# Chapter 4
# E-Commerce:
## A Brief Historical and Conceptual Approach

**Daniela Meira**
*University of Trás-os-Montes e Alto Douro, Portugal*

**Francisco Pereira**
*University of Trás-os-Montes e Alto Douro, Portugal*

**Luís Magalhães**
*INESC TEC, Portugal & University of Minho, Portugal*

**Emanuel Peres**
*INESC TEC, Portugal & University of Trás-os-Montes e Alto Douro, Portugal*

## ABSTRACT

*Despite being a recent phenomenon and being in constant evolution, e-commerce (EC) is already embedded in current society. However, difficulties in establishing a universally accepted definition have resulted in a multiplicity of meanings that sometimes merge with the e-business (EB) concept. This article presents a brief historical and conceptual evolution of EC and some of its most significant aspects.*

## INTRODUCTION

To establish the exact moment of EC's birth is a complex task since there were several precursors, at least since the late 1970s. The introduction of Electronic Funds Transfer (EFT) between banks through safe private networks restructured financial markets (Kalakota and Whinston, 1997) and the development of Electronic Data Interchange (EDI) standards enabled companies to exchange commercial documents and transactions between themselves also across private networks. However, it was the emergence of the Internet - which was not used by any of the precursors - that determined our current understanding of EC, so it can be considered that it began in 1995 following the sale of advertising space on the Internet by Netscape and Infoseek (Laudon and Traver, 2009).

## E-COMMERCE HISTORICAL ROUTE

Although EC is a relatively new phenomenon, many researchers believe that it has already changed the way businesses are perceived and, therefore, compare it to historical events that affected the global economic organization such as the Industrial Revolution. Since this revolution lasted several decades, it is expected that EC will follow a similar line of development, going through a series of phases (Schneider, 2011). According to Laudon and Traver (2009) it is possible to distinguish three of them, with the first having taking place between 1995 and 2000 during which EC set off due to the expansion of the Web to product advertisement. In these early years, startups with easy access to capital began creating thousands of dot-com companies driven by the euphoric times and with the excitement of the idea that being the first to provide a particular service or product would give them a competitive leverage. According to these entrepreneurs, the EC era was an unmissable opportunity to generate huge profits from segmenting the market into groups with different needs and characteristics, channelling promotional campaigns and positioning their product or service in an effective and appropriate way according to theirs potential clients' needs. To computer scientists and information technologists, EC was a virtual environment with irrelevant costs, accessible by all and able to provide a universal communication and to economists, EC presented the possibility of the concretization of a nearly perfect competitive market since price and cost information would be equally distributed and consumers would have access to international markets. Consequently, businesses would be able to reach millions of clients, spread all over the world, without needing intermediaries and, thanks to the instantaneous nature of communications made over the Internet, would dynamically adapt the prices in order to reflect the demand. Despite the initial euphoria around EC, the investment of large amounts of capital in new technology along with the uncertainty about the consumers' desires at the time that this technology would be effectively functional, has proved to be a very risky move that eventually led to a stock market crash (Schneider, 2011). Indeed, many startups initiated their commercial activity without solid projects simply because they wanted to be "first movers" which, coupled with the fact that they "underestimated the cost of making consumers change their habits, of building a new brand from scratch or of mastering the complexity of distribution logistics" (United Nations Conference on Trade and Development Secretariat, 2001, p. *xx*) led many of the pioneers to bankrupt or to be bought by latecomers companies that had already established a brand and a physical infrastructure. As Tassabehji (2003) claims, fast profusion of websites created such a market saturation that it became difficult for consumers to differentiate them and hard for the companies to gather enough customers to achieve higher returns on major initial investment. The stock price, based on unrealistic estimates about how fast millionaire profits could be achieved began to decrease, dashing expectations and provoking a confidence crisis in the sector. Within one year (between March 2000 and April 2001) EC and related technologies' stock market value crashed more than 90%, causing to believe the stagnation of EC (Laudon and Traver, 2009). Contrary to this prediction, companies that survived the crash took a more entrepreneurial and less technological approach, perfecting their business models and strengthening their brand rather than dispersing efforts in creating others. They also started to apply their own funds, providing themselves a lower but sustained growth (Schneider, 2011). This consolidation phase took place, according to Laudon and Traver (2009), between 2001 and 2006, and was followed by a third one, which is currently undergoing, characterized by the reinvention of EC with new services and features available on the Internet as well as business models based on social networks and consumer-generated content. Although the Internet started out as a simple network capable of supporting e-mail services and file transfers among remote computers and as a rudimentary form of

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