University, Australia), Kasia Zdunczyk (University of Newcastle upon Tyne, UK) and Roxanne Zolin (Queensland University of Technology, Australia). Further, we owe a bow to Andrew Mulley at BEH, for his rigorous work on proofreading each and every chapter and thereby enhancing the readability of the book. Finally, we are grateful to Ben Booth, Francine O'Sullivan and Jenny Wilcox at Edward Elgar Publishing for their help and commitment in making this book reality.

Teemu Kautonen  
Heikki Karjaluo  
Vaasa and Jyväskylä

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## PART ONE

### Consumer trust in online environments



# 1. Consumer trust in electronic commerce: conceptualization and classification of trust building measures

**Sonja Grabner-Kräuter and  
Ewald A. Kaluscha**

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## INTRODUCTION

Despite continued proliferation of commercial websites, many consumers perceive electronic commerce transactions to be riskier than traditional real-world purchases (Metzger, 2006). Lack of consumers' trust in online shopping in general and in many online vendors still represents a significant barrier for many Internet users, slowing down the e-commerce industry (Cheung and Lee, 2006; Consumer WebWatch, 2002; Dayal et al., 2001; Gefen and Straub, 2004; Kim et al., 2004; Koufaris and Hampton-Sosa, 2004; Lee and Turban, 2001; McKnight et al., 2002; Pavlou, 2003). Meanwhile a number of researchers have investigated the role of trust in the specific context of business-to-consumer electronic commerce, focusing on different aspects of this multi-dimensional construct. However, the phenomenon of trust and the process of its development in e-commerce transactions and relationships remain elusive in theory and practice and there is still a need for better conceptual trust definitions. Reviewing the trust literature in several academic fields should help to reach conceptual clarification and make it easier to compare and communicate results. A major objective of this chapter is to provide a synopsis of different conceptualizations of trust and to analyse the adequacy of these different perspectives in order to conceptualize and define online trust.

Trust in general is an important factor in many social interactions involving uncertainty and dependency. Trust is central to any commercial transaction, whether conducted in a retail outlet in the real offline world or over the Internet, by means of a website. However, trust is even more important in an online situation (Riegelsberger et al., 2005; Walczuch and

Lundgren, 2004). Buying on the Internet presents numerous risks for consumers over and above the transaction process itself being perceived as risky (Einwiller et al., 2000; Einwiller and Will, 2001). Online products and services typically are not immediately verifiable and there is still a paucity of rules and customs in regulating e-commerce (Gefen and Straub, 2004). Beyond that, in the online environment criminal acts can be performed at extremely high speed, and without any physical contact (Cheung and Lee, 2006).

The importance of initiating, building and maintaining trust between buyers and sellers as key facilitators of successful e-commerce is increasingly being recognized in academic as well as in practitioner communities. Meanwhile a number of studies have investigated the role of trust in the specific context of business-to-consumer electronic commerce, having their roots in different scholarly disciplines and focusing on different aspects of this multi-dimensional construct. However, empirical research in this area is beset by conflicting conceptualizations of the trust construct, inadequate understanding of the relationships between trust, its antecedents and consequences, and the frequent use of trust scales that are neither theoretically derived nor rigorously validated (Bhattacharjee, 2002). This is a significant barrier to the further development of the topic as the 'confusing potpourri' of trust definitions (Blomqvist, 1997) makes it difficult or even impossible to ensure that the theoretical formulations and the empirical results of different researchers build on each other.

In order to make progress in a scientific field, scholars need to find a consistent terminology to be able to test their hypotheses adequately, to communicate their results among each other and to build on each other's findings. In this chapter we first address current conceptual problems in online trust research. Our efforts focus on trust related to informational and transactional websites addressing online consumers. We propose a framework that facilitates a multi-level and multi-dimensional analysis of online trust, proposing a set of trust constructs that reflect both institutional phenomena (system trust) and personal and interpersonal forms of trust (dispositional trust, trusting beliefs, trusting intentions and trust-related behaviours). We then summarize recommendations for enhancing and maintaining online trust, building on numerous empirical studies that investigate determinants of online trust. In order to categorize these measures, they are classified into three different categories of instruments that can help to make transactions and cooperative relationships more efficient (Spremann, 1988): information policies, guarantee policies and reputation policies.