# Chapter 113 Marketing 4.0: Enhancing Consumer-Brand Engagement Through Big Data Analysis

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# ABSTRACT

Marketing evolves in parallel with technology. During the last five years, Marketing 3.0 has become the most innovative marketing approach, but of growing, is research focusing on Marketing 4.0: the marketing of big data. Much has been speculated, but academic journals have published little about Marketing 4.0. Maybe, because the total understanding of Marketing 4.0 requires: firstly, a depth knowledge about the evolution of marketing, especially about Marketing 3.0, and secondly, an analysis of how a range of technology –not only the Internet and social media- can be used to design marketing strategies that enhance the brand-consumer relationship. Taking into account how consumers' behavior has been changing since the beginning of this century, this chapter seeks to review Marketing 4.0 concepts, analyzing how big data can be used to enhance the consumer-brand relationship.

# INTRODUCTION

Companies in both the public and private sector continue to explore not only new ways to influence the decisions of individual consumers but also to look to gain the hearts and minds of the consumers. Ten years ago, a new context became apparent, where the increasingly visible emerging social and economic trends highlighted the need for alternative, more sustainable forms of living, creating and consuming.

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#### Marketing 4.0

In this last decade, this need has become more widely recognised, and technologies at the consumers service make it increasingly possible.

The new consumer exhibits a socially responsible buying and consumption behavior. As this is a demanding and informed consumer, he/she has more power with respect of the company, sometimes being able to participate actively in the development of certain business processes. In this context, companies must reconsider how they appeal to their clients. Developing new formulae to achieve their total and active participation, as well as their emotional engagement, which is essential for a companies' survival. The key might be in the new Marketing approach: Marketing 4.0. This shift is especially crucial for retail companies, which once they have moved online, have increased the understanding of their consumers (Corstjens and Lal, 2012). Online retailers can track not only what customers bought, but also what else they looked at; how they navigated through the site; how much they were influenced by promotions, reviews, and page layouts; and similarities across individuals and groups (McAfee et al., 2012). All this flow of information increases the power of the company, if it has the right tools and also knows how to use them.

In line with these changes, this chapter seeks to offer evidence regarding the ways that companies use to enhance their relationship with consumers, using big data marketing as a way to measure, know and understand the new consumers' needs and behaviours. With these ideas in mind, we revise the marketing concept evolution from Marketing 1.0 to Marketing 3.0. Then, we will present the concept of Marketing 4.0, as the evolution of Marketing 3.0 when used intensively with technology. Finally, once defined as Marketing 4.0: big data marketing, we analyse the philosophy and strategic changes exhibited by retail companies to better serve their consumers. This chapter concludes with some key conclusions and managerial recommendations for retail companies. For example, companies must know how the use of big data marketing has the potential to transform traditional businesses as well was retail, offering them even greater opportunities for competitive advantage. Managers can measure and therefore manage more precisely than ever before. Also, they can make better predictions and smarter decisions, as well as target more-effective interventions, in areas that so far have been dominated by gut and intuition rather than by data and rigor. But as with any other major change in business, the challenges of becoming a big data— enabled organization can be enormous and requires a correct design and leadership.

# BACKGROUND: THE ETHICAL CONSUMER AND A NEW MARKETING APPROACH

During the last decade, the world has gone through a period of rapid and unexpected turbulence. The financial meltdown has increased the level of poverty and unemployment, thus reducing the rate of growth of developed countries. Meanwhile, economic power has shifted to countries in the East, which are experiencing higher rates of growth. Moreover, climate change and rising pollution are forcing countries to limit the emission of carbon dioxide into the atmosphere, which is also imposing a higher burden on business. These changes had a profound impact on the economic and social context. But it is the case that their effect had been enhanced by two other factors which are: new technological developments and the globalization process.

Technological advances have brought about huge changes in consumers, markets and society in general. Since the end of the last century, many new information technologies have been introduced into marketing and further developed into what it is considered as a new-wave of marketing technology.

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