The Impact of COVID-19 on Product Returns Management in Multichannel Retail

Danni Zhang, Regina Frei*, Steffen Bayer, PK Senyo, Enrico Gerding, and Gary Wills University of Southampton, UK *r.frei@surrey.ac.uk

Adrian Beck, University of Leicester, UK

Abstract

Purpose: The Covid-19 pandemic affected customers' shopping and returns behaviours and significantly aggravated the problem of high product returns rates and returns fraud. Measures for public health and safety resulted in retailers modifying their returns processes. This study describes the changes observed and experienced by retailers as well as consumers and concludes what lessons retailers can learn from the experience.

Design/methodology/approach: 18 semi-structured interviews were conducted with multichannel retailers and retail experts. This was complemented with a consumer survey focusing on returns behaviour (497 valid responses).

Findings: Our project outputs include a list of recommendations for retailers to mitigate the effects of the pandemic on returns and related fraud and what they can learn from the experience with the goal of reducing returns rates and fraudulent returns in non-pandemic situations.

Originality: The effects of the observed returns process changes on returns management were unclear; very little was known about what retailers experienced in terms of product returns during the pandemic. We shed light on this and identify opportunities for improvement in multichannel returns management.

Keywords: Product returns, Returns Management, COVID-19 pandemic

Introduction

COVID-19 tremendously affected the retail industry in terms of disruptions to supply chains, retailers' operations, and changes in customer shopping behaviours. The closure of shops and instructions to 'stay at home' forced consumers to shop online during the pandemic (Young et al., 2022). A survey conducted by the Institute for Supply Management (ISM) shows that by the end of May 2020, 95% of respondents (642 of 676) reported operational problems because of COVID-19 related disruptions (PR newswire, 2020). UPS found that globally, approximately one in three online customers had returned an item at least once between December 2018 and January 2019 (UPS, 2019). As eCommerce has much higher returns rates than in-store shopping (NRF, 2022), product returns rates have soared. Moreover, it is likely that there will be a permanent effect since shoppers have become comfortable with online shopping and returns (Ward, 2022; Incisiv, 2021; OECD, 2020; Ecommerce News, 2021). For example, the US online returns rates increased from 10% in 2020 to 18% in 2021 (Repko, 2022). Disruptions caused by the pandemic have affected the existing retail management and can have long-term effects.

A strand of literature has emerged to investigate the impact of COVID-19 on supply chain and retail operations from various aspects (Pujawan and Bah, 2020; Schleper et al., 2021), including strategies to improve supply chain resilience in the COVID-19 (Vanpoucke and Ellis, 2019; Golan et al., 2020; Chowdhury et al., 2020) and the operational challenges being faced by the retailers (Mukherjee et al.,

2021; Pantano et al., 2020). Likewise, other scholars have developed mathematical simulation models to assist retailers in recovering (e.g., Paul and Chowdhury, 2020). Scholars called for more research on the implications of COVID-19 on the operation of retailing and supply chains (Pujawan and Bah, 2022, Rahman et al., 2022). Schleper et al. (2021) highlighted an urgent need to understand the implications for high-street retailers in a post-pandemic world. However, research investigating the impact of COVID-19 on retailing is typically limited to the forward supply chain and ignores product returns. Roggeveen and Sethuraman (2020) also pointed out that current research often overlooks the impact of product returns on retailing businesses even though evidence shows that returns affect sales volume and induce more costs (Jack, Frei and Krzyzaniak, 2019). Additionally, while tools such as the Loss Prevention Pyramid provide a model for facilitating retailers to design loss prevention programmes and assess a range of retail developments (Beck with Peacock, 2009), the application of product returns management was not specifically addressed. There is no doubt that product returns require the attention of both practitioners and academics. Shopping behaviours have changed; the post-pandemic world is different from the pre-pandemic world. To survive and remain competitive in the long-term retailers will need to reflect on their returns management during the pandemic and draw lessons for the future. Therefore, this paper aims to explore these under-researched issues, guided by the following research questions:

RQ1: How did pandemic constraints and changed customers' returns behaviour affect product returns management?

RQ2: How did retailers react to the returns management challenges caused by the pandemic?

Following the analysis to address these RQs, in the discussion section, we demonstrate what retailers can learn based on their experience and customers' returns behaviour to increase competitiveness in the post-pandemic phase, with continued high returns and fraud rates.

Literature review

Product returns have become a significant challenge for retailers and society, causing economic, social and ecological harm, although some scholars and practitioners emphasise the opportunity of creating customer value leading to customer retention (Minnema et al., 2018). Evidence shows that returns result in complicated reverse logistics, increased expenses, financial loss, and unnecessary waste because many returns cannot be resold (Optoro, 2020). Retailers have already faced challenges in reducing and managing returns and associated fraud, even before Covid-19 (Frei, Jack, and Brown, 2020). In particular, processing returns can be very expensive, including sorting, checking, stocking, transportation, refurbishment, repacking or disposal (Jack, Frei, and Krzyzaniak, 2019; DiFrancesco et al., 2018). Many returned items are destroyed rather than resold due to their condition or operational/financial constraints (Wood, 2021). Product returns cost UK retailers and consumers over £7 billion annually (Eccles, 2022). High costs can further increase the costs of products and reduce retail profitability. In addition to the costs of returns, the variations in the many ways of returning products make management more complex for multichannel retailers. For instance, Frei et al. (2022) present different paths to cross-channel or omnichannel returns, which consume different resources and require strategic management. A growing body of product returns studies has investigated the role of returns policies on product return rates and customer purchase behaviour. The investigated elements include the cost of returns, and returns efforts, approaches, and period (Janakiraman et al., 2016; Heiman et al., 2001; Mukhopadhyay & Setoputro, 2005). In general, the more generous the return policies, the more likely customers will return items. Notably, the pandemic pushed many retailers to adjust their return policies. However, the consequences of these changes and their implications are underexplored.

The COVID-19 pandemic disrupted retail operations and led to economic and psychological pressure on individuals, resulting in an increase of fraudulent activities. The British Retail Consortium (2022) found £76 million online loss due to online theft and fraud because more customers have been shopping

online, and more retailers introduced generous offers during the lockdowns. Based on the Fraud Triangle framework (Cressey, 1973), three elements contribute to increasing the risk of fraud: (1) opportunity, (2) incentive, and (3) rationalisation. In the context of fraudulent returns, it is plausible that financial pressure caused by the pandemic motivates dishonest customers to commit returns fraud. As suggested by the UK's Fraud Prevention Community (FPC), the pandemic posed financial stress, leading some households to explore fraudulent opportunities to gain financial benefits (Cifas, 2021). The FPC also found that in the UK, a proportion of young people (16-45 years old) perceived that falsely claiming a 'lost in transit' case is socially accepted. A study by LexisNexis (2020) shows a considerable increase in retail fraud since the pandemic. A recent survey conducted by NRF (2021, p1) also found that '*for every \$100 in returned merchandise accepted, retailers lose \$10.30 to return fraud, up from \$8.80 in 2019'*. Therefore, the pandemic significantly aggravated the problems of high returns fraud. It is essential to gain a deeper understanding of why returns fraud has happened more frequently since the pandemic.

Existing studies exploring the disruptions caused by the pandemic on supply chains and retail operations have not accounted for disruptions in the management of product returns. For instance, Remko (2020) provided insights on the supply, demand and control risks that retailers have experienced during the pandemic; however, the study did not focus on the risks of product returns. The potential risks of product returns, such as unpredictable returns volume and returns fraud, could affect the entire supply chain. It is also important to know if any resilience strategies developed in the supply chain can help mitigate returns problems and support returns management. Likewise, non-essential retailers, such as those selling apparel, footwear and electrical goods, had to adopt new ways to engage their customers, especially during the lockdowns and the subsequent phase with reduced socialising. Mukherjee et al. (2021) identified operational challenges in the fashion retail stores due to the pandemic but did not consider the changes in customer return behaviours and related problems in managing returns. For example, we lack knowledge on how store managers deal with the returned products after lockdown and any new challenges that occur. Sarma et al. (2021) developed an optimisation model for multichannel fashion retailers to maximise their merchandise performance to mitigate the COVID-19 impact. While the model includes different priorities (e.g., sales, store performance, and capacity) to formulate the business scenarios, it does not include the factor of product returns. Remko (2020) also highlighted that future research on supply chain resilience should focus on more empirical and less conceptual research surrounding impacts of the pandemic. Thus, more industrial practice research is needed to better understand the new challenges regarding returns management and the types of strategic plans return managers should make.

The above discussion has demonstrated that whilst there is substantial research exploring the impact of the pandemic on the supply chain, the disruption of product returns processes due to the pandemic has remained largely unexplored. Therefore, the purpose of our research is to (a) investigate the impact of the pandemic on the management of product returns, (b) explore consumer returns behaviours during the pandemic, and (c) explore the subsequent strategies that retailers would take to manage returns problems effectively in a post-pandemic world (Discussion section).

Methodology

To address our research questions, both qualitative and quantitative research methods are required. The qualitative study was undertaken to allow us to gain a deeper understanding of a situation (Crouch and McKenzie, 2006; Brown & Dant, 2008), that is, how product returns management was affected by the pandemic from retailers' perspectives and how they coped with the challenges. Interviewing experts is recommended as an effective and efficient method in social sciences (Bogner et al., 2009). We conducted semi-structured interviews with 8 omnichannel retailers, 3 experts from retailer associations, 2 returns technology service providers, and a former police officer who specialised in retail crime between July 2021 and October 2022, ensuring retailers and experts had an opportunity to reflect on their experience during and after the pandemic. A total 18 informants were interviewed, which has reached the saturation of sample size for qualitative research (Bogner et al., 2009; Hennink & Kaiser,

2021). All informants work in different departments with responsibilities in returns management, loss prevention, data analysis, and retail fraud prevention. We chose to interview experienced managers, as they are embedded in the operations and are likely to have a good understanding and overview of what is happening and why. Table 1 provides details about the organisations and the positions of the informants. The retailers we interviewed are large omnichannel organisations selling clothing, home entertainment and electrical goods. To complement the interview data, we also participated in several Efficient Consumer Response (ECR) Retail Loss Group and ORIS Forums online meetings to observe and collect data on retailers' experiences.

Table	e 1. Company types, countries an	<i>id roles of interviewees.</i>
(*) For internation	ally operating companies, indicated	ates the location of the interviewees

#	(*)	Retail sector	Representatives
1	UK	Groceries, Apparel, Electricals	A: Loss Prevention Manager in charge of online and wholesale
			operations
			B: Loss Prevention Manager in charge of store operations
2	UK	Fashion & Apparel, Footwear,	Profit Erosion and Data Mining Manager
		Accessories	
3	UK	Electricals, Fashion & Apparel	A: Head of Digital Risk
			B: Risk and Loss Prevention Investigator
4	CA	Electricals	A: Manager of Loss Prevention and Inventory Control (online).
			B: Returns Manager, involved with returns and returns
			prevention.
5	UK	Groceries, Apparel, Electricals	Multichannel Returns Manager
6	UK	Fashion & Apparel, Footwear,	A: Fraud Analytics Manager
		Accessories	B: Head of Online Loss Prevention
7	UK	Electricals	Fraud Prevention and Investigations Manager
8	US	Fashion & Apparel	Director of Loss Prevention
9	UK	Expert (IMRG)	An analyst who has extensive retail experience
10	UK	Expert (ECR)	Closely working with retailers on identifying problems of loss
			and returns
11	UK	Expert (ECR)	30 years research experience on understanding retailers'
			problems with loss and returns.
12	UK	Expert (IASME)	Former police officer specialising in retail crime
13	US	Expert (Returns technology	A: President of the retail technology provider
		service provider)	B: Public relations senior manager
14	US	Expert (Returns technology	A: Senior Manager (Public Relations) who works closely with
		service provider)	retailers.
			B: President of the retail technology company.

The interview questions were primarily designed to learn about the impact of the pandemic on returns and related fraud. Examples of the interview questions were (1) '*How have your return and fraud rates been pre-pandemic, during lockdowns, upon shops reopening, etc.*)?', (2) 'Since the start of the

pandemic, have you introduced any specific policies to influence returns and returns fraud?, and (3) *'What more can you tell us about the influence of the pandemic on returns?*'. Thus, the interviews with retailers deepened our knowledge of the changes in returns since the beginning of the pandemic, in particular regarding the emergence of new returns fraud types and the operational challenges in returns management. The interviews lasted between 60 and 90 minutes and were recorded with the interviewee's consent.

To analyse the interview data, a thematic analysis method was employed to identify, analyse, aggregate, and provide insight into meaningful themes (Kvale, 1994; Seidman, 2006). We followed the widely recognised six-phase approaches suggested by Braun and Clarke (2006) for our data's thematic analysis. Since there is limited research investigating the pandemic's influence on product returns management, we used an open coding approach (i.e., without pre-set codes) to develop a set of initial codes as we worked through the coding process. Each segment of data we coded was related to the challenges and changes of returns management during the pandemic, to answer the research questions (RO1 and RO2). The following step was to develop the preliminary themes by collating the initial codes to identify potential themes of broader significance. Lastly, we reviewed, modified, and aggregated the preliminary themes to ensure the codes within each theme were properly fitted, and the individual theme was meaningful within the data set to address the research questions (Kiger & Varpio, 2020). In total, we identified three main dimensions, as shown in the coding structure of Figure 1. Three researchers independently coded and analysed the interview data to ensure the coding and analysis process was credible. They re-read and re-examined the codes and themes, which followed the recommendation by King (2004), and Braun and Clarke (2006). Additionally, our research team consists of 7 members and 3 project advisors who regularly met to discuss the data analysis and findings to check for discrepancies.

A UK-focused consumer survey was conducted in February 2022 as a supplement to understand consumer returns behaviours in a pandemic. This method aims to obtain a different insight into the impact of the pandemic on product returns from the customers' perspective (addressing RQ1). It can also provide indications of how retailers can better manage product returns in a post-pandemic world. The survey was specific to the returns of fashion products, given that such products have higher returns rates (Mostard & Teunter, 2006). A total of 507 eligible respondents were collected from Prolific (a platform that provides access to an online pool of respondents with higher quality data than those from other recruitment platforms), of which 497 were used in the analysis after removing invalid responses that failed the intention check question (Oppenheimer et al., 2009). All respondents had to be at least 18 years old, UK residents and have bought fashion items online during the pandemic. Table 2 provides the demographic characteristics of the respondents.

	Number (%)
Gender	
Male	242 (48.7%)
Female	250 (50.3%)
Non-binary / 3 rd gender	4 (0.8%)
Prefer not to say	1 (0.2%)
Age	
18 - 24	103 (20.7%)
25 - 34	102 (20.5%)
35 - 44	99 (19.9%)
45 - 54	78 (15.7%)
55 - 64	62 (12.5%)
Over 65	53 (10.7%)
Total of number of respondents	497

Table 2. Description of the sample



6





The impacts of the pandemic on returns and related fraud

Regardless of their respective retailing industries, all retailers we interviewed experienced similar product returns management disruptions during the pandemic. This section describes the impacts caused by the pandemic on product returns in three dimensions, namely (1) risks and uncertainties, (2) processes and costs, and (3) new strategies for returns management, before proceeding to a discussion in the next section.

Dimension 1: More risk and uncertainties in product returns and fraud

A) Unpredictable returns rates

Regarding the general returns, the informants reported that the return rates were lower during the lockdown, increased when stores reopened and then went back to the pre-pandemic level in some cases. The managers all agreed that they were no longer operating based on the pre-pandemic retailing situation to manage their returns and faced more challenges in allocating resources and mitigating costs. There are several reasons related to the pandemic that drive this situation.

One is the fact that almost all retailers extended the return window from 28 days to 45, 60, or 90 days, resulting in more uncertainties in forecasting whether and when customers would return the items. In parallel, because of the lockdown and health concerns, retailers observed that customers were pushed to shop online, but even those shopping in-store and finding fitting rooms closed were pushed to buy the same items in different sizes, which induced higher return rates. We were told by several managers that to maintain competitiveness, they have adjusted their retailing strategies to boost sales, introduced more 'effortless' returns processes, and be more customer friendly to avoid losing market share during the pandemic. This pattern was more likely to be highlighted by the retailers who sell competitive products (where several retailers offer similar products), for instance, retailers 1, 2, 5, 6, and 8. Retailers speculated that customers would order similar items from different retailers for comparisons, which could further increase returns rates and increase instability in returns management.

In addition, due to the pandemic outbreak, restrictions on transportation routes also resulted in significant delays in receiving returns and increased the difficulties in making plans to manage returns more efficiently. This is a particular challenge for retailers who lack a capable return portal system as they do not have the visibility to track and identify the movement of returns back to their warehouses. As such, these retailers were unable to predict the number of upcoming returns, thus they would face imbalanced inventory and resource re-allocations. Meanwhile, customer services dealing with returns queries also faced challenges in providing useful information to their customers, which could result in a negative customer experience; as a concern expressed by their managers. These findings indicate that the return rates were more unpredictable during the pandemic, and managers faced more uncertainty in making plans for returns and providing better customer service.

B) Increased rates of fraudulent returns

In addition to the changes in general returns rates, all retailers highlighted that they have faced more returns fraud since the beginning of the pandemic, especially shipping-related fraud. Typically, dishonest consumers would claim that they sent returns back, although they did not. One reason that emerged from our data is that in the lockdown period, non-essential retailers had to close their stores whilst asking customers to return items by post, which increased risks of returns fraud related to shipping. Additionally, retailers felt obliged to follow government 'suggestions' and hence introduced contactless deliveries to eliminate customers' signatures. Unfortunately, this allowed fraudsters to ask for refunds claiming that products were lost in transit. More elaborate schemes using fake tracking IDs or manipulated shipping confirmations also significantly increased during the pandemic. We were told by all informants that step-by-step instructions how to produce fake tracking and demanding refunds were easily available online, even in book-form. Furthermore, dishonest customers who do not want to engage

with retailers directly can use professional fraudulent 'refunder' services, who execute the fraud on their behalf for a fee.

In conclusion, there are now more opportunities for committing retail fraud, and many customers feel more financial and mental pressure (Fegert et al., 2020), which increases their motivation to commit fraud that is conveniently accessed. For example, one manager said:

'I'm sure a lot of retailers are seeing this trend: the rate of lost shipments. Lots of different fraud guys out there claimed items that were not received and asked for a refund. I think it's, obviously a problem that just exploded during Covid '. (Loss prevention manager 1B)

We also found that higher-valued products were more frequently targeted by fraudsters. Specifically, electronic retailers experienced 'Bricking', where fraudsters harvest valuable components (e.g., a highend lens in a camera bundle, CPU, or graphics cards) and then return the remainder for a refund. Retail experts suggested this had become more frequent due to the financial stress caused by the pandemic.

Returns managers also facing difficulties in evaluating whether return claims are genuine or fraudulent, especially for customer service priority retailers. Moreover, the often-significant delay in reverse logistics (IMRG, 2021), transporting returns to the processing location, forced some retailers to refund customers before receiving and inspecting the returns. Managers followed customer-centred policies even when this increased the risk of (successful) fraud. These strategic decisions offered more opportunities for fraud and endangered retailers' profitability. For instance, two managers from different organisations highlighted that:

'Because it has taken so long for us to get the stuff back, we were almost having to make the refunds before we've seen the packages come back into the distribution centre, because it was taking ages from the supply chains and Royal Mail and all that, everything was absolutely slow and delayed.' (Head of Digital Risk 3).

'The easiest thing to call out was that we saw a delay, [it's] taking longer for that stock to get back to us. It might be [that] the courier took longer to process it through the depot, returning it back to us. That had a lot of operational impacts on us because customers were waiting for their refunds and their money back. And we hadn't yet had those units back. So, in some circumstances, our call centres decided to refund before the product returned, which is not our standard process and gives us less protection. And longer returns meant that we were taking decisions we probably wouldn't normally make.' (Fraud Prevention Manager 7)

Dimension 2: More complicated processes and higher costs in managing product returns

All informants pointed out that the return processes had become more complicated because of measures taken to reduce the risk of virus transmission in returns. Hence, more time and effort was spent on processing and managing returns.

A) More complicated returns management processes

Pandemic health concerns required extra processes, leading to more resource consumption, longer processing times, stock imbalance, and increased risks of fraudulent returns.

First, all returned products needed to be quarantined for 48-72 hours, in addition to increased cleaning, such as sanitising of packages. This extra quarantine time for the returns reduced operational efficiency. More importantly, retailers could not inspect the returned items before refunding as would happen normally. Fraudsters used this as opportunity for price arbitrage frauds. For instance, we were told:

'We actually saw a bit of a spike in fraud because when COVID came out, we had these mandatory waiting periods of 'don't touch the package for this amount of time'. We weren't opening. Most retailers

weren't opening or touching any of the products. So, it made it easier for someone to come in and swap an item. And then the issues started cropping up.' (Returns Manager 4)

'Actually, we stopped testing certain things that we [otherwise] would have done, from a COVID perspective. So, we weren't testing VR headsets anymore. And they're quite high-ticket value items, but we had no choice. So, we have started taking back more returns for different reasons but they could be fraudulent.' (Risk and Loss Prevention Investigator 3)

Second, after the lockdown, when stores reopened, many retailers had to deal with a mountain of returns due to extended return windows. Many customers had chosen to wait and return their items in stores upon their reopening. However, retailers lacked staff to sort and check all returns. In distribution centres (DC) retailers had to put social distancing measures in place and add staff to process the increased returns quantities, reducing operational efficiency and increasing processing times.

'It was really challenging because, at the same time, we had to put social distance to our DC operation as well. But we had more volume coming through. It was like a peak [in] trading '. (Head of Digital Risk 3)

Third, fashion retailers specifically highlighted the challenge of managing fitting rooms. Early after the end of the lockdown, they were unsure whether they should reopen fitting rooms, how they would manage them, and what the extra costs would be. Even after some competitors reopened fitting rooms, some retailers continued to keep fitting rooms closed which directly increased returns rates as customer would need to try clothes at home. Indeed, one of the key reasons raised by top managers was the costs and resources spent on managing the fitting rooms. The interview data also shows that in order to follow government guidance, retailers had to leave time between each customer for cleaning, and all clothes that had been tried on required quarantine for 24-48 hours as well. Thus, the challenges caused by the pandemic consumed an extra proportion of resources. One manager highlighted that,

'... we've never experienced this before, so, we don't have a reference to consider. It's a tough decision...if we still close them [fitting rooms], are we still having higher returns. I can imagine people would shop more online as they cannot try them [clothes] on [in store, either]. And, how about the costs. It's tough, isn't it. ...But, we have to reopen, we need specific staff to watch the [fitting rooms] all the time'. (Profit Erosion and Data Mining Manager 2)

B) Higher returns costs and losses

The above discussion demonstrates that the significantly increased online returns and associated fraud and the more complicated returns processes increased retailers' costs and losses, which significantly affected retailers' bottom line. Retailers highlighted that the increased costs of the returns are not only caused by increased shipping costs, but also reflect the increased costs of refurbishment, administration, repacking, restocking, and more. Our interview data analysis also demonstrated other significant losses related to product returns.

First, retailers reported that because of the lockdown, the convenient and effective route of returning products bought online to stores became unavailable. This means that more shipping costs were incurred by retailers, but more importantly, retailers would lose the opportunities to boost in-store sales. All managers observe that when customers return items in-store, retailers can save time and costs in processing a return, and customers would be more likely to buy new products ((Jack et al., 2019; Ertekin, 2018).

Second, the extra quarantine time for returned products reduced the speed of the reselling cycle, resulting in a higher probability of losses. Also, such additional time increased stock holding costs. Likewise, the extended returns window or stopped accepting returns entirely for a while during the lockdown period provided more opportunities for wardrobing behaviour or a higher probability of return rates due to 'change of mind'. The negative impact is that wardrobing customers (those who

10

illegitimately "borrow" items) could increase the use of returned items and extract more of a product's market value before returning it. Afterwards, these returns were unlikely to be resellable, especially seasonal products. Thus, the change to a longer period to check and sort the returned products caused more risks.

Dimension 3: New returns management strategies responding to the new return behaviours

The above findings demonstrate that the pandemic induced new challenges and risks, which forced retailers to operate under new constraints when managing returns. Returns problems such as wardrobing, returning fake items, and shipping fraud, have worsened since 2020 according to the interviewed retailers, retail service providers and retail experts. Managers have been faced with higher return costs and potential losses, along with scarce resources due to cost saving pressures as well as higher staff absences due to both COVID-19 and other illnesses after social distancing measures eased.

A) Reinforcement in returns management

Our in-depth discussions with retailers and experts reveal that in addition to the challenges caused by external factors, retailers have started to fundamentally rethink their returns management. The retailers we interviewed have taken the pandemic impacts as an opportunity to review their returns systems and develop more strategic plans.

First, our interview data demonstrates that retailers with higher 'lost-in-transit' fraud rates have planned to collaborate with 3rd party returns service providers, implementing effective returns portals. These systems record detailed returns information and allow retailers to be in control of issuing the return shipping label with a tracking number instead of leaving the chance for dishonest customers to provide a fake tracking ID. Hence, retailers can refuse a refund if the returns portal was not used and often prevent shipping-back fraud. Additionally, this allows retailers to obtain real-time returns data to understand customer return activities and plan accordingly. We were told that:

'Now for returns, we're gonna use [return portal solution] for our customers to use. And that makes it a lot easier journey for the customer in terms of being able to return the product, the labelling for returning the product, etc. But it also means we have a lot more control, because we only accept our returned goods being returned through our portal, which means that we have the proper returns label. And they can't do this proof of delivery where we don't know who it is. (Head of Digital Risk 3).

Second, more retailers are considering the use of unique item level product IDs, instead of universal barcodes per stock keeping unit. Electronics often already carry individual serial numbers, but these have the potential for being used more effectively for returns control. We were told that radio frequency identification (RFID) technology could provide unique IDs to enable products to be identified uniquely and matched to the transaction. Retailers can use product IDs to prevent or identify different types of fraudulent returns, such as in-store shoplifted fraud and fake item returns fraud. It is imperative to reduce the opportunities to initiate a fraudulent or abusive return at the initial purchase stage. We were told that:

'In the future, we will be able to do returns using RFID. So, that mean even if stuff comes back faulty, we will know whether or not we've actually sold it. We also put an RFID [reader] in the DC, so when it comes to online orders, we're hoping that they would be picked using RFID. And then when you've got your missing item claims in the denial of receipt, if we mark those items as 'not received' by the customer, and they go to try and return them in-store, it will say that this customer never got these items; therefore, they're not eligible for [another] refund because they've already received it'. (**Profit Erosion and Data Mining Manager 2**).

However, feedback from a larger number of retailers from the ECR Retail Loss group showed that retailers often struggle to make a business case for enabling the use of item level ID in returns processes,

even if the unique IDs are already in place in the form of printed serial numbers or attached RFID tags. The necessary investment in IT system upgrades seems too significant for most retailers.

Third, we found that retailers who reported having lower rates of returns fraud had already started to take a step further in investigating the suspected fraud during the pandemic. For example, Company 6 has an anti-fraud team to specifically contact individual customers who are found or suspected to have returned a used or fake item. These retailers have observed the benefits of such interventions in reducing losses and believe that building a reputation for being tough in dealing with fraudulent returns will discourage potential offenders from attempting to abuse their system.

B) Re-evaluation of returns and management policies:

In contrast, our data show that customer-centric policies, effortless return processes, and customer expectations of easy product returns could increase the rates of product returns and returns fraud. These influential factors need further investigation.

First, all interviewees agreed that providing a better customer experience is the key for every retail business to stay competitive, retain customers, and increase sales. However, the retailers also agreed that if the return is seamless and policies are very customer-friendly, retailers are more likely to have higher rates of returns and fraud (Jack et al., 2019). This could reduce retailers' profitability and hence also affect loyal customers. We would suggest retailers properly review their returns costs, probability, and customer profiles to evaluate their current returns policies and management strategies. In particular, several managers were not aware of the cost of returns when we asked them. The experts we interviewed all agreed that they observed a similar situation: most retailers do not clearly understand the costs of returns and the associated impact on their profitability and product prices.

Second, due to the competitive retailing market, more retailers have introduced a variety of returns paths, including drop-off points, product returns banks, and returns at sister-brand stores. This is likely to result in less scrutiny, which could increase fraud over time. It is also inferred that such implementations could cost more money, make the returns processes and management more complicated, and require extra supervision. Several managers of leading retailers stated that they would focus more on customer convenience than on the probability of returns fraud.

Third, all managers were concerned that, although the retailing situation has started to normalise, many consumers have maintained their returns habits and expectations. A recent survey conducted by Rebound also shows that almost 60% of customers expect returns to be either cheaper than before or free (Gee, 2021). These findings imply that the pandemic has greatly accelerated comfort with convenient returns. To counterbalance this, some retailers have introduced returns fees or restocking fees, following the example of fast-fashion retailer Zara (Nanji, 2022; Ryan, 2022; DiFrancesco & Huchzermeier 2020). A study conducted by parcelLab (2021) also found that 43% of the top 100 US eCommerce channels have started to charge for returns fees.

Notably, retailers also highlighted that fraudsters are becoming more sophisticated and organised. Because of the Internet, frauds are no longer restricted to small geographic areas but spread across the globe. Therefore, retailers are expected to re-evaluate their return policies by considering the long-term impacts of return costs and associated fraud losses.

For example, one manager highlighted that:

'I don't think we're ever going back to the way it was, from the fraud trends that are emergent; as I said before, do you want to go into a store and be seen [on] CCTV cameras or by store staff? Or do you want to just be returning online, claiming you never received a package, and you can hide behind those aliases? I think that's e-commerce, and what's really happened. And I don't see it going away. And I think, it's gonna get worse if retailers are don't buckle up and put in programs to address the [returns fraud] situation'. (Director of Loss Prevention 8)

The following subsection is the survey findings that demonstrate the UK customer return behaviours during the pandemic, which provides different perspectives from consumers rather than retailers.

An investigation of customer returns behaviours during the pandemic

Three key findings were obtained from the survey. First, more than 40% of respondents agreed they were more comfortable returning fashion items bought online since the pandemic, and only 11.5% disagreed (see Figure 1 for details). This result aligns with retailers' practices that aim to provide a better return experience and more convenience (Narvar, 2020), but it will conflict with the latest development of retailers tightening their returns policies after the Christmas season in 2022 (Matarese, 2022).



Figure 1: The response of customer return experience in the pandemic

Second, more than 80% of respondents indicated that they return unwanted fashion items within a week, and 8% returned within two weeks, although retailers have extended their returns windows during the pandemic (see Figure 2). This result suggests that a legal minimum of 14 days in the UK (gov.uk, n.d.) is adequate to meet customer returns behaviour and expectation. Retailers believed offering an extended returns window to improve customer satisfaction is questionable. Importantly, with a shorter returns window, retailers can receive their products back to stock more quickly and mitigate the losses in product value (Frei, Jack and Krzyzaniak, 2020). It would be interesting to explore the related financial savings and the effect on customer satisfaction when retailers shortened their return window again.



Figure 2: Customer return behaviours around return periods during the pandemic

Third, returning to stores is the preferred return option by all participating retailers. Our data shown in Figure 3 demonstrates that 'the inconvenience of the store' is the primary reason that inhibited customers from returning to stores. The inconvenience includes the store being far away, difficult to

reach, or having inconvenient opening times. Interestingly, the second most selected reason is that stores are likely to have a long queue. It is plausible that purchases and returns are operated through the general tills in most stores. As only 7% of respondents indicated that returning items to a specific customer service desk inhibited them from returning to the store, it could be advisable to adopt this strategy. Handling all returns at the customer service desk or a returns desk could increase work efficiency, reducing processing time as well as the probability of fraud attempts. Specifically trained staff are better at spotting returns policy abuse and fraud (Jack et al., 2019). They should also record the returns data correctly, including reasons for returns, which is often not the case due to reasons of convenience or time pressure (Jack et al., 2019).



Figure 3: Reasons preventing customers from returning products in-store

Discussion

The findings of this study demonstrated that the disruptions deriving from the pandemic and the consequential challenges on return management are interrelated. The returns rates fluctuated during the pandemic caused by lockdowns, delays in transportation, and social distancing. This resulted in more challenges in forecasting returns rates, and more tasks and difficulties in processing returns effectively. In addition, most retailers liberalised their return policies and introduced effortless returns methods with contactless service. Whilst there was information on how to defraud retailers available online before the pandemic, such information as well as "refunder" services has become much more widely available since the pandemic. This situation together with the financial and psychological pressures of the pandemic all aggravated the problems of returns fraud. Higher costs of returns and losses resulted.

Theoretical contributions

First, the findings of this research have extended the current pandemic research in several ways. Prior to this research, there was limited knowledge about how the Covid-19 pandemic affected product returns and associated management challenges in detail (Roggeveen & Sethuraman, 2020; Schleper et al., 2021; Gultekin et al., 2022); thus, this research filled this knowledge gap. For instance, the interview results of this investigation show that the disruption in transportation has also affected reverse logistics significantly slowing down treturns processes, negatively affecting customer experience, and creating more opportunities for fraud. These findings advance the existing knowledge by showing how the transportation disruption caused by the pandemic impacted not only the forward supply chain and general operations (Spieske et al, 2022; Rahman et al, 2022), but also resulted in higher costs of returns and higher losses associated with increased returns fraud. Moreover, unlike previous research, our study investigated fashion, electronics and other retailers rather than just one sector. Thus, our findings provide a more comprehensive understanding of pandemic impacts on retailing and shed light on the different types of fraudulent returns.

Second, the findings on fraudulent returns are consistent with the Fraud Triangle framework (Schuchter & Levi, 2016). According to our analysis, the pandemic restrictions (e.g., contactless services) and the fragile returns systems and management (e.g., ineffective returns portals, and customer-centric policy) provided more opportunities for fraudsters to abuse retailers' returns management and gain financial benefits. Additionally, the newly identified factors of widespread unethical information sharing on how to return products fraudulently and the ready availability of professional fraudulent 'refunder' services, along with financial stress, can be viewed as the incentives, capability, and rationalisation elements related to the framework (Charlopova et al., 2020; Wolfe & Hermanson, 2004). In particular, participants of this study indicated that more expensive items have become the key target items for fraudsters, given the financial stress during the pandemic. Furthermore, the findings of increased shipping-related frauds have extended prior research. Our research uncovered the causes of increased fraud opportunities, which can explain the prior findings of why there are increased false claims in lost-in-transits (Cifa, 2021).

Third, the research identified a pattern showing that many retailers deal with returns and related fraud in an ad-hoc manner (Frei, Jack and Krzyzaniak, 2020), lacking an overall strategy. In particular, these findings suggest that retail businesses should adopt a more systematic and systemic approach to how they design and manage their loss prevention operations (Beck with Peacock, 2009). Our findings indicate that if a well-defined strategy for managing product returns is not properly devised, organisational and operational aspects become disoriented and disconnected. For instance, our findings indicate that inefficient returns management can easily be exploited by serial returners and fraudsters. This increases retailers' costs and can significantly affect the bottom line (Frei, Jack and Krzyzaniak, 2020). In addition, the findings regarding the return window policies in our research contribute to the related academic literature on returns policies (Akturk et al., 2021; Janakiraman et al., 2016) by suggesting that the returns window not only affects the returns rates but also causes uncertainties in return rates forecasting and subsequently induces challenges in making plans for resource allocations. Furthermore, longer returns windows are not used by most customers.

Managerial implications

Retailers and service providers are the key players responsible for designing and implementing strategic returns management. This research's findings can be of importance to them for future practice. Retailers should reassess their returns management and policies, keeping in mind the changes caused by increased eCommerce and increased fraud. We generated a list of actions that retailers can take to become more strategic and resilient in managing product returns and mitigating related fraud. These suggestions primarily address the weaknesses of returns systems identified via the analysis of the interviews. The effectiveness of these suggestions should be further examined via simulation models which account for the related costs, returns, fraud rates, and profitability (Zhang *et al.*, 2022). Retailers should consider the following:

- Effectively utilising existing and new technological solutions (e.g., RFID, blockchain) can accelerate informative data collection and allow retailers to gain visibility to combat returns fraud.
- Building a thorough consumer-based data system to record, analyse and track individual consumer's returning behaviour plays an important role in making strategic plans for reducing returns rates, targeting serial returners / potential offenders, and improving returns management.
- Providing a smooth process for good customers and being tough on fraud (Laing, 2022) can establish a reputation, which means the retailer will be less targeted by organised crime and serial abusers.
- Reconsidering the liberal return and customer-centric policies to mitigate unnecessary losses. For example, no refund can be given if beyond the returns period, and no refund without a receipt.
- Developing sophisticated risk models by building a series of customer and context specific indicators to filter the refund decision accordingly.

Limitations and future research opportunities

The findings of this research are subject to certain limitations. First, we employed a purposive sampling method for the interviews, focusing on larger multichannel retailers. The impacts of the pandemic on product returns and practical impactions may vary for medium and small retailers or those operating only online or only offline. The impacts of the pandemic on medium and small retailers would be a fruitful area for further work. Second, the investigation of this research focused on the perspectives at the management and general customers levels as different stakeholders faced different challenges during the pandemic. Collecting data from specific groups of stakeholders may lead to a bias (Marshall, 1996; Seidler, 1974) which can be compensated by also considering other stakeholders. A further study could assess the short-term and long-term effects of the pandemic on personnel directly dealing with product returns, such as customer service staff (including at call centres), in-store return desks staff, and warehouse staff. Moreover, considerably more research will need to be done to explore the long-term impacts of the pandemic on product returns. It is important to investigate the impacts on returns rates and losses if retailers introduce new returns portal systems and stringent returns policies or retain their frictionless customer centric return processes. Furthermore, there are calls for a green recovery from the pandemic, yet most retailers have not considered how to apply this to returns management, and the problem has received scant attention in the research literature (Zhang et al., 2023). Future research is needed to develop a sustainable plan for managing product returns.

Conclusion

Retailing is a driving force of the UK's economy and is the UK's largest private-sector employer. The problems caused by product returns and fraudulent returns can be significant, increasing environmental damage and cost to consumers, risking retail workers' jobs, reducing retail profitability, and creating unethical social norms. However, questions remain unaddressed over how Covid-19 affected the management of product returns, and what actions retailers should take to become more competitive in a post-pandemic retailing world. Therefore, after an in-depth investigation of the impact of the pandemic on returns management, our findings suggest that it is necessary that retailers become more strategic in dealing with returns and fraud. Returns processes need to be streamlined for efficiency and smoothness, ideally adopting a lean approach (Frei et al., 2022), whilst the returns policy abuse and crime must be fought effectively.

This paper placed the development of product returns during the pandemic in the context of other retail operations management research. The study makes several contributions: (1) It deepens our understanding of the new challenges in managing product returns during the pandemic, and (2) customers' perceptions of product returns after experiencing the pandemic, it provides (3) a list of recommendations that retailers can implement to effectively manage new customer returns behaviours and combat increased returns fraud in a post-pandemic world, and (4) suggestions for future studies, such as the effectiveness of returns interventions and the sustainability management of product returns. The theoretical contribution of this research lies in identifying the need for developing strategic approaches to dealing proactively with returns and fraud in an omnichannel retail environment, expanding on what was proposed in Frei, Jack and Brown (2020). This is even more important in a post-pandemic world with increased online shopping, increased returns and increased fraud.

Acknowledgments Funding

This research is funded by the UK Economics and Social Research Council (reference ES/V015605/1) and supported by ECR Retail Loss.

References

Beck, A. with Peacock, C. (2009), New Loss Prevention. Palgrave Macmillan, London, 2009.
Brown, J. R., & Dant, R. P. (2008). Scientific method and retailing research: a retrospective. Journal of Retailing, 84(1), 1-13. https://doi.org/10.1016/j.jretai.2008.03.001

Brydges, T., Heinze, L., & Retamal, M. (2021). Changing geographies of fashion during Covid-19: The Australian case. *Geographical Research*, *59*(2), 206-216.

- Bogner, A., Littig, B., & Menz, W. (Eds.). (2009). *Interviewing experts*. Springer. <u>https://doi.org/10.1057/9780230244276</u>
- Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social science information*, 45(4), 483-499.
- Chowdhury, M. T., Sarkar, A., Saha, P. K., & Anik, R. H. (2020). Enhancing supply resilience in the COVID-19 pandemic: a case study on beauty and personal care retailers. *Modern Supply Chain Research and Applications*, Vol. 2 No. 3, pp. 143-159. https://doi.org/10.1108/MSCRA-07-2020-0018
- DiFrancesco, R. M., Huchzermeier, A., & Schröder, D. (2018). Optimising the return window for online fashion retailers with closed-loop refurbishment. *Omega*, 78, 205-221. <u>https://doi.org/10.1016/j.omega.2017.07.001</u>
- DiFrancesco, R. M., & Huchzermeier, A. (2020). Multichannel retail competition with product returns: Effects of restocking fee legislation. *Electronic Commerce Research and Applications, 43*, 100993. https://doi.org/10.1016/j.elerap.2020.100993
- Ecommerce News (2022) 74% of Europeans won't reduce online shopping. Available at: https://ecommercenews.eu/74-of-europeans-wont-reduce-online-shopping/ (Accessed: 02 January 2022).
- Ertekin, N. (2018). Immediate and long-term benefits of in-store return experience. *Production and Operations* Management, 27(1), 121-142.
- Fegert, J. M., Vitiello, B., Plener, P. L., & Clemens, V. (2020). Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: a narrative review to highlight clinical and research needs in the acute phase and the long return to normality. Child and adolescent psychiatry and mental health, Vol. 14, pp. 1-11.
- Frei, R., Jack, L., and Brown, S. (2020), "Product returns: a growing problem for business, society and environment", *Int. J. of Operations and Production Management*, Vol.40, No.10, pp.1613-1621.
- Frei, R., Jack, L., and Krzyzaniak, SA. (2022), "Mapping product returns processes in multichannel retailing: challenges and opportunities", *Sustainability*, Vol.14, No.3, 1382.
- Gee, L. (2021). *Free Returns Are Happening Is Your Company On Board?*. Available at: <u>https://www.reboundreturns.com/blog-articles/free-returns</u> (Accessed: 11 July 2021).
- Golan, M.S., Jernegan, L.H. and Linkov, I. (2020), "Trends and applications of resilience analytics in supply chain modeling: systematic literature review in the context of the COVID19 pandemic", Environment Systems and Decisions, Vol. 40, pp. 222-243.
- Gov.uk. (n.d.). Accepting returns and giving refunds: the law. Available at: <u>https://www.gov.uk/accepting-returns-and-giving-</u>

refunds#:~:text=You%20must%20offer%20a%20refund,have%20to%20provide%20a%20reason (Accessed: 18 April 2022).

- Gultekin, B., Demir, S., Gunduz, M. A., Cura, F., & Ozer, L. (2022). The logistics service providers during the COVID-19 pandemic: The prominence and the cause-effect structure of uncertainties and risks. *Computers & Industrial Engineering*, 165, 107950. <u>https://doi.org/10.1016/j.cie.2022.107950</u>
- Hung, M. and Jin, D. L. (2020), "Impact of buy-online-and-return-in-store service on omnichannel retailing: A supply chain competitive perspective", *Electronic Commerce Research and Applications*, Vol.41, 100977.
- Hennink, M., & Kaiser, B. N. (2021). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. Social Science & Medicine, 292, 114523. <u>https://doi.org/10.1016/j.socscimed.2021.11452</u>
- Incisiv (2021) State of the Industry Report Retail Returns. Available at: <u>https://www.incisiv.com/hubfs/ebook/2021%20State%20of%20the%20Industry%20Report%20%20Retail%</u> <u>20Returns/Incisiv%20-%20Newmine%20State%20of%20the%20Industry%20Report%20Optimized.pdf</u> (Accessed: 3 January 2022).
- Jack, L., Frei, R., & Krzyzaniak, S. A. (2019). The Problems & Opportunities of E-Commerce Returns. ECR Retail Loss Group. Retrieved from <u>https://www.ecrloss.com/research/buy-online-return-in-store</u> (Accessed 14 June 2022)
- UPS. (2019). UPS Pulse of the online shopper: A customer experience study. https://
- solutions.ups.com/rs/935-KKE-240/images/UPS-Pulse-of-the-Online-ShopperReport.pdf
- Young, M., Soza-Parra, J., & Circella, G. (2022). The increase in online shopping during COVID-19: Who is responsible, will it last, and what does it mean for cities?. *Regional Science Policy & Practice*. <u>https://doi.org/10.1111/rsp3.12514</u>
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical teacher*, 42(8), 846-854. <u>https://doi.org/10.1080/0142159X.2020.1755030</u>
- Laing, B. (2022) *Time to prevent fraud without impacting on the customer journey*. Available at: https://www.imrg.org/blog/time-to-prevent-fraud-without-impacting-on-the-customer-journey/ (Accessed: 18 April 2022).

LexisNexis (2020) *Explosive Growth of Ecommerce and Retail Fraud*. Available at: <u>https://risk.lexisnexis.com/insights-resources/article/true-cost-of-fraud-for-e-commerce (Accessed: 3 July 2021).</u>

- Matarese, J. (2022). *Retailers tightening return policies this year*. Retrieved from: <u>https://www.wcpo.com/money/consumer/dont-waste-your-money/retailers-tightening-return-policies-this-year?utm_medium=email&utm_content=HasIm-dXR2QQHyWLbqbGafioSeZrM_9fNFvYJEMyX-XG1IKgDRssh1jKDxRGT44v (Accessed on 05 January 2023).</u>
- Minnema, A., Bijmolt, T. H., Petersen, J. A., & Shulman, J. D. (2018). Managing product returns within the customer value framework. In Customer engagement marketing (pp. 95-118). Palgrave Macmillan, Cham.
- Mukherjee, S., Chittipaka, V., Baral, M. M., Srivastava, S. C., & Jana, B. (2021). Analysing the problems faced by fashion retail stores due to Covid-19 outbreak. *Parikalpana: KIIT J. of Management*, 17(1), 206-217.
- Mostard, J., & Teunter, R. (2006). The newsboy problem with resalable returns: A single period model and case study. *European Journal of Operational Research*, *169*(1), 81-96. <u>https://doi.org/10.1016/j.ejor.2004.04.048</u>
- Nanji, N. (2022). Zara starts charging shoppers for online returns. BBC News, 12 May. Available at:: https://www.bbc.co.uk/news/business-61423753 (Accessed: 10 June 2022).
- National Retail Federation (2021) Consumer Returns in the Retail Industry 2021. Available at: <u>https://cdn.nrf.com/sites/default/files/2022-</u>

01/Customer%20Returns%20in%20the%20Retail%20Industry%202021.pdf (Accessed: 18 April 2022).

- National Retail Federation (2022) *Retail Returns Increased to \$761 Billion in 2021 as a Result of Overall Sales Growth.* Available at: <u>https://nrf.com/media-center/press-releases/retail-returns-increased-761-billion-2021-result-overall-sales-growth</u> (Accessed: 01 February 2022).
- National Retail Federation. (2021). Consumer Returns in the Retail Industry 2021. Available at: <u>https://cdn.nrf.com/sites/default/files/2022-</u>

01/Customer%20Returns%20in%20the%20Retail%20Industry%202021.pdf (Accessed: 07 March 2022).

- OECD (2020) *E-commerce in the Time of COVID-19*. Available at: http://www.oecd.org/coronavirus/ policy-responses/e-commerce-in-the-time-of-covid-19-3a2b78e8/ (Accessed: 21 January 2021).
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. Journal of experimental social psychology, 45(4), 867-872.
- Optoro (2020) Impact Report. Powering Resilient Retail 2020. Available at: https://info.optoro.com/hubfs/The%20Optoro%202020%20Impact%20Report.pdf (Accessed: 3 July 2021).
- Pantano, E., Pizzi, G., Scarpi, D., & Dennis, C. (2020). Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak. Journal of Business Research, 116, 209-213.
- Pierce, F. (2020, May 17). 'Goods lost in transit' threaten UK supply chain. Digital Supply Chain. Retrieved from: <u>https://supplychaindigital.com/digital-supply-chain/goods-lost-transit-threaten-uk-supply-chain</u> (Accessed on 24 July 2021).
- PR Newswire (2020) COVID-19 Survey: Round 3 Supply Chain Disruptions Continue Globally. Available at: <u>https://www.prnewswire.com/news-releases/covid-19-survey-round-3-supply-chain-disruptions-continue-globally-301096403.html</u> (Accessed: 6 January 2021).
- Pujawan, I. N., & Bah, A. U. (2022). Supply chains under COVID-19 disruptions: literature review and research agenda. Supply Chain Forum: An International Journal, 23(1), 81-95. doi:10.1080/16258312.2021.1932568
- Repko, M. (2022). A more than \$761 billion dilemma: Retailers' returns jump as online sales grow. cnbc.com. Available at: <u>https://www.cnbc.com/2022/01/25/retailers-average-return-rate-jumps-to-16point6percent-as-online-sales-grow-.html</u> (Accessed: 6 January 2023).
- Rahman, S., Ahsan, K., Sohal, A., & Oloruntoba, R. (2022). Guest editorial: The "new normal": rethinking supply chains during and post-COVID-19 global business environment. *International Journal of Physical Distribution & Logistics Management*, 52(7), 481-490.
- Remko, v.H. (2020), "Research opportunities for a more resilient post-COVID-19 supply chain closing the gap between research findings and industry practice", International Journal of Operations & Production Management, Vol. 40 No. 4, pp. 341-355. https://doi.org/10.1108/IJOPM-03-2020-0165
- Roggeveen, A. L., & Sethuraman, R. (2020). "How the COVID-19 pandemic may change the world of retailing", *Journal of Retailing*, 96(2), 169.
- Ryan, G. W., & Bernard, H. R. (2000). Data management and analysis methods. *Handbook of qualitative research*, 2, 769-802. Available at: <u>http://qualquant.org/wp-</u>content/uploads/text/2000%20Ryan Bernard.denzin.pdf
- Ryan, T. (2022). *Should Zara (and other retailers) be charging for online returns?* Available at: <u>https://retailwire.com/discussion/should-zara-and-other-retailers-be-charging-for-online-returns/</u> (Accessed on 05 January 2023).

- Sarma, P. R. S., Kumar, A., Choudhary, N. A., & Mangla, S. K. (2021). Modelling resilient fashion retail supply chain strategies to mitigate the COVID-19 impact. *The International Journal of Logistics Management, Vol. ahead-of-print No. ahead-of-print.* <u>https://doi.org/10.1108/IJLM-03-2021-0170</u>
- Schleper, M. C., Gold, S., Trautrims, A., & Baldock, D. (2021). Pandemic-induced knowledge gaps in operations and supply chain management: COVID-19's impacts on retailing. *Int. Journal of Operations & Production Management, Vol. 41 No. 3, pp. 193-205.* <u>https://doi.org/10.1108/IJOPM-12-2020-0837</u>
- Spieske, A., Gebhardt, M., Kopyto, M., Birkel, H., & Hartmann, E. (2022). How did supply chain networks handle the COVID-19 pandemic? Empirical evidence from an automotive case study. *International Journal* of Physical Distribution & Logistics Management, 52(7), 567-601. <u>https://doi.org/10.1108/IJPDLM-06-2021-0231</u>
- Spreer, P., Pfrang, T. and Linzmajer, M. (2021), "The psychology of returns; How behavioural design can reduce the return rate in e-commerce". Available at: <u>https://www.elaboratum.com/psychology-returns-behavioral-design/</u> (Accessed 30 May 2022).
- Ward, T. (2022) The Pandemic Permanently Changed Consumer Behavior. Top 3 Retail Lessons for 2022. R Available at: <u>https://www.mytotalretail.com/article/the-pandemic-permanently-changed-consumer-behavior-top-3-retail-lessons-for-2022/</u> (Accessed; 06 May 2022).
- Wood, Z. (2021). Amazon faces MPs' scrutiny after destroying laptops, tablets and books. The Guardian. Retrieved from <u>https://www.theguardian.com/technology/2021/jun/22/amazon-faces-mps-scrutiny-after-destroying-laptops-tablets-and-books</u> (Accessed on 03 March 2022).
- Zhang, D., Bayer, S., Willis, G., Frei, G., Gerding, E., and Senyo, P. (2022), "Using Big Data Analytics to Combat Retail Fraud", In *Proceedings of the 4th International Conference on Finance, Economics, Management and IT Business*, ISBN 978-989-758-567-8, ISSN 2184-5891, pp.85-92. Available at: <u>https://www.scitepress.org/Link.aspx?doi=10.5220/0011042600003206</u>
- Zhang, D., Frei, R., Wills, G., Bayer, S., Senyo, PK., & Gerding, E. (2023). Strategies and practices to reduce the ecological impact of product returns: an environmental sustainability framework for multichannel retail. Business Strategy and the Environment. Online first: <u>https://onlinelibrary.wiley.com/doi/10.1002/bse.3385</u>