Institution: University of Portsmouth		
Unit of Assessment: UoA 17: Business and Management Studies		
Title of case study: Improved profitability despite growing cost of returns in online shopping		
Period when the underpinning research was undertaken: 2015-2021 (ongoing)		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	**Role(s) (e.g. job title):**	**Period(s) employed by submitting HEI:**
Lisa Jack	Professor of Accounting	9/2009 - date
Sally-Ann Krzyzaniak	Research Fellow	2/2014 - 3/2019
Regina Frei	Senior Lecturer	9/2013 - 8/2019
Jason Sit	Senior Lecturer	9/2018 - date
Period when the claimed impact occurred: 2019-2021		
Is this case study continued from a case study submitted in 2014? N		

1. Summary of the impact

Following our 'Buy Online Return in Store' project and extensive engagement with industry, loss managers in major UK multiple retailers have reported that our findings have been used to influence senior management to implement changes in practice and processes. They have seen **improved profitability** through greater visibility of hidden costs of online returns and **improved returns management** through adoption of lean management and circular economy approaches. Further, retailers have moved toward integrating returns management into the **wider strategic planning** processes through implementing cross-functional teams, and changing returns reporting practices and returns policies. Based on our work, the international industry group ECR Retail Loss has changed its research focus and programme to emphasise e-commerce returns and has commissioned further work based on our findings.

Data scientists at one international clothing retailer have also used our cost model as a basis for the development of a new set of calculations for the cost of returns, identifying **potential savings in excess of GBP10million**. Total savings across members of ECR Retail Loss, a global membership organisation of major retailers, are estimated at **GBP55 million** in the two years following the report.

2. Underpinning research

Many traditional retailers now offer the shopper an omni-channel experience. Products purchased online may be returned by multiple channels e.g. post, courier or to a physical store. However, offering this customer choice comes at a cost to the retailer with the increased complexities this brings to processes, IT systems, accounting systems and logistics, to name just a few. **Research by Jack and her team investigated the "buy online, return to store" scenario to identify the true cost of returns**. The work has been timely, as online returns in the UK are predicted to increase by 27.3% in the next five years and hit a total of GBP5.6 billion by 2023, according to analysts GlobalData. In 2020, because of the COVID-19 pandemic, this has become a major problem for retailers with more shopping online, and more returns made through costlier routes as stores have been closed.

Jack is recognised internationally as a research-consultant, writer and speaker on accounting and fraud in food supply chains. She has led projects for the Chartered Association of Management Accountants and the Food Standards Agency, as well as for commercial and non-governmental organisations in the industry. This brought her work to the attention of the ECR Retail Loss group in 2014, beginning a collaboration which is still ongoing. With Frei and Krzyzaniak, she brought expertise on costing and sustainable supply chains to bear on issues of interest to ECR Retail Loss and has been able to build on her theoretical interests in how the way in which accounting is communicated can change business practices.

The research on reverse logistics was developed with ECR Retail Loss (formerly the ECR Community Shrink and On Shelf Availability Group) (**G1**), globally recognised in the industry as the leading "think tank" on retail loss. Their e-commerce working group was established in 2015, to examine all aspects of e-commerce loss, with an initial focus on the cost of returns. The combined turnover of 20+ organisations represented in this working group exceeds GBP400 billion, and includes retailers such as Amazon, Adidas, Bol.com, John Lewis, Tesco, M&S and

TJX Europe. Jack and her team were chosen on the merits of their proposal and the team's expertise in reverse supply chain management (**R3** and **R5**).

The project consisted of four in-depth studies of UK multiple retailers involving interviews, site visits and documentary evidence; 17 telephone interviews with loss managers in other retail firms and a desk study of 100 returns policies and over 20 industry reports. The qualitative case-study based research builds a rich and detailed set of data from which Jack and her team were able to develop process maps (Frei and Krzyzaniak), a costing model (Jack), proposals for a lean returns management process (Jack) and circular economy strategies (Frei) (**R1** and **R2**). Jack and her team presented the interim results to the ECR community at their regular meetings to "triangulate" findings and strengthen their applicability across the retail sector.

Key findings were that multiple returns paths are offered to customers, bringing complexity to businesses and additional costs. The "route" of returns within the business is complex, depending on product type, value, where it is returned, the condition of the returned product (e.g. if it is damaged) and this builds **significant costs and inefficiencies into current returns processes**. One reason for this is that online businesses have generally been "bolted onto" existing bricks and mortar businesses, with system gaps being patched up. The "patchwork quilt" of systems is inefficient and increases vulnerability, but businesses have been unable to make a case for new, harmonised systems. As a result, few businesses currently collect or process data to give an accurate cost of returns, let alone cost of returns for their online business. It is estimated that the rate of returns for online sales is 22% on average, compared with 8% for bricks and mortar sales, and can be higher than 50% for luxury goods and holiday purchases. Their research showed that the cost of returns averaged around GBP7-12 per returned item. A very small reduction in the rate of returns can achieve increases in net profits of 100-200 basis points.

Their **recommendations** fall into three key areas that link directly to impact. First, they recommended that their **model for the cost of returns** should be implemented to improve profitability through greater visibility of hidden costs of online returns. The model can be used to demonstrate to senior management the need to concentrate on reducing the rate of return as the most effective means of enhancing profit. This included the finding that return to store was the most cost-effective route, and that returns should be seen as a profit, not a cost centre. The model was shown to provide better data capture and an improved analysis of cost of returns. The research also recommended improved communications with customers to prevent returns and the removal of transaction steps from the returns management process to reduce costs (**R2**).

Second, the team recommended the **adoption of lean management and circular economy approaches to improve returns management**. Both concepts are timely and relevant in the context of the retail sector because of their potential for improved profitability (**R4**).

Third, Jack and team identified the need for **implementing cross-functional teams** and executive manager oversight of the returns process as best practice for the **integration of returns into strategic planning**. Loss prevention teams need to gain support from executive officers for **changes in return policies and practices** (**R1**).

3. References to the research

(R1) **Jack, L**., **Frei, R**. and **Krzyzaniak, S.A**. (2019). Buy online return in store: The Challenges & Opportunities of Product Returns in a Multichannel Environment. London: ECR Retail Loss. https://institutducommerce.org/medias/publications/Final Report on Online Returns.pdf

(R2) **Frei, R**., **Jack, L**., and **Krzyzaniak, S. A.** (2020). Sustainable reverse supply chains and circular economy in multichannel retail returns. *Business Strategy and the Environment* https://doi.org/10.1002/bse.2479

(R3**) Frei, R.,** Bines, A., Lothian, I., and **Jack, L**. (2017). Understanding reverse supply chains. *International Journal of Supply Chain Management and Operations Resilience*, *2*(3), 246-266. https://doi.org/10.1504/IJSCOR.2016.082029

(R4) **Frei, R**., **Jack, L**. and Brown, S. (2020). Product returns: a growing problem for business, society and environment, *International Journal of Operations & Production Management*, *40*(10), 1613-1621. https://doi.org/10.1108/IJOPM-02-2020-0083

(R5) El Baz, J., **Frei, R**., and Laguir, I. (2018). Reverse supply chain practices in developing countries: the case of Morocco. *Journal of Manufacturing Technology Management*, *29*(1), 198-216. https://doi.org/10.1108/JMTM-04-2017-0068

(G1) **Jack, L**., and **Frei, R**. *Buy online, collect in store: The benefits, barriers and performance metrics of reverse supply chains*. Funded by ECR Community, November 2016-May 2018 (GBP28,201).

The references above contain four peer-reviewed journal articles (R2, R3, R4 and R5) and one policy report (R1). Two articles (R4 and R3) were published in CABS 4* and 3* journals, respectively, and, following per-review, adjudged as of 2* or better REF2021 quality. R1 was, following peer-review, adjudged as of 2* REF2021 quality.

4. Details of the impact

The online returns research started in early 2017 with data collection finished by October 2017. Further work was then undertaken to develop the cost model and validate it with stakeholders through workshops organised by ECR. The report, together with its recommendations, was published online in January 2019 and has since been downloaded 59 times including by 19 retailers with annual turnovers between GBP10 million and GBP10 billion from UK, Europe, Russia and the USA, six manufacturers and industry associations from Europe and the USA and 16 solution providers from the UK and Europe. ECR Retail Loss launched a new website in late summer 2020, and an open access version of the report has been made available (**R1**).

Building engagement with the research through industry events and media

ECR Retail Loss have run several events to help their members implement the recommendations from the research. The events included a first Webinar on 12 February 2019 (**S1**) hosted by ECR Retail Loss, translating the research insights into strategic implications for businesses. The webinar included a representative of [text removed for publication] who elaborated upon how the report was used by senior management to alter their returns management policy so as to focus on the profitability of returns (**S1**). In all, 61 people registered for the Webinar from Europe, the USA, Russia, Brazil, Australia and Kazakhstan. Feedback included the following comment from the USA, [text removed for publication]: *"Very interesting work that the team has assembled – including highlighting the cost of the CREDIT CARD transaction as a cost of the return; I have not heard that in any discussion including Walmart, US Industry Groups or other areas (truly insightful)"* (**S2**).

Loss Prevention Magazine (28 March 2019) ran a feature on the back of the report. The team also disseminated the results through an article in The Conversation (21 January 2019), which achieved 61,500 hits and 47 reprints, translated into Indonesian and Romanian (**S3**). Jack has been invited to present the work on this project to: the Chartered Institute of Management Accountants Irish Spring Seminar in Cork on 6 March 2020; in an international online seminar for AICPA/CIMA Ireland on 19 November 2020 for practising accountants along with the lead accountant for returns in a major online retailer (annual turnover GBP80 million in Ireland); and a webinar with the University of Sheffield on reverse logistics recorded by AICPA-CIMA in Summer 2020.

Following the first webinar on 12 February 2019, ECR Retail Loss also organised a workshop for a wider stakeholder group on 2 April 2019 in London that led to a selected group of retailers requesting an additional workshop on 25 April 2019 to discuss the implementation of the cost of returns model specifically. 22 representatives from 14 major UK, European and North American retailers attended, along with ECR Community grant providers and industry representatives, with 75% saying that the event met or exceeded their expectations (see **S2**).

Improved profitability through greater visibility of hidden costs of online returns

According to Colin Peacock, Strategy Coordinator of ECR Retail Loss, the true cost of returns model "has **delivered an estimated GBP55 million to the bottom line profits**" **to their members** in the two years following the publication of the report in January 2019. He further states that Jack's research "remains one of the most important pieces of research we have undertaken,

and its relevance and importance is now more relevant than ever with the growth of e-commerce." (**S4**).

In addition to the workshops mentioned earlier, ECR Retail Loss organised another workshop for its members in 15 July 2019 based on the report (**R1**). An important part of the impact strategy was to provide a space in which retailers could share experiences of similar and growing issues with online returns, which fed into reviews of returns policies across the sector in 2019/20 (**S4**)**.** One major retailer later responded to say that the findings from the report and workshop had made a significant impact on their review and initiatives for managing returns (**S5**).

The workshop was attended by loss managers from four UK, one Spanish and one South African based companies with average annual turnovers of between GBP0.8 billion and GBP56 billion. The workshop took place in the [text removed for publication] of an **international clothing retailer** (annual international turnover of GBP900 million) in [text removed for publication] on 3 July 2020 and focused on the implementation of the new cost model. The same retailer then set up an NDA with the University of Portsmouth to test and develop the cost model. The data analytics team used the new cost model as a starting point to demonstrate to senior management that customers making returns in store was significantly more cost-effective than any other means of return, something that had not previously been apparent and which would change customer interactions. Subsequently, the international clothing retailer "used the model to inform a change of returns strategy that has **led to a GBP10 million saving to the bottom line**" (**S4**).

Furthermore, the retailer stated that by using the cost model they identified that encouraging customers to return to store rather than by post **could realise circa GBP1 million in a further reduction of costs to return goods in a full year**. This information is still being reviewed to highlight further benefits to the business (**S6**). During the covid-19 pandemic, ECR Retail Loss reported that several of their members have leveraged the model to account for the increased cost of returns being sent to fulfilment centres rather than being returned in store, enabling budget write offs to be estimated. Increased rates of return and the closures of stores will therefore increase the cost of returns and drive further innovation in this field (**S3**).

In addition, the University of Portsmouth is negotiating an NDA with a European logistics company with an annual turnover of GBP60 billion who will begin a similar data analysis investigation based on our cost model in 2021. As a result of reading the report and follow-up conversations, one software company in Portsmouth also developed concepts for new products (**S7**). These are expected to be introduced through 2021 in the previously mentioned international clothing retailer and the European logistics company.

In September 2020, ECR Retail Loss asked Jack to extend the cost model into an online self-assessment tool and to adapt the model to the cost of food waste to retailers (**S4**).

Improved returns management through adoption of lean management and circular economy approaches

A smaller, invited group of ECR Retail Loss members was convened by ECR on 23 January 2020 at the headquarters of one of the major UK retailers. [text removed for publication] from that group have said that the research has been a definite prompt and input to change in their organisations, as well as enabling them personally to feel more confident in developing their evidence to present to company leaders (**S8**). A [text removed for publication], working for a British fashion retailer with a turnover of around GBP1.8million, explained how the research helped them to engage with senior management to assess the potential of various changes in their current systemic and operational processes and procedures for handling digital web returns. This involved incrementally assessing all contributing factors to the operational cost and customer mindset when returning goods. Particularly during the COVID-19 crisis, the research helped companies to implement new procedures that changed the way their customer care and warehouse teams worked with customer returns, leading to a stronger business model during an unprecedented trading year (**S8**).

ECR Retail Loss organised another workshop for a wider stakeholder group with a focus on how technology can help with returns management, which took place online on 15 July 2020 and was attended by retailers with annual turnovers of between GBP1 billion and GBP400 billion. ECR

Retail Loss reported that the series of workshops has enabled retailers to share best practice and build capacity. In addition, they have changed their workshop programmes to increase their promotion of work around the returns process with the aim of 'selling more and wasting less' and to integrate a circular economy which was not previously on the agenda for research (**S4**).

Integrating returns management into wider strategic planning processes through cross-functional teams and changed returns reporting practices and returns policies

One of the key issues identified in the research is the lack of cross-functional teams and Executive Director oversight of the returns process. A very serious concern of the loss prevention managers interviewed (**R1**) was the difficulty in getting investment and intervention to mitigate returns because of the lack of involvement of other sections of their organisation. Through ECR Retail Loss the new cost model has been communicated at board level in the majority of retailers and that several retailers have already implemented cross-functional teams to tackle the growing rate of returns (**S4**). ECR Retail Loss also report that others have leveraged the model to make significant changes to the way in which returns are managed, such as changing the threshold value for free deliveries (**S4**).

5. Sources to corroborate the impact

(S1) Webinar slides; email communication as evidence of representative of [text removed for publication] endorsing the report and outlining changes they made; feedback from webinar attendees, 02/2019.

(S2) Feedback from webinar participants, 02/04/19.

(S3) Media analytics report, other outlets reproducing our article on tinyurl.com/yqlbjtgt.

(S4) Letter, Colin Peacock, Group Strategy Coordinator, ECR Retail Loss Group, corroborating impact on retailers and industry more widely, 22/10/2020.

(S5) Results of survey of ECR Community members to ascertain level of use of report, 11/2020.

(S6) Letter, major clothing retailer (HQ in South Africa), corroborating impact of cost of returns model, 01/2021.

(S7) Presentation by [text removed for publication] on their returns software at the Gartner Supply Chain conference, one of the biggest in the world, citing Jack's work, 06/2019.

(S8) Emails from [text removed for publication] from two major UK retailers on how they have used the research for organisational change, 11/12/20 and 21/01/21.