Chapter 8

Effect of E-Retail Product Category on Performance

Erik Ernesto Vazquez
University of Monterrey, Mexico

ABSTRACT

Literature on product categorization of e-retail products has adopted a consumer view and studied the direct effect on consumer-level variables such as purchase intent or customer satisfaction. In doing so, the moderating effect of product categorization of e-retail products on firm-level variables has been ignored. To address the implications of e-retail product categorization, this chapter asks the following question, What is the moderating effect of e-retail product category on sales performance? This chapter uses concepts of information economics, e-retailing, and the search-experience-credence (SEC) categorization of products to develop theoretical hypotheses. Using data from 500 US e-retailers, this chapter contends that the ease to evaluate retail products online has a positive effect on sales volume of e-retail firms. This effect is the result of increased web traffic and decreased conversion rates, which describes the e-retail market behavior with firm-level variables.

INTRODUCTION

Revenue from e-commerce is expected to reach US $2.7 billion by 2023 according to Statista (2019). It forecasts a 9% of average yearly growth rate. Li et al. (2017) explains that cross-channel strategies and new product categories shape this growth and the competitive dynamics of e-commerce. Nielsen (2017) reports Fast-Moving-Consumer-Goods (FMCG) will drive future growth in product categories such as grocery, fashion apparel, and personal care. However, there is a lack of research on how the product categories managed by e-retailers have an impact on the e-retail markets.

Product categories have an influence on e-retail markets (Pascual-Miguel, Agudo-Peregrina, & Chaparro-Peláez, 2015). Although studies have proposed categorizations for retailers and their products (e.g. Girard & Dion, 2010; Korgaonkar, Silverblatt, & Girard, 2006; Nakayama, Sutcliffe, & Wan, 2010) to explain the behavior of markets, research on the latter has not been the main focus for several reasons. First, there is a lack of consensus about the most pertinent product categorization theory for e-retail
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(De Figueiredo, 2000). Second, due to empirical designs, theory on product categorization has not been fully tested on e-retail because most studies consider only one product category (e.g. Kumar, Bhaskaran, Mirchandani, & Shah, 2013; Smith, Fischer, & Yongjian, 2012). Third, previous studies have not tested the effects of diverse product categories on e-retail market behavior in terms of firm-level variables as the dominant research approach considers consumer behavioral theories focusing on emotional and cognitive variables of individuals (e.g. Brettel et al., 2015; King et al., 2016; Yan et al., 2016).

Extant research focuses on consumer-level variables (e.g. Gupta, Su, & Walter, 2004; Laroche, Habibi, & Richard, 2013; Wang, Wang, & Wang, 2018; Yan et al., 2016) rather than firm-level variables even when there are data available at unprecedented scale (Akter & Wamba, 2016). This approach on product categorization contributes to the literature. Therefore, the research question of this chapter is: How do product categorizations explain e-retail market behavior in terms of firm-level variables?

Existing literature concentrates on specific products or single product categories neglecting their impact on performance (Christodoulides, 2012; Smith et al., 2012). By investigating product categorization for e-retailers, this study addresses calls to study their effects on digital markets using firm-level variables such as web traffic and conversion rate (e.g. De Maeyer 2012; Nakayama et al. 2010). Only few studies consider how digital markets differ according to product categories, such as hedonic versus utilitarian or search versus experience versus credence product categories. However, the product category plays a major role to shape firm-level variables of e-retailing such as conversion rate and web traffic. The reason of the former is product awareness.

Product category awareness reflects a cognitive process of attention on tangible product categories (e.g. shoes, books). The awareness of product category is very important for e-retailers’ sales performance, web traffic and conversion rate (Babić Rosario, Sotgiu, De Valck, & Bijmolt, 2016). When consumers are not aware of products, it is unthinkable that they purchase them, so, awareness is the first step of market success. In fact, product awareness increases the likelihood of consumers to buy in the future even when there was initially a negative perception (Berger, Sorensen, & Rasmussen, 2010). The reason is that product awareness is the first step in getting into the mind of e-retailers’ customers. There are several ways to cause product awareness (e.g. paid advertising, physical presence, word-of-mouth). Digital media contribute with product awareness through user-generated content that serves as electronic word-of-mouth (Wen, Tan, & Chang, 2009; Zailskaite-Jakste & Kuvykaite, 2012), which ultimately affects web traffic, conversion rate and sales performances of e-retailers.

Based on literature from information economics, e-retailing and categorization of products the objective of this chapter is to present an overview e-retail market behavior. At the same time, this study theoretically argues and empirically proves how the SEC categorization of products could help to understand e-retail market behavior. The research design of this study, therefore, uses cross-sectional data analysis of a secondary database to compare diverse categories for a considerable sample size of the US e-retail firms. This chapter entails a literature review that is relevant for product categorization and insights from empirical data using two regression analyses. In doing so, the chapter provides a guideline to use regression analyses and secondary data available to study further the trends of and strategies in retail environments.