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Research Article

How would the COVID-19 pandemic reshape retail real estate and high streets through acceleration of E-commerce and digitalization?

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ABSTRACT

This paper aims to explore the impact of the COVID-19 pandemic on retail real estate and high street landscape through acceleration of e-commerce and digitalization. The retail business have been evolving over the past several decades, accentuated by the evolution and development of digital technologies. Almost all parts of the world have witnessed the changes in consumer behavior, the nature of retail, and reshaping of the high street landscape due to the e-commerce revolution and continued expansion. Especially due to the COVID-19 pandemic, the retail platforms powered by digital technology had to be adapted quickly, and it is expected to continue to support this change as consumers and retailers adjust to new normalities. Moreover, retail real estate is intricately linked with the retail sector dynamics. While lockdown and social distance rules have devastating impacts on "traditional" retail property sector, it may accelerate the evolution process of multi-channel retail and the channel integration role of physical stores and thus, bring in transformations in urban-retail landscape. It is not necessarily leading to an end of high street stores, but it may have a significant impact on retail real estate business. There remains a lack of understanding of how these changes may pan out with a rigorous academic investigation. To close this knowledge gap, we analyze both the strategy event data of a range of UK retailers as well as the insights from interviews with retail asset manager and landlords using a mixed-method approach. The findings indicate an urgent need for physical shops to reposition the functions of their multi-channel business. Our analysis provide significant insights and highlight several implications for retailers, landlords and, also policy-making units dealing with urban regeneration and local economic development in the post-COVID-19 world.

1. Introduction

Arguably, two concurrent mega-trends with profound economic and social implications that we are experiencing are digitalization and urbanization fuelled by population growth. Retail real estate is right in the middle of these two megatrends. Basic economic needs of a vast population are continuously fuelling the emergence of technological innovations to cater to those needs. As a result, the traditional way of retailing has been going through massive transformations over the last couple of decades to address continuous disruptions. The recent COVID-19 pandemic experience has instigated even much sharper and sudden disruptions. It is not quite possible to see how exactly all these will pan out in future, and what shapes and formats of retail business will sustain coming out the COVID-19 crisis.

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Nonetheless, we undertake both primary and secondary research to highlight some issues and trends that can facilitate in understanding disruptions and the transformations that are starting to take shape. There is little doubt that new normalities will take shape and the changes will have a high degree of permanency

According to the United Nations report,[1] only about 2% of the world's population was urbanized in 1800. By 1950, that had risen to 30% of the world's population. Within five decades, in 2000, almost half (47%) of the world's population was urban. Within a short span of a decade and a half, in 2016, an estimated 54% of the world's population lived in urban settlements. With such rapid urbanization across all parts of the world, aspects of human living such as education, health, food, shelter, work, infrastructure and other amenities and needs have been going through enormous changes – and the implications of these changes are very significant.

Along with the above trends in urbanization, there is a significant cross-cutting trend, which is technological change and digitalization. With the advent of the Internet and mobile technologies, we see massive transformations across all sectors and aspects of human life. Benefits of technology are immense: it can reduce costs; it can increase efficiency; it can reduce delays in the planning processes; it can identify more accurately the needs and areas of development; it can help with accurate performance measurement; it can lower the possibility of wild speculation; it can reach more citizen etc. Investment into technology that helps with the development of tools, products and services can be very useful and sustainable in terms of profits and revenue.

There are already many platforms and start-ups focusing on technological innovation. Right from 3D printing building sections to better materials to digital connectivity, there is an opportunity for investment. Within the property market, retail real estate is perhaps facing the most prominent implications of these two key trends. The online platforms of retailing have expanded from a few websites (i.e. Amazon and eBay) to a variety of alternative models, for example, the social media platforms, the independent retailer webpages and mobile shopping apps. Internet penetration and widespread availability of 3G and 4G mobile networks have provided a massive boost in recent years. This is expected to expand exponentially as the 5G networks are adopted in near future. Our analysis shows several significant implications for retail real estate business and the need for adopting several specific strategies. While our focus is the UK market in terms of empirical evidence base, the insights derived are relevant for any other regions of the world as issues tend to have a great deal of commonality.

The rest of the paper is structured as follows: the second section presents relevant literature and provides a critique of various relevant research issues. The third section describes the physical store and multi-channel strategy trends of the retailing brands (retail tenants) in the UK from 2012 to 2020. The fourth section analyses the semi-structured interviews from the asset managers and investors in both the public and private sectors. Based on the findings from the previous two sections, section five summarises the implication to the retail property sector during and post-COVID-19, and it outlines the further research framework. Section six provides concluding remarks.

2. Relevant literature and theoretical underpinning

Several strands of literature are relevant for the research topic in hand. It is important to note that while our focus is on retail real estate sector, there are several non-property market trends that determine the performance of the retail property business. As the consumer market goes through transformation, it affects the revenue generation channels and thus, need for physical property space, where the dynamics of property sector plays out. Hence, we first present relevant literature and thoughts around the overarching trends of urbanization and digitalization. These two underlying trends define the challenges and opportunities for the retail sector. Therefore, against the back of this trend, we next present evolution of online retail, which has been shaping up for last couple of decades. We then discuss the issues around the COVID-19 pandemic and subsequently, how those would entail transformative impacts on the role and nature of retail real estate and high street.

2.1. Technology and urbanization as key drivers of retail business

The urban expansion in the developing world has been dramatic. Between 1950 and 2015, the total urban population in the developing countries increased tenfold from about 300 million to 3 billion; the urban share tripled from about 17% to 50% (United Nations, 2013). Jedwab et al. (2015) looked at the rate of urbanization across developed and developing countries. Overall, there are many similarities with the urban expansion process of developed countries in the 19th century. However, the author also notes important differences. First, urban expansion has been substantially faster in today's developing world. In Europe, urbanization accelerated with the advent of the Industrial Revolution, rising from 15% in 1800 to 40% in 1910. Both Africa and Asia reached the same rate in half the time. Second, while income growth and urbanization tend to be highly correlated (Henderson, 2010), higher levels of urbanization are now also observed at low levels of income (Glaeser, 2014). For example, in 1960, the 35 countries with capita income of less than $2 a day had an average urbanization rate of 15% (Wdi, 2013). In 2010, the 34 countries with comparable incomes had an average urbanization rate of 30%.

We have been witnessing an eventful period of economic growth and development across the world since the 1980s. The economic reforms of the 1980s and 1990s have made significant differences in the economic performances of some major economies, e.g. BRICS economies (Brazil, Russia, India, China, and South Africa). The gross domestic product (GDP) growth rates have outpaced those of the developed parts of the world, which have arguably led to improvement in the per capita income levels and consequently, poverty alleviation. The last couple of decades have especially seen massive changes in the economic structures due to technological

[1] https://www.un.org/ga/Istanbul+5/bg10.htm.

innovations, leading to much greater accessibility and affordability of consumer goods and services. Arguably, those technological innovations could have a fair share in improving the socio-economic outcomes. Concurrently, there has been a steady and strong movement away from dependence on the agriculture-based rural economies to the service- and manufacturing-based urban economies, fuelled by job creation and migration.

Studying the extent of digitalization in sub-Saharan Africa, Wentrup et al. (2016) examined whether sub-Saharan African countries are catching up with the rest of the world in terms of online usage. The findings reveal a heterogeneous pattern with a few African countries being 'digital oases' and close to European levels, whereas the majority of the countries are still 'digital deserts'.

The digital inclusion is a key issue where different demographic groups have varied levels of access to digital technologies. Ko et al. (2019) studied the effects of information and communications technology (ICT) on rural community sustainability by comparing digital literacy, degree of a community's economic vitality and online activities between villages with a well-equipped ICT infrastructure and villages without. The results showed that the ICT infrastructure improved digital literacy and strengthened community cohesion. The authors also pointed out a few challenges, e.g.: (1) inefficiencies to enhance individuals' ability to use computer hardware and software; and (2) reduced income levels below average national farm household income. In a comparable work, focusing on the importance of rural population, Fennell et al. (2018) examined the linkages between smart villages and smart cities in the Indian context. Across the world, there is now a great deal of focus on creating smart cities. Using the new waves of ICTs, cities are being transformed. Both the soft and hard technologies are being looked into for providing the public services and managing the demand for those services. Often those endeavours remain concentrated within the urban areas.

Technology can offer several advantages to address the challenges of urbanization and spatial inequalities. However, technology can also create further divides if the access is constrained. As discussed above, providing goods and services through digital technology-driven channels is the key focus. The traditional marketplace is fast transforming into digital mega-market, reaching millions at a time and aiming to provide economic goods and services in a frictionless manner. Retail business has been at that forefront. In the next sub-section, we discuss those implications.

2.2. The emergence of online platforms and switch to online retail

The online retail platform has undoubtedly brought the retailing sector to a new stage. With communication technologies, customers enjoy products with more competitive prices and retailers benefit from lower operating costs (Steel et al., 2013). Together with the improvement of the payment and distribution systems, the online channel has moved forward from an "alternative" to the physical store to a mainstay. Discussions have developed on whether the relationship between the online and "brick-and-mortar" channels is one of substitution or of complementary in nature (Fornari, Fornari, Grandi, Menegatti, & Hofacker, 2016), and the respective functions of the online and offline channels in the shopping process.

Several studies about the "substitution" effects assume the consumer adapted to one shopping channel would abandon the other channel (Ansari et al., 2008; Mehra et al., 2013). The increasing popularity of online shopping will therefore make customers "migrate" from the physical stores to the online (Couclelis, 2004; Visser & Lanzendorf, 2004; Weltevreden & Rotem-Mindali, 2009; Zhang et al., 2016). In this sense, online platforms compete with physical stores as the channel for realizing the product/service sales.

On the other hand, more studies have started to highlight the different functions of physical stores in the multi-channel and the "synergy" effect of online and in-store shopping. The first function is "showrooming", where physical store displays the product information and allow a customer to access the product in their "research shopping" (Bosman, 2011; Zimmerman, 2012, cited by Mehra et al., 2013).[2] Though the purchase is not directly realized in-store, Fornari et al. (2016) suggest the direct and indirect synergy effects where the physical store presence boosts the retailer's overall revenue. The second function that an online channel cannot (entirely) substitute is the in-person engagement of specific services, such as bespoken service appointments, customer complaint, product repair and refill (Alexander & Cano, 2020; Miquel-Romero et al., 2020). In experiential shopping, physical stores present products and the shop design to "amplify the sensory experience" of the customers instantly (Alexander & Cano, 2020) and combine the promoting effect from different channels (Fornari et al., 2016), hence can increase the sales opportunities.

Meanwhile, retailers evaluate the efficiency and profitability of different channels. Online platforms help retailers minimize the operating cost (Baen, 2000; Dixon & Marston, 2002), enhance business efficiency (Burt & Sparks, 2003) but also increase the pressure of competition with more transparency (Hendershott & Hendershott, 2000). Several studies find that the adoption of e-commerce is affected by the cost of developing the online platforms as well as the performance of the online retailing (Kurnia et al., 2015; Olatokun & Kebonye, 2010; Sila, 2013; Tan et al., 2009). However, Colla and Lapoule (2012) suggest that e-commerce enables retailers to develop broader market coverage and draw attention to physical stores.

While much of these have been taking shape over the last few decades, along came COVID-19 pandemic, which is proving to be transformational. The impact is massive, deep and widespread, which is the focus of the next sub-section.

2.3. Pandemic implications

The pandemic has changed our world in many ways. Previous research has studied the impact of economic crisis or natural disasters

[2] Bosman, J. 2011. Book Shopping in Stores, Then Buying Online. The New York Times. December 4. Available at http://newgreatbooks.blogspot.com/2011/12/book-shopping-in-stores-then-buying.html. Zimmerman, 2012. Showdown Over 'Showrooming'. The Wall Street Journal. January 23. Available at https://www.wsj.com/articles/SB10001424052970204624204577177242516227440.

on various sectors. For example: Ifanti et al. (2013) explored the impact of the Global Financial Crisis on the healthcare sector, Ion (2014) studied how the economic crisis affected the retail sector and Jiang et al. (2019) virtualized and captured the research in the impact of disaster on the hospitality and tourism sector. Urbanization, which has been discussed over decades, has also been rethought and reviewed in the context of the pandemic (see in Connolly et al. (2020)).

Disasters and crisis have huge impacts on consumption behaviours amongst other aspects (Ballantine et al., 2014; Larson & Shin, 2018; Pantano et al., 2020; Sheu & Kuo, 2020). . With the considerable growth of online shopping and food-delivery spending during the pandemic, it is very likely that such new shopping behaviors may become the new normal after the pandemic. The most significant change in shopping behaviors centres around online grocery shopping. Hwang et al. (2020) find the increase of online sales lately is driven by both new and existing customers and suggest that the online retail platform can help the retailer to survive and adapt in a pandemic. The luxury goods retailing has also seen tremendous growth along with the online shopping lately. Both single- and multi-brand luxury retailers have been attracting a wide range of consumers, especially the ones with online shopping channel. Desmichel and Kocher (2020) find that the consumers of the multi-brand stores are more likely to make the price/brand comparisons as the stores carry larger varieties compared to the single-brand store. This is more likely to happen when the consumption occurs through online platforms. With a broader range of choices, the consumers tend to engage in the comparisons of the brands, goods and price points. Therefore, they suggest that hedonic shopping experience can make consumers less price-sensitive. Abay et al. (2020) use Google trends data to document a temporal shift from physical store sales to online shopping services and the significant reduction in demand for hospitality, restaurants and retail sectors. Hacioglu et al. (2020) note that the partial lifting of restriction measures helped some sectors (i.e. retail, food delivery and durable goods) to recover in June 2020 while the spending on several categories, for example, restaurants, holidays and entertainments remained in doldrums.

Some studies also explored the implication of the COVID-19 pandemic in the property sector. Sanderson and Read (2020) systematically review the previous literature and address the importance of realizing the benefits of customer-focused property management, especially after the COVID-19 pandemic. As noted in Poleg (2019), to procure property space within a shorter period (i.e. month, week or day) is not impossible for tenants now. It is based on their needs. The flexibility is one of the emerging demands of the tenants, which has put pressure on traditional models of property management. Despite the cash-flow stability and certainty provided by the long-term leases and fixed-rate rent [(Bannister (2008); Crosby et al. (2006); Halvitigala et al. (2011)], tenants are increasingly seeking flexibility in lease terms to adapt to the changes in their space needs when they have more bargaining power (Msci & Paribas, 2018). The tenants have favored such requirements on flexibility. It can be explained by the changes in the business model of tenants (Msci & Paribas, 2019). This is more likely to be the norm after the COVID-19 pandemic due to the changes in tenants' portfolios.

As the retail businesses attempt to rise from the ruins of the pandemic, an essential requirement is reorientation of strategic focus and repositioning of key business goals along with optimization of the mix of physical and digital presence of the business. We discuss these issues in the next sub-section.

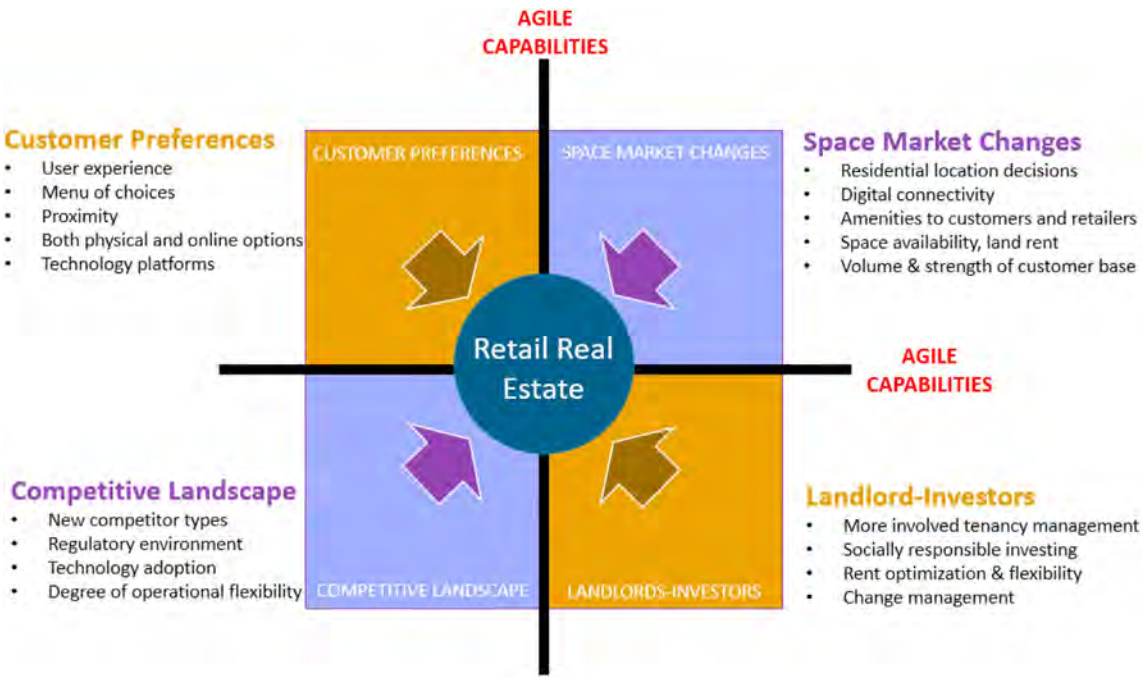

Fig. 1. Post-Covid19 dynamics of retail real estate – a theoretical mapping.

2.4. Repositioning of the high street

As a strategy, repositioning has been developed upon the market theories of positioning (Dibb & Simkin, 1991; Doyle & Stern, 2006; Ries & Trout, 1981; Tadajewski & Jones, 2014) and is defined in the marketing theories, as the changes of the positioning of products and services due to the highly dynamic market conditions. As such, the repositioning strategy is essential to keep the products' appeal to the consumers. The concept can be extended to urban places as they also need to anticipate, adapt to the changes and respond to the external forces Warnaby et al. (2005). The formats of stores have been transforming with the changing preferences of the consumers. Especially after the COVID-19 pandemic, the empty shops and vacant places in malls have called for urgency and importance of the short-term adaptation along with the long-term repositioning strategies.

The place repositioning can be taken into account as part of placemaking strategies. It can be regarded as part of the place marketing and as a mechanism to improve the competitiveness of a place by discovering and creating uniqueness by Kavaratzis and Ashworth (2008). It also connects with the literature on place branding.

Millington and Ntounis (2017) address the top 25 priorities for repositioning of town centres and high streets which were identified in the High Street UK (HSUK) 2020 project (Parker et al., 2017). It summarises several key challenges of repositioning high street in the UK towns through the investigation and communication with ten participating British town centres. They also point out that the successful repositioning cases do not necessarily need to replace the existing markets. Instead, they need to adapt to the local services or goods to match the users' tastes and preferences. This is also evidenced in Theodoridis et al. (2017) that repositioned places, including high streets, have to match the expectations and demands of the users through development or reinvention.

2.5. Retail real estate: a theoretical mapping

As discussed in previous sections, various changes across all aspects of retail business would create transformations in the business environment. The scale of operations of the retailers may dictate how they can adapt to the changes. Some retailers may need to develop agile capabilities to be able to respond to fast-shifting business environment as depicted by the following theoretical mapping (Fig. 1).

Customer Preferences: The biggest ongoing change in the retail industry is the evolution in customer preferences. Although the online retailing have been available for customers for some time now, the physical shop is still very important to shopping experience. The covid19 pandemic has forced customers to embrace the online channels. Therefore, it is critical for the retailers to understand the factors behind the shift in consuming behavior and the impacts it will bring to retailing. They will more likely shift resource and focus to their online retail strategy.

Competitive Landscapes: Multichannel retail may lead to stronger competition among retailers, with need for both online and in-store customer engagement. Online sales platform is widely adopted among retailers, as it contributes to a significant proportion of sales with lower managing costs. This further can lead to the function re-positioning of the physical stores to accommodate the product delivery needs, consumer's experiential shopping demand and the adoption of digital facilities. The retail space in the future may need to allow the flexibility of space use in the building design, planning and operating stages. Meanwhile, physical stores disappearing from the highstreets pose threats to the town-centre place-making agenda. New regulation in terms of space use and taxation of online retail revenues may form new policy tools to balance retailers' business benefits and highstreets landscape design.

Role of Landlords and Investors: Both the long-term diversifying functions of the physical store and the short-term lockdown shock require the investors and retail asset managers to re-evaluate their asset management strategies. In the UK market, retailer tenants require shorter lease length and more flexible rental payment method linked to their business performance, which may amplify the tenant risks for retail property investment. Landlords and asset managers may need to make comprehensive strategies on engaging and monitoring the performance of retailers. The retail asset management also needs to coordinate the short-term profits contributed by tenants with guaranteed cashflows, as well as the long-term agglomeration effect from the tenant combination in the high street and shopping malls.

Space Market Changes: The pandemic has changed our way of living, working and retailing. With the flexibility of work and more digital options for shopping, there is now stronger preference for suburban and rural areas with less congestion, sparse population and easier access to greenspace. Digital connectivity is a key determinant behind such changes in location preference. This creates a need for retailers to follow the customer base in a spatial sense. It is imperative for both customers and retailers to have access to the amenities with the changes of residential location. The suburban areas will play important roles in supplying the physical retail spaces. In view of these changes, the high streets in smaller towns and villages may achieve competitive rent and revenue levels.

In order to situate the above theoretical underpinning to the transformations happening in retail property sector, we undertake a

Table 1
Interviewees.

No.	Role	Business Type
1	Founding Shareholder/Executive Director	Asset Management Company in private sector, specialized in UK real estate investment and asset management
2	Head of Retail and Asset Management	Asset Management Company in private sector, specialized in UK real estate investment and asset management
3	Head of Shopping Centres	Pension Fund with significant presence in the UK
4	Real Estate Executive	Property Fund with significant presence in the UK
5	Surveyor	Asset Management Company in public sector (collaborating with local Council)
6	Asset Manager	Asset Management Company in public sector (collaborating with local Council)

primary research through interviews of major players and key stakeholders. In the following section, we present the interview findings and bring out insights for the key strategic aspects of retail property business.

3. The change in retail asset management strategy

To investigate the changes in retail property asset management strategy, we have interviewed six participants from five organizations (as shown in Table 1), which are either managing or owning the retail property in the portfolio. The interviewees represent a range of leading companies and provide a good coverage of facets of retail market in the UK. Due to COVID-19 restrictions, the interviews took place via video platforms. The interviews revealed that the management strategy of the retail property has been evolving over the past decade, and the COVID-19 pandemic has accelerated the changes. Amongst all the points taken from the interviews, two categories of views stand out: 1) imminent changes in the asset allocation; 2) resetting of the landlord-tenant relationship, for example, landlords started to show their strong preferences to some specific types of retail tenants and put importance on the ESG factors. The detailed discussion over the two main categories is provided in this section.

3.1. Asset allocation strategy

3.1.1. Spinning off the non-core asset

The portfolio selection concept has been firstly developed by Markowitz (1952) and widely used ever since. There are two types of decisions to make when it comes to stock selection: to invest and to divest. Spinning off the non-core assets has been widely used in Real Estate Investment Trusts (REITs) as well as property funds (Ooi et al., 2006; Parker, 2016). Jones and Livingstone (2015) see the decrease of the demand for retail space in the near future based on their empirical findings that the small retailers are reducing their presences in retail space due to the changes of strategy in the UK. As asserted by Interviewee-4, "… ***it's been quite tough this year especially. We announced that we're trying to exit the retail park sector***." This is evidenced by several transactions in the retail property sector in 2020, where retail property investors adjust their portfolio against the closure wave of retail tenants. On the investor side, Hammerson Plc completed its £400 million retail parks sale to Orion at 8.7% yield in February 2020 (Hammerson, 2020). Landsec Plc also plans to "optimize" London office and "reimagine" retail by the £4 billion sales, including hotels, leisure and retail parks in October 2020 (Landsec, 2020). London Metric Plc sold £22 million of convenience mall properties at 4.6% net internal yield in October 2020 (Londonmetric, 2020).

Fig. 2 shows the movements of the retail property sector, together with internet sales in the past ten years. The average yield has seen no dramatic volatility while the vacancy rate has been relatively low till the beginning of 2020, when the COVID-19 pandemic started and the online sales significantly increased.

3.1.2. Re-identifying the function of physical stores

In the meantime, the function of the physical stores has been re-identified. It is not always necessary to reduce the proportions of retail properties in the portfolio. The identification of the function of the physical stores and the tenant-mix strategy are the keys to retain the assets.

As Interviewee-1 asserted "… ***a brand (tenant) only keep 20 or 30 stores across the country and they are moving most of their business online …. the physical stores are just the closet to showcase their products***."

Also, Interviewee-2 asserted "… ***they will use that space to really showcase their brand. They will give some sales there, but they will do sales online etc."*** and "***… as you know, we have too much retail floor space, so retailers will choose where they'll have their stores in the future***."

Moreover, Interviewee-1 added "… ***all of those elements are still very important to the successful retailer. And what we've seen is***

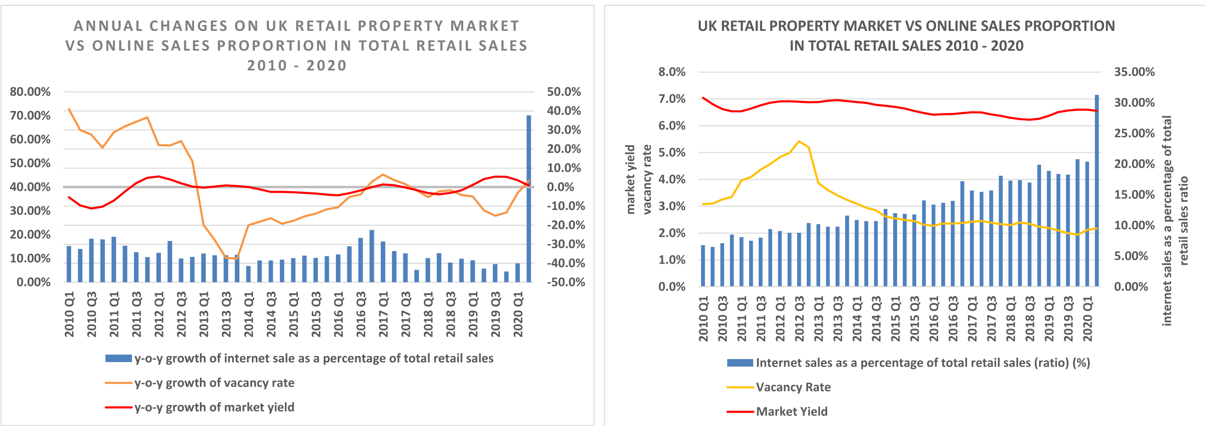

Fig. 2. UK Retail Property Market vs Online sales, 2010 to 2020. Source: CoStar and ONS.

that densities still getting stronger and stronger. The retailer needs the store, but it's getting more and more efficient at selling from the store."

Both participants believed that the function of physical stores has slowly changed over the years. With the impact of COVID-19 pandemic, the physical stores will soon be re-identified based on their functions to the retailers.

3.2. Landlord-tenant relationship

3.2.1. ESG as a crucial factor

Studies such as Ailawadi et al. (2014), Elg and Hultman (2016), Schramm-Klein et al. (2016) indicate that retailer's ESG profile and activity have significant impacts on consumer's shopping choice in the past several years. It is expected that ESG becomes even more crucial factor in the retailer's sale performance after the pandemic.

As asserted by Interviewee-1 "***They (The Millennials) want to do something that's much more ethical than just making money. So that's a preamble to the retainer – it's now going to appeal to that generation, because they are far more sensitive, and they will be much more empathetic to retailers that have, even if it's just in terms of marketing, said something or done, something that looks to be a good thing for work. And I think that's really important because I think that's now beginning to influence people that aren't of that generation***".

ESG, therefore, is believed to be an important element to the landlord when it comes to choosing the tenant.

Meanwhile, some landlords are seen to adopt different strategies to the small and independent tenants based on the concerns from tenant-mix as well as ESG. As asserted by Interviewee-4 "… ***If it's more small independent ones … (we) will probably take more mercy, because also if they're represented across our portfolio, (if we had) agree(d) with a thing or one on one asset and then like they asked for it on other assets***." and "***… also the independent retailers that kind of tend to mean smaller, smaller units and less impact on the capital value***."

The ESG concerns motivated some landlords to adopt "kinder" terms on the independent tenants, which has been pointed out by Interviewee-3 ***"… for independent retailers, for private independent and smaller leases, we tended to be more agreed. We tend to be more generous and, give them a concession sooner in the negotiation process***." and P6 ***"… it's definitely done by on a case by case basis. A small cafe … had to shut up shop, when COVID happened … we've given a rent-free period of the year."***

3.2.2. Customer engagement feature as a crucial element in tenant selection

Customer engagement behavior has been studied for several decades with a heavy focus on the purchase behavior of the customer in the context of customer management (Van Doorn et al., 2010). More recently, the customer engagement feature has been paid extensive attention to in the context of omnichannel retailing (for instance, Sashi (2012), Alvarez-Milán et al. (2018) and Lee et al. (2019)). It is believed to be a very crucial element to the retailer's sale performance in future, so as to the tenant selection from the landlord's perspective.

As addressed by Interviewee-1 "**Where we (are) going in terms of the experiential piece is the high engagement retailing, where the customer is prepared to invest in his or her time in that brand, and that brand speaks to me in lots of different media.**"

And as predicted by Interviewee-2 "***The high engagement retailer is not going to lose its customer, because this customer can't go and shop for eating its premises over next six months because they've got that deep relationship with them.***"

3.2.3. The reflection on the COVID-19 "rent holiday" scheme

The lockdown restrictions started on March 26, 2020 in the UK and to help the business which had to close during the lockdown, the UK government launched several measures since April, including a moratorium (Coronavirus Act 2020) on evictions for non-payment of rent, which was then extended until the end of this year (Government, 2020). On the one hand, landlords have been dismayed by this, complaining that the rent holiday would hit investments that link to pensions, savings as well as lending channels. On the other hand, even with the Coronavirus Act 2020, landlords can still issue the Commercial Rent Arrears Recovery (CRAR) and the debt claim or start winding-up proceedings, which are all lethal to commercial tenants without income.

As Interviewee-3 asserted "… ***everything that government legislation (the* COVID-19 *rent holiday scheme) has been very tenant-friendly, very business or poor-man friendly, which is taking away some of the relieving contractual act that we could take in a normalized market where people won't pay their rent, but we can't do that. And that is the real risk that is storing up a big problem for later on in the year or even in the next year because it will come to a point when the protection for tenants will be eased or taken away completely. And I think there's a real risk that you know, landlords will go after their arrears, and the tenants would have very significant interferes by that point, and then a little bit of a sort of the contractual that you know, they're facing aggressive landlords chasing rent that they effectively have to pay. And that might all lead to retail failures***."

Interviewee-5 also pointed out the rent holiday scheme might not work for some landlords as "… ***other landlords wouldn't be happy with the level of void. But the Council are as long as they are getting the high rents that they want***."

Interviewee-6 shared similar views by asserting that ***"… there was negotiation that took place … initially for that particular Company Voluntary Arrangement (CVA), we voted against it, because there was a large reduction in their rent.***"

3.2.4. Foreseeable changes on high street

Despite, 71% of people still felt that high street is important to their community, according to a survey by Nationwide, there will be some changes on high streets in the UK. There might be fewer fashion shops on the high street in the future given the fact that the

COVID-19 pandemic showed the benefits of shopping online, especially on seasonal garments and fast fashion (Wood & Obordo, 2020). On the other hand, the food and beverage sector will be more likely to be welcomed both on the high street and in the malls. The convenience store is forecasted to be popular on the high street as well.

As pointed out by Interviewee-4 "… ***We're trying to not let too (many) new fashion brands and to get the tenant mix-matched. … putting sectors like small food-and-beverage but not just kind of a generic food or beverage chain but more kind of like curated independence***."

And, Interviewee-6 "***We definitely have more interest from food operators … Retailers have been a bit of a problem like clothing brands.***"

Meanwhile, Interviewee-1 confirmed that "***we're going more towards 'best-split' in consumer purchases around the low engagement products – things that you always need to buy … For that, consumers don't want to spend much time buying those products. Convenience is as important as price in those purchases, and convenience can be provided by the shop that you live next door to, just as much as online.***"

However, the landlords with limited experiences in active asset management may still prefer the large chain brands in pursue of the reliable credit rating and the stable income stream.

As pointed out by Interviewee-6 "… ***we don't usually go for an independent brand, just simply because of Covenant strength. Because the company is owned by the Council have a very low-risk strategy. If we were to take on an independent one, unless they have a larger company backing them as a guarantor, it's difficult for us to justify it to the board.***"

Next, we undertake a detailed empirical analysis of the trends.

4. The function evolvement of physical stores in the multi-channel retailing

Retailers' demand on retail space and the usage efficiency of each channel affect retail property market and town centre landscape. To investigate the retail asset management strategy, we collect and analyze the omnichannel (including physical store) strategies of 57 selected retail brands across ten sectors. All retailers have high street stores in major UK cities. The strategy statements are from financial reports of listed firms, news and analysis items from Mintel, Retail Gazette, CoStar and other industry or regional press media. The time window for the collection is from Jan 2012 to Dec 2020.[3] The timeframe is long enough to allow us to observe a sufficient amount of trend data, and it covers an important period in which digitalization has intensified significantly.

When defining the strategy categories, studies in marketing, operation management, and real estate tend to provide different paradigms. We focus on the categories in terms of the costs and benefits related to the property portfolio of the retailer (store units and distribution warehouse and related logistic system), which addresses both the consumer experience enhancement and shop management efficiency. A detailed category explanation and keywords for news or reports search are provided in Table 2.

It is worth noting that the data collection in this exercise relies on the sources in the public domain. Therefore, it may not capture some engagement activities held in individual stores or less "innovative" activities of certain brands. Nonetheless, public disclosure also reflects whether the retailers recognize a business act as a strategic trial at the brand level. Moreover, information from the news disclosure is limited in identifying whether one's strategies are independent of each other. As a refinement, this analysis records the strategy adoption in each year with binary indicators rather than the aggregation of news or events number.

First, Figs. 3–1 shows the strategy trends among the retailers by aggregating the aforementioned strategies over the past three years.[4] The dashed line (with secondary index) is the consumer confidence index (CCI). "Traditional" shop expansion strategies have been dominant for an extended period until 2019, where more retailers choose to improve their omnichannel function (Fig. 3.1). This is expected as physical stores are still the crucial channels in enhancing the customer shopping experience and integrating the multi-channel in the same space (FFornari et al., 2016). However, the switch from physical stores to multi-channel has been accentuated by various phases in the economic cycle (shown by the consumer confidence) and particularly, by the impact of 2016 Brexit referendum and the recent COVID-19 pandemic. While the number of physical store strategies – both expansion and shop upgrade – are cyclically decreasing, the number of retailers improving their online channels and delivery service is increasing.

Moreover, a low level of consumer confidence and stagnant revenue generation force the retailers to tighten the capital budgets even before the first lockdown in March 2020. Hence, optimizing property portfolio and improving efficiency become crucial concerns. Related store strategies include store portfolio slimming, in-store customer engagements and omnichannel development. In Figs. 3–2, more retailers have been reviewing and reducing (the less profitable) physical store space. According to the undisclosed two-sample *t*-test, there have been significant changes in physical store strategies, where much more shop closure and leasing negotiations took place after 2016 Brexit referendum.

Under tighter capital budgets and low levels of consumer confidence, especially since the pandemic, retailers need to adopt sale and customer engagement strategies with lower operating costs and more flexibility (Figs. 3–3 and 4). With the poor levels of in-store performance in the recent years as well as during the national/regional lockdowns, several retailers have been negotiating with the landlords for reduced or flexible rent agreements that can directly link to the in-store performances. It brings new challenges to the retail

[3] The initial collection picked non-repetitive business activities of the retailers in their multi-channel business. After filtering, 641 news and 49 financial reports are used to generate the trend analysis.

[4] The three-year rolling aggregation is used to capture a consistent trend in a longer time window and to avoid the potential time lag between appearance in the public domain and the implementation of the strategies. The undisclosed trend graphs with single-year statistics have shown the similar (though nosier) trends.

Table 2
Definitions of selected retailer strategies and searching keywords.

Omnichannel Strategies	Explanation	Searching Contents Examples[a]	Retailer Examples
Store Portfolio			
Expand	The retailer increases more than one shops in the UK market. Adding single shop (except the first shop) is not included. Single flagship store or concept store belongs to "upgrade" sector.	"Increase/expand/add" + details of stores	"ICELAND will open 50 new stores across the UK this year …" (Express, 2019)
Close	The retailer permanently close more than one shops in the UK market.	"Reduce/close/shut" + details of stores	"BrightHouse to close 28 stores following tough trading" (Mintel, 2017)
Relocation	The retailer relocates the shop in the same town in the UK market.	"Relocate/move" + details of stores	In FY2020 report M&S mentioned to relocate the Rochdale store to the new Riverside development. (M&S, 2020)
Leasing Negotiation	The retailer negotiates with the landlords of the physical stores leasing contract.	"Lease negotiation"; "Conversation with landlords"; specific leasing criteria (lease length, reduced rent etc.)	"Next is looking at inserting a clause into its property leases to lower its rent in response to against a wave of cuts landlords are providing its high street peers." (Retail Gazette, 2018)
Upgrade	The retailer includes one or more physical store that has more "showrooming" and/or promoting functions. This include the flagship stores and concept stores.	"Flagship"; "concept store"	"Next secures new flagship store" (Mintel, 2017)
In-store Engagement Strategies			
Sales service	The in-store services and engagement directly related to product sales. The activities that change the value of product is not included.		"Lush has launched a conveyor belt for its cosmetics products at its Liverpool, Oxford Street and Birmingham stores. The 'sushi-style restaurant' conveyor belt is part of the retailers gifting service and will enable customers to choose plastic-free products which will then be wrapped in Lush Knot Wrap." (Mintel, 2019)
General engagement	The in-store services and engagement not directly related to product sales, but to improve the in-store experience of customer or increase customer's shop visits.		"Monsoon introduces eReceipts" (Mintel Report, 2014)
Click-and-collect	The retailers provide click-and-collect service in her own store. Retailer using the click-and-collect facilities of other retailer(s) is included as *omnichannel collaboration*.	"Click-and-collect"; "Buy online and pick up in-store"	"Waitrose click-and-collect locker trial begins" (Mintel, 2014)
Hi-tech	The instore engagement activity adopts new technologies and facilities. This strategy may have overlap with the sales service or general engagement.	(Include but not restricted to) "VR technology; 3D printing; "data analysis system"	"Topshop launches VR water slide at Oxford Street store"
ESG	The instore engagement activity addresses the ESG. This strategy may have overlap with the sales service or general engagement.	(Include but not restricted to) Activities addressing environment and wildlife protection, gender and ethnical equality, LGBT + rights, local community engagement, COVID-19	M&S introduce dedicated shopping hours for caretaker and elderly people (M&S, FY 2020).
Omnichannel			
Development	The retailer develops a multi-channel/omnichannel on her own.	"develop/build up the first" + specific multi-channel	M&S launched M&S.com in FY 2014. (M&S, 2014)
Enhancement	The retailer enhances the existing multi-channel/omnichannel on her own.	"further invest/upgrade/improve" + specific multi-channel	TJX (TK Maxx) implement E-commerce expansion in FY2014 by adding new categories in to the website. (TJX, 2014)
Collaboration	The retailer develops/enhance a multi-channel/omnichannel collaborating with other retailer or delivery service provider.	"partner/collaborate/cooperate" + a different retailer or delivery service provider	M&S establish partnership with Ocado in FY 2019. (M&S, 2019)
Omnichannel improvement	The retailer develops/enhance/collaborate to improve the multi-channel/omnichannel. This indicator is the union set of the above three strategies.		
Delivery improvement	The retailer improves the product delivery methods. This specifically refer to the relation between the customer and the last distributor. This strategy may have overlap with *Development/Enhancement/Collaboration*.	"delivery"	"Superdrug launches 30-min delivery service." (Mintel, 2019)
Supply chain			

(*continued on next page*)

Table 2 (*continued*)

Omnichannel Strategies	Explanation	Searching Contents Examples[a]	Retailer Examples
Supply chain improvement	The retailer improves the distribution or supply chain system. This specifically refer to the distribution relation within the retailers' distribution system and shops.	"distribution centre/warehouse"; "supply chain"	"Topshop and Topman gets its own logistics warehouse" (Mintel Report, 2019)

[a] The evidence from news or annual reports are searched by keywords and manually reviewed. This column gives searching examples, but other keywords with resembling meanings have also included.

property sectors.

Within the remaining stores or newly-established (mostly) concept stores, the retailers are enhancing the "showrooming" functions of the stores or strengthening the multi-channel integrating function of the physical space. In Fig. 3–3, aside from the customer engagement services directly related to product sales, several general engagement services are implemented primarily to improve the in-store experience of customers. The "function upgrade" and in-store engagement strategies are correlated with the sales per store positively (Table 3). Meanwhile, more digital equipment and internet-friendly shop environment support the "research shopping" activities of consumers. Nonetheless, as the multi-channel synergy effect suggests, providing in-store digital amenities improve online sales. In the correlation table (Table 3), there is no significant evidence showing the in-store sale is strongly correlated with the engagement methods with hi-tech facilities, but general sales do improve. Further, the implementation of hi-tech facilities is sensitive to retailers' capital budget. The cyclical trend is also captured among the engagement methods. Therefore, a retailer may carefully evaluate the efficiency of adopting digital-intensive engagement method, especially in the economic downturn.

In contrast, there has been a steady increase in retailers with an increased focus on addressing corporate social responsibility (CSR)

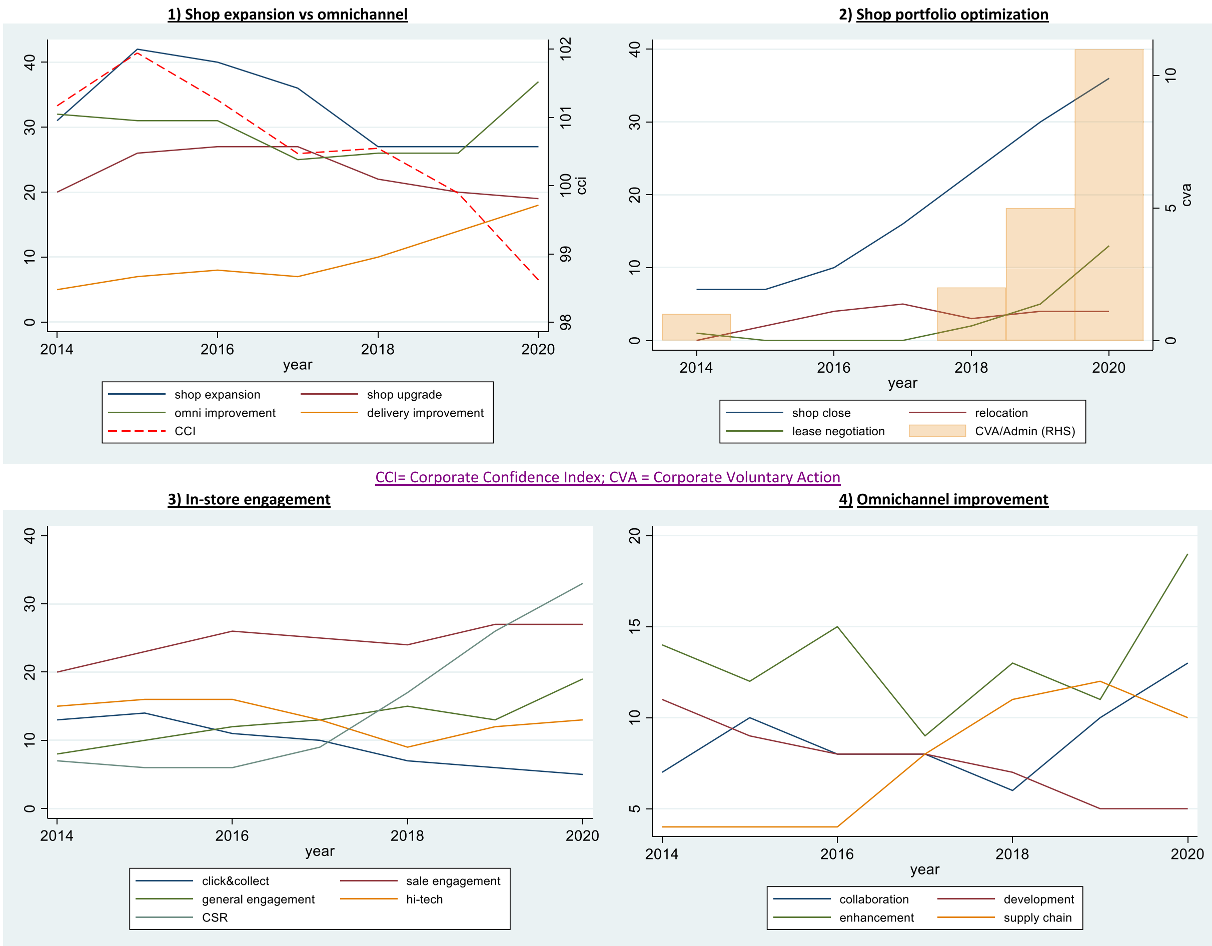

Fig. 3. Strategy trend by years.

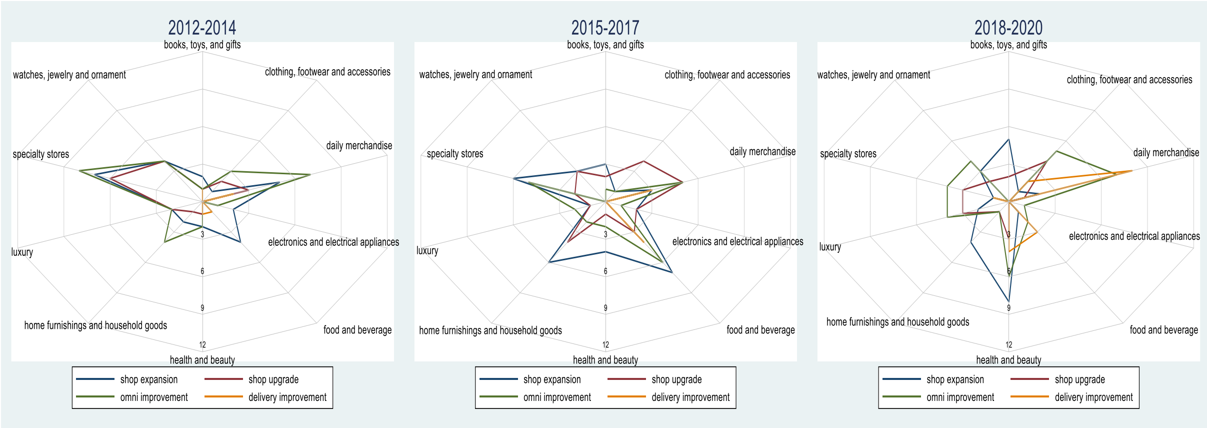

Fig. 4. Trends in Industries: Shop expansion vs omnichannel.

or Environmental, Social and Governance (ESG) factors in their engagement activities. Even before the COVID-19 pandemic, retailers across different sectors have been reshaping their in-store services to address several ESG factors, such as environmental concern, cultural diversity or caring to the local community. This was intensified in 2020 with many high street retailers providing services to the vulnerable groups and workers in essential sectors. The engagements addressing ESG may improve the brand recognition of customers, which can turn into a positive correlation with overall sales and sale per store in Table 3. As a result, selecting tenants with a strong ESG profile in the "new normal" can be not only an "ethical" but also a beneficial choice.

When breaking down into industry sectors (Figs. 5 and 6), some industry sectors are more active than others in managing the physical stores and improving the omnichannel strategies. While multiple sectors have closed stores to protect themselves from the foreseeable downturn, sectors providing daily essentials (health & beauty, books, toys and gifts) have been expanding their network of stores numbers till the more recent years. It can be expected that the food & beverage units, as one of the experience-driven retail business, is more resilient under the challenge of e-commerce (Dong & Wang, 2014). This is true during the heydays before 2016; when facing economic downturns, food & beverage tend to halt shop expansions and make more efforts in developing the delivery system and omnichannel business (Fig. 7).

Meanwhile, retailers in more "affordable sectors" (high street fashion; daily merchandise; health & beauty) gradually adopt the idea of concept stores or flagship stores. This is true for the fashion brands that are more sensitive to the challenge from e-commerce (e.g. Zhang et al. 2016) and proactively innovate their sales model. Compared with the other sectors, health & beauty, daily merchandise, and speciality stores are more enthusiastic about engaging with customers in-store. In recent years, the ESG activities such as supermarkets' reducing plastics and promoting local product, and fashion brands launching products for ethnic and cultural diversity all make positive impacts to engage with the customers.

Another advantage of these convenient stores is their wider reach to the customers, whether in the high streets or retail parks. Collaborations and enhancements for the omnichannel business are popular among these retail sectors. Compared with the evidence from the Dutch market (Gorczynski & Kooijman, 2015) and the Chinese market (Zhang et al., 2016) where supermarkets are less sensitive to the rise of e-commerce, the selected grocery brands in this sample have launched the engagement activities and multi-channel retailing strategies consecutively. During the pandemics, several daily merchandise brands collaborate with Uber and Deliveroo in grocery delivery, which further improves the customer reach without building up new delivery systems.

The COVID-19 pandemic has accelerated the existing transition trends and forced more retailers to enhance their multi-channel business. Although the multi-channel synergy effects and existing studies all indicate the physical stores have unique functions in specific business sectors, the economic downturn makes the retailers more "budget savvy" for their retailing strategies. Retailers need to evaluate the costs and efficiency in the location selection and functional design of the stores. Because of long-term function change and the short-term business recession, it is expected that the relation between the retail tenants and landlords will experience a structural change. The multi-channel business development requires more flexibility and capital. In this sense, brands' collaboration to access the existing platform or delivery network could become a new trend in a short period. On the other hand, the pandemic reinforces the value of establishing the ESG profile to a retail brand, which provides implications in tenant selection and tenant mix strategies.

5. Summary of implications for the high street

In the previous two sections, we have presented a range of trends (in section 3) and highlighted several aspects of asset allocation strategy and impacts on landlord-tenant relationships (in section 4). All of these are contributing to the reshaping of retail businesses with implications for changes in the urban-retail landscape.

Based on the analysis of the secondary data and insights from the stakeholder interviews, we list the following implications:

- User experience: While technology has driven much transformations and shown huge potentials in the retail sector, a key focus area now appears to be the experience aspect of the users. Retail products and services inherently require a physical experience to be able

Table 3
Strategy correlations.

	Sales	Sales per store
Physical shop strategies		
Expand	0.070	0.018
Close	0.093*	−0.057
Relocation	0.046	−0.027
Lease Negotiation	−0.027	−0.008
Upgrade	0.068	0.157***
In-store Engagement		
Click&Collect	0.248***	0.181***
Sale-related Services	0.253***	0.170***
General Engagement	0.090*	0.195***
Hi-tech	0.229***	0.044
CSR	0.290***	0.365***
Omnichannel		
Improvement	0.191***	0.135**
Development	0.018	0.043
Enhancement	0.141***	0.118**
Collaboration	0.160***	0.061
Delivery Improvement	0.285***	0.026
Supply Chain Improvement	0.185***	0.030

Note: this table shows the pair-wise Spearman correlation coefficients between the sales performance and retailers' strategies. ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

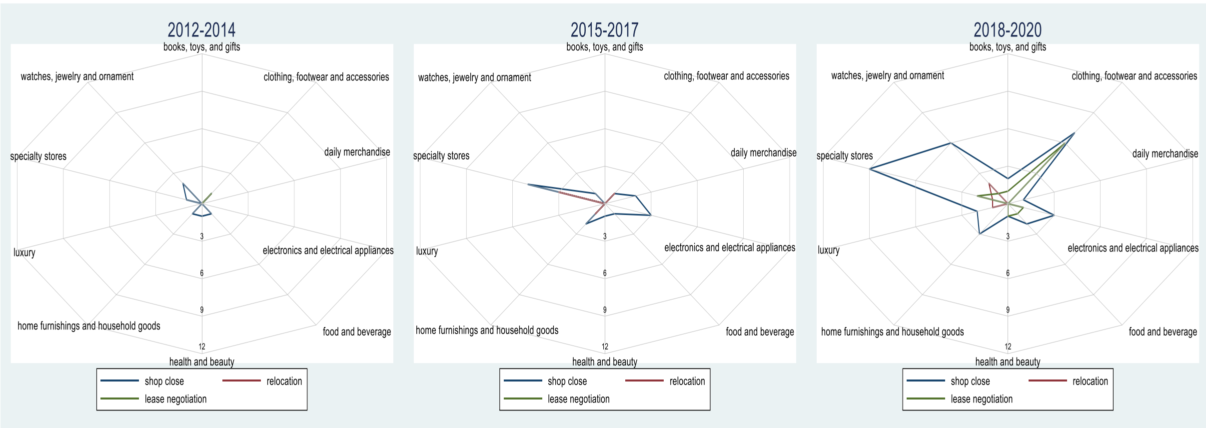

Fig. 5. Trends in industries: Shop portfolio optimization.

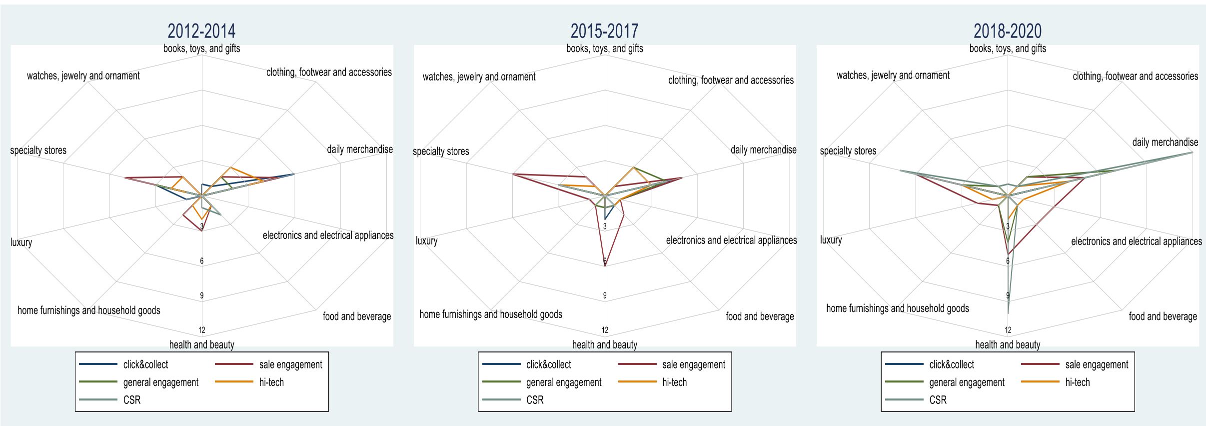

Fig. 6. Trends in industries: In-store engagement service.

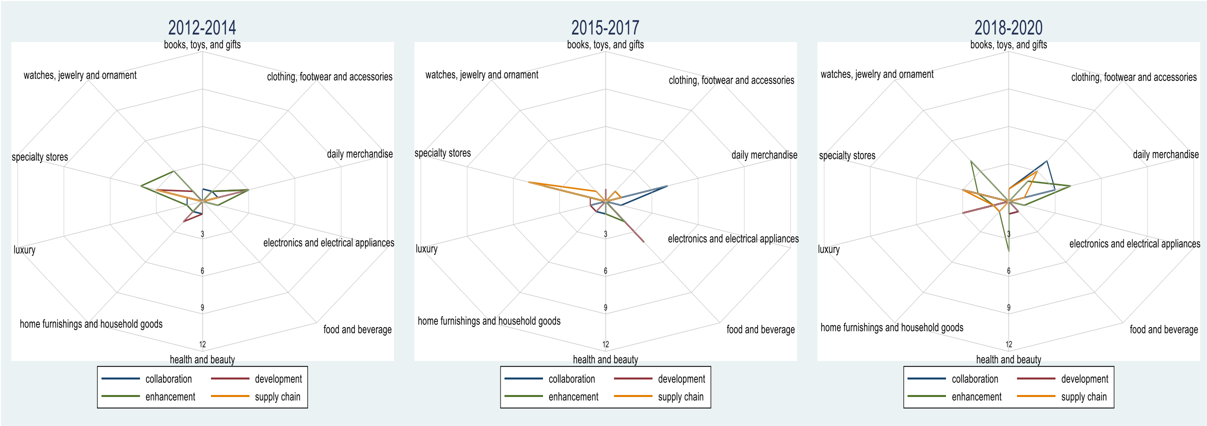

Fig. 7. Trends in industries: Omnichannel improvement.

to judge quality and performance, and to evaluate suitability from the perspective of personal tastes and preferences. This tends to be difficult to achieve in a purely digital environment. While virtual and augmented reality (VR, AR) enabled platforms are starting to address this concern, it cannot simply replicate the significance of physical experience. Therefore, a combination of digital and physical touchpoints enabled by technology-driven interfaces and follow-on personalized customer services will need to be adopted to deliver a unified customer experience.

- ESG: As mentioned in previous sections, ESG factors are even more important in the post-COVID-19 world. All aspects of 'E' (Environmental), 'S' (Social), and 'G' are becoming increasingly crucial for ensuring sustainable business operation. There is an increasing emphasis on creating awareness of ESG factors across all functions of the business, which are somewhat driven by new regulations as well. Increasing level of regulatory compliance will be required at all levels. This implies that awareness will need to transform into concrete actions in terms of embedding best practices and drive changes in ESG-related footprints. Alignment of asset management with fund management functions is key in achieving desired level of property investment performance. In order to achieve such synergies, a sound governance framework built on a high level of transparency and ethical standards is crucial.
- Landlord-Tenant relationship: The traditional relationship between landlord and tenant has often centred around dichotomous roles. Tenants focus on business development that can ensure a steady stream of revenues to enable uninterrupted rental payment. And, the landlords' key concern is servicing of property and undertake capital preservation activities. However, in a fast-emerging dynamics, the traditional, dichotomous relationship is needing to transition into a symbiotic relationship, where there is much more recognition of mutual interests, sharing of risks and uncertainties, and alignment of revenue generating strategies. It is increasingly likely that both the tenant and landlord need to develop a shared vision and undertake shared responsibilities. Such relationship will be sustainable and resilient from fluctuating economic uncertainties.
- Investor-Operator-Tenant relationship: Similar to the previous point, the traditional focus of an investor on maximizing return on investments (ROI) will also need to change as the ROI will crucially depend on a tenant's ability to perform. Instead of tenant turnover, it probably will benefit the investor more to engage and facilitate in driving success for the tenant's business. Therefore, the whole eco-system of Investor-Operator-Tenant will need to be built around mutual responsibilities, shared vision and tightly aligned business strategies.
- Flexible rent: The dynamics of revenue generation from the physical store and online platform is complex. A customer may undergo a physical store experience, but that may not necessarily transform into a sale or revenue generation. As indicated in section 2.2, there can be "showrooming" effect, where physical store displays the product information and allow a customer to access and experience the product in their "research shopping" and the actual revenue generation may be achieved via the online channel. Crucially though, the revenue realization would depend on the quality of physical experience and the strength of "showrooming" and "research shopping". However, in terms of attributing the revenue generation, it does not get to the physical store. This creates an interesting conundrum. This can especially be an important factor for retail franchise and chain store businesses. While nascent as a practice, there seems to be an increasing level of interest in flexible rents that are linked to attributable retail revenues from both in-store and online sales. The key issues relate to whether these would be acceptable to landlords, practical aspects of implementing flexible rent, including the requirement of collecting granular level of revenue information which would depend on new data capture and smart tools.
- Emergence of satellite retail centres: Traditionally, high street is the focal point of a town, where people and businesses congregate and form marketplace. It is a centre of economic activities and for innovation. However, digitalization and COVID-19 implications challenge the importance of such central role of the high street. Schirmer et al. (2014) suggest that households' location choice is mainly influenced by four sets of attributes. First, built environment (e.g. built density, structural density (or compactness), transport network, green space, and land use. Second, points of interest (e.g. education, services and retails, recreation and sport, distance to city centre). Third, socioeconomic environment (e.g. population density and household type, household income, and school quality). Fourth, access and accessibility (e.g. access to work and commuting costs, spatial distribution of facilities and services). All these

factors came under scrutiny during the Covid-19 pandemic. Changes in households' location choice would drive the changes in retailers' location choice. As customer traffic is no longer concentrated in high streets or town centres due to workers working from home or from suburban locations, the footfall relevant for retail businesses is decreasing. At the same time, worker locations being scattered around the town also seem to be driving emergence of satellite retail centres (with parade of shops) around where the worker mass is. As a result, traditional high street retailers may need to relocate or expand their business to those emerging satellite centres. This will cause a significant spatial realignment.

- Urban planning implications: Spatial realignment as discussed above will have significant implications for urban planning. As the satellite retail centres start to emerge, the needs for providing public amenities, transport connections and location of other residential and non-residential properties will arise. This will require re-zoning of urban areas and changes in use codes, which in turn will drive changes in option value of physical spaces. These changes will require both local and regional-level policy-making and investment to support emerging areas of growth and also create a governance structure that can facilitate such transformation in the urban environment.

6. Concluding remarks

In this paper, we have critically evaluated the impacts of the COVID-19 pandemic on retail real estate and high street landscape. While there has been an undercurrent of changes over the last few decades driven by urbanization and digitalization, the COVID-19 pandemic seems to have hastened the process. We have analyzed both the strategy event data of selected UK retailers as well as insights from interviews with the retail asset managers and landlords regarding the evolution of retail property business and high street landscape in the UK. The findings shed light on several trends and areas of emphasis e.g. moving away from non-core assets, greater importance on asset selections, re-figuring the function of physical stores, ESG factors in asset and investment management and customer engagement as a determinant for tenant selection. Our findings also highlight a range of implications for the high street and urban-retail landscape.

Overall, this paper presents an evidence base and highlight an urgent need of repositioning of the physical shop and embracing of digital platforms as key functions of multi-channel retail business. As more evidence start to emerge in post-COVID-19 world, future research should focus on delving deeper into the firm and place-level implications as identified by this paper.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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