Preface

Recent progress in the field of Information and Communication Technologies (ICT) has impacted both companies and the national economies of some countries in terms of profitability, productivity, competitiveness, and economic growth.

While other historical innovations such as radio, television, and telephone facilitated and promoted economic development besides providing new sales and marketing opportunities, the advent of the Internet and the emergence of mobile phone technology have widely changed the business scenario.

Nowadays, empirical evidence proves the profound social and economic revolution brought about by the use of mobile phones; mobile phones’ functionality and portability provide users with convenience, independence, mobility, and flexibility that can help to increase users’ productivity and improve time management. In spite of this, we know that the functionality of mobile payments is still at the expansion stage and has great potential thanks to the wide use of its support.

On the other hand, the global technological gap regarding the existing mobile payment systems is being reduced and the different technologies are already implemented in almost all the countries, which suggests faster and more effective development.

The mobile payment market is growing faster and faster with new products and services. This development rate is increasing the level of confusion on the market, which compels us to carry out an in-depth analysis of this issue, as well as to more accurately assess the implications and long-term potential of these new services.

Mobile payments largely depend on the existing payment infrastructures and on stakeholders’ marketing efforts towards their implementation in society. While it is true that the infrastructure will hardly change in the short term due to stakeholders’ economic interests (mainly telephone companies and financial institutions), the market is already taking steps to modify the payment structure offered to consumers. In spite of this commercial interest, mobile payment cannot circumvent this entire process, and it will remain reliant on existing payments infrastructure. Long-term growth in mobile payments, however, will require the integration of value-added services in the wider payments ecosystem.

Almost 400 million consumers all over the world currently use their mobile phone for their purchases. A recent study conducted by the consulting company Juniper Research indicates that over the next five years mobile payments will be multiplied seven-fold, reaching over $180,000 million by 2017, which proves the clear importance of this new payment method (Juniper Research, 2012).

According to public statistics, this situation together with the general public’s exceptional level of acceptance for both technology branches, brings up a discussion on e-commerce and its related payment systems to be necessary and urgent.

The present book’s aim is to be highly multidisciplinary, establishing a series of links between the economy, consumer behaviour, information technology, and computer science. This contribution synthesizes the way e-commerce relates to each field and, therefore, can help researchers to expand and
improve their understanding on how to combine technology and business. It will also help graduate and doctoral students identifying new research problems upon those areas.

Furthermore, the book provides a snapshot of the thematic evolution regarding some exchange transactions such as Business-to-Business (B2B) or Business-to-Consumer (B2C), giving experts and novices a better understanding tool for current state-of-art and leading them down new paths for future research.

All 15 chapters in this book have been organized under the following 3 sections: 1) Internet as a Buy and Sell Distribution Channel, 2) Modelling of Users’ Behaviour towards New Electronic Environments, and 3) Challenges and Opportunities for the Financial Sector: The Case of Mobile Payments (see Figure 1 for the theoretical structure of the book).

The first section describes in three chapters the new economic and business reality that society is facing, with the development of new commercial formats and payment methods, as far as the influence of some marketing variables are included, allowing Word-Of-Mouth Marketing (WOMM) to move forward. Chapter 1 contributes to the existing literature by exploring the impact of the Internet and B2B e-commerce usage in building up a solid market exchange. Chapter 2 studies the use of the Internet as a commercial channel and focuses on examining a virtual platform managed by an intermediary, not a producer, which puts manufacturers and consumers of organic products in direct touch. Chapter 3 revises the importance of e-WOM as a product or services experience within marketing activities (WOMM) and their influence on commercial transactions amongst electronic environments, as well as the new guidelines for an optimal implementation of those types of techniques.

The second section is composed of six chapters describing, throughout different behaviour patterns, the importance of Web systems and social networks as well as word-of-mouth, together with the revision of decisive variables. Chapter 4 offers an analysis of online consumers’ behaviour, so a characterization of those motivations to shop online is therefore proposed as a pillar for motivation-based customer segmentation. Chapter 5 analyses the importance, under comparative terms, of the role that confidence in commercial agreements has within B2B and C2C contexts. Chapter 6 studies the effect of the type

Figure 1. Theoretical structure of the book
of Web design and users’ satisfaction about security and functionality perceived from electronic commerce. Chapter 7 analyses the influence of eWOM and Internet referrals across different product types, including gender as a moderator variable. Chapter 8 highlights the importance of social networking within social and commercial contexts departing from the differences among users’ genders. Chapter 9 focuses on the importance of electronic banking, whether online or virtual, and the loyalty that can be generated beneath by taking into account several socio-demographic and economic factors, just as satisfaction and trust coming from its users.

The third section consists of six additional chapters, which provide a technical view of technological implications related to new commercial and payment formats as well as the relevance of mobile phones within new commercial transactions. Chapter 10 concentrates on the present situation of mobile banking from the double perspective: users’ financial entities, including future projections for those channels, and the areas offering a higher potential of economic growth and profitability. This chapter constitutes a nexus between that particular sector of electronic commerce, which has been named electronic bank by researchers, and the variety of available payment alternatives, which will be consequently treated, and some of which are being adopted only in detail. Thus, the goal of chapter 11 is to do research into the field of mobile payment and to understand the concepts and emerging technologies that can benefit mobile payments with respect to their utility and security. Chapter 12 describes new contexts involving the different payment systems originated from new trading environments (electronic and mobile commerce), establishing a revision of those factors affecting their implementation as well as a series of recommendations for those companies wishing to set up these new technologies among their activities. This chapter shows a practical application through a comparative study about the adoption of three mobile payment systems (based on SMS, NFC, and QR), starting from an extended TAM model. Chapter 13 analyses new horizons regarding mobile payment systems, paying special attention to NFC technology. Chapter 14 builds up a collection of the different technical implications from mobile payment systems, their typology, and the existing diverse business models. Specifically, it describes the case of different emerging applications carried out ad hoc between a resource-limited mobile device and a resource-rich computer server over wireless networks. Chapter 15, following a case study, shows the impact of the increasing adoption of mobile payments as a financial transaction mean for money transfer, retail payments, or micropayments in Africa.

We hope that the content of this book will spark reader’s interest and will contribute to exploring the present and future of mobile payments, as well as the scientific and corporate implications involved in this new business reality.

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