The Impact of COVID-19 on Managing Product Returns in Retail

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Abstract
The Covid-19 pandemic has affected customers' shopping and returns behaviour 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. The effects of these changes on returns management are unclear; very little is known about what retailers have experienced in terms of product returns during the pandemic. This paper addresses this research gap via a series of semi-structured interviews and a consumer survey. Our findings include a list of recommendations for retailers to mitigate the effects of the pandemic on returns and related fraud.

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

Background
COVID-19 tremendously affected the retail industry in terms of disruptions to supply chains, retailers' operations, and changes in customer shopping behaviours. A survey conducted by Institute for Supply Management (ISM) shows that by the end of May 2020, 95% of respondents (642 of 676) reported their businesses experienced operational problems because of COVID-19 related disruptions (PR newswire, 2020). 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 the strategies to improve supply chain resilience in the COVID-19 pandemic (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).

Scholars called for more research on the implications of the COVID-19 on the operation of retailing and supply chains (Pujawan and Bah, 2022). Schleper et al. (2021) pointed out an urgent need to understand the implications for high street retailers in a post-pandemic world. Roggeveen and Sethuraman (2020) pointed out that current research overlooked the impact of product returns on retailing business even though evidence shows that returns affect sales volume and induce more costs (Jack, Frei and Krzyzaniak, 2019).

Current studies exploring the disruptions caused by the pandemic on the supply chain and retail operations did not account for the 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 which plays a crucial role in supply chain resilience. The potential risks of product returns, such as unpredictable returns volume and returns fraud could affect the entire supply chain. It is also interesting 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 in COVID-19. 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 occurred. 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 did 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 COVID-19 impacts. Thus, more industrial practice research is needed to better understand the new COVID-19 challenges regarding returns management and the type of strategic plans return managers should make.

Purpose

Product returns have become a significant challenge for retailers and society, causing economic, social and ecological harm. Evidence shows that the returns result in complicated reverse logistics, increased expenses, financial loss, and unnecessary waste because many returns cannot be resold (Frei, Jack, and Brown, 2020; Optoro, 2020; Zhang *et al*., 2022c). During the COVID-19 pandemic, the closure of shops and 'stay at home' orders forced consumers to shop online. As eCommerce has much higher returns rates than in-store shopping, product returns rates soared as well (Ward, 2022; Incisiv, 2021; OECD, 2020). The National Retail Federation (NRF, 2022) found that, on average, the return rates of online purchases were three times higher than those of offline purchases. Additionally, the convenient and effective route of returning products bought online in store became unavailable. Moreover, the relative inactivity of many people in combination with economic and psychological pressures created an optimal breeding-ground for fraudulent activities. Therefore, the pandemic significantly aggravated the problems associated with high product returns rates and returns fraud (NRF, 2021). Their recent survey found that '*for every $100 in returned merchandise accepted, retailers lose $10.30 to return fraud, up from $8.80 in 2019*' (NRF, 2021, p1).

Furthermore, since the pandemic, retailers have had to adapt to changing the way they manage product returns. For instance, the government urges retailers to discourage customers from trying on items because of the hygiene concerns. Hence, many retailers closed their fitting rooms and used them to quarantine returned products for 48-72h. Also, more customers have been purchasing the same items in different colours or sizes, which induces a higher return rate. When stores reopened, many retailers had to deal with a mountain of returns due to extended returns periods and customers having waited to return their items once stores reopened. In the meantime, although the situation has normalised, many consumers have maintained their increased online shopping habits (Ecommerce News, 2021). On this basis, it is plausible that the pandemic consumes more operational and financial resources, and results in more complicated returns processes.

Whilst there is increased research exploring the impact of the pandemic on the supply chain, less is known about the impacts of the pandemic on product returns management. Therefore, the purpose of our research is to (1) investigate the impact of the pandemic on the management of product returns, (2) explore the subsequent strategies that retailers would take to tackle returns problems, and (3) offer recommendations for retailers.

Methodology

To achieve the above goals, a qualitative study was undertaken. We conducted semi-structured interviews with 8 omnichannel retailers (more interviews are currently ongoing), three experts from retailer associations, a returns technology service provider, and a former police-officer specialised in retail crime. In total, 18 informants were interviewed (Table 1). They work in different departments with responsibilities in returns management, loss prevention, data analysis, and retail fraud prevention. The organisations are large omnichannel retailers selling clothing, home entertainment and electrical goods. We also participated in several online meetings of the Efficient Consumer Response (ECR) Retail Loss Group and ORIS Forums to observe and collect data on retailers' experiences, to complement the interview data.

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, lockdowns, shops reopening, etc.)*?', (2) '*Since the start of the pandemic, have you introduced any specific policies to influence returns and returns fraud behaviour?'*, and (3) '*What more can you tell us about the influence of the pandemic and 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. The interviews lasted between 45 and 90 minutes. They were recorded with the interviewee's consent and then transcribed and thematically analysed.

Table 1. Company types, countries and roles of interviewees.
(*) For internationally operating companies, indicates 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, Accessories	Profit Erosion and Data Mining Manager
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	Multi-Channel Returns Manager
6	UK	Fashion & Apparel, Footwear, Accessories	A: Fraud Analytics Manager 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 specializing in retail crime
13	US	Expert (technology)	A: President of the retail technology provider B: Public relations senior manager

In addition, we conducted a consumer survey to better understand consumer returns behaviours in a pandemic specific to the returns of fashion products. 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 used in the analysis after removing invalid responses that failed the intention check question (Oppenheimer et al., 2009). All respondents had to be UK residents, 18 years old or older, and have bought fashion items online during the pandemic. Table 2 provides the demographic characteristics of all the respondents.

Table 2. Description of the sample

	Number (%)
Gender	
Male	242 (48.7%)
Female	250 (50.3%)
Non-binary / 3rd 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

Results

1) The impacts of the COVID-19 pandemic on returns and related fraud

The retailers we interviewed reported that their return rates were lower during the lockdown, increased when stores reopened and then went back to the pre-pandemic level in some cases. This indicates that the return rates were more unpredictable, and managers faced more risks and uncertainties in making plans. Also, all retailers have commented that they have faced more returns fraud since the start of the pandemic. This finding confirms the study by LexisNexis (2020), showing a considerable increase in fraudulent returns. The section below describes the challenges caused by the pandemic in detail.

First, retailers reported that because of the lockdown, they lost the most efficient return route of 'buy online, return in store' (Huang and Jin, 2020), whilst facing more risks and uncertainties in returns' shipping. As such, returns fraud related to shipping increased significantly. Dishonest consumers typically claim the parcel never arrived and ask for a refund, or they claim that they sent returns back, but they did not. A more elaborate scheme uses fake tracking IDs or even works with professional fraudulent 'refunder' services, who then take a percentage of the fraudulent refund as their fee. 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**)

Additionally, there was a significant delay in return transportation (IMRG, 2021), forcing retailers to refund customers before receiving the returns. This indicates that more returns shipped via post or courier services mean higher risks and fewer protections for retailers but more fraud opportunities for dishonest customers. For instance, two managers from different organisations have 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**).

Second, health issues caused by the pandemic made returns processes more complicated. For instance, returned products need to be quarantined, in addition to increased cleaning. Hence, retailers could not inspect the returned items immediately before refunding, which would not happen during a normal retailing period. Fraudsters took this opportunity to undertake more 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 like 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 start cropping up' (**Returns Manager 4**).

'Actually, we stopped testing certain things that we 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 could be fraudulent'. (**Risk and Loss Prevention Investigator 3**)

Electronic retailers faced the 'Bricking' type of fraud, where fraudsters harvest some valuable components (e.g., a high-end lens in a camera bundle, CPU, or graphics cards) and then return the remaining products for a refund. In addition, most retailers extended their returns periods (e.g., from 14 to 60 days) or stopped accepting returns entirely for a while during the lockdown period. Thus, wardrobing customers could extract more of a product's market value before returning it, and the product was highly likely not resellable afterwards, especially in case of seasonal products. The change to a longer return period caused more uncertainties and losses for retailers.

Third, there were more challenges in managing returns. Retailers tried to reduce customers' time in-store, making returns transactions fast and simple. Measures taken by retailers included introducing drop-boxes, processing items via hand-held devices and accepting returns at sister-brand stores—this leaded to less scrutiny, which increases fraud over time. Also, a surge of product returns arrived when non-essential retailers reopened; however, retailers lacked the staff to thoroughly sort and check all returns. For distribution centre (DC) operations, retailers had to put extra measures for social distancing and add staff to process the increased quantity of returns. Thus, the challenges caused by the pandemic consumed a large proportion of resources; for instance,

'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**).

Fourth, 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. 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. 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)**

2) The actions retailers would like to take in response to the new product return behaviours

The above findings demonstrate that the pandemic induced new challenges which force retailers to operate under new constraints in managing returns. The returns problems, such as wardrobing, returning fake items, and shipping fraud, have worsened since 2020.

Meanwhile, our in-depth discussions with retailers and experts reveal that in addition to the challenges caused by external factors, retailers' fragile returns systems and management also aid the fraudsters. E.g., the lost-in-transit fraud is more likely to happen to retailers without an effective returns portal. Similarly, underdeveloped product information systems result in various forms of returns fraud, such as price arbitrage fraud and in-store returns fraud. Therefore, we have further discussed with retailers what strategies they would like to implement to lower returns and fraud rates:

First, several managers agreed that it is imperative to work with 3rd parties on managing customer returns logistics via an effective returns portal. This is because a properly designed returns system can record detailed returns information and be in control of issuing the return shipping label (with tracking number) instead of leaving the chance for dishonest customers to provide a fake tracing ID. In other words, retailers can refuse a refund the returns portal was not used and hence prevent shipping back fraud. Additionally, this allows retailers to obtain real-time returns data to understand customer return activities. We were told that:

'Now for return, we're gonna use XXX [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, we found that retailers who reported having lower returns fraud tend to take a step further in investigating the suspected fraud. They have an anti-fraud team who contacts individual customers who are found to have returned a used or fake item. These retailers believe that such action can build a reputation for being tough in dealing with fraudulent returns, which will discourage potential offenders from attempting to abuse their system.

Third, more retailers are considering the use of unique product IDs (with or without RFID) instead of universal barcodes and serial numbers. Unique IDs enable products to be identified uniquely and matched to the transaction (Beck, 2021). As such, retailers can use product IDs to prevent or identify price arbitrage frauds, refund frauds, and in-store related frauds. 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 in the care. 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 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 are 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 refund because they've already had it'. (**Profit Erosion and Data Mining Manager 2**).

3) The investigation of customer returns behaviours during the pandemic

This section highlights three key findings obtained from the survey on customer returns behaviours during the pandemic. First, more than 40% of respondents agreed that they were more comfortable with returning fashion items bought online since the pandemic, and only 11.5% of respondents disagreed (see Figure 1 for details). This result aligns with current retailers' practices that aim to provide a better returning experience and convenience (Narvar, 2020). The retailers we interviewed also believe that eCommerce is the future, and offering an 'effortless' returns experience for customers to increase sales volume is the priority. However, retailers should consider the potential risks of 'effortless' return processes that can result in higher return rates and significantly affect their profitability.

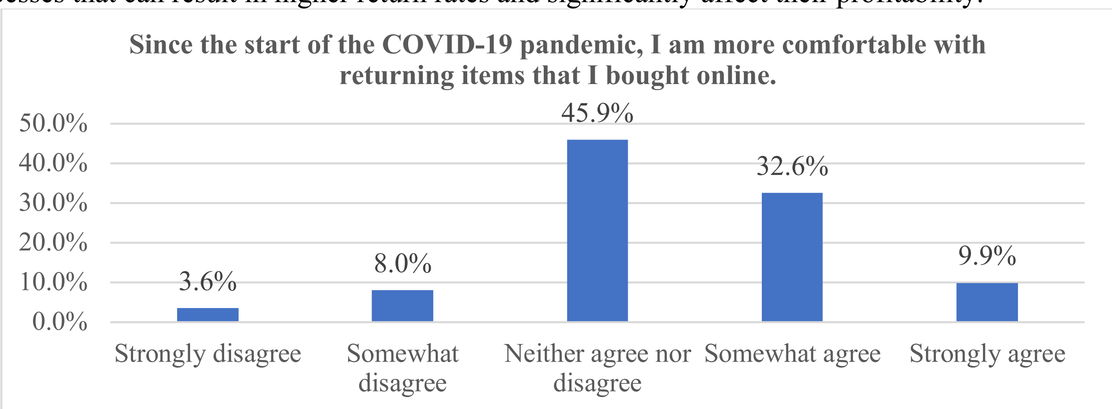

Figure 1: The response of customer return experience in the COVID-19 pandemic

Second, more than 80% of respondents believe they returned 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 is adequate to meet customer returns behaviour and expectation. Retailers believed that offering an extended returns windrow 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 customer satisfaction when retailers shortened their return window again.

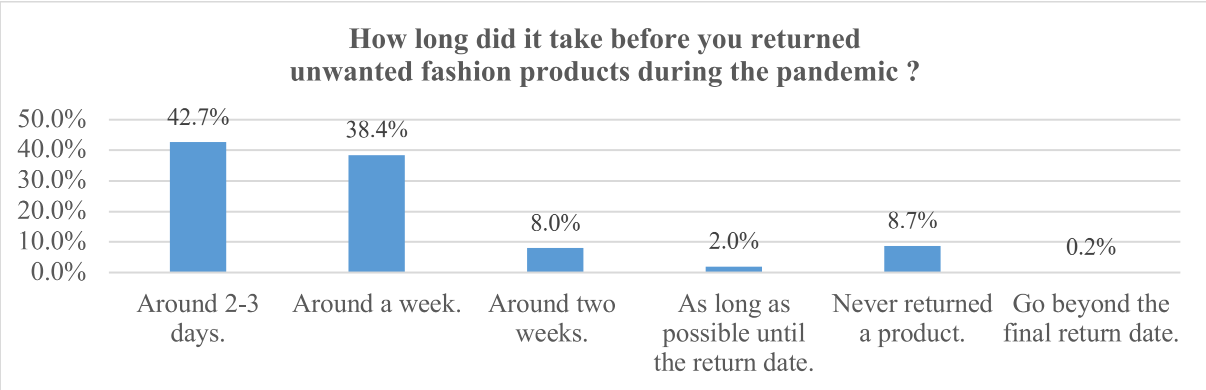

Figure 2: Customer return behaviours around return periods during the COVID-19 pandemic

Third, return to stores is the preferred return option by most 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. They should also record the returns data correctly.

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

4) Recommendations for retailers

Retailers should reassess their returns management, keeping in mind the changes caused by COVID-19. Below a list of actions that retailers can take to become more 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. A detailed analysis of the factors driving product returns as well as the full list of recommendations can be found in (Zhang et al., 2022b).

- Building a thorough consumer-based data system to record and analyse individual consumer's returning behaviour plays an important role in making strategic plans for reducing returns rates and improving returns management.
- Effectively utilising new technologies (e.g., RFID, blockchain) can accelerate informative data collection and allow retailers to gain visibility to combat returns fraud.
- Investment in human resources (e.g., a skilled fraud analysis team) is imperative to ensure that critical anti-fraud actions are taken.
- Establishing a reputation for being tough in dealing with returns fraud means a retailer will be less targeted by organised crime.
- Collaborating with other retailers or retailer associations (e.g., the ECR Retail Loss Group) to gain insight into how other retailers deal with the most recent returns behaviours and fraud trends and to share experiences regarding any effective strategies for managing returns can be helpful.
- Providing high-quality product images and/or videos from multiple perspectives can reduce the probability of multiple-item purchases.
- As Spreer et al. (2021) have shown in their study on the behaviour economics of returns, consumer behaviours can be influenced through specific prompts ("nudges") at the purchasing stage, leading to reduced returns rates. This includes providing information about what other customers have done (e.g. ordering only one size after checking the sizing chart) or pointing out the environmental damage caused by product returns.
- For in-store returns, all products should be returned to a customer service or specialised returns desk that is operated by well-trained staff.
- Ensuring staff uphold the returns policies when dealing with a return. For example, no refund can be given if beyond the returns period, and no refund without a receipt.

Discussion

Our preliminary findings indicate that the pandemic has exacerbated the returns problem; returns volumes fluctuated, and fraud increased considerably. This means it is even more important for retailers to strategically deal with returns. However, many retailers deal with returns and related fraud in an ad-hoc manner (Frei, Jack and Krzyzaniak, 2020), lacking an overall strategy. The loss prevention pyramid (Beck and Peacock, 2009) identifies strategic, organisational and operational aspects. If the foundation of the pyramid, the strategy, is not properly devised, organisational and operational aspects become disoriented and disconnected. Our findings confirm that an inefficient system with weaknesses can easily be exploited by serial returners and fraudsters. This leads to even higher costs for retailers and can significantly affect the bottom line (Frei, Jack and Krzyzaniak, 2020).

As our data indicated, leading retailers provide a smooth process for good customers and are tough on fraud (Laing, 2022). Retailers gain a reputation for how lax or tough they are when it comes to dealing with returns and refunds, whether they ban serial returners, follow up on fraud and use legal procedures. Confronted with organised crime and serial returners, all refunds must be reviewed before issuing them. Some retailers are developing sophisticated risk models. Built upon a series of indicators – customer and context specific – they filter the refund decision accordingly. Refunds also must be checked against customer service logs and reports from other functional departments. Some customers have managed to obtain multiple refunds through various channels due to the lack of cross-checks. Besides blocking offenders from making further purchases, retailers could also create evidence for law enforcement agencies to take action against organised fraud. Further, it is important to maintain an effective database allowing them to track and target serial returners / potential offenders. Also, new technological solutions, such as RFIDs, allow better product management and strategic planning. Moreover, 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*., 2022a).

The findings of this study lay the groundwork for future research. For instance, it would be beneficial to analyse the effectiveness of advanced tools, such as clothes fitting analysis tools, artificial intelligence, chat-bots, and the display of customer reviews on a product's fit, quality and value, in terms of reducing return rates. At the same time, there are calls for a greener 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. Future research is needed to develop a sustainable plan for managing product returns.

Conclusion

In conclusion, after in-depth investigation of the impact of the pandemic on returns management, our findings suggest that it is necessary that retailers need to be 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 COVID-19 pandemic in the context of other retail operations management research. This study contributes in several ways to our understanding: (1) the new challenges of managing product returns during the pandemic, (2) a list of recommendations that retailers can take to effectively manage customer new returns behaviours and combat increased returns fraud in a post-pandemic world, and (3) 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 for an omnichannel retail environment, in line with 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.

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