The Reverse Logistics of Cross-Border e-Tailing in Europe: Developing a Research Agenda to Assess the Environmental Impacts

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ABSTRACT

The purpose of this article is to develop a research agenda to analyze the potential environmental implications of the reverse logistics involved in the B2C element of cross-border clothing e-tailing. Based on a combination of literature review and primary case study data from five major clothing retailers and two logistics service providers in Sweden, a categorization of cross-border reverse chain possibilities is developed. Seven reverse chain types are identified and it is shown that all of the five retailers use multiple reverse chain types. The results are subsequently used to highlight research gaps and define a future research agenda which will enable a more complete environmental analysis of the impacts of online clothes shopping incorporating both the outward and reverse elements.

KEYWORDS
Cross-Border, Digital Single Market, DSM, E-Commerce, E-Tailing, EU, Returns, Reverse Logistics

1. INTRODUCTION

The selling of goods online (e-tailing) continues to increase in Europe as in the rest of the world, with clothing being the sector with the highest online sales in most European countries (Ecommerce Foundation, 2016). A major development in e-tailing over the past decade has been the increase in cross-border e-tailing, with this trend being supported by EU legislation in the form of the ‘Digital Single Market (DSM) for e-commerce and online services’. However, with the increase in e-tailing has come a commensurate increase in the number of items being returned by online customers (Postnord, 2015). In the clothing sector, the average clothing return rate across European countries is around 22%, translating into billions of packages requiring logistics handling. In general, many retailers simply see returns as an inevitable cost of doing business, since they do not understand what factors cause the customer to return a product (Rao et al., 2014).

The process involved in getting the returned items back to the retailer is reverse logistics. As long ago as Terry (1869), the importance of dealing with returned products in retail activities had been identified. Returning products was also dealt with by Beckley & Logan (1948) and Guiltinan & Nwokoye (1975) without explicitly mentioning the term ‘reverse logistics’. Although there is no universally accepted definition of reverse logistics (Murphy & Poist, 1989; Fleischmann et al., 1997; Kivinen, 2002; Agatz et al., 2008), the Reverse Logistics Association defines it as: “...the process
of moving goods from their typical final destination for the purpose of capturing value, or proper disposal” (RLA, 2016).

The academic literature on reverse logistics is growing, albeit from a small base (Dowlatshahi, 2000; de Koster et al., 2002; Blackburn et al., 2004; Blumberg, 2005; Blanchard, 2007). Although there is a reasonable body of academic literature on the environmental impact of the outward logistics associated with e-tailing (for a review of the topic, see for instance Mangiaracina et al, 2015), there is considerably less on environmental sustainability issues relating to reverse logistics. In the absence of such knowledge, the overall environmental impact of e-tailing cannot be evaluated. This points to an important gap in academic knowledge which needs to be filled. The purpose of this paper is to develop a conceptual framework for analyzing the potential logistical approaches to dealing with returns within a cross-border context. Based on this conceptual framework, a research agenda is proposed which fulfils the need for a fuller understanding of the reverse logistics associated with cross-border e-tailing and its potential environmental impact.

The methodology underpinning the paper is outlined in the ensuing section. The paper then illustrates the increase in clothing e-tailing, including the increase in cross-border trade and product returns within this context. It must be noted here, that with the rise of ‘disruptive logistics’ has come the need for ‘disruptive statistics’ that are only available from the commercial sector (Dhillon et al., 2001; Evangelista, 2012; Goldsby & Zinn, 2016). Official statistics on e-tailing are often out-of-date before they are published and they often exclude topics on which information is sought. Whilst data from commercial sources need to be treated with a degree of caution, they are often more relevant.

Informed by both the literature review and the primary data, the paper then proceeds to build a conceptual framework for categorizing the different logistical approaches to handling returns in the clothing sector. A research agenda is specified for refining this framework and analyzing the potential environmental consequences of the reverse logistics of cross-border e-tailing for the clothing sector. In so doing, the paper integrates knowledge and insights from several different disciplines and industries to shed light on a previously under-researched aspect of logistics and its impact on the environment.

2. METHODOLOGY

The scope of the paper is delimited in three ways. First, the product group considered is limited to clothing and apparel, since this is the sector with the greatest proportion of online trade (Ecommerce Foundation, 2016). At the end of their review, Mangiaracina et al. (2015) conclude that clothing and consumer electronics have become the most important B2C e-commerce sectors and are two of the most complex industries in terms of logistics and the environment and that, therefore, are the most worthy of study. Second, this paper is also limited to considering only the retail element of the clothing and apparel sector, i.e. the return of products from customer to retailer (i.e. C2B), and ignores the retailer to manufacturer element (i.e. the B2B element). This is not to belittle the importance of the B2B element, but is rather for the more practical reason of rendering the scope of the paper more manageable. Third, the paper is geographically constrained to considering only the EU context.

This paper adopts an interpretivist, deductive approach using a qualitative methodology where the aim is to develop a deep understanding and identify patterns based on a pre-existing literature (Bryman and Bell, 2007). In most cases, deductive research is associated with the positivist paradigm and quantitative methodological techniques, whilst inductive research is associated with interpretivism and qualitative methodological techniques. However, Hyde (2000) argues that the terms qualitative and quantitative are methods which can and should be applied to any research paradigm. Qualitative methods produce a wealth of rich and detailed data on a limited number of individuals or companies (Patton, 1991; Farquhar, 2012).

The research developed in this paper is both descriptive/analytical and explorative. The literature review and commentary are descriptive, devising the research agenda is explanatory and analytical whilst the case study element is explorative. Ghauri & Grønhaug (2010) argued that case studies are
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