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# **Incumbents' capabilities to win in a digitised world: the case of the fashion industry**

## **Running title**

Incumbents' capabilities to win

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# Abstract

The literature on digital disruption has a gap in understanding the capabilities that incumbents develop or enhance to defend or counter-attack against digital attackers. We examine examples of incumbent fashion retail-manufacturers, both high and poor performers, from a systematic review of publicly available data. We uncover the capabilities that underpin the performance outcomes from the incumbents' defence or counter attack against disruption from digital attackers.

We show that the higher performing incumbents have developed new and enhanced capabilities across the whole range of capability categories in order to out-perform the digital attacker. In addition they focus on two specific categories: to further enhance a strong capability around their unique differentiation based around existing resources - their physical stores; also to focus on one of the attackers' strongest capabilities - a rapid response to changing GENz customer trends. The strategic choice of which capabilities to enhance is driven by a goal to increase an existing advantage, or match the attacker's advantage, or both.

We contribute to theory on the dynamic capability of strategic agility which includes the speed and scale of pivoting to implement new initiatives and the capability to shape, and not just respond to, uncertainties in the external environment.

# Keywords

Incumbents' capabilities, fashion industry, digital attackers, digital disruption, strategic agility, dynamic capabilities

# 1. Introduction

Digitisation causes rapidly evolving trends - new technologies (for example, cloud-based consumer platforms, social media, AI, AR/VR, blockchain), consumer preferences (for example, GENz's changing preferences for sustainable products) and new business models from disruptive attackers (for example, peer-to-peer sharing). Its rapid speed and magnitude of change (step, exponential) generate sector discontinuities and challenges to the management of organisations to respond effectively. New capabilities must be built and existing capabilities enhanced to survive or win in this new digital economy. For example managing ecosystem partner relationships or adapting to new consumer preferences. The literature on incumbent capabilities needed to win against digital attackers is scant and missing theory on which new capabilities to develop, or existing capabilities to enhance, and why? We contribute to theory on the incumbent's strategic choice of capabilities to build/invest/enhance to out-compete the digital attacker. The choice is driven by a goal to increase an existing advantage, or match the attacker's advantage, or both.

The global fashion sector has experienced recent discontinuities with rapid growth rates for digital attackers (Bloomberg, 2020). For example, digital players Boohoo and ASOS reported annual revenue growth in 2018 of 50% and 20% respectively. Similarly, Zalando has become Europe's leading online fashion platform, with revenue growth rates of 24% on average 2014-19. As for speed to market, Southern California's Fashion Nova, UK's ASOS and Germany's Zalando are much faster than incumbents. They can design, manufacture, and market their apparel within one to four weeks compared to top performing incumbents Inditex' five weeks and H&M's a few weeks to six months. Other than these successful companies incumbents' performance over recent years include quite a number of failures including the 2019 bankruptcies of Forever 21, US Diesel, Sonia Rykiel, US Roberto Cavalli, Barneys New York and Charlotte Russe.

Our study is based on a systematic review of publicly available data, in order to identify the capabilities needed by incumbents to defend and counter-attack against digital attackers in the global fashion retail-manufacturing industry. We identify these capabilities by comparing high performing incumbents with those that perform relatively poorly, all undergoing an attack from digital players. The competitive environment in the fashion industry in a world based around digital technologies is very different from a traditional "bricks and mortar" world. Underlying the strategies for growth in a digital era, there are two important questions relating to the underlying capabilities needed for success (Foss and Saebi, 2017; Volberda, Van Den Bosch & Heij, 2018):

- How do the dynamic organisational capabilities required in this digital era differ from those needed in the past and what is needed to develop such capabilities?
- What are the new or enhanced capabilities needed by incumbents to win the battle for share of customers against digital attackers

We focus on incumbent capabilities because previous studies have not examined them in depth in the fashion industry. The fashion sector in its own right is an interesting one to examine as it is a global industry with high-turnover products that appear to be easily transferred to online sales. Here there are numerous examples of incumbents whose business models are being destroyed without seeming to be able to do anything about it. We are interested in identifying why this is so.

Our findings are that the higher performing incumbents (Inditex, H&M, Fast Retailing) have developed new and enhanced capabilities unlike the lower performing incumbents (Forever 21), across a range of capability categories. Furthermore to counter the attack from digital attackers (ASOS and Zalando) they have been able to enhance their strongest capabilities based on their own unique set of resources, in combination with improving one or more of their average capabilities - for example adapting to GENz consumer needs. The strategic agility driving the choice of which capabilities to enhance is governed by the higher-level goal to increase an existing advantage, or match the attacker's advantage, or both. Incumbents have to be very fast followers (behind the digital attackers' initiatives) to catch-up and potentially to win. The dynamic capability strategic agility is used to design and implement a fast response, coupled with a flexible mindset which first accepts, and then learns from, the pervasive dynamics they face under digital disruption. Furthermore the digital attackers' ability to implement new capabilities with speed and scale is a meta-level dynamic capability in its own right. Finally, the ability to shape uncertainties in the external environment is an emerging dynamic capability and potentially a game changer for sectors facing large discontinuities from digital disruption.

In the next sections we first review relevant theory, including the disruptive changes brought about by digitisation, competitive positioning in a digital world including strategies for both incumbents and attackers, and the contingent capabilities driving strong performance. Then we describe our methods and research design, followed by a discussion of the results. Finally we discuss the implications of the results for future research and practitioners.

## **2. The disruptive changes brought about by digitisation**

Digitisation is causing industry disruptions to happen more rapidly and more frequently than in the past. It changes products, processes infrastructure, services and business models (Kaulio, Thorén & Rohrbeck, 2017). An average 35% of companies' global revenues are now "digitised", which includes supply chain automation, new platforms for customer engagement or distribution, virtual products and transformations of products and services (Bughin & Van Zeebroeck, 2017).

The global fashion retail-manufacturing sector is affected by many new digital contingencies. Two strong digital attackers (ASOS and Zalando) have created innovative business models that include building ecosystems with digital partners. Some of the strongest incumbents (Inditex and H&M) have sustained performance under attack through adopting multiple new digital technologies such as AR/VR, cloud-based apps, AI, big data analytics and 3D printing. These technologies are becoming pervasive within the whole industry (Bloomberg, 2020). We focus on "fashion retail-manufacturing" (hereafter abbreviated as "fashion") to describe players who manufacture most/all of their own retail products, as opposed to pure retailers (for example, Debenhams, Isetan, Selfridge's, Neiman Marcus, Macy's). Strategic issues for these players include digitized supply chains, brand coherence, international positioning and economies of scale and scope.

The digital technologies include cloud applications and social media, artificial intelligence (AI) and machine learning, blockchain, augmented and virtual reality (AR and VR), IoT (Internet of

Things) including smart TVs and connected cars, Big data analytics, robotics and automation, custom manufacturing and 3D printing. Many of these digital technologies demonstrate changes in demand, capacity and technology costs at exponential rates (World Economic Forum, 2018). For example, automotive grade lithium ion battery packs decreased in cost from \$1100 / kWh to \$156 / kWh (-86%) over nine years from 2010 to 2019. These high exponential rates of change are difficult to predict and manage. There have also been large and unanticipated discontinuities in digitally-driven macro environmental trends (Bloomberg, 2020). For example, the Dow Jones index increased 66% during 2016/17 driven by artificially intelligent-driven automated traders.

The McKinsey Global Institute (MGI) (2015) reports the rapid progress of digitisation in some sectors, such that the race to keep up with new technology and use it effectively is producing digital “haves” and “have-mores”. The widening gap between them is becoming a driver of competition. Digitisation is happening inequitably hence organisations with advanced digital capabilities are capturing more of the financial rewards. Some are reshaping industries to their own advantage as many incumbent organisations are struggling to evolve quickly enough (Day & Schoemaker, 2016) as it depends on their capability to effectively anticipate and manage potentially disruptive threats from attackers (Blume, Oberländer, Röglinger, Rosemann, & Wyrski, 2020; Guo, Pan, Guo, Gu, & Kuusisto, 2019; Kilkki, Mäntylä, Karhu, Hämmäinen, & Ailisto, 2018).

## **2.1 Competitive positioning in a digital world**

We now discuss the generic strategies for both conventional incumbents and digital attackers. In this research we articulate strategies as the development of new or enhanced capabilities to out-compete or gain an advantage over competitors. Whether the dominant strategy paradigm is *which game to play* (industrial organisation (IO) theory; Porter, 1980; Teece, 2019) or *how to play the game better by outperforming rivals* (resource-based view; Barney, 2001 and 2020), then the important contribution of capabilities differs. Either the capabilities required for successful implementation of a strategy (IO theory) or the distinctive capabilities that can be used to develop a new strategy (RBV theory). Either way, the incumbents’ new or enhanced capabilities are inextricably linked to the strategies developed to defend against, or counter-attack, the digital attackers (Herrmann, 2008). We look first at strategies for incumbents and then for digital attackers.

### **2.1.1 Strategies for incumbents**

One of the biggest challenges in a digital world is for incumbents who have to cope with threats from attackers i.e., play catch-up, or proactively dismantle and/or digitally re-engineer their own business operations (Bradley & O’Toole, 2016). Incumbents can succeed in the era of digital disruption. Strategies to win for incumbents have been discussed in the economics, strategy, innovation and marketing literature, including Hill & Rothaermel (2003); Conner (1988); and Bergek, Berggren, Magnusson & Hobday (2013). Studies have considered different approaches to anticipating disruption, and general response strategies (Christensen, McDonald, Altman, & Palmer, 2018; Hopp, Antons, Kaminski, & Salge, 2018), as well as suggesting approaches to adapting business models after disruption (Cozzolino, Verona, & Rothaermel, 2018; Cozzolino & Rothaermel, 2018; D’Ippolito, Petruzzelli, & Panniello, 2019).

In summary there are three main approaches:

**Protectionism** - prevent new entrants, buy up threats through acquiring attackers, buy up or tighten control over the industry supply chain or business ecosystem, buy up any owner of essential resources.

**Disrupt your own industry** using intrapreneurship to create a new attacker, acquire technical knowledge through setting up a joint venture or investing in the new entrant. Price gauge to grow faster than existing attackers.

**Differentiate yourself** by investing in innovative digital dimensions (business processes or functions) that have been less developed and neglected by competitors, both attackers and incumbents

Traditionally, incumbents observed increasing uncertainty and volatility in their sector and responded by letting competitor incumbents or native attackers incur the substantive costs of tests and prototypes and then quickly invest to catch-up before the innovation reaches scale.. A risky strategy to try to outmanoeuvre competitors with a more substantive resource base and develop the enhanced capabilities required quickly. In a digital world it is first movers and very fast followers that gain a huge advantage over their competitors (Day & Schoemaker, 2019).

In the fashion industry Cachon (2020) discusses how a crucial component of Inditex's business model success is based on limited markdowns driven by little excess inventory. They are able to take a desirable design concept and deliver a new product in a matter of weeks, rather than months. During 2019, 54% of the factories in which Inditex has produced its articles are in proximity (in countries such as Spain, Portugal, Morocco and Turkey) with the remaining 46% being medium and long distance. This means relatively high manufacturing costs but which are more than offset by the advantage of adapting production to the trend changes of each season. This reduces the amount of merchandise leftovers from each campaign. Incumbents who digitise early and quickly can potentially do very well. Without sufficient scale, the digital natives are forced to follow a niche strategy and the incumbents can attack all the niches together (Bughin, Catlin, Hirt & Willmott, 2018).

### **2.1.2 Strategies for digital attackers**

We include a discussion of the attacker perspective because insights can be generated for incumbents as to how best to defend against attackers, or how they can disrupt themselves and become attackers. Many of the successful digital attackers have been new entrants who placed “big bets” (i.e., very large capacity investments to benefit from increasing returns – a “get big fast” (GBF) strategy (Sberman, Henderson, Beinhocker & Newman, 2007).

The classic “learning/experience curve” perspective applied to the growth of new markets argues that new entrants can achieve sustainable competitive advantage through rapid investment in capacity and by pricing aggressively to forestall competition (Spence, 1979). “Increasing returns” based on reinforcing positive feedback include network externalities, gaining complementary assets and economies of scale and scope. Winners “win big” when scale and network effects dominate markets, because economic value rises to the top. It’s no longer distributed across the typically large number of players (Kuester, Konya-Baumbach & Schuhmacher, 2018).

WSJ (2019) discusses the tech companies' GBF boom over the past two decades, including the FANGs (Facebook, Amazon, Netflix, Google) and Twitter, Uber, Airbnb. The "platform business model" in various forms became a springboard for enormous growth and wealth, matching buyers to sellers, riders to drivers, guests to hosts etc. For example, the Instagram exponential growth of monthly average users (MAUs) since launch in 2010 reaches over 1 billion by 2019, with a CAGR of 47%. This growth has significantly impacted fashion sector marketing. 71% of Instagram users are Millennials or GENz. Fashion is the second most dynamic industry on Instagram, accounting for 18.0% of interactions and 18.2% of total posts amongst all sectors (L2 Gartner Dec 2018 study).

But scalability comes with constraints - tech companies have often been focused on GBF - but it is risky and can become "get big too fast" (Sberman, Henderson, Beinhocker, & Newman, 2007; De Massis, Frattini, & Quillico, 2016). Forecasting errors in demand can lead to surplus capacity. In this case any advantage from scale declines because low capacity utilisation offsets advantages from increasing returns. Furthermore, organisations struggle to cope with delays in adjusting firm resources, and with delays in gathering market data, in carrying out competitive intelligence, and in adjusting demand forecasts.

For a GBF strategy to be successful, enhanced capabilities are needed (Kampmann & Sberman (2014), including a sophisticated understanding of the disequilibrium dynamics of market demand, to avoid being caught unprepared by the market saturation (peak). Other capabilities include:

- a deep knowledge on how to expand capacity more conservatively, let rivals expand aggressively, then acquire rivals when assets are distressed;
- expertise on how to grow new markets through co-opetition and complementaries (blue oceans), rather than compete aggressively for share in existing markets (red oceans), Christodoulou & Langley (2020).

## 3. Theoretical background

### 3.1 Capabilities for incumbents to win against digital attackers

A major challenge for incumbents is the trade-off between building new digital capabilities and enhancing existing capabilities (Svahn, Mathiassen & Lindgren, 2017). But somewhat surprisingly, the building of capabilities for digital transformation has received limited scholarly attention and is now an essential context for the study of strategic change (Warner & Wäger, 2019). Hence our research study aims to address this gap. For an incumbent under attack from digital players, which are the new capabilities to develop, or existing capabilities to enhance, and why? How best to use these capabilities to out-compete the attackers, with a defensive or counter-attacking strategy.

The dynamic capabilities framework is one of the most active research streams in the strategy literature. The theory seeks to understand how firms respond to rapid technological and market change (Di Stefano, Peteraf & Verona, 2014; Teece, 2007). Firms need to build strong dynamic



capabilities to rapidly create, implement, and transform business models to remain relevant in the emergent digital economy (Karimi & Walter, 2015; Teece, 2018).

Three dynamic capabilities (Teece, Pisano, & Shuen, 1997) capture the firm’s ability to integrate, build, and reconfigure intangible and tangible assets to address rapidly changing environments. First, organisations and their employees need the capability to learn quickly and to build strategic assets. Collaborations and partnerships can be a source for new organisational learning and can enable firms to bring new strategic assets into the firm from external sources. Second, new strategic assets such as operational capability, technology, and customer feedback have to be integrated within the company. Third, existing strategic assets have to be transformed or reconfigured, because the needs for these have changed. Teece (2019) argues that strategy is a “critical adjunct” of dynamic capabilities. which in turn shape decisions on product design and target customer segments. Strategy drives market entry timing decisions and how to outmaneuver competitors.

Much of the prior research has focused mainly on digital attackers, despite incumbents' enormous theoretical advantages in resources and capabilities, including capital, scale, knowledge and experience (Hill & Rothaermel, 2003). In this section we review empirical studies that report on incumbents in various sectors facing disruption, either under attack from challengers, or undergoing a digital transformation to meet changing customer needs. All of these build on the development of new technologies. We investigate parallel themes in other sectors given the lack of empirical studies focusing on the digital disruption of the fashion industry. In all cases we are looking for themes around enhancements to existing capabilities or emerging new capabilities. Our starting point was the three dynamic capabilities described by Teece, Pisano, & Shuen (1997). We chose to expand their categories because we wanted greater granularity in understanding incumbent actions on new capability development and existing capability enhancement. Fifteen original categories were refined down to twelve and then to six as some appeared redundant or less important, and others were combined into a single more encompassing category. These categories were revisited and refined as our data analysis progressed.

The six capability categories which characterise the conduct of incumbents, are summarised in Table 1 and are discussed in more detail below. .

| <b>Capability Categories</b>               | <b>Citations</b>                    | <b>Explanation</b>   |
|--|-------------------------------------|--|
| 1.NPD - product extensions and innovations | Karimi & Walter (2015)              | Establishing values for capability building of digital platforms |
|  | Svahn, Mathiassen & Lindgren (2017) | Overcoming culture tensions between employees                    |

|  |  |  |
|--|--|--|
|  | Sarkar, Osiyevskyy & Clegg (2018)  | Refining existing products to match the attacker's disruptive technology.  |
| 2.Brand asset building                                       | Frasquet, Dawson, Calderón & Fayos (2018)<br>Caniato, Moretto & Caridi (2013)<br>Ansari & Krop (2012)              | Brand coherence - maintaining core values whilst simultaneously operating new ones<br><br>Vision and strategy - brand development<br><br>Leveraging a strong brand   |
| 3.Specialist digital talent hiring, retention and management | Caniato, Moretto & Caridi (2013)<br><br>Karimi & Walter (2015)<br><br>Ansari & Krop (2012)<br><br>Zhou & Wu (2010) | Experienced talent retention<br><br>Talent recruitment to deliver innovation<br><br>Attracting and retaining digital talent<br><br>Building cross functional teams for innovation<br><br>Organising for change and developing effective cross-boundary strategies<br><br>Strategic flexibility in resource allocation. |
| 4.Building knowledge on customer trends                      | Ansari & Krop (2012)<br>Caniato, Moretto & Caridi (2013)<br>Frasquet, Dawson, Calderón & Fayos (2018)              | Building knowledge on customers<br><br>Organisational intelligence - customer needs<br><br>Knowledge of customer trends - knowledge management   |

|                                  |  |   |
|----------------------------------|--|---|
| <p>5.Organisational learning</p> | <p>Frasquet, Dawson, Calderón &amp; Fayos (2018)</p> <p>Bruce &amp; Daly (2011)</p> <p>Warner &amp; Wäger (2019)</p> <p>Sarkar, Osiyevskyy &amp; Clegg (2018)</p> <p>Svahn, Mathiassen &amp; Lindgren (2017)</p> <p>Rahmandad &amp; Repenning (2016)</p> | <p>Adapt to manage new agents</p> <p>Lean and agile supply chain response to address changing market conditions driving consumer behaviour</p> <p>Strategic agility to adapt - a flexibility in mindset</p> <p>Incumbents that respond creatively to challenges sense changing events as a threat demanding action</p> <p>Too strong a sense of organisational identity can restrict ability in adapting organisational capability to changing environments</p> <p>Cross-fertilization of ideas while firm is organised for division of labor and specialization</p> <p>Capability erosion explaining software startups success and failure</p> |
| <p>6.Collaboration with ...</p>  | <p>Svahn, Mathiassen &amp; Lindgren (2017)</p> <p>Wang (2016)</p> <p>Karimi &amp; Walter (2015)</p> <p>Ansari &amp; Krop (2012)</p> <p>Frasquet, Dawson, Calderón &amp; Fayos (2018)</p>   | <p>Empower independent developers</p> <p>Motivate external actors to share IP (e.g. on digital radio know-how) while the firm is organised to conservatively regulate supplier commitments</p> <p>Choosing an appropriate partnership strategy</p> <p>Reaching out to their communities using a variety of crowdsourcing techniques to build deeper network of sources</p> <p>Strong relationship with regulators</p> <p>Flexibility in managing partners and alliances</p>   |

|  |  |   |
|--|--|---|
|  | Azoulay, Reppenning & Zuckerman (2010) | Embeddedness failure in the pharmaceutical industry - relationships with partners                       |
|  | Rietveld & Eggers (2018)               | Organisations need to reshape their collaborative and competitive conduct within digital ecosystems     |
|  | Ott, Eisenhardt & Bingham (2017)       | Understanding the role of complementors and networks in shaping the ability to form superior strategies |
|  | Weill & Woerner (2015)                 | New digital ecosystems fundamentally change the basis of competition                                    |

**Table 1. Six categories of capability themes in the literature**

We now discuss the importance of each capability category to incumbents’ defensive or counter-attacking strategies as articulated in the previous sections. What were the key challenges to successful implementation in this category and how were they overcome.

### **3.1.1 New product development (NPD) - product extensions and innovations**

The “NPD - product extensions and innovations” capability category involves refining the existing product under threat from disruption (defence), or designing and building new products to match or beat the digital attackers’ disruptive technology (counter-attack). The challenges to overcome include drawing on strategic agility to quickly adopt new defensive or counter-attack moves, in order to establish essential values and culture for change.

Establishing values for capability building of digital platforms

In the US newspaper sector under digital disruption incumbents invested in resources to build digital platform capabilities for new markets and value networks for their new digital products (Karimi and Walter, 2015). Players also challenged if their core product processes were appropriate for developing new digital non-core products and whether their values were sufficient to reconfigure their capabilities. If they were not, then the values need to be changed first, since values ultimately drive process implementation. For example, they needed to change their legacy print culture and their news-gathering processes to increase audience involvement.

Overcoming culture tensions between employees

In a study of the development of a new range of “digitally connected cars” (bluetooth, 3G/4G), Svahn, Mathiassen & Lindgren (2017) found that Volvo had to develop new digital capabilities

without derailing existing product innovation practices. This created tensions between employees who seek to bring about change and those whose capabilities have become inflexible, causing skills gaps and inhibiting effective responses to digital options. They found that the key factor for success was the ability to develop capabilities to keep design spaces open throughout the life of the car until scrapping, while existing product innovation practices relied on a capability to freeze designs before production starts..

Refining existing products to match the attacker's disruptive technology

The global cork stopper industry was examined for the efficacy of an incumbent's capability enhancement, while under attack from a disruptive technological innovation - screw tops (Sarkar, Osiyevskyy & Clegg, 2018). Facing the threat posed by reducing market share and loss of important clients, the CEO sought to build new capabilities aimed at reducing cork contamination. Actions taken included emphasizing R&D to resolve the initial problem and developing new products stemming from the existing technology.

### **3.1.2 Brand asset building**

The "Brand asset building" capability category involves the challenges of building brand identities in a digital, global and less parochial, space.

Brand coherence - maintaining core values whilst simultaneously operating new ones

In the fashion retail sector, societal embeddedness mainly involves brand building capabilities coupled with adaptation capabilities that enable locally nuanced perceptions of the brand while keeping the core brand values intact (Frasquet, Dawson, Calderón & Fayos; 2018). Channel management capabilities help to transfer the values of the brand to partners and consumers.

Brand development

The linkage between supply chain innovation (SCI) and dynamic capabilities in the fashion-luxury industry was investigated using an in-depth case study of one Italian fashion-luxury company (Caniato, Moretto & Caridi, 2013). An important part of the organisation's vision and strategy was brand development. Reducing the number of luxury brands drove a reduction in the number of new products created each year, thereby avoiding the waste of resources devoted to the seasonal collection development.

Brand Leverage

Leveraging a strong brand was key to incumbent performance under attack (Ansari & Krop, 2012). Brand familiarity and knowledge of consumer trends, and the ability to leverage existing complementary capabilities for new applications provides the incumbent with clear advantages, both for competing head-on and for negotiating attractive partnership deals with challengers. For example in VoIP services, Skype used the Internet (generic and open complementary assets) to promote and distribute its new service.

### **3.1.3 Specialist digital talent hiring, retention and management**

The "specialist digital talent hiring, retention and management" capability category involves multiple people initiatives related to talent and the challenges to overcome include ambidexterity,

flexible organisation structures and delaying product decision making. Strategic agility is needed to accelerate or delay the timing for resource deployment and restructuring. Retention of existing talent can be difficult to implement

In luxury fashion, the importance of experienced talent retention and recruitment of new talent to deliver innovation was examined (Caniato, Moretto & Caridi, 2013). New employees were recruited to introduce breakthrough ideas inside the innovation process. Retention of employees with several years of experience was considered important, together with “stretching” the goals for innovation throughout the organisation. However, in the US newspaper sector undergoing digital transformation, attracting and retaining digital talent in a traditional culture was reported to be very difficult (Karimi & Walter, 2015).

Cross functional knowledge exchange and ambidexterity

In creative media, a key capability was building cross functional teams for innovation (Ansari & Krop, 2012). For example, in VoIP, KPN installed cross-functional teams to evaluate VoIP business opportunities in order to increase organisational preparedness for change.

Resource deployment and organisation structuring

In a study of the impact of strategic flexibility and technological capability in the high tech electronics China sector (Zhou & Wu, 2010), firms realised that they must understand the limitations of their existing capabilities in product innovations. To overcome such limitations, firms should develop strategic flexibility in their resource allocation and coordination. Companies could design flexible organisational structures (for example business units with self-organising teams), develop flexible manufacturing processes with modular product design, and build an organisational culture that promptly deals with rapid environmental changes.

### **3.1.4 Building knowledge on customer trends**

The “building knowledge on customer trends” capability drives the strategic agility to pivot with speed and scale, facing uncertainty in fickle consumer behaviour.

Knowledge on consumer trends provides the incumbent with a clear advantage, both for competing head-on and for negotiating attractive partnership deals with attackers (Ansari & Krop, 2012). For example, in the VoIP disruption, incumbent telecoms with extensive market knowledge and power, as well as experience of turbulent markets were difficult to displace.

Organisational intelligence is essential to fully understand customer needs and requirements in terms of products. An intelligence capability is helpful, oriented to learn from both customers and competitors (Caniato, Moretto & Caridi, 2013).

An online channel permits direct contact with the consumer allowing the retailer to collect information, if the capability for managing this knowledge is developed (Frasquet, Dawson, Calderón & Fayos, 2018). Companies can learn about trends and tastes through the online channel, so it becomes a powerful means for further embeddedness in the overseas territory.

### 3.1.5 Organisational learning

The “organisational learning” capability category involves continuous adaptation, learning fast from errors or crises, organising for change, cross-fertilization of ideas, and coping with capability erosion. Strategic agility is needed to develop a flexible mindset, make decisions rapidly, and undergo substantial adaptation.

#### Organising for change and developing effective cross-boundary strategies

A study on fashion retail internationalization found that organisations adapted to manage new agents (Frasquet, Dawson, Calderón & Fayos, 2018). This is evident in transferring operational routines associated with the different channels. Knowledge management involves negotiation based routines to transmit knowledge through the network of local partners. Similarly, a lean and agile supply chain response was implemented to address changing market conditions that were driving consumer behaviour (Bruce & Daly, 2011).

#### Rapid decision making - top management cognition and mindset

In a study of how six incumbent firms in traditional German industries build dynamic capabilities for digitisation, strategic agility was found to be a critical dynamic capability for taking advantage of new digital opportunities (Warner & Wäger, 2019). The results also show that rapid decision making is central to seizing technological opportunities and that strategic agility is a key capability under conditions of deep uncertainty.

The strategic agility is part of a strategic mindset that accepts the reality that many innovations turn out to be duds, frequent pivoting, and short-term advantages are pervasive dynamics in a digital world. Incumbents that respond creatively to challenges sense changing events as a threat demanding action. The sense of impending crisis provided the purpose (drive) to create new capabilities (Sarkar, Osiyevskyy & Clegg, 2018).

The cross-fertilization of ideas while the firm is organised for division of labor and specialization was investigated (Svahn, Mathiassen & Lindgren, 2017). Incumbents that respond creatively to challenges sense changing events as a threat demanding action. A sense of impending crisis provided the purpose (drive) to create new capabilities. Only after a prolonged decline, “weathering the storm” was abandoned and “unlearning yesterday” and “inventing tomorrow” embraced. Too strong a sense of organisational identity can restrict ability in adapting organisational capability to changing environments

#### Capability erosion

Software startups’ success and failure is explained through a project management capability strength or decline (Rahmandad & Repenning, 2016). They examined capability erosion using a simulation model methodology. The research identified the “adaptation trap”, a mechanism through which managerial learning can lead to capability erosion. Well-intentioned efforts by managers to search locally for the optimal workload balance lead them to systematically overload their organisation and hence cause capabilities to erode.

### **3.1.6 Collaboration with....**

The “collaboration with...” capability category involves the motivation of partners, choosing a partnership strategy, embeddedness in relationships and the role of ecosystems. Strategic agility is needed to maintain flexibility in partner management and cope with the changing basis of competition in digital ecosystems.

#### Motivation of external (creative) partners

Volvo empowered independent developers while the firm is organised for upfront specification of end-user functionality (Svahn, Mathiassen & Lindgren, 2017). They also motivated external actors to share IP (e.g. on digital radio know-how) while the firm is organised to conservatively regulate supplier commitments.

#### Choosing an appropriate partnership strategy

In contrast to firms in other industries, in order to rapidly increase their global competitiveness, five fashion firms used horizontal mergers and acquisitions and vertical integration to rapidly expand their sales, open up the raw material supply chain upstream and establish their own channels downstream (Wang, 2016).

Newspaper incumbents found it difficult to change their predominant print culture and their news-gathering processes to increase audience engagement and build unique values for their digital products (Karimi & Walter, 2015). The solution was to reach out to their communities using a variety of crowdsourcing techniques to develop deeper source networks, and by emphasizing industry standards for promoting platform agility for their digital products.

The dominance of the two incumbents RTL and SBS in the Dutch television and media industry, some 15 years after deregulation, was attributed in part to their strong relationship with regulators (Ansari & Krop, 2012).

#### Flexibility in managing partners and alliances

Knowledge management involves negotiation based routines to transmit knowledge through the network of local partners (Frasquet, Dawson, Calderón & Fayos, 2018; Gander, Haberberg & Rieple, 2007). The research found that fashion retailers are using multiple channels and in different combinations at home and abroad. Flexibility is essential to negotiate with different channels according to the needs of the host market. The capabilities have to be dynamic to accommodate changes in consumers, institutions and the networked agents in the host market.

#### Failure to build embeddedness in relationships

Firms in the pharmaceutical industry failed to build embeddedness (Azoulay, Repping & Zuckerman, 2010). The failure is caused by the pharma company’s business relationships with partners who conduct trials of new drugs. The explanation is in the misperceptions in the criteria for success of relationships - expectations were chronically set too high.

#### The role of the ecosystem and partner management



Digital platforms and ecosystems are gaining increasing attention, as the nature of collaboration and competition changes in these emerging ecosystems (Rietveld & Eggers, 2018; Kapetaniou, Rieple, Pilkington, Frandsen & Pisano, 2018). As industries converge, organisations need to reshape their collaborative and competitive conduct, because the digital ecosystems now involve players from unrelated industries.

Ott, Eisenhardt & Bingham (2017) examined the role of complementors and networks in shaping the ability to form superior strategies. They note that in an earlier study on mobile gaming entrepreneurs (Ozcan & Eisenhardt, 2009), some players had a more accurate understanding of the role of complementors and networks than others, and this shaped their ability to form superior strategies. For example, Hannah & Eisenhardt (2018) found that more successful entrepreneurs in the residential solar industry had a more complete and sophisticated strategic insight into the dynamics of ecosystems. In the case of the fashion industry, a good understanding of ecosystems might allow incumbents access to knowledge that is not available to them within the (non-digital) firm. New digital ecosystems are created which fundamentally change the basis of competition (Weill & Woerner, 2015).

This paper examines digital disruptions by attackers in the fashion industry to uncover the capabilities that underpin the performance of the incumbent following the disruption. We focus on incumbent capabilities, because previously this has not been studied very much in the fashion sector. There are two main research questions:

1. What are the new or enhanced organisational capabilities that underpin higher performance by a conventional incumbent compared to lower performing rival incumbents.
2. What are the new or enhanced organisational capabilities that underpin a successful defence, or a counter-attack, by a conventional incumbent to a disruption from a digital attacker.

## 4. Methods

A review of secondary data was undertaken to identify incumbent and attacker digital strategies across several industries and the related contingent capabilities. We chose to examine the fashion sector, focusing on integrated fashion retail-manufacturers. We draw principally from the best and worst performers in the industry. In terms of the attacker companies we selected the highest performing online fashion retailers. In order to compare similar types of organisation, we had hoped to identify integrated online fashion companies, however in each attacker case they started out as pure retailers, only latterly vertically integrating into designing and manufacturing their own branded clothing.

We used multiple sources to identify relevant organisations, including industry consultants' reports (e.g., McKinsey Fashion Industry Report 2019 and 2020), practitioner journals (e.g., Retail Week,

Business of Fashion), industry reports (e.g., WGSN, Drapers, Bloomsbury Fashion, Marketline, Global Data and Mintel) and company reports (e.g., Inditex, H&M, ASOS). Organisations were chosen to represent either high performance (increasing sales volume, revenue and profit over the past five years) or low performance (deteriorating sales volume, revenue and profit). We chose net revenues to illustrate performance, although we are aware that a number of other financial measures would be possible, such as profit margin or return on capital. In the consumer-focused fashion industry, sales revenue is a good indicator of effectiveness in stimulating demand.

These reports and articles were identified in databases and search engines using the following keywords: 1. “digital disruption”, 2. “digital attackers”, 3. “disrupting incumbents” and 4. “incumbent capabilities”. We also searched for articles within Factiva, the international newspaper and magazine database, from the period beginning in January 2010, when digital disruption first emerged, to July 2020, using these keywords. We identified around 300 articles in total. There is no quantitative analysis of results using statistical testing - the cases chosen helped us to examine the capability differences for high and low performers.

Our analysis commenced based on the authors’ pre-existing knowledge of the issues and a review of relevant literature. The articles that we identified from multiple search engines provided the raw data from which themes were identified (Kauppinen, Valros, & Vesala, 2013). The data were analysed using standard thematic qualitative coding techniques (Flick, 2014). This method was deemed appropriate as it can highlight similarities and differences across the data set and can generate unanticipated insights (Braun & Clarke, 2006).

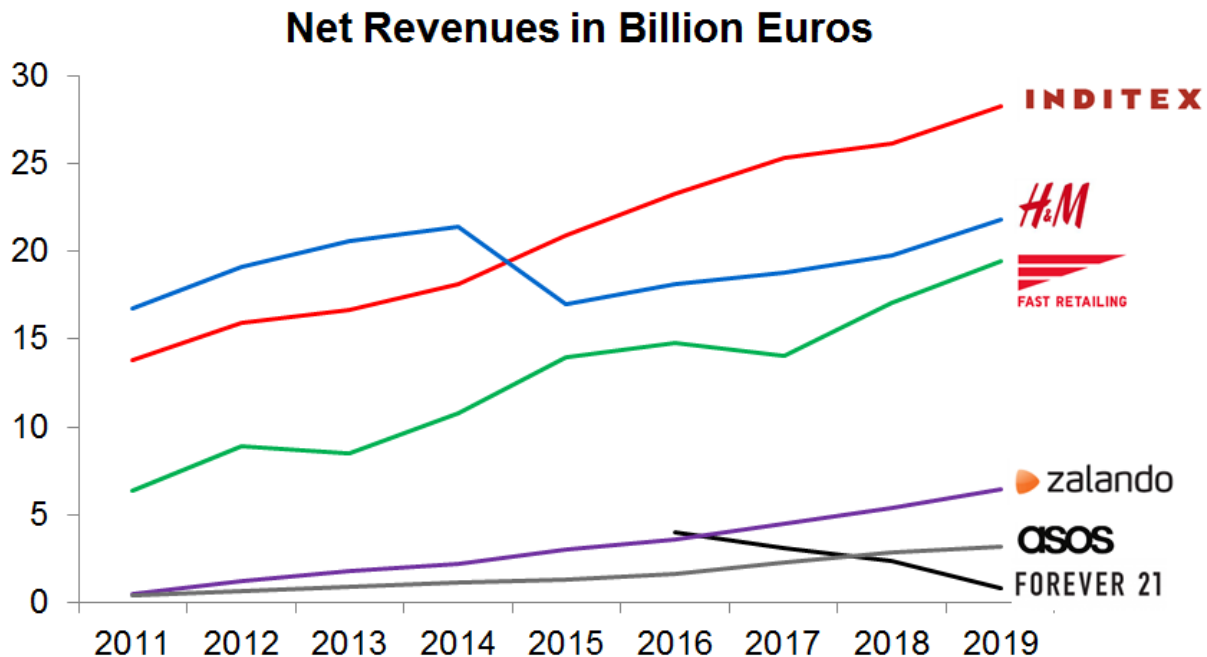
Data analysis was accomplished in three stages. The first stage consisted of multiple readings of the documents to identify the most common and/or important themes relating to organizational performance, digital strategies and capabilities. These were coded factually without any attempt to apply any theoretical frameworks. This analysis helped us understand the strategic, operational and change management issues affecting the industry as a whole. The coding was based deductively on prior literature, and inductively on new insights emerging from the data, in a retroductive stance. The second stage involved refining our interpretation of the coding, revisiting the literature, and refining and re-organizing the themes that had emerged from the first stage of our analysis. During the second stage we began to be able to identify theory-informed explanations for what we saw in our data, based around the emerging importance of attacker/incumbent capabilities, strategic agility and dynamic capabilities theories. The final stage in our analysis consisted of a further refining of the data focused on identifying theory-informed causal or explanatory links between variables, including links between digital capabilities and whether the organizations were incumbents or attackers. During the analysis we started exploring diagrammatic representations of moderating and intermediate variables. This type of exercise was useful in helping to understand how and why certain of our categories influenced others.

Rigour was ensured through strategies recommended to enhance the credibility and of qualitative study findings (Morse, Barrett, Mayan, Olson, & Spiers, 2002) such as the participation of both authors in the analysis and coding process, discussions as to interpretation of the data between the co-authors and other colleagues who work in similar fields (Chenail, 2011), an explicitly reflective and reflexive analysis processes, and transparency of data presentation.

Having selected relevant firms we sought to supplement the emerging material by looking at information provided on the organisation's website, as well as sector focused websites. Factiva was the most useful source at this stage of the analysis, giving the most mentioned organisation in each industry, although where appropriate we also included organisations described in other documents. As with this type of work, data gathering and analysis ceased when no new insights emerged, suggesting that all the major themes had been captured (Marshall, 1999). In a retrospective process, we used these themes to look for relevant academic literature. An inductive approach (Patton, 1980) such as ours, enables patterns, themes, and categories to emerge from the data rather than be placed in predetermined categories. We discuss these various categorisations in the following sections.

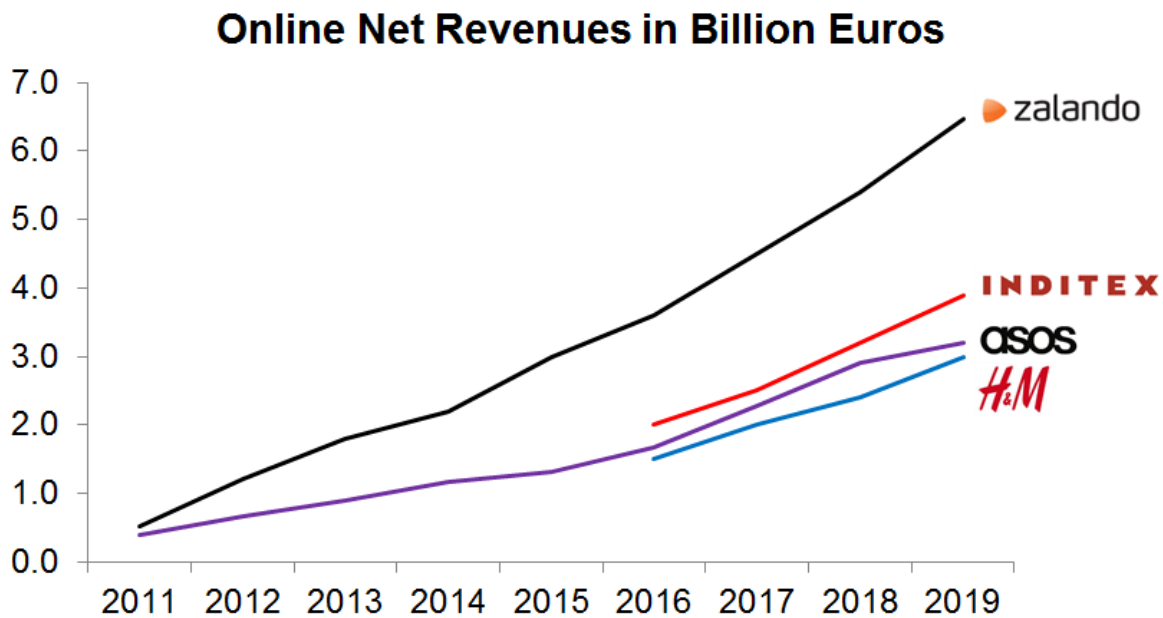
## 5. Results and discussion

In the global fashion industry, three of the highest revenue incumbents in June 2020 are Inditex (Spain, 7,500 stores in 93 countries, 176,000 employees), Fast Retailing (the Japanese owner of Uniqlo, 2,200 stores in 22 countries, 52,900 employees) and H&M (Sweden, 5,000 stores in 74 countries, 126,000 employees). A smaller incumbent Forever 21 (US, 800 stores in 50 countries, 33,000 employees) filed for Chapter 11 bankruptcy in September 2019. The two highest revenue digital attackers are ASOS (UK) and Zalando (Germany). Figure 1 shows net revenue for the four incumbents and two digital attackers from 2011-19.



**Figure 1 Net revenues 2011-19 for incumbents and digital attackers**  
**Source: Bloomberg, 2020.**

These data were analysed in July 2020 including financial performance up to Dec 2019 prior to the 2020 impact of COVID19 on 2020 Q1 and Q2 revenues. We choose net revenues to illustrate historical performance, although a number of other financial measures would be possible such as profit margin or return on capital. Incumbents Inditex, H&M and Fast Retailing grew net revenues consistently from 2012-2019, averaging 9.5%, 3.9% and 15.9% respectively. In contrast, Forever 21's net revenue declined by 23% in both 2017 and 2018 and a -67% decline in 2019 prior to declaring bankruptcy. The digital attackers ASOS and Zalando grew net revenues at a much higher rate from 2012-2019, average yearly 31% and 41% respectively. These rapid growth rates for 2012-2019 have now pushed their combined 2019 revenues (9.7 billion EUR) to 40% higher than the combined Inditex and H&M 2019 online revenues (6.9 billion EUR), as shown in Figure 2.



**Figure 2 Net revenues 2011-19 for incumbents' online sales and digital attackers**  
**Source: Bloomberg, 2020.**

The incumbents Inditex and H&M have both increased their 2019 online sales at 22% and 25% respectively, significantly higher than digital attackers Asos and Zalando at 10% and 20%. Their 2019 stores revenues (excluding online) grew at 7% and 8% respectively. An interesting question, therefore, is how the incumbents have apparently superseded the revenue growth performance of the (now) more experienced digital players - on their own ground. This is the question that we now address by examining the capabilities that appear to have influenced their relative performance.

## 5.1 Capabilities that underpin incumbent and attacker performance in a digital environment

Using the six capability categories drawn from the literature, we investigate these in fashion retail incumbents, both strong and poor performers and digital attackers.

### **5.1.1 New product development (NPD) - product extensions or innovations**

Digital attackers invest in digital technology to rapidly expand their social media profile through innovations on each of the major platforms, including Instagram and Snapchat (Karimi & Walter, 2015). For example ASOS analysed around 30 million Instagram posts from FY19 that contained #OOTD (Outfit Of The Day) and #Fashion. The “Instagram moment” pieces for festivals, date nights, parties etc. They also surveyed 3,860 customers in six key markets, finding that ASOS customers expect more diversity of styles (they identify with an average of 6.7 different styles) and sizes. Furthermore, surveys of social media show an increasing number of mentions of ethical and sustainability content.

Digital attackers ASOS and Zalando claim to “continuously innovate” the customer experience (Journée & Weber, 2017), including using visual search to let customers purchase items that they’ve seen and introducing a mobile app after identifying that customers would be interested in purchasing via mobile. They have also attempted to deliver more personalised services with chatbots that responded to requests such as, “Show me all the little black dresses on your site”. Also fast online customer support, which guarantees customers the quickest possible message response time on their Facebook page - a personalized response in minutes. Many product innovations were unique at the time they introduced them, for example free shipping and returns to all 196 countries.

Incumbents Inditex and H&M have also developed fashion garments and accessories emphasizing sustainability and recycling, including custom fit garments at significant scale. GENz customers want clothes that allow them to express themselves and provide themselves with a sense of individuality. Behind most of these innovations are digital technologies, including visual search, voice search and artificial intelligence (AI), drone deliveries and a trial roll-out of an augmented reality (AR) tool that allows consumers to view clothes on digital models and improves the product customisation process that is increasingly valued by young consumers.

Both Inditex and H&M payment systems incorporate the latest security checks, and they accept new currencies such as Bitcoin. In contrast, Forever 21 appeared not very knowledgeable about cyber security. There were privacy problems (payment card data breaches) and encryption technology installed on point-of-sale (POS) devices was not always activated at some stores. Asos has encountered and successfully defended tens of millions of cyberattacks on their website and app every year; their cyber-defence team’s cases grew six fold during 2013-19 (Daily Telegraph, 2017).

For manufacturing logistics and the supply chain, both Inditex and Zalando invested in digital technologies to streamline and shorten the time to market (Caniato, Moretto & Caridi, 2013). ASOS focuses on minimising the design/manufacture cycle time (Şen, 2008), continually offering new products. Close to half (41 percent) of their current product assortment arrives in store in the previous three months, offering between 2,500 and 7,000 new items every week. Online retailers

continuously improve customer service through delivery offers while using digital technologies to drive cost savings without increasing holding costs (Acimovic & Graves, 2015).

Incumbents Inditex and H&M have developed digital-based innovations in their physical stores (Svahn, Mathiassen & Lindgren, 2017), including BOPUS (buy online, pickup in-store). They shipped products to customers directly from the stores, for those who didn't want to carry the products home. Scan & buy is available in all Inditex's locations where online delivery is available. The customer scans the QR code on a product in store to find and buy the item online in the size and colour they want. In contrast there is no evidence that lower performing incumbents such as Forever 21 ever developed this service or designed their stores around digital innovations like augmented reality (AR) and BOPUS. The GAP brand (which includes Old Navy and Banana Republic) has suffered large declines in store revenue during 2019 which reinforces the idea that the boring, mediocre, undifferentiated middle retail is unsustainable.

### **5.1.2 Brand asset building**

Digital attackers ASOS and Zalando both have a significant marketing capability which differentiates themselves from other online fashion retailers (Chaffey, 2019). The strategy is to create a virtuous circle of growth through marketing their products' attributes through social media influencers, who in turn generate a network effect of increased demand. Both companies have a focus on high-quality products, ethical trading and an "all-inclusive approach" aka genderless fashion, all of which are increasingly important to GENz consumers. By interacting with fashion and lifestyle influencers equipped with built-in communities, ASOS effectively builds a natural, organic brand affinity and widens its overall reach without spending on advertising campaigns. ASOS Insiders is a good example of brand marketers playing the long game, prioritising long-term engagement tactics that provoke advocacy over time, building them a reputation for authenticity. This social marketing strategy is a seamless blend of influencer marketing and user-generated content (Caniato, Moretto & Caridi, 2013).

Incumbent Inditex designs and implements a distinctive store aesthetic which is carried through to their online platforms. They hire and develop talented creative and visual display teams who then use furniture and lighting "to express the personality of the brands and let the fashion speak for itself". The stores also serve as a visible demonstration of their commitment to sustainability, an important part of the brand. 92.7% are "eco-stores", using at least 20% less energy and 40% less water than a conventional store. A distinctive digital marketing capability is innovating ways to communicate the brand's values across the whole value chain (Frasquet, Dawson, Calderón & Fayos, 2018). Capabilities in ecosystem partner buy-ins are important because inconsistency in expressed values are very visible online, meaning that all suppliers, partners and collaborators within the ecosystem need to themselves behave consistently with these values. Incumbents Inditex and H&M aggressively pursue new marketing channels, mainly through social media (for example Instagram and Snapchat). They conduct continuous brand makeovers, for example by continuously reinforcing the commitment to fair trading and sustainability, also developing platforms as a way of preserving their reach and fulfillment capability (Karimi & Walter, 2015).

Failed incumbent Forever 21's effort towards a sustainability offering on their website is just a few hundred words updated in 2011. Also in 2019, GAP was caught in an uphill battle for relevance in

an era where malls and physical retailers are losing their pre-eminence falling behind more trendy e-commerce sites and direct-to-consumer brands.

### **5.1.3 Specialist digital talent hiring, retention and management**

Digital attacker ASOS renamed HR as the “people experience” (PX) team to reflect the focus on the customer experience, part of their brand building across the value chain capability previously mentioned. The PX team focuses on emerging talent, building a close relationship with universities and charities such as The Prince’s Trust to identify and nurture potential stars. A drive to unleash creativity at their revamped London HQ (2019), incorporating bespoke mobile first technology and location mapping software, plus flowing spaces for cross-functional interaction, making a flexible workspace that is conducive to a young creative workforce (Karimi & Walter, 2015).

Incumbents Inditex and H&M delivered growth on simple services, platforms, and components which are then used to deliver sophisticated new IT capabilities (for example BOPUS and AR). H&M created a new Business Tech function, which will gradually replace the previously separate functions of IT, Advanced Analytics & AI and Business Development, and where agile teams will work cross-functionally to increase their flexibility, speed and efficiency (Ansari & Krop, 2012). Forever 21 appears to have a weak digital presence and did not bolster its e-commerce platform. For example they don't synchronise cloud apps and location marketing.

### **5.1.4 Building knowledge on customer trends**

Digital attackers ASOS and Zalando are developing a big data capability to mine customer preference data. Persistently surveying customers on what they are looking for to improve their shopping experience and using the feedback as part of the user interface (UI) enhancement. Big data recommendations are based on what ASOS knows about the shopper and what has been bought, returned, browsed, etc. They exclaim “in the blink of an eye, we’ll show you products we think you’ll love”. ASOS also records information about what fits the customer, and can suggest outfits perfectly suited to the customer's body shape. These capabilities are all part of creating innovation in user experiences from data analytics (Frasquet, Dawson, Calderón & Fayos, 2018).

Digital attacker ASOS makes the most of their leaps by observing customer behaviour, and then seeing where they are going, and then pivoting accordingly, e.g. leap to mobile in 2010, more than 6.5 million followers on Instagram (Ansari & Krop, 2012) - the evolving ASOS customer. They analysed around 30 million Instagram posts from FY19 that contained #OOTD (Outfit Of The Day) and #Fashion. They also surveyed 3,860 customers in six key markets finding that ASOS customers expect more diversity of styles (they identify with an average of 6.7 different styles) and sizes, coupled with ethical and sustainability content (increasing mentions of these on social media).

Incumbents Inditex and H&M adapt quickly to changing GENz needs through customer profiling, design and marketing (Caniato, Moretto & Caridi, 2013). They use AI and Big Data analytics

(customer profiling and targeted marketing). Forever 21 failed to use their customer data to make fast, intelligent, and innovative decisions (e.g., Instagram). Also, they were initially squeezed out by the explosion of digital-first empires (i.e., GENz behaviour not well understood) serving their youthful population in new and dynamic ways.

The French player Sonia Rykiel, bankrupt in 2019, produced uninventive and sterile collections, following so called “trends and styles of market”. But in reality they failed to understand the latest GENz trends, possibly because social media consumer data gathering was weak. In contrast, responding to the sustainability theme that is increasingly critical to GENz customers, Japanese player Uniqlo produces far fewer designs than its competitors (2,000 items vs Inditex 6,300 vs H&M 17,700). Creating timeless garments that are made to last is the focal point of the brand - mainly knitwear using high-quality materials - almost 70% are made out of natural fabrics.

### **5.1.5 Organisational learning**

Digital attackers ASOS and Zalando followed an ambitious get big fast (GBF) strategy building dedicated websites in strategic country markets (e.g. UK, US, France, Germany, Australia and Russia). Driven by the premise “you can’t have a fast enough web experience” they adapted quickly by rapidly ramping-up website speeds, building data centres in every country, In 2020 they have nine country-specific websites, ship to 240 countries around the world with offices in the UK, US, France, Germany and Australia. They have 80,000+ product lines with 3,000+ being added every week. They have over 3.2 million visits daily and over 13 million active customers.

In 2019, digital attacker ASOS overcame the operational challenges of warehouse and inventory fulfillment by investing heavily in technology. The 2020 turnaround involved fast learning about shortcomings, recovering from the earlier 2019 strategic errors quickly (Warner & Wäger, 2019). By early 2020, ASOS admitted they were not adequately prepared for the additional complexities of planning and trading across the expanded warehouse footprint. It is also clear that the internal capabilities had not kept pace with this growth and change in complexity, and accordingly they lost focus on several core competencies, notably product, presentation and customer engagement. ASOS strengthened the depth and breadth of their senior management team (four new Director posts in strategy, growth, commercial and people) to ensure that they are well set for the next phase of growth. An aspiration to pivot strategy quickly is part of the dynamic capability in strategic agility.

Incumbents Inditex and H&M adapt quickly to changing GENz needs in terms of new apparel product offerings, new marketing communications channels and continuously evolving messages about sustainability and responsible practices (Sarkar, Osiyevskyy & Clegg, 2018). They are upping their social media game and enlisting millennial brand ambassadors. Above all, they are acknowledging the need to stay close to their new consumers. Inditex aggressively pursued the ongoing upgrade of legacy IT systems, in order to provide new product innovations which are technology based, for example buy online pickup in store (BOPUS). They created dedicated internal units to streamline the innovation process, part of their capability to continuously adapt.



Failed incumbent Forever 21 couldn't predict the shift to online (core customers are young people who prefer to shop online). They couldn't match trend-specific competitors that are significantly more apt at giving teens and young adults what they want. A lack of strategic agility to be responsive to changing market trends and customer needs. Possibly a lack of flexibility in mindset.

### 5.1.6 Collaboration with...

Digital attackers ASOS and Zalando have built multiple partnerships and acquisitions, including the acquisition of AI startups, partnerships with Microsoft cloud data centres and other technology startups, to help staying at the leading edge of innovation (Rietveld & Eggers, 2018; Ott, Eisenhardt & Bingham, 2017). ASOS opted to partner with a global technology start-up accelerator to co-invest and co-accelerate three fashion tech start-ups. They built data centres in every country to drive a super-fast web experience. Moving to a cloud-based solution (Microsoft Azure data centres) allowed them to scale up quickly.

Incumbents Inditex and H&M worked with franchising and partners for stores in some markets where direct ownership was not possible. Inditex cooperates with international groups such as CanopyStyle, Better Cotton Initiative, Sustainable Apparel Coalition and Textile Exchange, among others. They are one of the founding members and part of the Investment Committee on Organic Cotton Accelerator, a multi-sectoral initiative that supports organic cotton producers, to ensure the sustainable growth of the organic cotton industry and that all players are benefited, from the grower to the end consumer.

In contrast, failed incumbent Forever 21 had little investment in ecosystem/partner development or acquisitions, apart from stores outside the US which in some markets operated in joint ventures with local partners. Sonia Rykiel struggled with disengaged faraway Chinese investors who bought a majority stake in the company in 2012. A lack of capability to effectively manage investor relations.

In summary, high performing incumbents demonstrate positive performance in all of the capabilities categories, in contrast to the relatively poor performing incumbents which show much worse performance in all of the categories. Notably the largest differences are in capability categories "NPD product extensions or innovations" and "Organisational learning - continuous adaptation", because in the fashion retail manufacturing sector a rapid and customer-experience focused implementation of new initiatives is a major driver of competitive advantage. A part of the dynamic capability of strategic agility to continuously pivot these new initiatives.

Furthermore, the digital attackers ASOS and Zalando have rapidly built new or enhanced capabilities with two strong characteristics of **speed and scale** across all six categories. Speed refers to the urgency in terms of resource allocation, including allocation of management effort, hiring new talent, developing existing talent and learning from partners in the ecosystem. Scale is a measure of the size of the investment in terms of money spent and number of people of various skill levels and experience allocated to the activity. To be able to ramp-up activities quickly with sizable levels of investment of money and effort is a distinctive dynamic capability (Sarkar,

Osiyevskyy & Clegg, 2018). Three of the most notable initiatives implemented with rapid speed and large scale are the continual adapting to GENz consumer needs, the innovations in social media marketing including Instagram and Snap, and the relentless development of new relationships within their ecosystem of partners.

## 5.2 Incumbents' capabilities to win against the digital attackers

Our data indicate that for the high performing incumbents to win against the digital attackers, the key capability enhancements are focused on two main categories: "NPD - product extensions or innovations" and "building knowledge on customer trends".

### **NPD - product extensions or innovations**

There are two capabilities in the product extensions or innovations category, both building on an existing advantage:

1. Building on their existing differentiation that is only possible with traditional stores. Investing in new product development with digital dimensions that cannot be matched by the digital attackers, including buy online pick-up in store (BOPUS), promoting sustainable products and recycling in the stores through compelling displays and location marketing through social media to push current offers to nearby customers.

2. Also building on their existing differentiation through continuously tweaking supply chain and logistics, through digital investments to streamline and shorten the time to market. With both incumbents, the trendiest items are made closest to home so that the production process takes only two to three weeks, from start to finish. Higher labour costs are offset by greater flexibility - no extra inventory lying around and a faster turnaround speed. For example, Inditex makes 85 percent of the full price on its clothes, while the industry average is 60 to 70 percent. Unsold items account for less than 10 percent of its stock, compared with an industry average of 17 to 20 percent.

### **Building knowledge on customer trends**

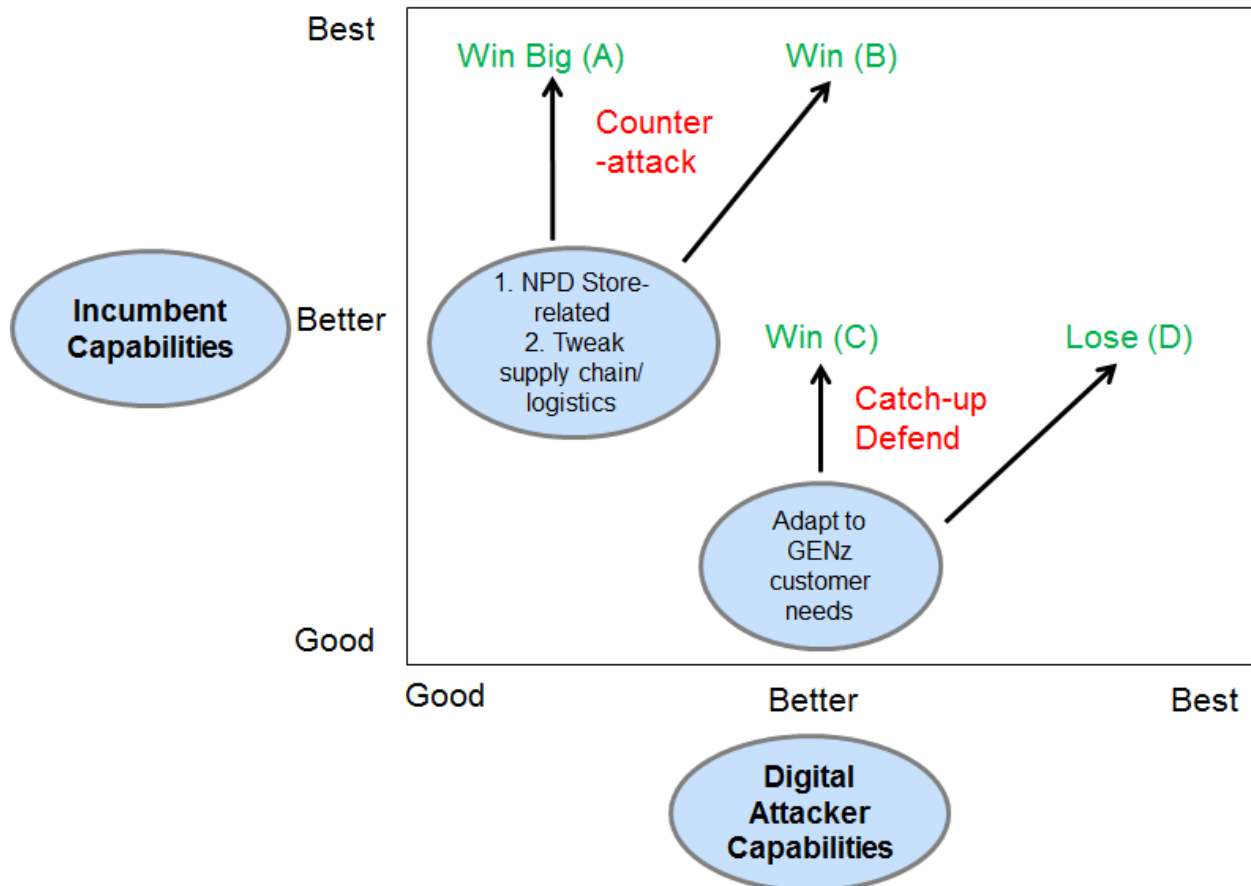
Building knowledge based on customer trends is a capability that meets head-on one of the attackers' strongest capabilities, that of adapting to GENz customer needs. A dynamic capability of strategic agility enables incumbents to adopt a fast follower approach, to catch-up the advantage of the digital attackers. They can analyse huge volumes of customer data drawn from their existing scale and network reach, and potentially take advantage of new technologies for Big data analytics using AI.

A question, therefore, is why are the incumbents focusing on these two capability categories? The key strategic issue is how best to win against a digital attacker (Markides & Oyon, 2010). Figure 3 shows the incumbents' and digital attackers' current positions on these capabilities (*good, better*). Which capabilities does an incumbent focus on building or enhancing? The broad choices are:

1. the digital attackers' *better* capabilities (i.e., the incumbents' strategy is to catch-up defend);
2. the incumbents' *better* capabilities and/or the digital attackers' *good* capabilities (i.e., the

incumbents' strategy is to counter-attack).

Our results suggest that the high performing incumbents have chosen a strategy with both a focused defence to match one of the digital attackers' *better* capabilities (adapting to GENz customer needs) coupled with a focused counter-attack to enhance their own *better* capabilities (new product developments (NPD) that are store-related, and tweaking supply chain and logistics). together with potential future positions (*better*, *best*) for both incumbents and attackers.



**Figure 3 Win/lose outcomes for incumbent counter-attack and catch-up defend strategies**

A strategic agility dynamic capability drives the parallel effort here. Teece (2019) articulates strategic agility as being more about effectiveness (identifying capability gaps to meet market or competitor opportunities and threats before issues become overwhelming) than efficiency (doing commonplace tasks faster and cheaper). As part of a counter-attack strategy, the incumbents' current *better* capabilities (store-related NPD and tweaking supply chain/logistics) could be enhanced to *best*, which may “win big (A)” if the digital attackers do not improve their *good* position (which is very hard to do in the case of store-related NPD because they don't currently have any stores). But if the digital attackers' *good* position improves somewhat to *better*, then the incumbents will still likely “win (B)” through an advantage that is hard to match.

As part of a catch-up defend strategy, one of the incumbents' current *good* capabilities (and also one of the digital attackers' *better* capabilities) - adapt to GENz customer needs could be enhanced to *better*, which may "win (C)" if the digital attackers do not improve their *better* position to *best*. But if the digital attackers' *better* position improves somewhat to *best* then the incumbent will "lose (D)" assuming that the digital attackers' capability cannot be matched.

These two strategies follow a parallel dual-option approach (Smit & Trigeorgis, 2012; Ceccagnoli, Higgins, & Kang, 2018) to catch-up and defend against the digital attackers' *better* capabilities and to counter-attack against the digital attackers' *good* capabilities. These options may be developed further through varying levels of investments depending on the digital attackers' competitive responses and other market uncertainties, for example GENz consumer trends or new supply-chain or store-related technologies (Christodoulou & Langley, 2020).

The option to catch-up defend against the digital attackers' *better* capabilities is a "big bet" (high risk investment for large but uncertain return), because the incumbents' capabilities, store-related NPD and supply chain/logistics, currently have a substantive advantage over the digital attackers', hence further incremental improvement may be marginal. A large investment which will only "win big" (i.e., generate a large return) if the digital attacker fails to improve these capabilities by very much, but may still win if the digital attacker improves the capability but cannot match the incumbent (in particular with respect to store-related NPD). Aside from the potential of a large return from a large investment, the incumbent can win from both strategic options, and at worst win in one and lose in the other. Numbers aside, it is a risk/return tradeoff asymmetrically designed through a conservative mitigation of potential downside risk ("lose (D)") coupled with a potential big bet upside ("win big (A)"), the outcome of which will be largely driven by the uncertainties on new technologies and consumer trends.

### **5.3 Strategic agility**

The dynamic capability of strategic agility enables a bold strategic positioning based on their existing sustainable advantage gained through their strongest capability of NPD in-store while potentially benefiting from the failure of the digital attacker to further enhance the capability to respond to GENz customer needs. Furthermore, the attack/defend combination builds a robust position to cope with market uncertainties, including fickle GENz consumers, new in-store and online digital technologies (for example AR/VR, AI) and even newer yet-to-be-commercialised digital technologies.

The fashion incumbents have demonstrated a dynamic capability of strategic agility to catch-up quickly on the attackers' advantage of adapting to GENz customer needs. This capability has previously been found to be a critical dynamic capability for taking advantage of new digital opportunities (Warner & Wäger, 2019), even more so under conditions of uncertainty. This strategic agility is part of the fashion incumbents' flexible mindset that accepts the reality that rapidly changing consumer preferences are pervasive dynamics in a digital world. The flexible mindset will help incumbents to begin to think like digital players, for example how best can the

stores support online sales.

Our findings contribute to theory that in a digital world it is not just first movers but also very fast followers that can gain a huge advantage over their competitors (Day & Schoemaker, 2019). The speed and scale of both the attackers' initiatives to build capabilities in all six categories presents a formidable challenge to the incumbents, who have responded quickly to catch-up on the capability where they are most disadvantaged - adapting to GENz customer needs. This aligns with existing research that strategic agility is central for operating in conditions of deep uncertainty (Doz & Kosonen, 2010; Teece, Peteraf & Leih, 2016). Furthermore it is consistent with existing research that strategic agility is the driving force for ongoing business model innovation (Volberda, Van Den Bosch, & Heij, 2018; Sebastian, Ross, Beath, Mocker, Moloney & Fonstad, 2017).

In fact the two fashion incumbents demonstrate a dynamic capability to potentially shape, and not just respond to, the external environment (Schilke, Hu & Helfat, 2018). For example, shaping GENz consumer preferences by using influencers to promote digital designs prior to manufacture; shaping digital attacker competitors' moves by signaling intentions to launch a new in-store digital technology; and shaping new digital technology development through the acquisition of a start-up specialising in AI (for example an app learns about your preferences from an audit trail of purchases and make purchase recommendations).

## 6. Conclusion

This research has shown that the higher performing incumbents (Inditex, H&M) have developed new and enhanced capabilities to outcompete the lower performing incumbents (Forever 21), across a range of capability categories. Furthermore to counter the attack from digital native attackers (ASOS and Zalando) they are continuing to enhance their strongest capabilities related to their own unique differentiation, in combination with improving one of their average capabilities - adapting to GENz consumer needs.

This research contributes to theory on the dynamic capabilities that incumbents need to develop or enhance when under digital attack (Warner & Wäger, 2019). The dynamic capability of strategic agility drives the choice of which organisational capabilities to enhance, and is governed by the goal to increase an existing advantage, or match the attacker's advantage, or both. Incumbents have to be very fast followers (behind the digital attackers' initiatives) to catch-up and potentially to win. They need strategic agility to pivot and design and implement a fast response, driven by a flexible mindset which first accepts, and then learns from, the pervasive dynamics they face under digital disruption. Furthermore the digital attackers' ability to develop new capabilities with speed and scale is a dynamic capability. Finally, the ability to shape uncertainties in the external environment is an emerging dynamic capability (Schilke, Hu and Helfat, 2018) and potentially a game changer for sectors facing large discontinuities from digital disruption.

This study has limitations. Our data from the fashion industry is mostly the "what happened" relating to capability development and enhancement. We did not examine the "why" driving strategic choices on capabilities, or the "how" relating to investment levels and timing. Future research could use primary data from surveys or interviews in the fashion retail sector, to explore

these issues. Also to examine quantitative data relating to investment of cash and levels of effort in capabilities over time. We also focused solely on sales revenues as the indicator of performance in terms of winning and losing. But with multiple stakeholders there are multiple performance metrics for the organisation, including profits and return on investments. It is arguable that different conclusions could be drawn about relative performance if for example, long term profit growth was used as the key indicator. The capabilities needed to manage this type of performance might be different from the ones we focused on.

## **6.1 Implications for practitioners**

The implications of the findings for incumbent and digital attacker practitioners are threefold. First, incumbents can create winning positions against omnichannel competitors and digital attackers by considering the potential advantages they have with various distinctive capabilities. Advantages can be improved and enhanced whereas disadvantages can be reduced or eliminated. They should also follow attacker advantages quickly as fast followers. Second, attackers should leverage their innovative digitally-driven capabilities which incumbents may struggle to match quickly. Attacker advantages based on speed and scale can be enhanced further. Finally, dealing with rapid digitisation requires a flexible mindset for both incumbents and attackers. The rapid exponential growth or step changes in trends, including consumer preferences, new technologies and emerging business models, requires strategic agility to pivot strategies quickly. Yesterday's performance disadvantages should be quickly forgotten - that's the flexible mindset.

Notwithstanding the impact of COVID19 as we write in August 2020, the future for the fashion retail-manufacturing sector will without doubt require more investment in digital capabilities, to improve the customer journey and the broader customer experience together with innovating new ways of online consumer engagement. New or enhanced digital capabilities will also need to strengthen ecosystem relationships with partners in technology innovations and the supply chain. And these digital transformations will need large and rapid increases in talent and capabilities either organically or through acquisitions of tech companies. Fashion incumbents still control over 90% of the global market revenue share and have brand recognition across a large customer base. However, maintaining these winning positions will require the strategic agility to pivot to new defensive and offensive strategies.

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