

# Web 2.0 Tools Adoption Model: A Study on Online Retailers

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## ABSTRACT

*The Internet has become a major sales platform, assuming an emergent importance in increasing the economic growth of businesses. Web 2.0 has been a very important change in the way people use the internet and it has created an impact in all sectors of society. This study emphasises the importance of including Web 2.0 tools in online retailing as a contribution for success. The focus of this research lies in Portuguese online retailers and the elaboration of an adoption model for Web 2.0 tools. Through an observation of the 36 most visited Portuguese e-Commerce websites, it was possible to gather information on their adoption patterns of these tools. Social networks, Rich Internet Applications, mashups and Really Simple Syndication were the most popular tools, while semantic search, wikis and blogs were the least implemented. These and other aspects were gathered and then used to build a Web 2.0 adoption model.*

*Keywords: Adoption Model, Business 2.0, E-Commerce, Portuguese Online Retailers, Web 2.0 Tools, Website Design*

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## INTRODUCTION

At the commencement of the e-Commerce period, the opportunity to buy online was innovative for customers and gave companies an advantage over their competitors. Currently, with the evolution of Web 2.0 technologies, the number of companies and brands investing in a model of online sales, with the goal of increasing sales and ensuring customer loyalty and satisfaction, has grown exponentially (Constantinides et al., 2009).

The fierce, worldwide competition has led companies to focus more on clients in the search for competitive advantage (Lynn, 2005).

For this reason, companies count on the aid of new people-centered technologies like Web 2.0 tools (W2.0), which have enabled easier and quicker communication between retailers and customers, changing the way they relate to each other. With these newly arrived technologies, the speed of business has dramatically increased (Dickie & Trailer, 2007) and so has the stimulus for the creation of new products. In addition, a large proportion of the tools can be adopted free of charge or at relatively low prices for the company (Levy, 2007).

This study intends to explore the range of W2.0 tools adopted by most online retailers (ORs) operating in Portugal. Also it will try to

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determine if there are differences between online exclusive retailers (OERs) and nonexclusive online retailers (NORs) on the adoption of W2.0 tools and what are the features provided by the ORs to present their products and adjust their websites to new technologies like mobile phones and tablets. One of the most important aspects of W2.0 is ensuring that it is not used because of its buzz word status. Enterprises require revenue, profits and sales and as advantageous as the application of technology to the corporate world may be, research should work in the direction of defining more measurable evidences of its success. This process is crucial to guarantee that human and capital investments put into the adoption of these technologies are having a return. Its benefits must clearly overcome the detrimental effect it can have (Isaías, Pifano, & Miranda, 2011).

The review of the literature examines several concepts around the term W2.0, by highlighting some of its most important tools and focusing on its importance as a source of competitive advantage for ORs. Also, it approaches previous studies namely Infosys (Jain & Ganesh, 2007a) and Mazurek (2009). This theoretical preface is then followed by a methodological explanation of the research. The subsequent sections of this paper are committed to the presentation of the results of the observation conducted on the chosen sample of Portuguese ORs and their contribution to the draft of the proposed model. The final objective of building an adoption model of W2.0 tools, optimized for the ORs that wish to operate in Portugal is described in the last segments.

## LITERATURE REVIEW

Portugal's online retailing is a proliferating sector, but it is still poorly documented. Similarly to other countries, Portugal has been growing under the influence of national and international patterns of economy, technology and emergent customer empowerment.

## Web 2.0

The Web 2.0 concept was originated in 2004 at a conference about innovation organized by Tim O'Reilly in partnership with Live Media International (Musser & O'Reilly, 2006; Graham, 2005; Levy, 2007) has assumed different shapes and definitions since then.

Web 1.0, the first stage of the World Wide Web, stood for "centralized business standards, with internal resources controlled by the companies to serve remote customers and consumers" (Clarke, 2008). During this period the number of creators of contents on the Internet was reduced and most users were limited to the browsing of content, with little innovation in its presentation, since all the websites and links had to be visualised in the same manner (Cormode & Krishnamurthy, 2008). In place of a "traditional centralized platform" (Kim, 2009) in which the "transmission of content on the site was one-way" (Chen, 2009) comes a "decentralized platform" (Kim, 2009), W2.0, where the interaction is "bidirectional" (Chen, 2009), proposing greater participation and trust in the content by users and richer user interfaces.

For Musser and O'Reilly (2006) W2.0 resulted from the maturity and development of the Internet over the last decade and the explosive increase in the number of people worldwide who have access to the Internet and mobile devices, which has led today's society to become an increasingly informational society. W2.0 platforms attempt to take advantage of collective intelligence, allowing an improved service that gets better the more people use it (O'Reilly, 2007). W2.0 is an open structure with the potential to reduce content publication barriers, enhancing the users connection to online content and hence facilitate the access to information and its update on web-based environments. Information can, then, be easily and constantly uploaded and updated (Levy, 2007; Rodriguez-Martinez et al., 2010). With this new generation of the Internet, users have started creating contents rather than simply consuming

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