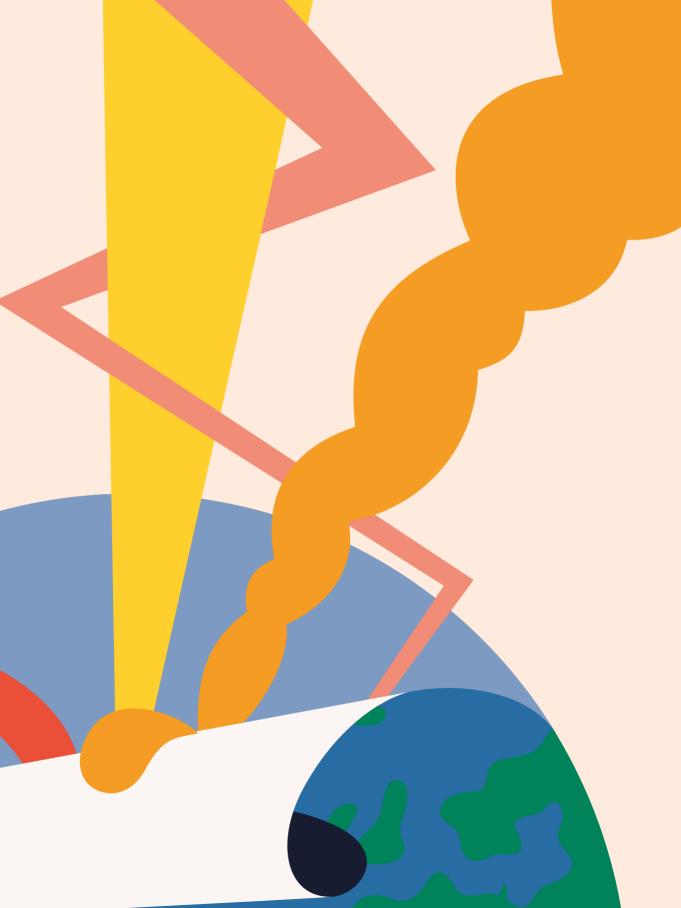
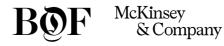
The State of Fashion 2022







The State of Fashion 2022





CONTENTS

EXECUTIVE SUMMARY	10—11	
INDUSTRY OUTLOOK	12—17	
GLOBAL ECONOMY	20—39	
01: Uneven Recovery How the Global Wealth Gap Is Impacting Fashion		
02: Logistics Gridlock Li & Fung: Facing up to Vulnerabilities in the Supply Chain		
CONSUMER SHIFTS	40-63	
03: Domestic Luxuries JHSF: Betting Big on a Permanent Shift to Local Retail		
04: Wardrobe Reboot PVH: Harnessing Creativity to Cut Through the Noise		
05: Metaverse Mindset Gucci: Testing Luxury's Opportunities in the Metaverse		
FASHION SYSTEM	64—111	
06: Social Shopping Snapchat: Enhancing the Social Shopping Experience		
07: Circular Textiles Novetex: Encouraging Brands to Raise Their Game on Circularity Time for Fashion to Raise Its Sustainability Ambitions to Deliver on COP26		
08: Product Passports Aura Blockchain Consortium: Uniting Rivals to Make Luxury Goods More Traceable		
09: Cyber Resilience Five Imperatives to Protect Fashion Businesses from Cyber Risk		
10: Talent Crunch Farfetch: Adapting to the New Talent War		
MCKINSEY GLOBAL FASHION INDEX	112—121	
THE STATE OF BEAUTY 2021	122—129	

THE STATE OF BEAUTY 2021

5

CONTRIBUTORS



IMRAN AMED

Imran Amed is one of the global fashion industry's leading writers, thinkers and commentators, and is founder, chief executive and editor-in-chief of *The Business of Fashion* (BoF), a modern media company and the authoritative voice of the global fashion and luxury industries. Imran holds an MBA from Harvard Business School and a B.Com from McGill University. He was born in Canada and holds British and Canadian citizenship. Previously, Imran was a management consultant at McKinsey & Co.



ACHIM BERG

Achim Berg is a senior partner in McKinsey's Frankfurt office, and leads McKinsey's Global Apparel, Fashion & Luxury group. He is active in all relevant sectors including clothing, textiles, footwear, athletic wear, beauty, accessories and retailers spanning from value to luxury segments. As a global fashion industry and retail expert, he supports clients on a broad range of strategic and top management topics, as well as on operations and sourcingrelated issues.



ANITA BALCHANDANI

Anita Balchandani is a partner in McKinsey's London office, and leads the Apparel, Fashion & Luxury group in EMEA and the UK. Her expertise extends across fashion, health and beauty, specialty retail and e-commerce. She focuses on supporting clients in developing their strategic responses to the disruptions shaping the industry, particularly accelerating digital growth and delivering customer-led growth transformations.



SASKIA HEDRICH

Saskia Hedrich is a global senior expert in McKinsey's Apparel, Fashion & Luxury group. She works with fashion companies around the world on strategy, sourcing optimisation, merchandising transformation and sustainability topics and publishes regularly. Additionally, she is involved in developing strategies for national garment industries across Africa, Asia and Latin America.



JAKOB EKELØF JENSEN

Jakob Ekeløf Jensen is an associate partner in McKinsey's London office, and is part of the leadership of McKinsey's Apparel, Fashion & Luxury group. He works with fashion and luxury companies as well as investors in the industry across Europe, China and the US on topics such as e-commerce, strategy, value creation, operating model and M&A.



MICHAEL STRAUB

Michael Straub is an associate partner in McKinsey's Hong Kong office, and co-leads the Apparel, Fashion & Luxury practice in Greater China. He partners with global luxury, fashion and beauty clients in defining their growth and go-tomarket strategies for China and other Asian markets.



FELIX RÖLKENS

Felix Rölkens is a partner in McKinsey's Berlin office, and is part of the leadership of McKinsey's Apparel, Fashion & Luxury group. He works with apparel, sportswear and pure play fashion e-commerce companies in Europe and North America on a wide range of topics including strategy, operating model and merchandising transformation.



ROBB YOUNG

As global markets editor at *The Business* of Fashion, Robb Young oversees content from Asia-Pacific, the Middle East, Latin America, Africa, the CIS and Eastern Europe. He is an expert on emerging and frontier markets, whose career as a fashion editor, business journalist, author and strategic consultant has seen him lead industry projects around the world.



PAMELA BROWN

Pamela Brown is a partner in McKinsey's New Jersey office, and is part of the leadership of McKinsey's Apparel, Fashion & Luxury group in North America. In this dynamic industry, she partners with brands and retailers across categories and price points to tackle topics ranging from M&A strategy to growth acceleration and organisational transformations.



LEILA LE MERLE

Leila Le Merle is an engagement manager in McKinsey's London office, and is part of the Apparel, Fashion & Luxury group. She works with fashion and luxury companies across Europe and the US on topics such as e-commerce, strategy, value creation and operating model.



HANNAH CRUMP

As associate director, editorial strategy at *The Business of Fashion*, Hannah Crump contributes to the execution of special editorial projects, ranging from case studies to in-depth market reports. With an extensive editorial background in B2B and B2C publishing, she partners with industry experts to develop, edit and produce data-driven research and analysis for professionals in the global fashion industry.



AMANDA DARGAN

As director of strategy at *The Business of Fashion*, Amanda Dargan manages the execution of special projects and strategic initiatives spanning the company's creative and commercial divisions. With a background in private equity, she partners with internal and external stakeholders to identify and develop new business opportunities and optimise key internal operations.



ACKNOWLEDGEMENTS

The authors would like to thank Emma Bruni and Dunja Matanovic from McKinsey's London and Oslo offices respectively for their critical roles in delivering this report. We would also like to thank Abhishek Goel for his significant contribution to the MGFI article this year.

A special thanks to all members of *The Business of Fashion* and the McKinsey communities for their contributions to the research and participation in the BoF-McKinsey State of Fashion 2022 Survey, especially the many industry experts who generously shared their perspectives during interviews. In particular, we would like to thank Claire Bergkamp, Daniela Ott, Daria Shapovalova, Geraldine Whary, Harald Cavalli-Björkman, Harminder Matharu, José Auriemo Neto, Joseph Phi, Lance Spitzner, Libby Wadle, Margaret Mitchell, Patrik Lundström, Rajni Jacques, Renee Parker, Robert Triefus, Ronna Chao, Sian Keane, Stefan Larsson, Steve Lamar, Steven Whitehead and Susan Scafidi. We'd also like to thank StyleSage and Lyst for their invaluable data sharing for this report.

The wider BoF team has also played an instrumental role in creating this report — in particular, Alexandra Mondalek, Amy Vien, Amy Warren, Anna Rawling, Brian Baskin, Casey Hall, Chantal Fernandez, Chavie Lieber, Darcey Sergison, Diana Pearl, Emma Clark, Isolda Hanney, Janet Kersnar, Jael Fowakes, Joan Kennedy, Josephine Wood, Kate Vartan, Laura Bateman, Marc Bain, Nick Blunden, Olivia Howland, Rachel Deeley, Robert Williams, Sarah Kent, Scarlett Fillingham Burrows, Sheena Butler-Young and Zoe Suen.

We would like to thank the following McKinsey colleagues for their special contributions to the report creation and in-depth articles: Aimee Kim, Andrea De Santis, Andres Avila, Annabel Morgan, Benjamin Klein, Carlos Sánchez Altable, Carsten Lotz, Charlie Lewis, Colin Henry, Corinne Sawers, Daniel Zipser, Elisa Albella, Ellie Baker, Ezra Greenberg, Guenter Fuchs, Hannah Yankelevich, Harry Bowcott, Ian De Bode, Irina Duchanin, Isabel Brito, Jaana Remes, Jessie Wang, Jonatan Janmark, Karl-Hendrik Magnus, Kris Cai, Krzysztof Kwiatkowski, Leigh Chantal Pharand, Libbi Lee, Marie Strawczynski, Mario Ortelli, Natalia Lepasch, Nic Cornbleet, Philipp Rau, Rachel Dooley, Rebecca Johnson, Rebecca Zhang, Richard Ward, Rickard Vallöf, Sakina Mehenni, Sarah Andre, Shruti Badri, Simona Kulakauskaite, Tiffany Wendler, Tom Skiles and Vanessa Goddevrind. We'd also thank David Wigan and Jonathan Turton for their editorial support, and Adriana Clemens for external relations and communications.

In addition, the authors would like to thank Chelsea Carpenter for her creative input and direction into this State of Fashion report, Francesco Ciccolella for the cover illustration and Getty Images for supplying imagery to bring the findings to life.

EXECUTIVE SUMMARY

Global Gains Mask Recovery Pains

With much of the world under Covid-19related restrictions through 2020 and 2021, the global fashion industry has faced exceptionally challenging conditions. But after nearly two years of disruption, the industry is beginning to find its feet again.

Despite ongoing headwinds, there were signs by mid-2021 that things were taking a turn for the better, particularly in markets where vaccination rates were high. In the US, the release of pent-up demand created spikes of so-called "revenge buying," leading to a growth spurt that echoed an earlier phenomenon in China. Return-to-work and occasion styles topped consumer shopping lists.

But the pandemic has only served to exacerbate inequalities in performance that have become a persistent theme over recent years. A small group of leading brands are equalling, and in some cases already surpassing, their pre-pandemic performance. This should not, however, be confused with a universal return to form. Large numbers of companies will continue to struggle to create value and, in some cases, to survive — as the bruises of the crisis linger on.

The few brands that outperformed either played into the needs of the moment — comfort, outdoor activities and online shopping — or appealed to wealthier cohorts who were able to better weather the impacts of the crisis. Companies that couldn't align with these market features tended to struggle, and the list of casualties grew longer as the pandemic continued through 2021. Indeed, the fashion C-suite has been an uncomfortable place to inhabit for much of the past year, illustrated by the rising numbers of takeovers and bankruptcies.

After a hiatus in last year's edition of The State of Fashion, we return to our roster of fashion "Super Winners" — the top 20 listed companies by economic profit. The proportion of value destroyers (companies generating negative economic profit) in 2021 was higher than ever. Moreover, the losses of the bottom 80 percent in terms of value creation more than offset the profits of the top 20 percent.

This year's Super Winners group is dominated by sportswear brands, luxury players and Chinese home-grown companies, all of which outperformed the wider market. From a geographic perspective, China recovered to 2019 levels of economic activity much faster than the rest of the world. Chinese demand was fuelled by appetite for local shopping, particularly in the luxury segment, as consumers who faced travel restrictions shifted to domestic alternatives.

Looking ahead to 2022, in aggregate, McKinsey Fashion Scenarios suggest global fashion sales will reach 96 to 101 percent of 2019 levels in 2021 and 103 to 108 percent in 2022. Still, while overall sales are expected to make a full recovery next year, performance will vary across geographies, with growth likely driven by the US and China, as Europe lags. In addition, as international tourism remains in the doldrums, the shape of consumption will continue to evolve, sparking a growing focus on domestic spending. In response, many companies will recalibrate their retail footprints, even amid uncertainty as to whether these pandemic-induced behaviour shifts will stick.

In the year ahead, discount and luxury fashion will continue to outperform, as recovery will be uneven across value segments, and the mid-market will be squeezed. Still, with economic growth and consumer sentiment improving in some markets, and many shoppers looking to refresh their pandemic-era wardrobes, growth will be top of the agenda for many brands.

The market environment, however, will remain complex with new challenges to address, amid logistical bottlenecks, manufacturing delays, high shipping costs and materials shortages. These will further inflate input costs and strain imbalances between supply and demand. The likely result will be higher prices for customers.

Despite widespread operational disruptions, the pandemic has done little to slow down the megatrends reshaping the industry. In fact, these have accelerated over the past year, with industry leaders making bold moves in digital, taking action on environmental and social priorities and focusing more sharply on diversity, equity and inclusion in response. However, concerns around slow progress in these areas, coupled with all-time high job vacancies, mean brands will need to work hard to attract and retain talent in the year ahead.

In a similar vein, fashion companies will need to ensure they are acting in the interests of all stakeholders — including customers, employees, contractors, investors and wider society. Many brands will push harder on circular business models, greener materials and more sustainable technologies. One breakthrough to support these initiatives is blockchain, which is the underlying technology for digital "product passports." These contain coded information that can add value, support supply chain transparency and ensure authentication – a significant advantage tackling counterfeiting.

Online business models were a standout success story of the pandemic. We expect that companies will continue to invest in digital innovation and experiment with fresh approaches to creativity and commerce in 2022. Digital assets such as non-fungible tokens (NFTs), gaming "skins" and virtual fashion will edge closer to the mainstream, with some brands expanding into the digital "metaverse." In-app social commerce will play an increasingly important role in sales and marketing. On the flipside, these opportunities will bring increasing threats of cyber crime and data loss, meaning companies will need to work hard on resilience in an increasingly risky digital landscape.

While overall fashion sales are expected to make a full recovery next year, performance will vary across geographies. The market environment will remain complex and inconsistent.

Most fashion players will proceed on an uneven footing in 2022, as an inconsistent and uncertain recovery requires them to either raise their games or face the threat of consolidation or bankruptcy. Indeed, many of the gains expected next year are likely to be offset by recovery pains and disruptions to the global economy, which will compel decision-makers to take measures to keep businesses steady.

As fashion leaders consider their options, they will need to reflect on the many lessons they have learned during the pandemic, keeping their companies aligned with an ever-shifting playing field, enhancing their strategies for managing turbulence and balancing the needs of various stakeholders to create value for their customers, their shareholders and society at large.

INDUSTRY OUTLOOK

Regaining Lost Ground Whilst Bracing for Aftershocks

Executives in the global fashion industry are cautiously optimistic about the year ahead, though new and ongoing disruptions are beginning to erode that mood in some quarters. While some global markets are starting to recover after 18 to 20 months of pandemic-related turbulence, propelled by surging e-commerce adoption and domestic spending, challenges relating to supply chain bottlenecks and uneven consumer demand continue to hang over the fashion industry, undermining growth prospects.

Overall, global fashion sales are on track to pick up momentum in 2022, as increasingly hopeful consumers unleash pent-up buying power, refreshing their wardrobes as social life begins to resume in many key markets around the world. While the luxury sector is expected to achieve a full recovery by the end of 2021, the wider fashion industry is not set to return to pre-pandemic performance levels until early 2022.¹ This is a much quicker recovery than was expected six months ago.

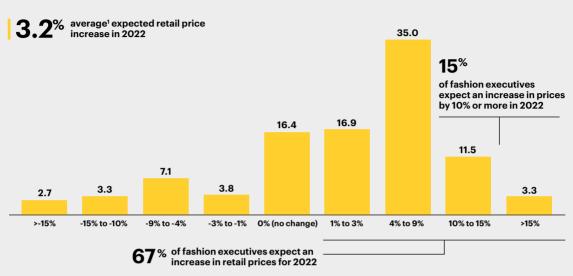
The industry's recent emergence from a sustained period of turbulence is still weighing heavily on the minds of industry executives, as shown by their choice of the top three words to describe business conditions in the year ahead in our BoF-McKinsey State of Fashion 2022 Survey: "recovery" (cited by 59 percent of fashion executives), "challenging" (50 percent) and "changing" (42 percent). However, executives are leaving behind the all-consuming preoccupation with "uncertain" market conditions that they expressed in 2021 and turning their attention to driving growth in an altered market landscape even though a degree of uncertainty around crisis recovery and inconsistency nonetheless persists in the year ahead.

In 2022, fashion is poised to benefit from fundamental macroeconomic drivers. Consumer sentiment is on a positive trajectory, especially in markets where vaccination and saving rates are high. In the US, savings in the first quarter of 2021 were estimated to be 3.1 times higher than in the first quarter of 2019.2 Alongside this, 43 percent of US consumers said they would increase their fashion spend in 2021,3 with clothing for work and special occasions top of their shopping lists. While pent-up demand has already played out as so-called "revenge shopping" in the luxury segment in China, similar behaviour is expected to pick up steam in the broader fashion market in the US in early 2022. In Europe, consumer confidence in economic recovery is more cautious, with approximately one quarter of respondents in a September 2021 survey optimistic that the economy would rebound to pre-pandemic levels by the end of 2021, while over half expected recovery only in 2022 or later.4

As fashion inches towards rosier conditions in some regions, industry leaders have a more hopeful outlook than last year. Some 75 percent of luxury executives, 61 percent of mid-market

Supply chain pressures on input costs will push some fashion companies to increase retail prices next year

EXPECTED RETAIL PRICE CHANGE IN 2022, % OF RESPONDENTS



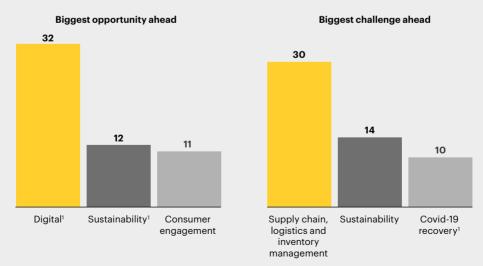
1 Weighted average of executive respons

SOURCE: BOF-MCKINSEY STATE OF FASHION 2022 SURVEY

Exhibit 2:

Digital and sustainability will offer fashion's biggest opportunities for growth, while supply chain pressures will challenge the industry in 2022

TOP THREE ANSWERS, % OF RESPONDENTS WHO MENTIONED THE WORDS



1 Also mentioned as a top industry challenge or opportunity in The State of Fashion 2021 report.

SOURCE: BOF-MCKINSEY STATE OF FASHION 2022 SURVEY

INDUSTRY OUTLOOK

executives and 50 percent of value executives expect better trading conditions in 2022 than 2021.⁵ This reflects a different distribution of mood compared to our last survey, which was conducted in 2020 to capture sentiment about 2021, in which mid-market executives were the least hopeful group, with only 22 percent expecting better trading conditions, whereas value executives were the most hopeful at 36 percent followed by luxury at 31 percent. While there are most likely a variety of reasons why mid-market executives are feeling more positive about 2022 than they were about 2021, one may be that the surviving and restructured players in that segment of the market are expecting a rebound after it fared poorly for several years.

From a demand perspective, younger cohorts such as Gen-Z and wealthier consumers from middle-income groups and upwards are predicted to demonstrate the strongest appetite for leisure spend (including fashion, dining out, travel, entertainment, electronics, etc.) in the US through 2021 and beyond. Fashion is one of the top three categories on which they seek to splurge or treat themselves.⁶ In China, there are strong prospects for growth in consumer spending power, where rising incomes will contribute to an anticipated increase of \$10 trillion in consumption growth between 2021 and 2030.⁷

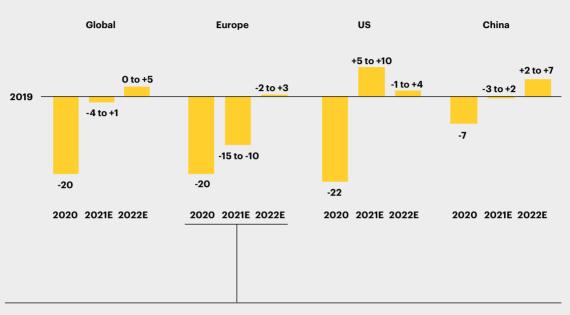
While the global fashion market will continue to grow overall, performance will be uneven across geographies, depending on their ability to recover from pandemic-induced health and economic shocks. The Chinese fashion market - including both luxury and non-luxury segments - is already back to pre-Covid sales levels. The non-luxury segment reached +2 percent over 2019 H1 sales in H1 2021.8 However, for a full-year comparison, macroeconomic disruptions through the latter half of 2021 will likely temper this growth to -3 to +2 percent for 2021 versus 2019 sales overall. On the other hand, the luxury sector shows strong signs of growth in China amid ongoing travel restrictions and increased domestic spend; the luxury segment is set to reach +70 to +90 percent over 2019 sales by the end of 2021.

The US is not far behind – US non-luxury segment fashion sales will have recovered to +5 to +10 percent over 2019 levels by the end of 2021, according to McKinsey Fashion Scenarios analysis.9 A similar picture will emerge in the US luxury segment, which is expected to return to -5 to +5 percent of 2019 levels in 2021, slightly below non-luxury due to ongoing luxury spend repatriation in China muting sales recovery in the US. In Europe, there will be a slightly slower trajectory for recovery of non-luxury fashion sales, reaching just -15 to -10 percent of 2019 sales by the end of 2021, and taking until 2022 to recover fully. Meanwhile, the European luxury segment will remain below 2019 levels until beyond 2022, as vast amounts of spend from Chinese nationals travelling abroad is redirected to Mainland China.¹⁰ Given this diverse set of dynamics and with the global fashion industry fully recovering only in 2022, growth will be front of mind in the year ahead: 87 percent of fashion executives plan to pursue sales growth in 2022.11

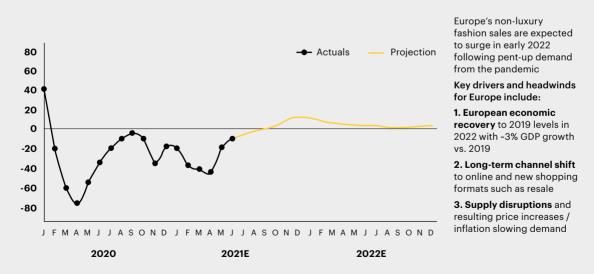
Despite the slower projected return to pre-pandemic sales levels in Europe, executives in that region are the most optimistic about the year ahead, likely owing to factors such as the comparatively strong presence of European luxury brands across global markets. Indeed, 67 percent of Europe-based executives expect better trading conditions in 2022 than 2021. This compares with 57 percent of executives in North America (where the release of pent-up buying spiked in 2021) and 52 percent in Asia, where most key markets have already returned to pre-pandemic sales levels. None of the executives in Asia anticipate worse trading conditions in 2022, while some scepticism remains among executives in Europe and North America, where 8 percent and 9 percent expect worse conditions respectively.12 Collectively, these sentiments likely reflect a relaxation of stimulus packages and the release of pent-up buying, and point to the caution required next year in the face of supply chain stresses and the challenges of maintaining stable growth.

Non-luxury fashion sales in the US and China will broadly recover by 2021, while Europe will not recover until 2022

NON-LUXURY FASHION SALES IN MCKINSEY FASHION SCENARIOS, COMPARED TO 2019, %



EUROPE MONTHLY NON-LUXURY FASHION SALES VS. 2019, %



1 Columns represent average of range.

SOURCE: MCKINSEY FASHION SCENARIOS, MCKINSEY ANALYSIS, EXPERT INTERVIEWS

INDUSTRY OUTLOOK

Several forces are at work to create both opportunities and risks in 2022, including new growth channels, consumer behaviour patterns and complications in the global economy. Executives predict that supply chain pressures, the rise of domestic luxury spend amid muted international travel and the continuing evolution of digital channels will have the biggest impact on their business in 2022. To be sure, the disruption of global supply chains ranked at the top of the agenda for 84 percent of executives in the BoF-McKinsey survey, as the turmoil experienced over the last two years amid material shortages, transportation bottlenecks and soaring shipping costs, exacerbated by surging consumer demand in some markets - is expected to remain in the year ahead.13 As the logistics industry continues to shift and challenges mount, executives need to pay close attention to the transparency and control measures in their supply chains to meet consumer demand.

Invariably, supply chain stresses will impact margins. As a result of these cost inflation pressures, 67 percent of fashion executives expect to increase retail prices in 2022, with an average uplift of 3.2 percent, while 14 percent of executives even expect to increase prices by more than 10 percent. Since many players will be focusing on sales growth, price increases will be used to offset narrowing margins. Still, 17 percent of executives expect to lower prices, with the most expectation for price decreases coming from the mid-market, perhaps due to the segment's ongoing squeeze throughout the pandemic.¹⁴

Following supply chain disruptions, the second most prominent challenge on executives' minds is the sustainability gap, cited by 15 percent of executives as one of their top three concerns for 2022 in the BoF-McKinsey survey. However, 12 percent of executives also rate sustainability as an opportunity in the year ahead, suggesting that any costs or challenges they encounter relating to sustainability may be outweighed by business benefits associated with improving their company's impact on the environment and society. Compared with 45 percent of executives who cited Covid-19 as a top challenge in last year's survey, the health crisis was highlighted by just 10 percent of respondents as a top challenge for 2022, suggesting that measures to curb the impact of the pandemic on business are proving their mettle in some markets.¹⁵ Looking ahead, fashion companies will need to address these interconnected challenges by taking an active and vigilant approach to supply chain management while establishing priorities for an ambitious and revitalised sustainability agenda.

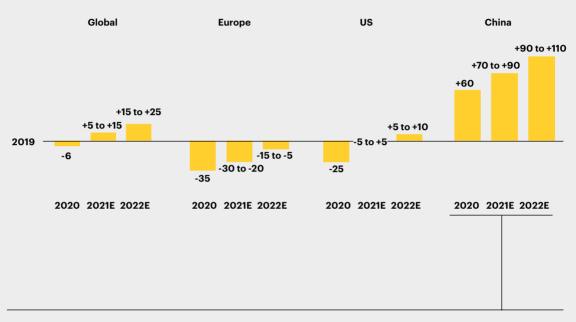
Alongside sustainability, executives are also looking to "digital" and "consumer engagement" as opportunities for 2022, cited by 32 percent and 11 percent of fashion executives respectively. While both digital and sustainability opportunities are longer-term themes that are highlighted by executives year on year, consumer engagement is a new opportunity cited by executives for 2022, reflecting the view that customer experiences with brands across online and offline channels are becoming even more important for brand differentiation in a highly competitive marketplace. Fashion players will therefore need to accelerate their use of data and analytics across business functions to develop customer insights and adjust their strategies accordingly.16

The year ahead will present a welcome shift for some fashion players, having regained much of the ground lost to the pandemic after nearly two years of turmoil. Still, worrying signs, supply chain stresses and a degree of uncertainty across some geographies and parts of the industry point to a need for prudence as an increasingly inconsistent overall picture emerges. At the same time, as overall industry sales recover, fashion players will likely continue to suffer business disruptions through 2022, with some fighting for survival as both pandemic-related and global economy aftershocks are likely to emerge in the year ahead. All told, the state of the global fashion industry in 2022, defined by the 10 themes in this report, will be characterised by new and persisting challenges tempered by fresh opportunities to grow and evolve at a crucial time for most businesses.

Industry Outlook as of the beginning of November 2021.

Luxury fashion sales in the US and China will broadly recover by 2021, while Europe will not recover until beyond 2022

LUXURY FASHION SALES IN MCKINSEY FASHION SCENARIOS, COMPARED TO 2019, %



LOCATION OF CHINESE CONSUMER LUXURY FASHION SPEND, % SHARE OF TOTAL



As travel shut down due to Covid-19 restrictions, domestic spend on luxury goods in China exploded as spend previously allocated abroad was repatriated to China. As a result, luxury markets in the US and Europe dropped, while China soared, also driven by duty-free incentives and local brand initiatives.

The State of

03.

Luxuries

GLOBAL ECONOMY

01. Uneven Recovery

Recovery from Covid-19-related economic shocks will be uneven across consumer markets and sourcing regions, as countries with strong healthcare systems and economic resilience outperform. In this patchy environment, fashion players with international footprints will need to look at investment decisions with precision. reassessing local conditions regularly while mitigating for market-specific risks.

02. Logistics Gridlock

The fashion industry is reliant on an intricate web of global supply chains that are seeing unprecedented levels of pressure and disruption. With logistical logiams, rising shipping costs and shortages of many kinds adding new lavers of complexity. companies must rethink their sourcing strategies while implementing cuttingedge supply chain management, and building in greater flexibility to keep products flowing with customer demand in the year ahead.

CONSUMER SHIFTS

04. Domestic

Travel has traditionally been a key driver of luxury spending, but international tourism is not expected to fully recover until between 2023 and 2024. To capture the shift in shopping patterns set to shape the year ahead, luxury players should engage more deeply with domestic consumers, rebalance their global retail footprints and dutyfree networks and invest in clienteling for local e-commerce channels.

Wardrobe Reboot

After focusing on the likes of loungewear and sportswear for nearly two years, consumers will reallocate wallet share to other categories as pent-up demand for newness coincides with more social freedoms outside the home. To anticipate these nuanced and sometimes paradoxical preferences, brands should lean more on data-driven product development, adjusting their inventory mix accordingly to ensure that assortments resonate with consumers adjusting to new lifestyles.

05. Metaverse Mindset

As consumers spend more time online and the hype around the metaverse continues to cascade into virtual goods, fashion leaders will unlock new ways of engaging with highvalue younger cohorts. To capture untapped value streams, players should explore the potential of nonfungible tokens. gaming and virtual fashion - all of which offer fresh routes to creativity, community-building and commerce.



Approximately 4 out of every 5 vaccines distributed globally by September 2021 were in high- and upper-middleincome countries



49% of fashion executives signalled supply chain disruptions as the top theme to impact their business in 2022



51% of 2019 air traffic flows between Asia and Europe are expected to recover in 2022



37% of fashion executives expect occasion wear to be a top-three category for year-on-year sales arowth



81% of Gen-Z played video games in the past six months, averaging 7.3 hours per week

Fashion 2022

FASHION SYSTEM

^{06.} Social Shopping

Social commerce is experiencing a surge in engagement from brands, consumers and investors alike as new functionality and growing user comfort with the channel unlocks opportunities for seamless shopping experiences from discovery to checkout. Though use cases differ across global markets, brands should double-down on tailored in-app purchase journeys and test opportunities in technologies such as livestreaming and augmented reality try-on.

^{07.} Circular Textiles

One of the most important levers that the fashion industry can pull to reduce its environmental impact is closed-loop recycling, a system which is now starting to be rolled out at scale. promising to limit the extractive production of virgin raw materials and decrease textile waste. As these technologies mature. companies will need to embed them into the design phase of product development while adopting largescale collection and sorting processes.

08. Product Passports

In a bid to boost authentication, transparency and sustainability, brands are using a portfolio of technologies to store and share product information with both consumers and partners. To get the most from these digital 'product passports,' which can help brands tackle counterfeiting. differentiate themselves and build loyalty by enhancing consumer trust, businesses must coalesce around common standards and engage with pilot projects at scale.

^{09.} Cyber Resilience

As the digitisation of fashion businesses reaches new heights, companies face more threats of cyber attacks and growing risks relating to improper data handling. Amid increased sophistication in cyber crime and rises in consumer and regulatory pressure, brands need to act urgently to shore up their defences and invest more to make digital security a strategic imperative.

^{10.} Talent Crunch

Companies that rely on brand appeal or the allure of fashion to attract and retain talent will need to raise their game as competition from both within and outside the industry intensifies, leading to more vacancies next year. As employees from upper management to the retail front line reconsider their priorities, companies must refresh their talent strategies for an increasingly flexible, diverse and digitised workplace.



37% of fashion executives cited **social commerce** as one of the top three themes that will impact their business in 2022



60% of fashion executives have already invested or plan to invest in closed-loop recycling next year -2/5 📮

Approximately 2 out of 5 fashion executives plan to adopt product passports in 2022 or have already done so



53% of fashion executives say it is either likely or very likely their company will experience a significant cyber attack in 2022



45% of fashion employees cited "sense of purpose" as one of the most important factors in choosing to remain at their employer

01. UNEVEN RECOVERY 02. LOGISTICS GRIDLOCK

01. UNEVEN RECOVERY

Recovery from Covid-19-related economic shocks will be uneven across consumer markets and sourcing regions, as countries with strong healthcare systems and economic resilience outperform. In this patchy environment, fashion players with international footprints will need to look at investment decisions with precision, reassessing local conditions regularly while mitigating for market-specific risks.

In the global effort to vaccinate people against Covid-19 and recover from the economic shocks related to the pandemic, some countries are better positioned than others. The key parameters that will shape recovery patterns in the year ahead include levels of health resilience — a function of both Covid-related measures and domestic healthcare systems — and economic resilience. Gaps will also be impacted by varying levels of government fiscal support and the maturity of their digital economies. In response, fashion companies operating international businesses will likely need to tailor strategies to local conditions, as well as take steps to mitigate risks and boost their supply chain resilience.

A significant differentiator is access to vaccines, which varies substantially between lowand high-income countries. Of the approximately 5.5 billion vaccine doses that were administered globally by September 2021, some 80 percent were in high- or upper-middle-income countries, according to the World Health Organization.¹⁷ Looking ahead, many low-income countries may not receive enough doses to vaccinate all adults until well into 2022 or 2023.¹⁸ With the ongoing threat of new variants, these countries could stand to be the most exposed to further humanitarian crises and deeper economic shocks.

"The pandemic is reversing hard-won development gains, adding to the problems facing the most vulnerable. The post-Covid recovery must not leave anyone, or any country, behind," World Trade Organization director-general Ngozi Okonjo-Iweala declared in a 2021 plenary session, calling for equitable access to vaccines and greater trade cooperation. "Keeping global markets open is essential for a strong and sustained recovery."¹⁹

Countries that lack the digital infrastructures for remote working, or whose economies rely heavily on manual labour, are particularly susceptible to further shocks. The fashion industry has seen workers in manufacturing hubs impacted by ongoing Covid-19 outbreaks and associated shutdowns that have punctured production output. Throughout 2021, outbreaks in Vietnam led to the closure of numerous factories affecting supply for companies such as Adidas and Swiss shoe brand On.²⁰ Meanwhile, Ethiopia, Honduras and India also saw increased uncertainty around job security and working conditions, while China's zero-Covid policy continues to result in factory shutdowns.²¹

Coupled with the slow distribution of vaccines in some markets, these ongoing disruptions will have both upstream and downstream consequences on fashion.

The global fiscal response to the pandemic has been three times higher than the response to the 2008 global financial crisis, exceeding \$10 trillion in the G20 alone.²² However, many countries struggling under high debt burdens have lacked the firepower to drive recovery. For fashion, this meant some companies used the financial support available to them to maintain labour and budget balances, while others have faced prolonged difficulties. With many existing fiscal support schemes set to come to an end in the year ahead while others have already ended — companies will need to consider alternative strategies to support a return to growth.²³

The global fiscal response to the pandemic has been three times higher than the response to the 2008 global financial crisis, exceeding \$10 trillion in the G20 alone.

Looking ahead to the medium term, McKinsey in partnership with Oxford Economics has developed a range of scenarios²⁴ for how the virus will likely influence the recovery of individual economies, based on the varying levels of effectiveness of their healthcare systems and fiscal responses. While some countries are likely to see their GDP growth return rapidly to pre-pandemic levels, others will likely face recurring health shocks and therefore weaker short-term growth or even prolonged downturns.

In the scenarios analysed across fashion's largest consumer markets, 2022 is broadly expected to be a year of growth. However, there will be variations across countries, reflecting

the unpredictable nature of viral outbreaks and differences in fiscal and healthcare responses. In the US, year-on-year GDP growth of 3 to 3.2 percent is likely in 2022, according to McKinsey analysis.25 While the economy in China had regained GDP levels from the third quarter of 2019 by as early as the end of the first quarter of 2020, further yearon-year growth of between 6.3 and 8.2 percent is expected in 2022.26 Across the Eurozone, the year-on-year GDP growth rate is predicted to be approximately 5.3 percent. For example, in Germany, the forecast is 5 to 5.3 percent GDP growth, following rising infections and accelerating inflation through mid-2021.27 Despite record numbers of Covid-related deaths and one of the most severe economic slowdowns, the UK outlook is brighter, with a forecast of 7.2 to 7.4 percent in 2022.28

Adjacent to fiscal and healthcare responses, consumer sentiment will play a large part in determining the speed of return to pre-pandemic social and working lives. Spending restrictions by consumers during Covid-19 lockdowns combined with stimulus payments boosted savings across key consumer markets such as the US, where saving rates in 2020 were double that of 2019. This will translate into increased optimism next year, particularly among younger and wealthier customers who will continue to drive spending in fashion categories, particularly in the luxury segment.²⁹ The spikes in spending that emerged in China during so-called "revenge shopping" periods in 2020, when lockdowns ended and consumer confidence returned, are expected to play out in some other fashion markets as they recover.30 In the US and UK, these spending spikes will likely occur after the start of 2022, according to McKinsey analysis.31

As a result of these and other factors, McKinsey Fashion Scenarios project an almost complete recovery to pre-pandemic sales levels in 2022 in Europe, the US and China, with the latter's incremental growth in domestic luxury spend

01. UNEVEN RECOVERY

outperforming.³² Globally, these scenarios suggest that total fashion industry sales could surpass 2019 levels by 3 to 8 percent in 2022, with the luxury segment surging by 15 to 25 percent over 2019 levels.

However, lower- or middle-income countries that have lower vaccination rates face the risk that Covid-19 could become endemic, causing cyclical waves of the virus and subsequent slowdowns in economic growth.³³ On top of this, the highly transmissible Delta variant has accelerated the spread of Covid-19 in some countries, with its high levels of vaccine resistance disrupting the recovery trajectory. For example, in India, the variant's proliferation in the first half of 2021 pushed consumer sentiment to a record low and disrupted fashion industry suppliers.³⁴ While spending has rebounded in urban areas especially, with the country's GDP predicted to expand by around 8 percent in 2022 according to McKinsey, supply chains remain impacted amid ongoing factory closures. 35

Across other regions, growth projections remain uneven and subject to rapid change. In Latin America, McKinsey projects between 2 to 5 percent GDP growth in Mexico in 2022, which is linked to growth in the US economy, while Brazil is set to experience slower growth of 1.5 to 3 percent.³⁶ In the Middle East, growth is expected to pick up overall, driven by the loosening of travel restrictions and increased oil output. Meanwhile in Africa, the outlook is mixed and will depend on vaccine dissemination and the severity of potential new waves of Covid-19. In Nigeria for example, the outlook is increasingly muted for 2022, with growth expected to be 2 to 4.5 percent following another wave of the Delta variant in 2021.³⁷

Given such a mixed global picture, there will likely be significant variation in recovery profiles across consumer markets and sourcing countries that play a critical role in fashion's supply chains. Moreover, the outlook remains volatile as Covid-19 continues to send shockwaves across the global economy. This, combined with the inflationary impact of additional supply chain disruptions — including shipping industry consolidations, global labour shortages, longer-term regulatory changes and a burgeoning energy crunch — and other macroeconomic and geopolitical risks, means significant and unpredictable challenges will remain in the year ahead.

"We are living in very uncertain and uncharted times," declared the International Monetary Fund's chief economist Gita Gopinath at an October 2021 press briefing for the organisation's world economic outlook. "We have never seen a recovery of this kind... and we have to be particularly vigilant."³⁸

As fashion leaders consider potential scenarios for the markets in which they operate in the year ahead, they will need to plan for accelerating growth in some and delayed recoveries in others. As a result, they should adopt marketspecific strategies that reflect conditions in their key centres of commerce. Those who navigate this uneven outlook by better anticipating granular demand trends across specific income groups, cities and demographics within each market will likely fare better (see "How the Global Wealth Gap Is Impacting Fashion" on page 26).

Given such a mixed global picture, there will likely be significant variation in recovery profiles across consumer markets and sourcing countries that play a critical role in fashion's supply chains.

Furthermore, given the supply chain uncertainty embedded in this outlook, fashion brands should reassess the risks of relying on each manufacturing hub in their sourcing footprint while weighing up the need for supply chain resilience with the increased cost of sourcing

from new and diversified locations. In any event, brands should consider avenues to strengthen their supply chains and logistics networks, where a renewed focus on flexibility, sustainability, transparency and cost management will help them meet consumer demand as it ebbs and flows across markets. By planning for an uneven recovery and allocating resources accordingly, fashion players are more likely to achieve a smoother upward growth trajectory in 2022 and beyond.

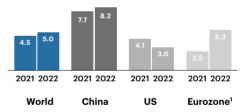
Exhibit 5:

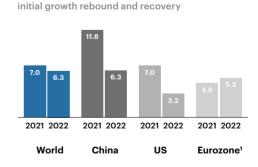
Some of the world's largest economies can expect robust recovery in 2022

REAL GDP PROJECTIONS 2019-2022, INDEX (100=Q4 2019)

Scenario 1: Recurring health impacts with slower near-term growth

REAL GDP PROJECTION 2021-2022. % CHANGE





Scenario 2: Recurring health impacts with strong

119 EU member states that have adopted the Euro as their currency: Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Greece, Slovenia, Cyprus, Malta, Slovakia, Estonia, Latvia and Lithuania.

SOURCE: MCKINSEY RECOVERY SCENARIOS, IN PARTNERSHIP WITH OXFORD ECONOMICS, JUNE 2021



How the Global Wealth Gap Is Impacting Fashion

Widening inequality between income groups and other demographics could exacerbate the already uneven economic recovery from the pandemic which is expected across countries in 2022. How fashion companies respond to these disparities will depend on the local context of each consumer market, operating hub and sourcing region that make up their global footprints.

by Casey Hall



When the president of the World Bank appeared at a virtual press conference in October 2021 for the organisation's annual meeting, his account of the growing inequality gap was unambiguous. "As you know, the world is suffering from a dramatically uneven recovery. Inequality is worsening across country groups," said David Malpass, referring to the different recovery speeds and trajectories of higher-income and lower-income countries from the impacts of the Covid-19 pandemic.³⁹

Since countries with stronger healthcare systems and economic resilience are likely to outperform others in 2022, business performance will vary across many of the consumer markets, operating hubs and sourcing regions that underpin the global fashion industry. But fashion companies will need to do more than just take

these differences into account as uneven recoveries across countries will be exacerbated by uneven recoveries within countries.

Indeed, the recovery picture is far more diverse, complex and nuanced at the sub-national level, complicated by disparities in each domestic context. Within countries, some provinces, states, regions and cities were impacted unevenly by the pandemic or saw economic gaps between them widen as a result.

The recovery picture is far more diverse, complex and nuanced at the sub-national level, complicated by disparities in each domestic context.

In the UK, for example, the pandemic has made the country's "North-South divide even worse," according to a report by the Centre for Cities, a London-based think tank. The health and economic impact of the crisis has made it "four times harder" to narrow the divergence between people's living standards in the North and Midlands regions and those in the South, with cities like Birmingham and Hull therefore predicted to face greater challenges than others.⁴⁰

Fashion companies considering their expansion priorities in a given market or refining their assortment mix across an existing retail footprint would be wise to keep such shifts in mind.

A similarly uneven picture has emerged across cities and regions in many other countries. In Brazil, longstanding economic disparities between certain states have heightened since the onset of the pandemic,⁴¹ such as significantly higher poverty levels in the states that make up the North and Northeast regions compared to wealthier states in the South and Southeast.

According to Carlos Jereissati Filho, outgoing chief executive of Iguatemi Empresa de Shopping Centers, a retail group which owns malls across Brazil, international brand partners that have noted these shifting patterns are now doubling down on certain states and cities.

"The luxury brands that have been in the market for a long time... are now seeing that Brazil is bigger than just states like São Paolo and Rio de Janeiro [in the Southeast region]. They're seeing opportunities in the South region [where we have malls and outlets in Rio Grande do Sul and Santa Catarina states] and in the Central-West region of the country like Brasilia [where we have a mall in the Distrito Federal] and places where the cultural industries have been booming [in spite of the pandemic] and a lot of money is flowing into like Goiânia [in Goiás state]," he said.⁴²

Different demographic groups within countries were also unevenly affected by the pandemic, with the nature of impacts influenced by factors such as socioeconomic group, occupation type, educational attainment, race, ethnicity, gender and others.⁴³ Due to the intersectional nature of some of these characteristics, pre-existing inequalities between cohorts are often reinforced or exacerbated by a widening wealth gap, which can lead to more severe outcomes for affected groups.

In some countries, early discussions of "V-shaped" or "U-shaped" economic recoveries from the pandemic have largely given way to a "K-shaped" model, in which the wealthiest people saw a quicker economic recovery, and those at the lower end of the income spectrum saw their economic opportunities dwindle or stagnate. This has happened in both developing and advanced economies.

In the US, for example, poverty increased after some of the benefits that were part of a government relief package ended in 2020, according to data published in a joint report by researchers at three universities in December of that year.⁴⁴ The authors noted a disproportionate impact on some groups and communities: "The increase in poverty in recent months was more noticeable for Blacks, children and those with a high school education or less," reads the report. A disproportionate impact between different demographic groups has been observed around the world, in countries as diverse as Japan,⁴⁵ Russia⁴⁶ and Argentina.⁴⁷

"The most marginalised groups always get

hit the hardest," Wendy Edelberg, director of the Hamilton Project, an economic policy arm of the Washington DC-based Brookings Institution, told a US media outlet in 2021.⁴⁸ "But what is so unusual is, for a lot of other groups, it's not that they're being hit less — it's that they're seeing no pain at all [or] they're doing well," she added. "For a lot of people, the crisis is over. It's invisible to them."

This is certainly not the case for the 97 million people around the world who were pushed into extreme poverty in 2020 by the pandemic, now living on less than \$1.90 per day.⁴⁹ Among the working poor are many who are employed by manufacturers and raw materials producers in the developing world that supply global fashion brands. Many have been at the sharp end of the Covid-19 crisis, increasingly vulnerable to factory closures and exploitation.⁵⁰ According to analysis in the "BoF Sustainability Index," a significant proportion of fashion companies' commitments to pay workers living wages are not backed by concrete action.⁵¹

Meanwhile, the number of people accruing extreme wealth during the pandemic period has risen precipitously. A record 493 people joined *Forbes*' World's Billionaires list in the year spanning March 2020 to 2021,⁵² amounting to the creation of a new billionaire every 17 hours on average. The growing number of people who are either very rich or very poor has meant that the global middle class, which had been an expanding demographic for many years, shrank by 54 million people in 2020.⁵³

These shifting dynamics clearly point to numerous moral imperatives for governments, societies and businesses in the years ahead. Yet, in addition to their collective and individual responsibilities to help tackle inequality across the countries where they operate, fashion companies must also prepare for the many potentially profound business implications that such disparities present. As they decide where and how to invest, leading fashion players will determine how unequal recovery speeds and trajectories affect them (see "Uneven Recovery" on page 21) in more granular terms.

Indeed, however useful a bird's-eye view on the wealth gap may be for identifying living wage

levels or distributing merchandise by value segment across countries, it obscures important detail about sub-national disparities. Decision-makers must weigh up risks and opportunities by studying subtly different and sometimes rapidly changing local market conditions across different subsets of society and different expanses of each country, which are influenced by a unique context of political, cultural, economic and historical factors.

Consider the following four snapshots which illustrate how uneven recoveries within countries could impact the global fashion industry in 2022.

The widening wealth gap could trigger policy changes that impact specific segments, such as the luxury sector in key markets like China.

Even in China, where comparatively effective early management of the Covid-19 pandemic allowed it to be one of the only major economies to experience growth in 2020,⁵⁴ recovery has been uneven across different demographics.

Chinese President Xi Jinping's calls to rein in "excessive incomes" can be seen as a direct result of widening inequality in the country, which has become more pronounced since the arrival of the pandemic. Like in many other countries, poor workers and small businesses bore the brunt of China's Covid-related economic impact, with Gavekal Research estimating that the bottom 60 percent of Chinese households lost about \$200 billion in income during the first half of 2020.⁵⁵

Meanwhile, the Hurun Research Institute reported that the collective wealth of the members of its 2020 China rich list — made up of 2,398 people with individual wealth of over 2 billion yuan (approximately \$312 million) — increased more that year than in any other during the 22-year period the organisation has been compiling the list.⁵⁶

In China and other countries, growing inequality undermines the social contract between the government and its people, whose satisfaction rests partly on the belief that they will collectively continue to grow more prosperous.

Though some luxury analysts are concerned that new policy interventions to curb income

IN-DEPTH

inequality could be implemented which may hit the luxury market (an October 2021 China International Capital Corp report predicted, for example, that China would expand its consumption tax to cover more luxury consumer goods),⁵⁷ others suggest that any impact on the bottom line is likely to be muted for most luxury brands.

The luxury sector's ultra-wealthy VIP consumers, the likeliest target of any overt moves to curb perceived excesses, are defined by investment bank Jefferies as those who spend more than €100,000 (\$117,000) a year on luxury goods. This cohort is estimated to comprise around 110,000 individuals, accounting for a quarter of total Chinese spending.⁵⁸

Though this is a significant proportion of the luxury market, it is not the main driver of luxury spend in China. Rather, that is the middle and upper-middle class, a cohort which expanded by 350 percent between 2009 and 2020.⁵⁹ A push to lift more of China's population into this group by promoting a so-called "olive shaped" economy (shrinking economic extremes at each end and growing the centre) could actually be positive for luxury sales in the long term, some analysts contend.

Still, as future policymaking plays out, analysts see 2022 as a pivotal year for luxury brands. Some may consider opportunities to shift marketing, distribution and product development in ways that align to consumers who are either less inclined to exhibit their wealth or prefer a more discreet experience.

Events in South Africa highlight how intersectional inequality can create a destabilising force for future high-growth retail markets.

Even before the pandemic, South Africa had one of the highest, persistent economic inequality rates in the world, with a consumption expenditure Gini coefficient, which measures the deviation from equal income distribution, of 0.63 in 2015 (0 represents perfect equality and 1 represents maximum inequality).⁵⁰ According to Vuyokazi Futshane, author of a May 2021 report prepared for the United Nations about the intersection of inequality and recovery, "upward mobility [in South Africa] is greatly influenced by gender, race and class," and "all of these dimensions of poverty and inequality have been heightened by the Covid-19 pandemic."⁵¹

South Africa has a "heavily racialised" labour market, according to a report by the country's department of statistics, in which Black South Africans are not only the most likely to be unemployed, but also earn the lowest wages. Whites earn substantially higher wages than all other population groups.⁶²

Manifestations of this longstanding inequality have been felt in both direct, as well as a multitude of indirect, ways by fashion retailers. One recent example was the attack on shopping malls and other retail centres as part of looting and protests that began in July 2021. The unrest was nominally triggered by the jailing of former President Jacob Zuma, but it also signified the release of longstanding pent-up grievances felt by Black South Africans who have been hit hard by job losses and rising living costs as a result of the pandemic.

Despite a slowdown in GDP growth in recent years and a contraction of per capita income since 2014, international fashion retailers have continued to enter the South African market and, in some cases, have succeeded in taking market share from local chains. The middle class and lower-income groups in South Africa have been squeezed throughout the pandemic period, denting business at shopping centres, but hopes are high for a relatively fast recovery among some high-end mall executives.

According to Preston Gaddy, general manager of Sandton City and Nelson Mandela Square in Johannesburg — both of which emerged unscathed from the unrest, though Sandton City did close its doors for a period as a precautionary measure after consultation with police — the number of weekend shoppers between 2021 lockdowns bodes well for 2022. In an echo of other markets, repatriated spending on luxury goods has helped soften the blow during the pandemic.

"'Mrs Sandton' cannot go to the Champs-Élysées to buy her LV bag, so she's been buying locally," he said, referring to an archetypal customer at the shopping centre seeking brands like Louis Vuitton. "Global luxury brands are saying, 'It might be a small dot on the edge of the African continent, but the numbers being posted by luxury retailers in South Africa [are] notable and we need to pay attention."

Gaddy said that brands from Adidas to Alexander McQueen have continued opening, expanding or investing in Sandton City. He believes more luxury entrants are eyeing South Africa as a gateway to the continent, a region which is increasingly on their radar. Others, however, are less certain that those who can afford to drive South Africa's consumer comeback in 2022 and beyond can necessarily be counted on to do so.

"I think we are going to see a huge dent to confidence... and maybe [we'll also see] another wave of emigrations," explained Sasfin Bank senior equity analyst, Alec Abraham. "Where we could have had an uneven but something of a recovery in more discretionary categories in retail, the fear that many people experienced during those riots will certainly impact that recovery in 2022."

A local approach to controlling India's Covid-19 outbreak has led to uneven retail recovery speeds across different regions of the country.

In late 2021, the recovery of the Indian retail sector from the country's devastating second wave of Covid-19 infections was still underway. According to Retailers Association of India (RAI) chief executive, Kumar Rajagopalan, recovery has been uneven, not only across income groups income inequality has broadly been widening over the last 20 years in India⁶³ —but also geographically.

Unlike in 2020, when India's pandemic plan included a lengthy nationwide lockdown, lockdowns in 2021 were mostly rolled out and lifted on a state-by-state basis. With different durations and severities of restrictions, retailers across the country naturally experienced different economic impacts. According to Rajagopalan, the South region of India, and most of the country's North region, where malls and retailers were open for business "almost all the way through [the pandemic]" in some states, have seen a faster retail recovery in the wake of India's second wave. By August 2020, an RAI survey showed the North had recovered 98 percent of retail sales (versus the same month in 2019) and the South had reached 97 percent.

However, in the country's East region, "there have been some ups and downs," he said, especially in the Northeast region, where persistently high Covid-19 case numbers resulted in more restrictions.

As one of the first states that went into lockdown and one of the last to emerge from Covid-19 restrictions, Maharashtra in India's West region, which boasts one of India's largest economies⁶⁴ and is home to the city of Mumbai, initially lagged other regions in its recovery.

It is not yet clear how these divergent recoveries will play out in the year ahead. This is in part due to the dynamic and complex nature of income inequality and other disparities between people living in India's regions, states and cities. However, there will almost certainly be perceptible differences which require diverse responses from global fashion companies as they decide how to invest across the country.

Overall, Rajagopalan says the "India story" is as compelling as ever for the broader retail sector: "India has a young population; its middle class is growing; per capita income is growing above the \$2,000 level; all these stories are still there. If you consider [all that alongside the return of] government spending and employment... the market for retail should return to its full might in 2022."

According to RAI's September 2021 business survey, nationwide retail sales had already reached 96 percent of comparable levels in 2019, boosted by the beginning of India's festive season, which runs through to December, and the return of weddings, many of which were postponed due to restrictions on people gathering.

IN-DEPTH

Women's employment-to-population ratios declined more than men's during the pandemic but the impact of the gender gap on economic recovery will depend partly on local local market conditions like those in Saudi Arabia.⁶⁵

"Social and economic inequalities have been exacerbated, undermining women's economic security and resilience against shocks," said Michelle Bachelet, UN High Commissioner for Human Rights, explaining the reasons for a growing gender gap over the pandemic period in a 2021 address. "[Yet] the majority of socioeconomic Covid-19 responses adopted by states are surprisingly gender-blind, often failing to address the specific needs of women."⁶⁶

The need to work from home and to home-school children has prompted many women to drop out of the labour force since the beginning of the pandemic. According to estimates by the International Labour Organization (ILO), women's employment worldwide declined by 54 million in 2020.⁶⁷

There have been some anomalies, though. In Saudi Arabia, despite fears the pandemic would set back recent progress in labour force participation, the number of women in the country's workforce actually grew 64 percent in the two years from late 2018 to the end of 2020, according to World Bank data.⁶⁸ Though part of that timespan covers a period prior to the pandemic, economists at the international organisation have specifically noted evidence of a continued rise since the onset of Covid-19.⁶⁹

Though years of gender inequality and laws limiting Saudi women's participation in society prior to reforms that started in 2016 mean the country is coming from a very low baseline in terms of female labour force participation, the recent lift in employment rates bodes well for the country, assuming it is accompanied by a more comprehensive female empowerment agenda. More working women is also good news for the fashion and retail industries. Both industries have been beneficiaries of Saudi Arabia's Vision 2030 master plan for economically diversifying the kingdom away from reliance on oil, spearheaded by Crown Prince Mohammed bin Salman Al Saud. Growth of the Saudi service sectors is a key pillar, particularly those that also boost domestic consumption and tourism. By 2020, 26 percent of Saudi women were working in the wholesale and retail sector, according to figures from the Brookings Institution.

An exodus of foreign workers during the pandemic and a relatively early retail reopening after the lifting of restrictions unlocked even more opportunities for women in the country. Saudi women are more likely to replace expatriate workers than Saudi men in some settings, according to Brookings, and they are also more likely to work in service sectors like fashion and retail. Though this is partly driven by their comparative willingness to work for lower wages, both Saudi women and men are paid significantly more than foreign workers.⁷⁰

While there are questions around how permanent the shift to local employees will be for blue collar and manual labour sectors, white collar jobs and those in the fashion and retail sectors are more likely to remain open to local women. The country's overt "Saudisation" policy, which compels companies to allocate a certain proportion of jobs to native Saudis, should help encourage that.

"For the first time, brands [are employing Saudi women and therefore] have direct access to their female consumers via their teams... and the result is [that brands are] having more insight into the consumer behaviour of their target market," explained Marriam Mossalli, founding partner and senior consultant of Jeddah-based luxury communications and marketing consultancy Niche Arabia.

Members of this new female workforce are also looking for new work-appropriate items for their wardrobes, a change she suggests more global fashion brands should note. "It's not just attire [for women who] lunch anymore."

The author of this article focuses on global markets in Asia-Pacific and other regions at The Business of Fashion.



02. LOGISTICS GRIDLOCK

The fashion industry is reliant on an intricate web of global supply chains that are seeing unprecedented levels of pressure and disruption. With logistical logjams, rising shipping costs and shortages of many kinds adding new layers of complexity, companies must rethink their sourcing strategies while implementing cutting-edge supply chain management, and building in greater flexibility to keep products flowing with customer demand in the year ahead.

Around half of global businesses suffered supply chain disruptions in 2021, with one in eight severely affected.⁷¹ This was the fallout from a combination of global and local factors, including material and component shortages, transportation bottlenecks, staff unavailability and rising shipping costs.⁷² Many of these challenges show no signs of abating, and the majority of business leaders expect logistical roadblocks to persist through 2022 and beyond. Indeed, 87 percent of fashion executives in our BoF-McKinsey State of Fashion 2022 Survey expect supply chain disruptions to negatively impact margins next year.⁷³

It is likely that logistics challenges will only intensify in 2022, with global surges in demand clashing with unpredictable pressures on freight services, ports and terminals. There are growing concerns that increased levels of disruption and price hikes could last longer term, or even represent a new logistical normal for the global fashion industry.

"The supply chain assets are running at full capacity. It's bursting at the seams. So my opinion is that these frustrations will continue until at least the second half of [2022 or]... even extend into 2023," said Joseph Phi, group chief executive of supply chain management company Li & Fung, which counts fashion brands among its clients.⁷⁴

Three structural factors are at play in creating these conditions, which add to the impact of the Covid-19 pandemic: operational challenges (caused in part by soaring demand), shifting industry dynamics and new waves of trade agreements and regulation.

After months of lockdowns, consumer demand is surging in markets such as the US and UK. However, some brands have struggled to obtain products on time, with manufacturing and transport delays — on sea, in the air and on land — leading to chronically depleted inventories in some cases. Brands with manufacturing operations in regions severely impacted by the pandemic have faced staff shortages and factory closures. In August 2021, Adidas said that pandemic-related supply chain disruptions could cost the company up to €500 million (\$586 million) in sales.⁷⁵

Outbreaks of Covid-19 have also worsened port congestion and restricted ship availability. In July 2021, container ship supply was 11 percent lower than the previous September. The situation was exacerbated by the limited availability of steel container boxes, as surging demand to

restock inventories amid shipping disruptions left thousands of boxes at sea, in freight hubs or in ports.⁷⁶ The dislocation contributed to skyrocketing costs and undermined brands' efforts to keep pace with demand. In response, some turned to air freight and trans-continental rail alternatives, leading to new capacity jams, longer waiting times and rising costs in air and rail freight, too.⁷⁷

Alongside logistical challenges, fashion and shipping companies are facing a range of new regulatory and trade hurdles. Among incoming regulations is the EU's proposal for a world-first carbon border tax and new restrictions on emissions from ship engines. Companies must manage these alongside challenges such as import bans from China's Xinjiang region.⁷⁸ For companies shipping between the EU and the UK, Brexit adds new layers of paperwork and customs delays. Equally, ongoing trade tensions between the US and China threaten to exacerbate supply chain disruptions.⁷⁹

In 2021, the vulnerability of maritime chokepoints was highlighted by the Suez Canal blockage, when a container ship became wedged in the canal, preventing shipping in both directions. The six-day event delayed the transport of billions of dollars' worth of goods.⁸⁰ Though such events are rare, they demonstrate the industry's reliance on a limited number of supply routes. "[With] the Panama Canal, there's always a threat of closure, either by accident, or maybe intervention by government and other factors too [but] ... what happened in the Suez Canal... is a call to action that we need to identify and build contingencies. Given what's going on, overland freight [via train between China and Europe] is definitely a viable alternative," said Phi of Li & Fung.81

Today, it costs up to six times more to ship a container from China to Europe than it did at the start of 2019, and up to 10 times more from China to the US West Coast.⁸² In real terms, shipping a 40-foot container from Asia to the US West Coast cost between \$1,600 and \$2,100 in July 2019; now it will set companies back between \$21,000 and \$23,000.⁸³ Looking ahead to 2022, shipping prices will likely continue to climb and remain above their pre-pandemic levels in the longer term, as shipping companies continue to consolidate and new capacity only slowly emerges.⁸⁴

"What happened in the Suez Canal... is a call to action that we need to identify and build contingencies."

In response, fashion brands may need to abandon the idea that cost increases are hiccups, instead planning for a permanently more expensive logistical future.⁸⁵ Still, some fashion players will be more exposed to these factors than others. There may be opportunities for luxury brands to pass on higher costs to customers by raising prices.⁸⁶

Globally, pressure on containers and shipping will continue to require logistics players to deprioritise some shipments, while a lack of road-transport drivers, both domestically and internationally, will exacerbate operational costs and delays. In holding back the delivery of products to stores and homes, these conditions will continue to make it difficult for brands to respond to booming consumer demand. To further complicate matters, customers have become accustomed to super-fast delivery, both online and in store, with delivery delays putting a strain on customer satisfaction,⁸⁷ while adjacent trends such as accelerating demand for sustainable materials are putting additional pressure on supply.⁸⁸

In the longer term, brands will need to balance the desire to enhance speed to market with the need to alleviate supply chain pressure. That may mean streamlining production, logistics planning and booking capabilities, as well as putting in place contingency plans and alternative suppliers, while remaining as agile and flexible as possible. To do this, some companies are bringing

02. LOGISTICS GRIDLOCK

shipping in-house: in late 2021, companies such as Walmart and American Eagle invested in dedicated container services to avoid third-party shipping congestion.⁸⁹ In the last mile of delivery, dynamic rerouting and drone delivery could present alternative solutions to short-staffed last-mile distribution in some circumstances.

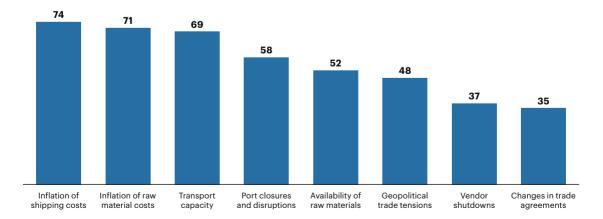
At the same time, brands need to work with their suppliers to scale up nearshoring and reshoring activities to build production capacity and safeguard access to raw materials. Indeed, a number of European companies doubled down on nearshoring efforts through the pandemic, moving textile manufacturing from China to Turkey to minimise delays.⁹⁰ Over 70 percent of companies plan to increase the share of nearshoring close to company headquarters, and roughly 25 percent intend to reshore sourcing to their headquarters' country, according to McKinsey's Apparel CPO Survey 2021.⁹¹ "As an industry, we still have too long lead times," said chief executive of PVH Corporation Stefan Larsson. "There is a big opportunity to better match planning and buying to demand, and that's something that we learned when Covid hit. The second-biggest learning is to build resilience into the supply chain now."⁹²

Brands need to work with their suppliers to scale up nearshoring and reshoring activities to build production capacity and safeguard access to raw materials.

Of course, adapting operations and adjusting to rising demand will come at a cost to a company's profitability. Shoe brand Steve Madden

Exhibit 6:

Multiple factors will negatively impact supply chains in 2022, with higher shipping and materials costs as the main concerns



OPERATIONAL TRENDS EXPECTED TO IMPACT¹ SUPPLY CHAINS IN 2022, % OF RESPONDENTS

1 Responded "very high impact" or "high impact"

SOURCE: BOF-MCKINSEY STATE OF FASHION 2022 SURVEY

reported that supply chain disruptions were behind a \$30-million cut in its first-quarter sales expectations in 2021, while Asos has warned that supply chain pressures and consumers returning to pre-pandemic behaviour could reduce 2022 profit by over 40 percent.⁹³ There will likely be more profit warnings attributed to supply chain issues in the year ahead.

"It has been difficult to plan inventory flow with much precision... We do not expect those conditions to change any time soon."

Given the hefty bottom-line implications of logistical gridlocks, many fashion executives are working hard to find solutions. "It has been difficult to plan inventory flow with much precision," said Erik Nordstrom, chief executive at Nordstrom. "We do not expect those conditions to change any time soon."⁹⁴ Common practical measures have included introducing agile ways of working to improve efficiency, upgraded inventory management, reimagined supply chain organisations (incorporating visibility-enhancing solutions) and technologies such as sophisticated dashboards known as digital supply chain control towers.⁹⁵

As leaders innovate to create efficiencies, there is an imperative for slower-moving brands to expand their focus from efficiency initiatives to digital and operational enhancements which help to better plan and track logistics. In addition, expectations for prolonged logistical turmoil will encourage larger brands and retailers to consider more fundamental solutions. It is likely some will explore cross-functional or even vertical integration, such as bringing distribution or production in-house.⁹⁶

Fashion executives have pointed to further digitisation of supply chain operations as the way

forward. VF Corporation chairman, president and chief executive Steve Rendle said that he sees "significant opportunities in creating a hyperdigital supply chain."⁹⁷ Meanwhile, H&M Group chief executive Helena Helmersson suggested that a lot of the firm's supply chain development is focused on technology and that it is a priority to find "competitive advantages in a supply chain context when it comes to speed, agility, cost efficiency and price."⁹⁸

With logistics caught in the industry's crosshairs like never before, decision-makers should think carefully about how to adapt. In 2022, brands will aim to regain control of supply chains while communicating potential delays with customers at each step. It will pay to consider control towers, in-house distribution, nearshoring of manufacturing and cutting-edge inventory management, all while securing early access to raw material supplies.

Leading brands will collaborate closely with logistics providers, communicating frequently and expecting that providers will hold more cards in negotiations. To keep a watchful eye on finances at a time of rising supply chain costs, they may also consider using a zero-based budgeting system, requiring all costs to be re-justified at each budget review. In short, as the pressure intensifies, careful planning and a deeper integration of supply chain considerations into decision-making will become table stakes in the year ahead.

Li & Fung: Facing up to Vulnerabilities in the Supply Chain



Joseph Phi Group Chief Executive, Li & Fung

In its 115 years of doing business, Hong Kong-based supply chain management company Li & Fung has seen off many challenging periods but the latest logistics crisis of container shortages, price hikes, logjams and threats to vital shipping routes is unprecedented. Group chief executive Joseph Phi says fashion brands can nevertheless boost their resiliency if they diversify their post-pandemic sourcing base, adopt new technologies and invest in serious contingency planning.

It's difficult to imagine the challenges that faced Joseph Phi when he was promoted to group chief executive of Li & Fung in October 2020. Not only was a pandemic raging, causing untold complications in global supply chains, but his company had only just delisted from the Hong Kong stock exchange after 28 years of public trading. Now, supply chain stressors, including port shutdowns, a container shortage and the rapid rise in freight costs, are front of mind for both Phi and the fashion executives who rely on him to provide solutions for international sourcing, production and logistics.

In 2022, responsible supply chain management means expecting even more of these unexpected shocks. Future-proofing supply

- by Casey Hall

GLOBAL ECONOMY

chains requires sustainable diversification, technological innovation and a wholesale reframing of the concept of "value," he says. Instead of trying to wring out every ounce of cost from the chain, value should be captured by decreasing complexity, shrinking lead times and reducing the financial cost of doing business while also reducing the cost that the fashion industry inflicts on people and the planet.

In 2021, there were port closures, shipping container shortages, freight cost surges and more. How long will this last and which challenges do you foresee carrying over into 2022?

Brand owners, retailers, consumers. I think, even suppliers, are starting to adapt to this so-called new normal. The irony is that this [consumption] rebound is adding pressure to a supply chain that's already under a lot of stress. Now the containers and the capacity, they are in the wrong place and this imbalance has resulted in a phenomenal rise in freight rates, which together with a shortage of containers and lack of vessel space, will slow down this global economic recovery, unfortunately. My opinion is that these frustrations will continue until at least the second half of 2022. if Covid is under control, and if the ports and the factories are operating with some sort of normalcy. If things are not under control, then this may even extend to 2023.

To what extent do you think some of these problems would have hit the fashion industry, regardless of the pandemic?

There were some unforeseen

external shocks, just like the [March 2021] Suez Canal closure and the driver shortage in the UK following Brexit. During normal times, frankly, we can withstand these shocks, but this time around they had an out of proportion impact because the whole supply chain is running at full capacity. So what this pandemic has done is expose vulnerabilities across the entire supply chain.

Do you think businesses will look back at this period as a point at which they made significant changes in the running of the global supply chain?

I truly believe so. The pandemic has shaken the very core and the very foundation of how the fashion supply chain has been built. It was built on efficiency by squeezing every ounce to make it cost effective. There is a need for a new equilibrium, and this will include diversification of the sourcing base, instead of putting all of your eggs in one basket. In the past, brand owners rarely needed to think about supply routes. Now, you've got to think of the trade lanes that you should be in. Of course, people need to think about the whole digitalisation of the supply chain too and you've got to make it more transparent so that it can facilitate decisionmaking.

What is the most important takeaway for brands?

I think brand owners and retailers need to rethink the relationship between themselves and the suppliers. You've got to treat them as partners; you've got to treat them as a critical component of the entire ecosystem. In a supply ecosystem, you are only as strong as the weakest partners.

Your parent company the Fung Group was one of 30 global fashion and textile industry companies to first sign on to the G7 Fashion Pact in 2019, committing to key environmental goals. What kind of tangible progress have you made so far?

We need to address the environmental impact of the fashion supply chain. Li & Fung's technology spin-off, LFX, recently launched 3D-as-aservice through a company we call UNIFi3D. In the past, a lot of products were air freighted for approval, back and forth [until they are approved]. Essentially, the whole thing now can be done in a 3D manner, so you eliminate waste during this process. The shortening of the whole product development cycle also means companies can give themselves more time to read the market, and with better intelligence develop products that have the highest probability of success, reducing the number of SKUs. So this reduces inventory, and then reduces inventory waste. It's going to be game-changing, in my opinion, because inventory [waste] is the biggest cost to the brand owners and retailers as well as [one of the] biggest negative impacts on the environment.

What do you think the fashion industry has learned from the Suez Canal blockage?

In the past, brand owners defined value in a way that was always skewed towards the demand, downstream side of the chain. My sense is that the Suez Canal incident is highlighting to everybody that we need to

start investing in solutions that manage the upstream supply side, and form greater partnerships with your suppliers and vendors, your freight forwarders and your shipping lines.

What about the potential for conflict in the South China Sea, is that a geopolitical factor the fashion industry needs to consider?

I've lived in this region nearly my entire life [and] my sense is that the probability of a conflict is low [and the] cost of a conflict is very high. Having said this, when we talk about probability, we are playing with chance. So we really need to think about if it happens, how do you then rebalance your supply chain? How would you ensure that the flow of goods is not disrupted? Certainly, as we think about our three-year plan, it will be on my agenda, and I think it should be on the agenda of every chief executive in a company that has exposure in this region.

Are there viable alternatives to these sea routes that are maritime chokepoints?

I may not have said this 20 months ago, but given what's going on, overland freight is definitely a viable alternative. My guess is that the future road and rail costs may be similar to the current ocean rates, but take half the lead time of the ocean route, which means that it's actually faster to ship by land. Earlier this year, our logistics business, LF Logistics, signed an agreement with a local company in Chongqing [to leverage the] growing railway network linking China and Europe along the New Silk Road, which basically connects Chongqing with the

port city of Duisburg in Germany. This agreement will definitely accelerate our expansion into Eurasia. For me, and for us as a company, that's the way to go.

Despite recent waves of offshoring from China and international trade disputes involving China, many fashion companies are still reliant on Chinese suppliers. In this new, more diversified era of sourcing, which trade agreements are most important for the industry moving forward?

A very important agreement is the Regional Comprehensive Economic Partnership [RCEP]. It's the largest multilateral trade agreement in the whole world and impacts 30 percent of the world's population. It has the potential to be at the core of the reconstruction of the global supply chain. RCEP is possibly the only trading block that has both the production capacity and the consumer demand, so my sense is that it's going to dramatically facilitate the regional trade and investment within Asia.

What does the conversation about hedging supply chain risk look like as we look ahead to 2022?

Given everything that we have learned from the pandemic, it's very important to diversify our sourcing base, but it should not be blind diversification. In my opinion, the export share of China will gradually reduce by design. The finishing part of production can then move to ASEAN [Association of Southeast Asian Nations markets]. Because of RCEP, the movement of raw materials, the fabric, components, they can enter ASEAN countries largely duty-free, so it softens the cost of movement and transport.

Do you think there's an overall decreased appetite for riskier sourcing locations, such as Ethiopia and Myanmar, even if they are lower cost?

As a company, we have started to look at Africa. In particular, we're talking about Egypt, Ethiopia, Kenya, Madagascar and the like because they're duty-free countries to America. Realistically, I think we possibly need to wait until this whole pandemic stabilises for us to have a really thorough assessment of whether we want to scale up or not, because there is some risk there.

How can brands make themselves more resilient in this new sourcing era?

You've got to be mobile. You cannot be tied to a particular location and geography. Secondly, I think it's about time that we seriously look at our business continuity and contingency plans. The third thing is that shipping costs are sky-high my goodness - so brands need to find ways of offsetting this increased cost through increasing productivity. I think the exercise of value engineering is therefore very important. By reducing the number of players between myself, as the chief executive, to the lowest rank and by delayering, you reduce your costs. At the same time, you improve your customer service because things get done faster. You remove bureaucracy. I think a lot of companies should pay attention to that.

This interview has been edited and condensed.

03. DOMESTIC LUXURIES 04. WARDROBE REBOOT 05. METAVERSE MINDSET

03. DOMESTIC LUXURIES

Travel has traditionally been a key driver of luxury spending, but international tourism is not expected to fully recover until between 2023 and 2024. To capture the shift in shopping patterns set to shape the year ahead, luxury players should engage more deeply with domestic consumers, rebalance their global retail footprints and duty-free networks and invest in clienteling for local e-commerce channels.

Before the Covid-19 pandemic, 30 to 40 percent of luxury sales were generated by shoppers in transit and abroad.⁹⁹ However, international travel flows plunged to new lows at the height of lockdowns and by 2021, global tourism spending had been cut nearly in half.¹⁰⁰ With tourists set to stay local in 2022, consumers and brands alike are doubling down on domestic luxury shopping.

Amid restricted international travel, consumers have switched to buying luxury online and at home, taking advantage of local duty-free offerings and the narrowing price gap between domestic and international markets. With tourism stalled, domestic shoppers helped buoy some of luxury's biggest players. LVMH, Kering and Richemont were among the companies to defy expectations, seeing sales surge above pre-Covid levels by the second quarter of 2021 thanks to consumer enthusiasm to shop locally and online, particularly in Asia and the US. In 2022, much of this new onshore business will remain intact.¹⁰¹

Aside from flows between Europe and North America which will get close to their 2019 performance next year, inter-regional travel is unlikely to return to pre-pandemic levels before 2023. Moreover, the recovery of travel between China and Europe — formerly a cornerstone of luxury purchases in Europe — is likely to lag other pairings, only reaching 50 percent of 2019 levels by 2022. In comparison, travel between the Middle East and Europe and between North America and Europe is expected to rebound to 110 and 105 percent of 2019 levels respectively by 2024.

"[Recovery will be] phased across different regions," said Benjamin Vuchot, chairman and chief executive of LVMH-owned luxury travel retailer DFS Group, in mid-2021. DFS is planning to open new T Galleria stores which will be fully operational by 2023 in Australia and New Zealand, two countries Vuchot predicts will be among the early beneficiaries of a resumption in travel. "When travel becomes possible, luxury will be one of the first categories to benefit."¹⁰²

With cross-border travel restricted throughout 2021, domestic markets have had an opportunity to pick up the slack. Indeed, despite some reopening to international traffic, most shopping has been comprised of local customers. Following the reopening of non-essential retail in the UK, the Bicester Village designer outlet reported a flood of domestic shoppers and only a trickle of international visitors. Luxury retailers including Harvey Nichols and Selfridges in London and Galeries Lafayette in Paris have tried to adapt to the changing conditions, with the latter offering online clienteling and next-day home delivery.¹⁰³

Governments have been similarly proactive in encouraging luxury shoppers to spend more at home by cutting local consumption taxes, reducing import duties and promoting duty-free zones. In China, the popular holiday destination of Hainan saw duty-free sales surge by 257 percent in the first half of 2021, to 26.77 billion yuan (\$4.13 billion).104 This followed a Chinese government announcement that it planned to transform Hainan into the world's largest free-trade port. The plan included reduced corporate and individual tax rates, relaxed visa requirements and a drastic expansion of the Hainan duty-free programme. The government also lifted purchasing limits from 30,000 yuan to 100,000 yuan (\$4,646 to \$15,487) and allowed consumers to buy duty-free products online for six months after returning home.

The success of China Duty Free Group (CDFG), which controls around 95 percent of the Hainan market, has attracted companies such as LVMH's DFS, Dufry and Lagardere over the past year. Looking forward, CDFG expects 20-fold revenue growth between 2019 and 2025. If that is accurate, the island province will account for one third of China's luxury market by 2025.¹⁰⁵ Meanwhile, elsewhere in China, municipalities in the city of Shenzhen are considering developing their own downtown duty-free zones.¹⁰⁶

Brands have also played their part in the shift to domestic sales. Many have launched or expanded local marketing campaigns and invested in their domestic physical footprints.¹⁰⁷ In November 2021, Dior opened its first Middle Eastern exhibition in Qatar, which was adapted specifically for the region and will run until March 2022,¹⁰⁸ and Chanel hosted its 2022 cruise collection in Dubai. In the US and UK, luxury brands such as Dior and Prada have compressed price differences between markets, reducing the allure of "travelling for a bargain" and shoring up consumer confidence in domestic purchases.¹⁰⁹

In China, Louis Vuitton and Prada have shifted some of their attention away from tourism

hotspots and first-tier locations to new stores in cities such as Wuhan.¹¹⁰ Meanwhile, the activities of China's *daigou* (grey-market surrogate shoppers who buy goods overseas to sell on the mainland) have shifted, with supply chain bottlenecks and closed stores and factories adding to the complexities of the trade.

While domestic markets have prospered, international airports and city-centre retail locations, which are often designed for the international traveller, have seen store closures and strategic shifts. In Japan, the ongoing travel ban has hurt duty-free retailers and tourist-focused outlets, leading to retailers shuttering more than a dozen stores in Tokyo's high-end Ginza Six mall in early 2021.¹¹¹ Meanwhile, tourism shopping tax refund company Global Blue, headquartered in Switzerland, saw a more than 80 percent drop in its first-quarter 2021 revenues compared with pre-pandemic levels.¹¹²

With airports maintaining strict social distancing measures and border controls, the sense of a fun, airport-based experience will likely continue to diminish in the year ahead. Of course, this does not spell the end of international travel. In countries that have seen rapid vaccine rollouts, the appeal of leisure trips abroad is returning: seven in 10 Americans are eager to book a vacation, according to a recent Nielsen survey.¹¹³ Still, even as international bookings rise, the practical difficulties and risks (such as uneven vaccination rates, testing and quarantine requirements and the threat of viral mutations) will mean many consumers continue to favour domestic trips.

However, some travel retail players are ramping up their duty-paid airport concessions alongside duty-free operations in provincial hubs across markets like Brazil.¹¹⁴ "With our new shops spread across the whole [Salgado Filho Airport in Porto Alegre] we will be able to... serve both domestic and international travellers [tailored accordingly]," said Gustavo Fagundes, chief operating officer of Dufry in South America.¹¹⁵

03. DOMESTIC LUXURIES

Globally, domestic travel is on a steeper upward curve than its international counterpart, and is likely to recover to more than 90 percent of pre-pandemic levels by 2022, compared to 50 to 80 percent for international travel. Demand for weekend and short shopping trips, which historically accounted for a large proportion of luxury tourism spend, will remain subdued. So too will business travel, amid continued adoption of digital alternatives.

Domestic luxury consumption has similarly benefitted local and regional online players. In China, Alibaba expects to see a continued rise in cross-border e-commerce through 2022, as consumers browse for both foreign and domestic goods on local sites.¹¹⁶ Global luxury e-commerce platforms such as Net-a-Porter may see more traffic from regions like the Middle East, where they have a localised offering with competitive delivery and payment options and offer access to local designers. UAE-based luxury players with an online presence, such as Al Tayer Insignia's Ounass and Chalhoub Group's Tryano and Level Shoes, are also expanding fast across the region.¹¹⁷

Citing the shift of international travel-based spending back to countries like the UAE and Saudi Arabia, Khalid Al Tayer, chief executive of Ounass and managing director of Al Tayer Insignia, which operates joint ventures with brands including Gucci and Saint Laurent, said the trend "has really accelerated the brands in their adaptation of local tastes and local cultures and local celebrations by coming up with communication, [events] and merchandising that appeals to them."¹¹⁸

Given the increased choice in home markets, both in terms of brands and channels, the rise of domestic luxury is likely here to stay. Another outcome of this shift is that consumers are discovering new local designers or investing more in familiar local names.

Exhibit 7:

Travel flows between most regions will not recover until 2023

		1-2	25 26-50 51-7	5 76-100 101-125
Intra- regional	Intra Asia	54	94	117
	Intra North America	73	97	101
	Intra Europe	36	95	103
Inter- regional	Asia - Europe	20	51	102
	Europe - North America	17	84	101
	Asia - North America	14	47	93
		2021	2022	2023

RECOVERY OF AIR TRAFFIC FLOWS WITHIN AND ACROSS REGIONS, INDEX (2019 = 100)

SOURCE: "UPDATE: COVID-19 GLOBAL AIR TRAFFIC DEMAND SCENARIOS" - MCKINSEY TRAVEL, LOGISTICS & INFRASTRUCTURE ANALYSIS; PAX-IS, JULY 2021

"Here in Shanghai, many showrooms are still reporting a big boost in sales of Chinese designer brands," said Shaway Yeh, founder of fashion innovation and sustainability agency Yehyehyeh.¹¹⁹ "With consumers having less access to international fashion than before, this isn't surprising, but it also speaks to the rising national confidence that consumers are tapping into, and a newfound sense of solidarity to support local businesses that won't go away anytime too soon."

A similar pattern is emerging in key African markets like Nigeria, where luxury consumers have been unable to travel abroad as easily as they did before the pandemic to shop in hubs like London and Dubai. "While we do expect customers to return to previous [international] buying habits, we're certain that [more] 'repatriated spending' will become the norm. As consumers search for quality products they don't have to travel for, local designers and artisans are exceeding expectations and matching — sometimes surpassing — the quality demanded," said Avinash Wadhwani, co-founder of Lagos multibrand store Temple Muse, which stocks both global and local luxury brands.¹²⁰

Looking ahead, brands will need to adopt a two-pronged approach to capture the shift in luxury spend, targeting both domestic shoppers and aligning with new travel and purchasing behaviours. However, in line with projections that a travel rebound and sustained domestic luxury spend will not be mutually exclusive, the pressure will be on - particularly from investors who increasingly expect a full sales recovery in 2022 - to prioritise the right opportunities at the right time. Indeed, consumers may begin to cautiously travel internationally, while temporary VAT exemptions and other domestic incentives support demand at home. But most likely, luxury consumers will shop for more novel, local designs abroad, while continuing to spend on staples, accessibly priced luxury items and local brands in domestic markets.

In response to these dynamics, travel retail and duty-free players will need to expand their horizons, offering more than the usual merchandise mix to travellers and broadening the travel retail proposition beyond the simple offer of tax savings. Companies must offer value-adds, such as unique local products or collaborations, that enrich the customer experience and create a pull factor for reluctant travellers.

European luxury hubs will be especially hard-hit by the sustained domestic spending boom in China and other markets and will need to find ways to compensate. In Paris, London and Milan, brands and retailers most dependent on international shoppers will likely see sub-par performance through the end of 2022 at the earliest.¹²¹ Leading European luxury department stores that are able to adapt their approach will remain influential in their respective cities. However, while many have expanded their e-commerce operations, they will continue to rely largely on in-store shoppers, meaning they will need to increasingly court local customers using enhanced localisation strategies.

Luxury brands will need to continue to expand their footprints across regions, moving away from an over-reliance on tourist destinations. In towns and cities, retail locations in transport hubs and domestic terminals offer potential for growth. To build meaningful relationships with domestic customers, players will need to sharpen their localised marketing strategies. This may mean introducing enhanced clienteling, holding community-building events or offering tailored merchandise mixes to accommodate local tastes.

As the dynamic between travel and luxury shopping shifts, luxury brands need to formulate new solutions to capture both domestic shoppers and incoming tourism in the longer term, reallocating their investments accordingly. This, in turn, will require a rethink of all aspects of doing business, across product development, marketing, merchandising and retail.

JHSF: Betting Big on a Permanent Shift to Local Retail



José Auriemo Neto Chairman, JHSF Participações President, Cidade Jardim

With tenants like Louis Vuitton and Christian Dior and partners including Celine and Valentino, retail behemoth JHSF Participações has had to strengthen its ties with local luxury clients during the pandemic, and the group's chairman is betting on longterm gains from their new shopping patterns. After leveraging the firm's hospitality assets to boost loyalty, José Auriemo Neto reveals how he plans to persuade well-travelled Brazilians to keep shopping domestically.

- by Zoe Suen

Though some have suggested that the repatriation of luxury spending in Brazil is only temporary, José Auriemo Neto believes otherwise. The increasingly local consumption habits Brazilians developed over the course of the pandemic aren't going away, says the chairman of JHSF Participações (JHSF), who is so confident that he is building a hotel on top of the group's largest luxury mall to make it more convenient and appealing for wealthy Brazilian travellers from across the country to shop domestically in the commercial capital.

One of two major luxury retail players in the country, JHSF has fostered long-term relationships with tenants such as Louis Vuitton, Christian Dior and

Cartier, while establishing exclusive joint ventures with the likes of Celine, Valentino and Balmain. But more than a decade after he introduced the likes of Hermès and Jimmy Choo to Brazil by way of the group's crown jewel Cidade Jardim, the executive is not plotting international, or even regional. expansion. Rather. Neto is doubling down on one state in Brazil, where he plans on strengthening ties with the group's high-end clientele using a diversified, experience-first strategy.

Brazil was hit particularly hard by Covid-19, both in terms of the human tragedy and the economic impact on businesses. But how substantial were JHSF's retail losses over the course of the pandemic and the local luxury sector more broadly?

In the retail division we were negative during the months we had to stay closed, down 15 to 18 percent, but sales recovered as of the last quarter of 2020, where we saw growth exceed 2019 levels. Sales in our malls grew 16 percent in Q2 2021, compared to Q2 2019. Of course, the luxury segment has benefitted as our clients were not able to travel and people were buying more domestically.

In the state of São Paulo, where the majority of our business is, vaccination [is happening quite quickly as of September 2021] so people are more confident about going out. We are seeing the luxury segment grow faster than other segments and the country's GDP which I believe... will be something close to 4.5 percent. Our retail division is expecting to have double-digit growth this year [in 2021], and also next year, due to all the demand that we're seeing.

How much of your retail sales did regional and international tourism respectively account for pre-pandemic? What did the repatriation of luxury spending look like for JHSF?

About 90 percent of our business was driven by locals, but we'd see people coming from the other regions of Brazil to buy in São Paulo - 25 percent out of this [domestic share of] 90 percent. Brazilian clients spent almost a year and a half with travel restrictions to destinations like the United States, Europe and also some of the countries in Asia and Africa. But this helped us provide an experience that they were not having before: I believe that the level of business that we are going to have post-pandemic is going to be higher, because customers adapted to buying in the country.

Brazil's high tax burden has traditionally prompted luxury brands to retail at significantly higher prices than in other markets, which gave affluent Brazilians an added incentive to shop abroad in the brand flagships in Europe and the US where there is usually a larger selection – rather than buying at home. Are things changing?

Some of the brands, they're now selling at 15 percent, 18 percent above US retail but our customers expected much higher price differentials considering prices used to be 50 to 60 percent higher than the US and Europe up until 2019, so we saw a very positive impact when they came to the stores and were saying, "Okay, it's not that bad, so I can be a regular customer in Brazil after all." Brands saw that they'd drive their business volume up, the closer they get to US and Europe retail prices so now they're making a very strong effort not to be much higher than 20 percent.

What strategies are you using now or planning to adopt at your shopping centres next year to continue to benefit from repatriation? And how can you fend off competition from local luxury mall competitors in the process?

It's all about providing these customers with the right experience. Through our brand partners, we can do merchandising and buy with a focus on our customers and their sizes. We are also having lunches and dinners where we are exhibiting some of the new products that we are receiving in advance. Some of the travel restrictions to France were lifted. so we're taking some clients to Paris Fashion Week. We have another advantage in that clients buy in instalments; this is a common practice in Brazil.

We also launched a benefit programme where we provide 2 percent cash back on all their buys in the mall; this is connected with our real estate division, so if you buy a house in one of our countryside projects, you collect 0.5 percent cash back that you can use in our malls, restaurants and hotels. So we're exploring these synergies more and providing more benefits in terms of service, experience and advantages to our clients.

Who is your core shopper? How have their habits

changed over the pandemic and what shifts do you predict for the year ahead?

Around 65 to 70 percent are women, aged 22 to 55. In terms of geography, it's mainly São Paulo, and states like Goiás, Minas Gerais and Rio de Janeiro. We are seeing more people travelling to São Paulo, not only to buy, but also to enjoy the city. We've seen more of our clients buying online, and more of our clients accessing our concierge service, which we started this year [in 2021] with one person but we are expecting to have 50 staff working on it by next January.

JHSF operates five malls with a total gross lettable area of over 265,000 square metres — and has others under construction. What exactly are your expansion plans?

We have four retail projects that are under development. One, in the area of Faria Lima, the central financial district of the city of São Paulo, is a mall with exactly the same model that we recently inaugurated in the Jardins area of São Paulo. We have a physical retail platform, and we also have a digital platform integrated into some of these stores: some of the merchandise is in the stores. but some orders that clients are receiving at their homes is delivered from a warehouse. We have another three projects: one in the countryside of São Paulo [state], called Boa Vista Village; another one in São Paulo, called Real Parque; and the extension of Cidade Jardim mall that we are opening in H1 2022.

You're really betting big on São Paulo. Why?

Our business is focused on high-end clients, so we have to

be where they are. It's the centre, the wealthy part of the country. More and more of these Brazilian clients are travelling to São Paulo from elsewhere, too, so we want to give them as good experience [as possible] when they are here. We're even opening a new hotel on top of the Cidade Jardim mall. It's going to be completed in about one-and-a-half years, so people will be able to stay in the same place they're shopping when they are travelling.

You also have shopping centres outside the state of São Paulo, in cities like Manaus and Salvador. How do they factor into your plans?

When we look at the growth opportunities in the country, they are more connected to the state of São Paulo, and we are not seeing a very relevant growth in the North or Northeast region where we have those two malls that you mentioned. Right now, we're focusing our expansion 100 percent on luxury malls but the ones we run there are not luxury malls, they're more democratic.

Once restaurants and shops re-opened after lockdowns in Brazil, did you see a fall in e-commerce sales versus physical retail sales?

Yes, the level of demand for the online platform stabilised, and then went down about 10 to 15 percent. But of course, that means clients did download our app [CJ Fashion] on their phone and they started to surf this digital world, and once they started to go to digital, they got more used to it.

There are many big global luxury e-commerce platforms out there with wide assortments of merchandise

trying to tempt wealthy Brazilians to buy from them. How can your online offering compete?

We have an advantage over international players because the brands that we offer on our digital platform are in our malls. We really believe that for a country where there are a lot of logistical challenges, it's very important to have both; it's different from other markets, where you can deliver merchandise across the country from a big warehouse. This integration is how we're giving our clients the access to the merchandise that they want, and how we can understand our clients in a very deep way.

JHSF also operates the Catarina Fashion Outlet outside São Paulo. What shifts have you seen in your outlet business, and what are your expectations for 2022?

The outlet business is growing a lot. We're seeing this business grow year over year in double-digits.

Everyone is bracing themselves for continued uncertainty in 2022. How is JHSF adapting to a more volatile market when it comes to luxury, travel and retail?

A good part of our strategy is related to mixed-use projects. This is helping us a lot, because we can provide for our clients not only the experience to buy merchandise, but the experience for them to live in our properties. I believe that this is relevant for the next few years, because we're seeing that people want to get together; they want to spend time with their families. So our challenge is to be on that trend even more.

This interview has been edited and condensed.

04. WARDROBE REBOOT

After focusing on the likes of loungewear and sportswear for nearly two years, consumers will reallocate wallet share to other categories as pent-up demand for newness coincides with more social freedoms outside the home. To anticipate these nuanced and sometimes paradoxical preferences, brands should lean more on data-driven product development, adjusting their inventory mix accordingly to ensure that assortments resonate with consumers adjusting to new lifestyles.

The pandemic fashion era will be remembered for a surge in comfortable clothing among other things, but some shifts in spending between categories were temporary, while others will see sustained momentum over the longer term. The net result is an altered consumer demand structure comprised of new baselines for some fashion categories, a change which will compel some players to adjust strategies across product development, merchandising and marketing in 2022.

Consumers' lifestyles were drastically altered through the pandemic, causing lumpy seasonal purchases characterised by irregular spikes and lulls of activity, such as surging demand for athletic wear and loungewear. Resizing needs have also disrupted usual demand patterns. In the US, 40 percent of women and 35 percent of men are a different size than in 2019.¹²² Now, some categories and products are starting to experience demand fatigue as the recent torrent of irregular purchases is set to subside.

According to analysis by online fashion platform Lyst, pandemic-resilient categories such as nightwear, activewear and underwear are starting to see decelerating demand compared with the more-than 100 percent growth rates that were common in 2020.¹²³ While 2022 will certainly not see a collapse of loungewear and leisurewear, some brands operating in these categories are beginning to slow down their inventory turnover. Launches of new activewear shorts and tops in the US and UK were down 20 percent and 50 percent respectively in late 2021 compared with the same period in 2020, according to e-commerce trend research by data analytics platform StyleSage,¹²⁴ reflecting a similar trend in China.

On the other hand, as more people return to the workplace and formal occasions are reinstated on social calendars, consumers will reinvigorate the formalwear business in the year ahead, building on momentum established in the latter half of 2021, as pent-up demand manifests as so-called "revenge shopping" in some markets after people's social lives resume.¹²⁵ Global monthly searches for occasion dresses, such as homecoming, wedding guest, cocktail and formal dresses, were already up 200 percent in 2021 compared to the previous year, according to StyleSage.¹²⁶

Similarly, in footwear, consumers will look beyond the sneakers and comfy sandals that ruled lockdown-era shopping. In August 2021,

online searches for women's heels were up more than 200 percent compared with the same month in 2020.127 However, more practical heel shapes that cater to adjusted consumer preferences will likely remain popular even as people dress up again: footwear styles with the highest number of units sold in 2021 were wedge heels, rubber heels, thick or block soles and kitten heels.128 In summer 2021, similarly comfortable options like Gucci pool sliders and Tory Burch "Miller Cloud" sandals were cited as bestsellers by Bloomingdale's footwear merchandiser.129 Dressier sneaker styles were also high on consumer wish lists, particularly in the US, where searches for platform sneakers and brands such as Golden Goose were up 28 percent and 104 percent respectively.130

In contrast to the reinvigorated demand for occasion dressing, workplace wardrobes will witness increased casualisation in some markets, such as the US and UK, as people adjust to new ways of working, including hybrid office-home patterns. "Work looks and feels different now," said US-based retail consultant Kathy Gersch. "Virtual work and flexible hours aren't going to go away. Brands that believe old patterns will revive will fall by the wayside."¹³¹

Workplace wardrobes will witness increased casualisation in some markets, such as the US and UK, as people adjust to new ways of working, including hybrid office-home patterns.

In another sign of creeping casualisation, workplace returnees in many regions have been shopping for casual blazers rather than suits: global search volumes for blazers were more than 100 percent higher in August 2021 than in August 2019. In some markets like Germany, searches for suits were down. Even some traditional and corporate offices will adopt hybrid styles, replacing suits and heels with business-casual styles and sneakers. Of course, there are nuanced differences between markets, where dress codes in some regions and professions will necessitate a return to formality. This said, brands will still find opportunities to tap into the casualisation shift by developing products with new fabric options or hybrid styles. For example, athletic brands Lululemon and Athleta have expanded into workwear, while Hugo Boss collaborated with Russell Athletic to produce suits in jersey fabric, some of which have shorts in place of trousers.¹³²

In addition to the changes companies make across design, product development and merchandising, they may also need to employ fresh marketing strategies that align with those changes. For example, exuberance in marketing campaigns will likely mirror consumers' eagerness to dress up for social occasions again. As such, brands should consider bold ads and ambassadors suitable for the new mood, fine-tuning their approach to rapid shifts in social marketing trends on platforms like TikTok and Instagram to enable customers a seamless and instantly gratifying route to purchase new styles. At the same time, leveraging marketing channels that were largely ignored during pandemic, such as in-store events, will be increasingly important to build a sense of community and loyalty.

With consumer demand rebounding alongside ongoing logistics challenges in many global markets, 2022 pricing strategies should also be re-examined. Indeed, fashion executives across different value segments have cited plans to increase prices in 2022, with an average expected rise of 4 percent in luxury, 2 percent in mid-market and 5 percent in value, according to the BoF-McKinsey State of Fashion 2022 Survey.¹³³ These price hikes are in part due to ongoing supply chain disruptions that will impact margins (see "Logistics Gridlock" on page 32). However, they will also have downstream effects on how consumers

in each segment shop new styles to reboot their wardrobes.

Looking ahead, there will likely be increased appetite for experimentation and self-expression as consumers seek out more playful and energetic ways of dressing, boosting demand for novel designs, more adventurous colourways and creative pairings across categories in 2022.¹³⁴

"Often it's the case during times of crisis, people revert back to shiny fabrics, bright colours, clothing that can inspire happiness," said Londonbased trend forecaster Geraldine Wharry. "If you look at the 2008 [global financial] crisis, a couple of years after that, there was the trend starting to really gain traction in terms of bright clothing, almost clothing inspired by toy colours."¹³⁵ In the US, patterned trousers and women's garments in bright colours such as fuchsia, green, orange and purple were more commonly sold out through 2021 versus 2020, according to StyleSage.¹³⁶

The budding new consumer mood, which was captured in late 2021 by fashion critics like *GQ* magazine's New York-based Rachel Tashjian, is likely to continue feeding into aesthetic preferences in 2022. "During the opening stages of the pandemic, there was defeatism... but that's evolved into this type of exuberant attitude," she said.¹³⁷ Brand leaders are increasingly aligning their creative teams with the changing consumer sentiment: "People are ready for a little bit of optimism... [and] looking to be inspired," said J.Crew Group chief executive Libby Wadle.¹³⁸

"There will be more awareness of 'how can this [wardrobe] item also be recycled into other occasions?'"

Executives, merchandisers and buying team leaders at retailers including Moda Operandi and Intermix noted soaring appetite for bold and risqué styles in late 2021.¹³⁹ Indeed, this theme will likely extend into next year, with luxury players' Spring 2022 collections by brands such as Michael Kors and Chanel showing skin-baring looks at fashion weeks in New York and Paris.

In a bid to capture demand for new styles, particularly from younger consumer cohorts, fast and ultra-fast fashion players are upping their inventory turn. Asos, Boohoo and PrettyLittleThing are among those to have recently accelerated product introductions.¹⁴⁰ Chinese ultra-fast fashion player Shein consistently introduces more than 6,000 new products per day in limited units, with designs informed by customer data, which can be turned around in as little as three days.¹⁴¹ However, companies reliant on these business models are facing increased scrutiny for their environmental impact and labour conditions.¹⁴²

"There are huge contradictions at the moment [with the concurrent rise of both ultra-fast fashion and]... the mindful consumer," said Wharry. "I think we're at a tipping point when it comes to people associating the item they buy with its contribution to society... [but even for those who are less concerned about that aspect], there will be more awareness of 'how can this item also be recycled into other occasions?"¹⁴³ As such, a growing number of consumers are likely to allocate more of their wallet share to investment pieces and versatile items, even as inexpensive items and impulse purchases remain an important part of the wardrobe mix for many in 2022.

For most brands, the demand for new styles does not necessarily mean adopting bigger assortments, but instead using greater thoughtfulness around data- and demand-driven product launches and inventory mixes. With increased opportunities to collect consumer data through the growth in e-commerce spend, brands should track category shifts and pay special attention to how new assortments resonate with consumers.

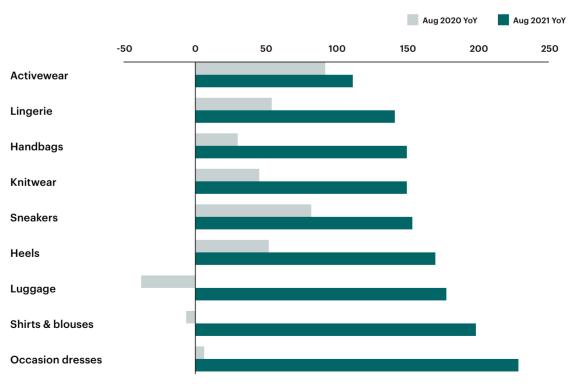
04. WARDROBE REBOOT

To respond rapidly to changing preferences amid next year's wardrobe reboot, brands should also strengthen the reactivity of their supply chains and think differently about the highly seasonal nature of the traditional fashion business. This means reimagining their collections and production cycles, while being prepared for uneven supply and demand. To achieve this, brands will need to collaborate with suppliers to carefully manage orders and inventories. They should also be aware of the need to balance consumer demand and pricing opportunities with the need for increasingly careful allocation of budgets to marketing and supply chain operations.

Exhibit 8:

Interest in categories that were down at the height of the pandemic, such as occasion dresses and workwear, is rebounding quickly

NUMBER OF PAGE VIEWS ACROSS CATEGORIES ON LYST.COM. % CHANGE FROM PREVIOUS YEAR



SOURCE: LYST, AUGUST 2021

PVH: Harnessing Creativity to Cut Through the Noise



Stefan Larsson Chief Executive, PVH Corp

The chief executive of the company that owns Calvin Klein and Tommy Hilfiger believes creativity will be even more of a differentiator in 2022 as fashion players move to better align merchandise planning with demand in the face of escalating supply chain challenges. By further elevating the iconic status of PVH. brands and using persuasive design to drive engagement, Stefan Larsson sees opportunities to gain market share.

- by Chantal Fernandez

Since becoming chief executive of the group that owns Calvin Klein and Tommy Hilfiger in February 2021, Stefan Larsson has been clear and consistent about his mission at PVH Corp. "I keep coming back to the same [idea], which is our ability to stay true to the iconic DNA of our brands and keep connecting them closer and closer to where the consumer is going," he says. In a crowded and disruptive digital market, the seasoned executive considers creativity one of the most important differentiators. One way to accomplish more creatively, he suggests, is for companies to break down the traditional boundaries between internal and external activities, in favour of a "network" approach.

Like most of its peers, PVH is emerging from a period of great challenges, during which the company moved to boost its e-commerce channels and reprioritise domestic consumers, especially in the US where foreign tourists generated more than a third of sales prior to the pandemic. To gain market share in the year ahead and indeed for the long term, "it's never been more important to invite in [voices from the outside], to let [them] be heard," Larsson said, referring not just to design functions but sustainability initiatives and workplace culture. "We have to be leading big companies and big brands in a much more entrepreneurial way than before to win."

Europe is PVH's largest region in terms of revenue, and its brands benefit from a healthier wholesale market there too. Are there lessons that you can take from your stronger markets to apply to the North American market, where discounting and the shift to digital have been disruptive?

The consumer is moving and continuously moving fast - and the barriers have come down, and the noise levels have come up, and the consumer has all this choice - so it's the importance of connecting with the consumer through creativity and design that drives engagement. Equally important is to connect with technology and become more data driven to understand more about where the consumer is going. Having a systematic, repeatable operating model is also going to be more important going forward.

But how does that focus on being intimately connected with the consumer impact your global distribution strategy?

It's about growing with a mix in those channels that reflect where the consumer is going. The consumer also wants to shop at the likes of Zalando, About You, Amazon and Tmall, So increasingly, it's about winning in the digitally led marketplace, and looking at it as an integrated marketplace region-by-region and almost city-by-city. The biggest opportunity to grow, by far, is direct-to-consumer e-commerce and third-party e-commerce, both with pure players like Amazon, and with more traditional wholesale partners.

Most customers around the world have gradually started to return to their prepandemic lives or something close to it, but international tourism is still depressed; in the US, most international travel bans were only due to be lifted in November 2021. How has this informed your view on refocusing the business around domestic consumers?

Where we were the strongest with the domestic consumer pre-Covid is where we weathered Covid the best. And where we had the most dependency, or an overdependence on tourism, we had the most work to do to win more with that domestic consumer. So strength has to be built into every market [in terms of the domestic consumer going forward].

How do you see recent and future supply chain disruptions permanently changing your production

strategies and your sourcing footprint?

We still as an industry have too long lead times, and there is a big opportunity to better match planning and buying to demand, and that's something that we learned when Covid hit. The second-biggest learning is to build resilience into the supply chain now, with an awareness that [crises like] pandemics do happen. Also to build in a geographic and partnership approach where we are able to compensate for what happened during [an event like the] pandemic and continue to supply the business with goods.

How are you thinking about cutting down on lead times next year?

For us, it starts with making sure that every single product in the assortment has an intent, and our focus is on the most essential categories and then, within those categories, developing hero products. Once we do that, we create the foundation for planning and buying inventory closer to demand, because we have fewer SKUs and more focused product silhouettes. Then we can work more with flexible and more agile supply chain set-ups, cutting the lead time by getting much more focused and upfront in the categories and the product silhouettes that matter, and then getting closer [to demand] when it comes to deciding fabric, colour and where in the world these products go.

Many companies have benefitted from reducing their inventory and focusing on their hero products, and that's helped them cut down on discounts and raise their

average unit retail (AUR). What will distinguish the companies that are able to keep that momentum going in 2022 from those sliding back into bad old habits?

The winners will be those who keep developing a systematic focus on building assortments of products that [stand] out in a sea of generic products. Next year, I believe we are moving into an era in this sector where creativity will become even more of a differentiator — style, taste, original creativity — and then technology will be an amplifier of that. But I'm surprised that there hasn't been more conversation about the importance of competing with creativity.

Tommy Hilfiger was still staging runway shows before the pandemic, but Calvin Klein no longer does, and both brands have been focused on collaborations. In our fastmoving digital world, do you see collaborations as the best way to create halo moments that attract customers to your brands?

The consumer appreciates the iconic brands with staying power, where they have a certain level of predictability. They also love creative newness like never before, and the mix of those. Staving true to the iconic nature of your brand, and then utilising that iconic nature as a platform to amplify new up-and-coming creativity - it creates newness and relevance for the consumer. The consumer is taking down barriers. They don't look at it like, "Is this Calvin or Heron Preston?" They're saying, "Oh, I love Calvin, and I love what Heron is doing, and I love the mix." So that, I believe, will just continue.

Are there trade-offs when moving towards sustainability goals while also optimising the supply chain, whether that relates to environmental concerns or workers' rights?

Our experience is that most often they go hand-in-hand. We just had our big yearly supplier summit. What I asked them for, and what I committed to them, was to tap into some of their innovation and expertise because a lot of them are moving forward in making more sustainable sourcing and production. One mega trend I see overall in the sector is the importance of breaking down the traditional boundaries of what's in the company and [what is done externally]; what can be accomplished together as a network - whether it's creativity, sustainability and supply chain, or technology. It's looking at how we can follow the consumer and maximise our positive impact by working together in a way that breaks down the boundaries of what traditionally we said we wanted to do [internally] as a big company.

We've seen several textile recycling projects come out of both Tommy and Calvin. What do you feel has the greatest potential to scale in the next year?

Tommy has piloted something called Tommy For Life, where we bring back old pieces and clean and repair and resell them. We're taking a lot of action to try to see what we can do, and what can be scaled. We're moving forward on a number of fronts, and we are increasingly looking at identifying the big needle-movers that we can drive over the next few years to make a real positive impact. So it's a combination of going big — where we see we can go big right away, like sustainable products and VPPAs (virtual power-purchase agreements), and the solar roof on our [distribution centre in Venlo, Netherlands], to testing circular design and circular product initiatives — and testing small, so that we can then learn and scale over time. [But most of all, it's about] being humble enough to realise that we have 90 percent of the work still to do [in this area].

What about opportunities in the metaverse and virtual goods? Do you see that as something that could become a revenue driver for the business?

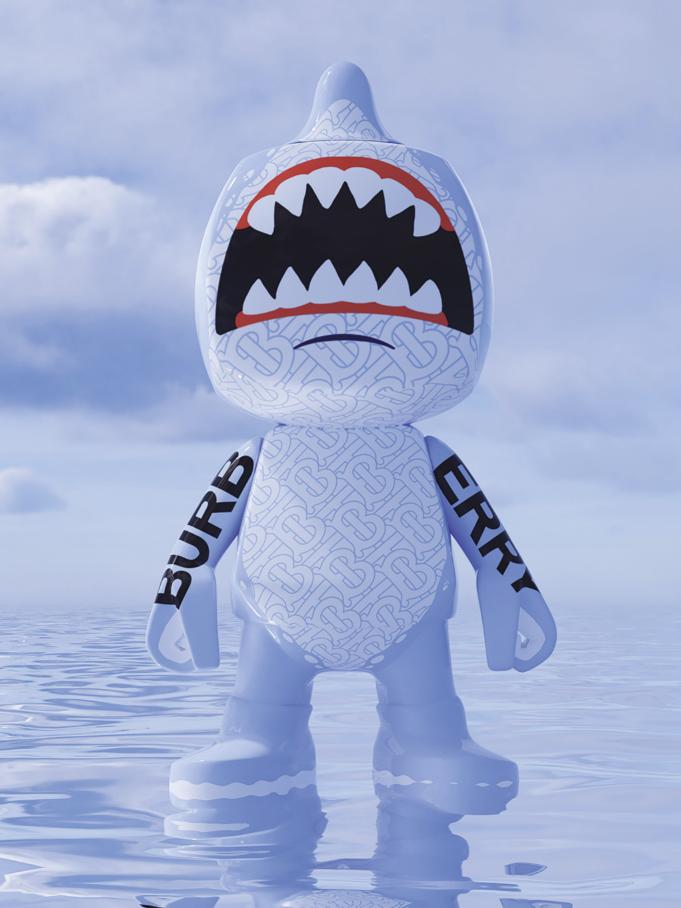
One thing we learned through Covid, and the disruptions ahead of Covid, is that when you see those exponential growth rates of consumer-shifting behaviour, you need to follow that, including the meta-world, and be open to how the consumer wants to engage and be open to the possibility that it could, sooner rather than later, be an income stream.

"[Most of all, it's about] being humble enough to realise that we have 90 percent of the work still to do."

The fashion industry is currently facing a talent crunch. What does it mean to be a competitive employer in 2022, and how might that evolve going forward?

Just like the consumer, team members also have a lot of choices. The traditional way of running a big company – where you told people what to do and the further down you got in the organisation the more you'd just execute - is going to be obsolete. If you're really clear on the vision, you're really clear on the priorities, you can empower team members across all levels of the organisation to make decisions to follow the consumer. It will put pressure on us to become much more inclusive, much more engaging and much more diverse. It's going to be our job to invite team members, independently of where they are in the organisation, to engage and see that they have impact in not only driving to become one of the winners from a shareholder return perspective, but also doing it in a way that maximises our positive impact from a [diversity and inclusion] and sustainability perspective.

This interview has been edited and condensed.



05. METAVERSE MINDSET

As consumers spend more time online and the hype around the metaverse continues to cascade into virtual goods, fashion leaders will unlock new ways of engaging with high-value younger cohorts. To capture untapped value streams, players should explore the potential of non-fungible tokens, gaming and virtual fashion — all of which offer fresh routes to creativity, community-building and commerce.

As digital environments come of age, they are transforming from linear and transactionfocused spaces into multi-dimensional, experiential and collaborative virtual worlds. Tech-savvy and younger cohorts are spending increasing amounts of time in these spaces from social media and gaming to virtual realities — and are adopting multiversal identities along the way. At the vanguard, digital assets in the form of virtual fashion and non-fungible tokens (NFTs) are offering new ways for consumers to shop, exchange goods and inhabit those identities.

Hyper-interactive and creative digital environments are a natural evolution of how people use technology and reflect the ever-growing amount of time consumers are online. Gen-Z spent an average of eight hours per day on screens in 2020.¹⁴⁴ Part of the appeal of virtual worlds is the chance to engage with others and build communities — a need that was exacerbated when global Covid-19 lockdowns put an end to most in-person social contact. As digital spaces become more dynamic, some consumers are participating in "digital campfires,"¹⁴⁵ around which they can connect with others who share their values, have conversations, tell stories and co-create.

These soaring levels of engagement have spawned a new generation of digital fashion

creatives, who are pushing the limits of possibility online. Brands, meanwhile, see the emerging "metaverse," in which people work, play, socialise and shop, as an opportunity to engage more deeply and creatively with their customers and unlock new value streams.

"There are more and more 'second worlds' where you can express yourself [but] there is probably an underestimation of the value being attached to individuals who want to express themselves in a virtual world with a virtual product, [through] a virtual persona," said Gucci's chief marketing officer Robert Triefus, citing the 19 million visitors who came to the Gucci Garden within the Roblox gaming metaverse.¹⁴⁶

The \$176-billion gaming industry, which attracts more than three billion players globally, has a long history of community-building.¹⁴⁷ Meanwhile, the metaverse is becoming a big business, with funding pouring in from investors. Epic Games raised \$1 billion in April 2021 to accelerate its work in building connected social experiences across a metaverse of linked games and services.¹⁴⁸

As gaming increasingly becomes an extension of the real world, and with the pandemic supercharging participation, it has become a prime target for fashion brands. In many cases,

engagement has taken the form of collaborations with gaming platforms to design virtual fashion assets. Ralph Lauren partnered with South Korean social network and avatar simulation app Zepeto to create a virtual fashion collection, giving users the opportunity to dress their avatars in exclusive products, or appearance-altering "skins." Gucci has created digital assets for gaming platform Roblox, as well as for Pokémon Go and Animal Crossing. Some brands have set their sights even higher. After unveiling its Autumn/Winter 2021 collection in the form of a fully-fledged video game,149 Balenciaga teamed up with gaming giant Fortnite to unveil a collaboration including shoppable virtual clothing and physical products. It advertised the partnership across traditional and metaverse channels.150

As gaming increasingly becomes an extension of the real world, and with the pandemic supercharging participation, it has become a prime target for fashion brands.

The opportunities in gaming are extensive and offer a platform to engage younger consumers, as well as create buzz with cohorts that would not usually interact with brands in physical formats. Tapping into in-game merchandise further allows brands to monetise digital assets where it is the norm to pay for elevated experiences.

Virtual clothing is picking up momentum across a range of digital environments. "Gamers are famous for buying skins in games [but] we have two sets of [broader] customers," said Daria Shapovalova, co-founder of DressX, a platform that estimates the total addressable market for digital fashion at \$31 billion¹⁵¹ and has more than 100 partner designers offering digital fashion items. "First, there are those Millennials who immediately understand the idea of digital fashion and are active shoppers of luxury goods; they want to try something new, so they use it to elevate their social media. Then there are Gen-Z customers who are on platforms like Snapchat or TikTok, where video is becoming the main communication tool rather than the still image."¹⁵²

Indeed, for some consumers, digital fashion is the natural extension of applying social media filters on platforms like Instagram and Snapchat, says Simon Windsor, co-founder and joint managing director at Dimension Studio, an agency that worked with Balenciaga on its video game.¹⁵³ "We're just at the tipping point of this new era… It starts to change the meaning of fashion itself."¹⁵⁴

Beyond social media and gaming, artificial intelligence (AI) and augmented reality (AR) technologies present additional opportunities for new business models leveraging virtual fashion. Online fashion wholesale platform Ordre uses 360-degree view technology to present seasonal collections through online showrooms, offering a complementary channel to facilitate management of luxury wholesale networks. Elite World Group and Tommy Hilfiger have recently partnered on various virtual ventures, including avatars of models walking 3D virtual runways.¹⁵⁵

Much of the excitement around virtual environments is directed towards NFTs, which have seen an explosion of interest over the past year. NFTs are unique crypto assets whose authenticity and ownership are verified on blockchains and are bought, sold and exchanged in the metaverse, often with cryptocurrency. Their uniqueness means that the value of some NFTs can skyrocket: one created by digital artist Mike Winkelmann — also known as Beeple — was sold at Christie's auction house in 2021 for a recordbreaking \$69.3 million.¹⁵⁶ NFT platform OpenSea exceeded \$1 billion in sales in the first seven months of 2021.¹⁵⁷

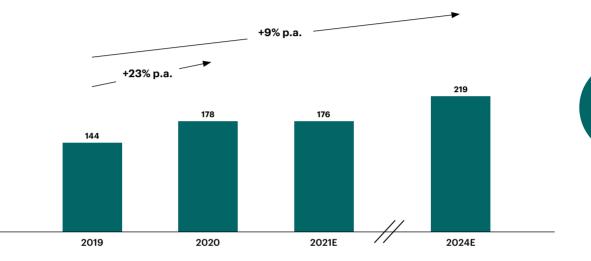
Proponents of NFTs argue that the recent boom is no flash in the pan. "This is fundamentally going to change digital ownership, creative structures, the creative economy, how we view

05. METAVERSE MINDSET

Exhibit 9:

The global gaming industry grew rapidly in 2020 and is on track to be worth \$219 billion by 2024

VIDEO GAME MARKET SIZE, USD BN



SOURCE: NEWZOO, KEY NUMBERS 2021

money even," said Karinna Nobbs, co-chief executive and chief experience officer of NFT marketplace The Dematerialised. "This is bigger than the internet."¹⁵⁸

In fashion, NFTs have a wide range of use cases, ranging from product authentication (see "Product Passports" on page 88) to serving as collectable pieces in their own rights. With consumers seeking to collect and invest, digital fashion creators such as The Fabricant, DressX and RTFKT are finding audiences for digital clothing authenticated by NFTs. Meanwhile, some companies are tapping into the excitement around NFTs by experimenting with alternative engagement models: Adidas attracted headlines when it collaborated with The Fabricant and model Karlie Kloss to launch a competition for creators to make their own NFT versions of the WindRdy parka jacket.¹⁵⁹ In 2021, there was a wave of NFT engagement among luxury players, often via the gaming universe. For its 200th anniversary, Louis Vuitton launched a video game with collectible NFTs partially designed by Beeple. The game contained NFT art that could be acquired by players in a story echoing the journey of the brand's founder.¹⁶⁰ Burberry created NFTs within the Blankos Block Party game, featuring digital vinyl toys that live on a blockchain. Adorned with Burberry's TB summer monogram, the limitededition Burberry Blanko Sharky B NFT can be purchased, upgraded and sold. The collaboration also includes branded in-game NFT accessories, including a jetpack, armbands and pool shoes.¹⁶¹

Beyond gaming, Farfetch has partnered with digital fashion platform DressX and Crypto.com, a marketplace for NFTs, to launch a virtual collection.

Dolce & Gabbana collaborated with Unxd, a curated marketplace for digital luxury and couture, to create an inaugural nine-piece collection of NFTs sold alongside physical couture.¹⁶²

With no shortage of marketing hype, there are indications that digital fashion assets can generate significant revenue streams. Dolce & Gabbana's collection fetched the equivalent \$5.7 million.¹⁶³ Still, monetisation opportunities are likely to be contingent on the psychology of scarcity and limited editions driving NFT mania — together with the security of authentication and the potential for community-building that they provide. The most likely fashion segments to lead the way are luxury and streetwear.

What is undisputable is that fashion industry leaders are interested in exploring the potential of virtual fashion.

"We say to any fashion brand we work with: it's experimental. It's not always going to work and we can't guarantee it will work," said Amber Slooten, co-founder and creative director of The Fabricant, a digital fashion house that helps brands create their own virtual products and has worked with brands including Adidas, Marques Almeida and Buffalo London.¹⁶⁴

Amid the hype, there are also reasons to exercise caution. One concern is the environmental impact of the blockchain technologies that underlie NFTs and, in particular, the energy required to validate transactions. Cyber security is also a potential cause for concern (see "Cyber Resilience" on page 97), with counterfeiting and security breaches a significant threat. A recent cyber attack on the artist Banksy's official website caused a collector to pay £244,000 (\$334,000) for a counterfeit NFT.¹⁶⁵

"To assume that... NFTs or more generally blockchain won't be an incredibly volatile environment for the next five years is to have forgotten the lessons of history when it comes to the internet," said Ken Seiff, a managing partner at Blockchange Ventures, a venture capital firm investing in early-stage blockchain technology.¹⁶⁶

At a minimum, fashion's foray into the metaverse promises new routes for consumer engagement. This will support creative branding strategies, enable immersive consumer experiences and generate excitement among highly sought-after consumer groups.

Looking ahead, the buzz around NFTs will continue to build as increasing numbers of fashion brands seek paths to differentiation and launch creative experiments. As consumers spend more time interacting online, their interest in collecting and displaying digital objects is likely to deepen. However, they will also seek out opportunities for co-creation and will expect brands to engage with digital assets in a format that is native to the spaces they inhabit, rather than content that repeats across channels.

The crypto fashion opportunity will demand significant investment, experimentation and a new playbook. Brands will need a strategic mindset and a willingness to develop partnerships and harness a variety of talent to deliver high-quality content, either in-house or via third-party collaborations. In an arena characterised by a large amount of hype, it will pay to seek out business cases that spark excitement but remain on-brand.

The crypto fashion opportunity will demand significant investment, experimentation and a new playbook.

To do this, it may be necessary to take a new lens on ROI, focusing on less measurable benefits such a brand awareness and marketing impact, as well as setting flexible targets that are calibrated to potential, rather than focusing exclusively on the bottom line. Flexibility will be key, and brands should remain cautious in deploying their capital. However, the risks should not deter them from engaging with this rapidly growing digital universe.

Gucci: Testing Luxury's Opportunities in the Metaverse



Robert Triefus Executive Vice President and Chief Marketing Officer, Gucci

Intangible products such as NFTs and digital fashion used in games and other virtual environments are a fast-growing area of interest for luxury brands, but will their experiments in the metaverse pay off? Gucci's chief marketing officer Robert Triefus believes the immersive world signals a paradigm shift and expects it to drive a 'very significant new revenue stream' for the brand in the years ahead.

- by Robert Williams

The metaverse became one of the fashion industry's hottest buzzwords in 2021, as interest in digital products linked to blockchain-powered nonfungible tokens (NFTs) exploded, and activity on virtual reality interfaces surged as the global fanbase of video games made their presence felt. Luxury brands raced to get a foothold in these fast-evolving virtual worlds, with Gucci among those leading the charge.

In 2021, Gucci auctioned off its first NFT and issued its first-ever virtual sneakers, selling the 3D animated kicks for \$12 a pair. Staging virtual brand activations on the Roblox platform and life simulation game The Sims, it has also created assets for Pokémon Go and Animal Crossing. The

brand even hired a dedicated team to work on developing digital products under creative director Alessandro Michele. **Overseeing Gucci's experiments** in the metaverse is Robert Triefus. the brand's chief marketing officer who has been a central player in a multi-year push to build a sprawling and highly engaged online community. But establishing Gucci's foothold in the virtual realm isn't just about marketing, Triefus says. In the years to come he expects the metaverse to become a "very significant" driver of revenue growth.

As blockchain technology burst into the digital art world with the emergence of NFTs, Gucci was quick to get involved, auctioning off an NFT for charity in June 2021. Since then, brands including Dolce & Gabbana, **Rimowa and Louis Vuitton** have also released NFTs. But luxury brands aren't known for being first adopters of new technologies and NFTs remain a niche market, so what is it about this space that has the industry in such a hurry to participate?

The industry has changed. Whereas back in 2000, naysayers were saying e-commerce could never be a luxury experience, today there is a deeper understanding that digital can lead to enhanced [client] experiences. When it comes to NFTs, it's going to require a lot more time to understand what they can represent in terms of customer experience or valueadd. But you've seen a significant number of brands within the sector saying, okay, we believe that NFTs have relevance, we're

not 100 percent sure yet what that relevance is but we're going to pilot [this], we're going to experiment, and have some learnings and insights as a result.

Why is the audience for NFTs an interesting market to engage with? Is there really significant overlap between luxury consumers and the market for NFTs?

As we think about the Gucci community, we do think about adjacencies, or other communities and cultural groups that potentially intersect. Digital art has been a growing area of cultural intersection with fashion for a few years.

How valuable to you is the intersection that NFTs have with the cryptocurrency community?

Cryptocurrency is linked almost inextricably to NFTs and that's an area with great future potential. I think cryptocurrencies will progressively become better understood, and also some of the issues surrounding [blockchain's] sustainability, which have been of concern for NFTs too, will be resolved. It's an area of test and learn, but I would suggest in probably a year or two these areas will be much more pervasive in terms of how fashion brands are engaged.

The NFT space still feels like it's only relevant to a fairly narrow swathe of fashion consumers. What evolutions could help pave the way for broader adoption?

One is the actual application. There are opportunities around authentication, providing an additional sense of authenticity and security to customers. Or around added value that comes with specific products, where there may be a narrative linked to it. Digital collectibles may inspire physical manifestations. This will take time, as brands are [just] beginning to understand how they can add value through NFTs. Then, as with any new technology, the customer equally needs to understand what's in it for them, how you purchase NFTs, how you potentially resell them. That learning experience is essential as a foundation.

Isn't there also an issue around customers' ability to enjoy them? It's not necessarily intuitive, how you would admire an NFT or show it to somebody.

Yes. The ease with which the end-user can understand, benefit and appreciate what NFTs offer still has a way to go.

NFTs' valuations skyrocketed in early 2021 but fell significantly later in the year. As a luxury brand, whose business is based on selling things that are meant to retain their value over time and be quite durable, do you have concerns about the reputational risk of being a first mover in a space like this?

When you test and learn, you always do that with an understanding that the learnings may move you not to proceed. Is it better to test and learn or sit on the sidelines? If you ask me, it's better to test and learn.

Speaking about the metaverse more broadly – whether it's NFTs or your recent projects on virtual reality interface Roblox, where you staged a Gucci Garden exhibition and sold high-top sneakers –

what are some of the top-line learnings your team gained from these experiences?

There's the dynamism of the gaming world, which has grown significantly, probably because of [pandemic] lockdowns, but also because of the innovation that is going into the experience. Then there are more and more second worlds where you can express yourself. There is probably an underestimation of the value being attached to individuals who want to express themselves in a virtual world with a virtual product. [through] a virtual persona. The idea that everything has to be physical is very quickly being disproven. We had 19 million visitors to the Gucci Garden within the Roblox metaverse.

Could you tell us a bit about how fashion brands' deals are structured with emerging players in the metaverse, like Roblox or The Sims? Are any brands actually seeing revenue from these initiatives so far, or is it more of a marketing investment?

It depends on the objective. It might be about branding, or a revenue share, or a combination of the two. I won't tell you how we structured our different deals [but] what I can tell you is that we have proven to ourselves through these collaborations that the virtual world can create a very significant new revenue stream.

How significant? How lucrative do you think the metaverse could become for brands and how soon can it be monetised?

Roblox has a remarkable market capitalisation... and they've only been around for a very

short while. This demonstrates that they have become very successful at understanding how to monetise virtual experiences. We know that people are willing to pay good money for NFTs, for digital collectibles, and to have a second life in the metaverse. So the revenue potential is absolutely there. One has to understand how to curate the experience as in the physical world, and make sure that experience is delivering what the customer would expect from the respective brand.

Still, with some initiatives in the metaverse it's hard not to suspect the brand is doing it for the headlines. How much of the activity we're seeing in this space is just tech-washing?

Of course, to be perceived as a brand that is innovative, that is leading potentially the industry or the sector, those are great perceptions. But I think Gucci has been recognised as a brand that is authentic, that doesn't put marketing ahead of trust with its community. There's too much at stake in these innovations. You've got to go into it with your eyes open and a belief that they can ultimately benefit the business and the brand. We have a dedicated team that is focused on this area. We really want to be able to understand what it is like to exist in the metaverse.

One thing that feels like a sticking point with virtual products is that they're often limited to one specific platform. Consumers are bouncing around between social networks and games, so does it make sense to buy a digital product that is only usable in one of them? Are any

solutions emerging for better compatibility?

In terms of collectibles and digital assets, we certainly want to try to create value by allowing assets to be used in multiple universes or metaverses. Where that isn't feasible, we have to look to create something that is appropriate and authentic to a specific metaverse. With The Sims and with Roblox, the way we entered those experiences and those worlds was to co-create with creators from those communities, who can ensure there is authenticity.

Social media platforms remain the "second world" we're most familiar with – and it's one where Gucci is very active. Since the pandemic, you've left the fashion week calendar and have been setting your own pace for releasing designs and content online. What's working and what isn't right now in terms of your social media investments?

Because of Covid, we decided not to put on physical events [until] our first physical fashion show for some time, [which was] on November 2nd in Los Angeles. The way that we have been able to navigate these unusual circumstances has been to exploit all the digital platforms that are available to us. In the West, I'm thinking of Instagram, Snapchat, TikTok, Twitter, YouTube. Then, in China and in the East, there's another whole ecosystem. Each platform's community is based around a certain type of experience, and if you go on to that platform with an experience that isn't relevant, it's not going to be successful.

This interview has been edited and condensed.

FASHION SYSTEM

06. SOCIAL SHOPPING 07. CIRCULAR TEXTILES 08. PRODUCT PASSPORTS 09. CYBER RESILIENCE 10. TALENT CRUNCH

06. SOCIAL SHOPPING

Social commerce is experiencing a surge in engagement from brands, consumers and investors alike as new functionality and growing user comfort with the channel unlocks opportunities for seamless shopping experiences from discovery to checkout. Though use cases differ across global markets, brands should double-down on tailored in-app purchase journeys and test opportunities in technologies such as livestreaming and augmented reality try-on.

The use of social media to discover and shop for fashion gained traction over the course of the Covid-19 pandemic as customers — unable to visit stores or socialise in-person during global lockdowns — spent more time at home scrolling through their feeds. Indeed, 74 percent of consumers say that they are now more influenced to shop via social media than they were before the pandemic, and 70 percent cite clothing as one of the product categories they shop for most on social media.¹⁶⁷

While Western markets may still lag China in rates of adoption, social shopping has gained a global foothold and is poised to grow in the year ahead as social media giants from Facebook and Instagram to YouTube and Snap Inc. invest heavily in shopping features and take advantage of new functionalities. Looking forward, in the US alone, annual sales through social commerce are expected to surge from approximately \$37 billion in 2021 to \$56 billion in 2023 (this includes sales of all products and services agreed on social platforms regardless of the method of payment or fulfilment).¹⁶⁸ By 2027, worldwide social commerce sales are set to reach over \$600 billion.¹⁶⁹

In some markets, social media is fast becoming a preferred way of shopping and interacting with brands, as social platforms are increasingly augmented with advanced technology. Indeed, social commerce – from in-app checkouts on social media platforms to sales transactions on livestreams - is already booming in China, where super-apps like WeChat offer users a wider array of functions than just social networking and messaging services, and social media players like Douyin and Xiaohongshu have boosted their e-commerce capabilities.170 In 2021, sales from social commerce across all sectors in China are set to top \$363 billion (which includes products or services purchased on social networks regardless of the method of payment or fulfilment), up 35.5 percent from the previous year.¹⁷¹ This is approximately 10 times higher than social commerce sales in the US.172

Product discovery and engagement with brands on social media is already commonplace across most global markets, with customers used to seeing brand activity and references alongside social exchanges with one another and influencers and within entertainment platforms. In fact, nearly half of US TikTok users say they have purchased a product or service from a brand after seeing it advertised, promoted or reviewed on the platform.¹⁷³ However, the next frontier for social commerce in Western markets is at the narrow end

FASHION SYSTEM

of the marketing funnel — seamlessly checking out in-app and paying for products within the social media ecosystem — where a reduced number of clicks to convert an impression into a sale offers a promising route to sales for brands.

As such, social media platforms are making moves to embed the entire shopping journey from discovery to checkout — into their core user experiences with functionality ranging from livestream sales and integrated product catalogues to augmented reality try-on. Fashion is the largest single category sold via social media in the US, as well as the leading category for livestream events,¹⁷⁴ suggesting that brands will find consumers willing to shop on these channels.

"There's no reason to say that just because we [in the West] don't have [companies like] Alibaba [whose platforms Tmall and Taobao have livestreaming functionality baked into their ecosystems], we won't have [livestream] e-commerce," said Sophie Abrahamsson, chief commercial officer at Bambuser, a B2B player equipping brands with livestream technology that in 2021 entered into a master agreement with LVMH. "I don't see it as an obstacle, it's just a different starting point."¹⁷⁵

Engaging with social commerce formats including those in livestream channels in China can provide brands with learnings that are beneficial when adapted for other geographies and platforms. Tommy Hilfiger held a livestream in China that attracted 14 million viewers and sold 1,300 hoodies in two minutes, which encouraged the brand to extend its livestream programme to Europe and North America thereafter.¹⁷⁶ However, specific market characteristics in China — including longstanding consumer comfort with in-app shopping and the outsized influence of key opinion leader (KOL) hosts for livestreaming — cannot be simply replicated in other markets.

"Tech, corporations and consumers need to be at the same pace. In China, all three things came together way before Europe and the US," said Mei Chen, Alibaba Group's head of fashion and luxury for the UK, Spain and Northern Europe.¹⁷⁷

Nevertheless, interest in social commerce is growing fast in markets like the US, where the number of people who make at least one purchase on a social channel during the calendar year is expected to be 50 percent higher in 2022 than it was in 2019, reaching 96 million customers.¹⁷⁸ In the UK, where consumers have been more hesitant, compound annual growth rates for social commerce usage are still expected to be more than 15 percent from 2019 to 2022, growing a further 9 percent in 2023 — suggesting that 15 million people will have made a social commerce transaction during that year.¹⁷⁹

Social commerce consumers typically skew young, meaning the medium has special appeal for brands targeting Gen-Z and Millennial consumers. This means there is still significant room to grow as consumers become more comfortable with in-app payments and platform functionality improves. Brands have a window of opportunity to tap into local consumer needs and build strategies that capture market share early.

To connect brands with consumers, global social media giants are doubling down on developing in-app shopping experiences. Instagram, which launched its Shop feature in 2020 and partners with brands such as Chloé, Michael Kors, Oscar de la Renta and Marc Jacobs to make products shoppable either in-app or by steering customers back to their own websites, is ramping up shopping features such as Drops. This is a new destination within the app where consumers can discover and buy the latest and upcoming product drops from brands like Adidas.¹⁸⁰

Meanwhile, Snapchat is applying its augmented reality capabilities to enable users to virtually try on clothes and accessories from brands such as Prada and Piaget, and TikTok has been expanding commerce partnerships and functionality, testing livestreamed shopping with select brands.¹⁸¹ In the US, during Walmart's first

06. SOCIAL SHOPPING

shoppable livestream fashion event with TikTok, it gained seven times more views than anticipated and grew its TikTok followers by 25 percent, according to William White, chief marketing officer for Walmart US.¹⁸² In August 2021, the social video platform announced an expansion of its partnership with Shopify including a pilot test of TikTok Shopping with select merchants across the UK, US and Canada, which could help brands enable social commerce.¹⁸³

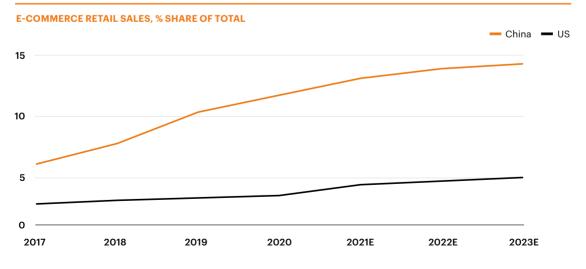
Looking beyond tech giants and incumbents, new venture capital-backed entrants, such as Flip and Chums, are offering fashion brands opportunities to engage with shoppers on hyper-immersive platforms, while platforms such as Amazon-owned Twitch, Discord and Clubhouse (which do not currently offer in-app checkout features) enable brands to target specific demographic cohorts. In the case of Twitch and Discord, for example, their gaming-enthusiast user skews male, attracting attention from menswear and streetwear companies such as sneaker marketplace StockX, which joined Discord to promote its latest products.¹⁸⁴

Brands looking to leverage communityspecific platforms as a way of boosting the discovery phase of social commerce should take care to engage authentically with users. "You don't have to be like the audience, you don't have to pretend [to be] one of them if you're not, they'll see straight through it. All you have to do is show you understand them," cautioned Adam Harris, global head of Twitch's brand partnerships studio.¹⁸⁵ Meanwhile, outside the tech ecosystems of the US and China, specialist social commerce platforms are gaining ground such as Trell in India, which saw investment from the likes of H&M Group.¹⁸⁶

While social media channels have typically been viewed as a means to increase reach and drive traffic to brand-owned websites or

Exhibit 10:

Social commerce penetration in both China and the US will continue to grow



SOURCE: EMARKETER, JANUARY 2021

FASHION SYSTEM

multi-brand e-tailers — owing to limited platform functionality, hesitation on the part of brands to relinquish control of checkout and payment data to third-party channels and previously lukewarm reception from consumers — social commerce is reaching an inflection point. "The old 'buy' button doesn't work… you are taking your shopper away from their online experience to fulfil a purchase… [so] you burst the bubble. You create what we call an 'abandoned basket effect,'" said Maria Prados, head of vertical growth teams at Worldpay.¹⁸⁷

Soon, however, even seamless payments will become table stakes, so brand laggards must overcome the reluctance to surrender control and increasingly have conversion in mind when investing in social. With the number of fashion brands adopting Instagram as a sales channel growing, more are likely to follow their lead next year, moving away from a focus purely on reach and seizing opportunities to generate paying social customers.

Largely thanks to WeChat, China has seen huge strides in frictionless payments, shortening the sales funnel by reducing the time and friction between discovery and purchase. The ability to interact with sales agents on WeChat to make purchase decisions, and the importance of miniprogrammes both on WeChat and other platforms in the Chinese social ecosystem, point to a future integrated model that global platforms could look to for inspiration.¹⁸⁸

Brands that may have had concerns about relinquishing valuable customer and conversion data to third-party channels will need to devise innovative ways to collect data, such as through discount code-driven sign-ups. Alternatively, some brands are choosing to build their own in-house social channels. For example, US retailer Nordstrom created its own livestreaming platform in 2021, where it hosted shopping events at which customers could chat and purchase products from featured brands such as Burberry.¹⁸⁹

Brands bold enough to test social-first strategies will be rewarded as younger consumers

increase their time spent on digital platforms and spark trends that are born on social media. "Whether or not Gen-Z is your primary consumer, they definitely set the trends and drive brand heat. And when you look at where trends start and where things go viral, it is almost always with Gen-Z," said Jenny Campbell, chief marketing officer at Kate Spade.¹⁹⁰

To capture the demand for social commerce, brands will need to implement a strategy that can scale fast. The speed at which TikTok took the world by storm is just one example of the pace of uptake, so fashion brands will need to be agile to ensure they are meeting consumers in the digital spaces where they are spending time. As such, companies should tailor their approach for existing mainstream platforms, while conducting A/B testing on emerging platforms to experiment with reaching specific customer segments.

However, brands will need to apply a tailored approach to users of each platform; while some might welcome a more playful style of engagement, such as those on TikTok, others are more conventional. There are regional differences, too, with consumers in some Asian markets approaching livestreams with more of a transaction-forward, deal-focused mentality than consumers elsewhere. While navigating these nuanced considerations, brands will also need to stay abreast of the latest trends and innovations, as currently niche platforms could very quickly become mainstream — or currently buzzy platforms could just as quickly lose their edge over rivals.

Looking ahead, as shoppers place increasing importance on convenience, brands that can unlock the potential of social commerce by offering simple, frictionless shopping will be well-positioned to unlock revenue streams. Indeed, brands thinking ahead to the longer-term growth of social commerce and permanent changes in global consumer shopping habits will use next year to test and learn from approaches that leverage social media platforms to create seamless shopping experiences from product discovery to checkout.

Snapchat: Enhancing the Social Shopping Experience



Rajni Jacques Global Head of Fashion and Beauty Partnerships, Snap Inc.

Prada, Dior and American Eagle are among the fashion brands harnessing Snapchat's augmented reality lenses, which overlay digital images on the real world to create immersive user experiences or allow shoppers to virtually try on products. As Snap Inc. works to make its social platform more shoppable, the company's new global head of fashion and beauty partnerships, Rajni Jacques, is tasked with bringing more top brands into the fold.

- by Marc Bain

After years as a fashion director at Condé Nast titles Allure and Teen Vogue, Rajni Jacques switched gears. In June 2021, she moved to Snapchat's parent company, Snap Inc. to serve as its global head of fashion and beauty partnerships. Jacques joined at a time when the platform and its competitors were making big pushes into social commerce, launching more shopping capabilities directly within their apps. For Snap, which considers itself a camera company first, those capabilities have primarily centred on augmented reality (AR) and features such as virtual try-on that have drawn brands and retailers ranging from Prada and Dior to American Eagle and Champs Sports.

The aim thus far, however, has not been to turn shopping into a revenue stream by grabbing a cut of sales. Snap says it neither takes a commission nor charges fees for brands to use its AR products. Instead, the company, which

FASHION SYSTEM

derives effectively all its revenue from advertising, views shopping as a way to bolster its appeal to users and brand partners alike. Jacques's mission is to attract and assist those fashion and beauty brands looking to use Snap's technology to connect with its largely Gen-Z audience.

Snapchat recently launched a number of new products and features to support shopping on the app, such as expanding virtual try-on, improving the look and movement of fabric, and introducing API-enabled lenses that let brands create content based on real-time product inventory. Why is the company investing so much in shopping?

We think of ourselves as [a camera company] first, and when it comes to AR, we have about 200 million Snapchatters engaging in AR every single day. That truly is revolutionising how fashion and beauty brands operate. We're harnessing a different type of power when it comes to shopping [and] when it comes to retail, unlocking a whole new range of experiences for Snapchatters and people on the app to engage with products. Everyone gets to try on a variety of different products from makeup to shoes to sunglasses to jewellery, and there's way more that's coming down the pipeline. We are investing heavily in it because we know that brands are looking to, in a way, future-proof their businesses.

There are different ways shoppers can discover and buy products through Snapchat right now. There's the approach taken by retailers like American Eagle, which has set up a Shop tab on its profile page that users can browse, much like a regular e-commerce site, or there's Dior's approach with AR for its B27 sneakers to "Shop Now," which takes you to the product on Dior's e-commerce site. What else is Snapchat doing to make it easier or more enticing for shoppers to buy products directly in the app?

We are long-term investing in augmented reality and personalisation for everyone. As consumers, we love personalisation. Snap has been laying the groundwork for an improved online shopping experience and creating value for the shopper but also for the fashion brands, to help reimagine what their fashion [point of view] is [and] help reimagine their campaigns. AR is really at the forefront of this. And it is working. For instance. Dior's try-on campaign resulted in over [six times the] return on the ad spend. Gucci, when we did all their sneaker try-ons, and even their beauty stuff, reached about 20 million people.

But there are so many different ways brands can use our technology. We worked with Farfetch and were able to do voice-enabled controls, where shoppers can say what they're looking for, like "I'm looking for a polka dot jacket." We did something with Prada where they tapped into our gesture recognition, where it allows you to stand in front of the camera and with your actual hands swipe so you can change the colour.

If I'm a brand, what's the value of trying to attract shoppers on Snapchat versus other

social platforms, particularly since Snapchat's audience may be smaller than some of its bigger rivals?

It's all because of AR. To be able to play with a brand is exactly what Snapchat gives you [and] makes it very different in the marketplace. AR allows you to put [clothes] on. When it comes to beauty, being able to swipe different colours on your eyelids, different colours on your cheeks, or different lipstick colours. There's nothing like having an immersive experience.

Are there certain categories of products that shoppers are more willing to buy in the app?

Beauty is at the forefront of that, but then accessories: bags, shoes, jewellery.

Is Snapchat doing anything specifically to attract beauty brands and help them to engage users on the app?

Oh, yes. I work on that side with the bigger companies, but then I also make sure to work with smaller companies, diverse companies. I partner with a couple of smaller companies [like] Ace Beauté [and] Kaja Beauty. They're niche but they have such an array of product. Allowing them to create lenses we have something called the Lens Web Builder - where they can go in and create their business profile and create their own lenses themselves, so they don't necessarily have to have a tech arm to be able to do that. That allows them to be in the game with your MACs or [other] big companies.

One of the areas where Snapchat has really expanded its capability is virtual

try-on. You started with Gucci and shoes, and more recently expanded into other categories such as clothing and accessories. Which other fashion brands are using the function and what sort of products are they offering?

Your Pradas, your Diors, your Guccis. One of my favourite activations we did was with American Eagle. We did this thing with Connected Lenses. Imagine it being social shopping, going back to the days where you went with your friend to the mall and shopped. We created Connected Lenses to allow that immersive experience to happen. It helped consumers experience the same lens together, so they're in the same room together, like friends are actually transported to the American Eagle virtual store and can live chat, select outfits and do all those things that you would do in real life. We've done something with Piaget where we have a wrist try-on, so you can actually put your hand in front of the lens and see what a watch looks like on your wrist. With Kay Jewelers we did earring try-on. There are so many different brands that use the AR lens.

Shopping directly on social platforms in the US and Europe still happens on a relatively small scale compared to China. For brands and retailers, the value is still mainly as a place to market to shoppers. How are brands using Snapchat as the top of their marketing funnel?

Brands look at Snap and say, "Wow, there is a lot of innovation there. How can we be a part of that?" I work with them to create top-of-the-funnel business pushes and help them with their marketing plans: What can we do that, one, shakes things up? What can we do that, two, uses our products in the best way possible, so that everyone else can see all the cool things that we can create?

Are there any forms of marketing that seem to work better on Snapchat than others, specifically for fashion retailers?

When it comes to fashion, you have to truly give an experience that someone hasn't seen before, or you have to give an experience where they feel like there is an emotional connection to what you're giving them. Dior did a lens for one of their fragrances, and it changes your environment with all these flowers. You could be on the dingiest street in New York City, and you use this lens, and that dingy street gets transformed into something else. Allowing your customer to be part of something and experience something on their own using the lens is what really seems to work. Gucci did a lens, and it was tied to when they did a collaboration with The North Face. It's a camping experience. You can literally go from day to night through that, and it transports you to being outside, and really understanding what that collaboration is about. Anything that allows someone to feel something is obviously the way to go, as opposed to something that is very like, "Here is my shoe. Buy it." It has to have a narrative, a story, a feeling behind it for people to connect.

Where do fashion and beauty partnerships fit into Snap's larger goals as a company?

Being the head of fashion and

beauty, the mission is to bring the best organic opportunities across the Snapchat app, and Snap Inc. as a whole. That's the broad scope of it: to bring the top brand partners, really having them be part of our ecosystem. We define organic as a non-revenue opportunity. Hopefully, that will lead to deeper investment across Snap's products from the partners. We don't want it to be one-and-done.

Are there any lessons you were able to bring from your background in fashion media that have helped in your role at Snapchat?

I came from Condé [Nast] as fashion director of Teen Vogue and Allure, but my job wasn't necessarily just being the fashion director. As magazines started to get smaller it was about me doing a lot more. Not only did I look over the covers and the centre of book and stuff like that, but I also worked in brand partnerships. I also did branded content. I also worked with the business side to make sure that, alright, if we're going to have any experiential moments that tag back to that editorial title that I was at, what does that look like? Doing all those things, being able to create, and using that head gives me a broad range to use everything that I learned.

This interview has been edited and condensed.



07. CIRCULAR TEXTILES

One of the most important levers that the fashion industry can pull to reduce its environmental impact is closed-loop recycling, a system which is now starting to be rolled out at scale, promising to limit the extractive production of virgin raw materials and decrease textile waste. As these technologies mature, companies will need to embed them into the design phase of product development while adopting large-scale collection and sorting processes.

Globally, the fashion industry is responsible for around 40 million tonnes of textile waste a year, most of which is either sent to landfill or incinerated.¹⁹¹ Textile production, meanwhile, consumes vast quantities of water, land and raw materials. Engaging in closed-loop recycling is seen as a critical opportunity to both reduce the extractive production of virgin raw materials and limit textile waste. Closed-loop systems recycle materials again and again, so that they theoretically remain in constant circulation.

Textile production is more resourcedepleting than many other sectors. In the European Union, for example, the textile sector is the fourthbiggest consumer of primary raw materials and water (following food, housing and transport),¹⁹² while the industry's reliance on fossil fuel-based textiles like polyester only adds to the challenge. Yet there are pockets of the global fashion industry that are starting to get serious about addressing these challenges at scale by working towards developing closed-loop recycling processes that have the potential to limit textile waste, reduce carbon footprints and partly upend fashion's extractive business model.¹⁹³

Currently, less than 10 percent of the global textile market is composed of recycled materials,¹⁹⁴ and this is largely the product of open-loop

recycling using PET (polyethylene terephthalate) bottle waste, which does not address the need to recycle materials from the fashion industry and has been criticised for breaking the well-established closed-loop process of recycling plastic bottles into other plastic bottles.¹⁹⁵ If the industry is to reduce the volume of waste going to landfill and limit the extractive production of textiles, closed-loop recycling systems will be required at scale.

The shift to more closed-loop systems is underway, driven in part by regulatory efforts to support a circular economy, which aim to relieve some of the pain points relating to waste collection and sorting. The EU's Circular Economy Action Plan, scheduled for adoption in the third quarter of 2021, incorporates an objective to ensure circular economy principles are applied to textile manufacturing, products, consumption and waste management.¹⁹⁶ Meanwhile, the EU's Waste Directive Framework requires countries to separate all textile waste by 2025, and several European nations have implemented extended producer responsibility schemes, making brands and retailers responsible for post-consumer waste and requiring financial contributions from producers for the collection, recycling and reuse of products.197

"Regulators should keep on putting that

pressure on markets," said Patrik Lundstrom, chief executive of Swedish textile recycling company Renewcell. "Every country needs to take responsibility and create that circularity."¹⁹⁸

China published a five-year plan in July 2021 to develop its circular economy by promoting recycling, remanufacturing and renewable resources. In the US, the National Institute for Standards and Technology is making progress in its ambition to facilitate a circular economy for textiles.¹⁹⁹ Still, if the industry is to align with global climate objectives and its own commitments on sustainable materials, it will also need to take action at a brand level to make a difference.

One challenge the industry faces is achieving sufficient scale in closed-loop processes. However, recent innovations are starting to reach maturity, moving from pilots to proofs of concept on industrial levels.

If the industry is to align with global climate objectives and its own commitments on sustainable materials, it will also need to take action at a brand level to make a difference.

Mechanical cotton recycling, through which cotton is shredded into reuseable fibres, has been in use for a long time. One example of mechanical recycling is the large-scale pilot in Bangladesh by the Circular Fashion Partnership, led by the Global Fashion Agenda, which aims to capture and direct post-production waste back into the production of new textiles, as well as developing solutions for deadstock. The partnership plans to roll out to countries including Vietnam and Indonesia.²⁰⁰

Mechanical cotton recycling has historically been more difficult to implement for garments that are already worn, mainly due to challenges in collection and sorting. As a result, less than 1 percent of cotton was recycled in 2020.²⁰¹ However, among recent initiatives, Hong Kong-based yarn spinner Novetex Textiles, in collaboration with the Hong Kong Research Institute of Textiles and Apparel (HKRITA) has developed a method called The Billie System for the mechanical recycling of cotton blends. The system does not consume water or produce chemical waste and currently processes up to three tonnes of fabric per day.²⁰²

To enable recycling of the various textile fibres on the market, more innovative recycling solutions other than shredding are required. For non-blended materials, a number of industrialscale solutions are beginning to hit the market, and further capacity is set to become available. For example, Renewcell has partnered with brands including H&M and Levi's and has an agreement with Beyond Retro's parent company Bank & Vogue, which supplies post-consumer waste to Renewcell.²⁰³ Renewcell is building a new plant that will be able to recycle 60,000 tonnes of textiles a year by 2022. Meanwhile, US materials company Eastman is investigating using polyester in its new \$250-million recycling plant.²⁰⁴

One of the technical challenges facing the industry is the high proportion of garments made from material blends such as cotton and polyester, which make them hard to separate. Still, after years of research and development and pilot ventures, this is another area that is reaching maturity and scale. In Europe, viscose producer Lenzing and recycling company Sodra are working in partnership to increase the annual capacity of Sodra's technology for blended fibre, with the goal of processing 25,000 tonnes of textile waste per year by 2025.205 In Turkey, denim company Isko has signed a licensing agreement for the "green machine" technology developed by HKRITA, which recycles cotton and polyester blends.²⁰⁶ The technology is also being scaled with partners in Indonesia.207 In Australia, BlockTexx is building a textile recycling facility for polyester-cotton blends that aims to recycle 10,000 tonnes a year by the end of 2022.208

07. CIRCULAR TEXTILES

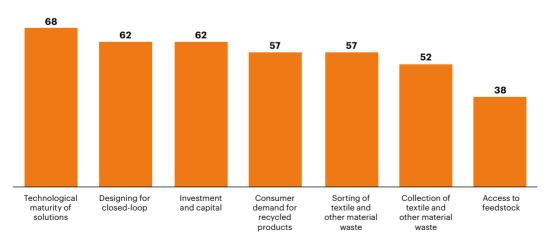
A critical piece of the used clothes recycling puzzle is collection and sorting. "If there can be larger-scale collection and sorting, that would help us tremendously," said Ronna Chao, chairman of Novetex. "I have limited space where The Billie System is housed, so I can't be the collector, storer and sorter all at once... [but] if we can partner with, for instance, NGOs or other players within the industry [in other countries], where they can do the collection and the sorting... then we can process that in a more meaningful way."²⁰⁹

To that end, authorities, waste companies and brands are making efforts to develop solutions. These offer some promise, but further efforts are required, including moving from manual to automated sorting at scale. For example, in Sweden, Sysav waste treatment and recycling company opened the world's first industrial-scale, fully automated textile sorting plant in 2020, with the capacity to sort 24,000 tonnes of textile waste a year.²¹⁰ In the same year, Belgium-based Valvan Baling Systems launched Fibersort, an automated sorting machine that can sort around 900 kilograms of post-consumer textiles per hour.²¹¹

Some companies are also pioneering digital solutions to manage material flows. Sorting for Circularity, created by Fashion for Good in 2021, is planning to launch a digital platform on which textile waste from sorters can be matched with recyclers. Brands including Adidas, Bestseller and Zalando are facilitating the project. In addition, a number of brands are helping to solve the sorting

Exhibit 11:

Technological maturity, changes to design processes and investment are considered most important in scaling closed-loop recycling



MOST IMPORTANT¹ FACTORS TO EFFECTIVELY SCALE CLOSED-LOOP RECYCLING, % OF RESPONDENTS

1 Responded "very high importance" or "high importance"

SOURCE: BOF-MCKINSEY STATE OF FASHION 2022 SURVEY

problem by encoding detailed information about materials into products with digital identifiers (see "Product Passports" on page 88).

A critical piece of the used clothes recycling puzzle is collection and sorting.

While these initiatives show the industry is making progress, some issues remain to be resolved. One significant challenge is that recycling facilities are sometimes far from the source of the feedstock, which could lead to significant emissions resulting from long-distance transport.

"We're taking clothes from [Asia] and bringing it all back to Sweden, making new Circulose [material], stripping it back and then making new viscose fibre. However, our next plant is going to be next to a harbour [and], of course, in the long-term, we probably want to have a plant also in Asia, and maybe one in the Americas," said Lundstrom of Renewcell. "There will be capex investment needed to make all this happen. How do we make that as low as possible and manage that? So that's another trade-off with going circular."²¹²

Experts mostly agree that closed-loop recycling will not realise its potential until products are specifically designed for that purpose, for example by facilitating the easier separation of materials through design. Claire Bergkamp, chief operating officer at Textile Exchange, a nonprofit aimed at improving the environmental standard of raw materials production, suggests that this also means incorporating the intention to recycle into design curriculums and industry-wide organisational thinking: "What's going to happen to the product when the first user is done with it? Is it durable? Will it have a long enough life? That's the crux. If you are intentionally making something that is not long-lasting, it needs to be recyclable," she said.213

For that reason, some parts of the industry are coalescing around common design standards, such as the Jeans Redesign Project by the Ellen MacArthur Foundation. By May 2021, 80 percent of the project's participants had made fabrics or jeans that complied with the guidelines.²¹⁴ Additionally, designers have more access to software that can support design with recycling in mind, such as the Circular Material Library from Circular Fashion, which showcases materials that have been tested and validated for future recyclability.215 Furthermore, innovations such as Ecocycle, a dissolvable thread recently launched by industrial thread company Coats, are making the recycling process more efficient, unlocking the removal of non-textile components and facilitating easier sorting of materials from the same garment.

"We know that it will be more challenging for some fashion brands — probably SMEs, for instance — to invest in closed-loop solutions at this early stage in the technology's development," said Shaway Yeh, founder of Shanghai-based fashion innovation and sustainability agency Yehyehyeh. "But designers really do need to make meaningful efforts to embed this principle in their studios now, if they haven't already. The creative teams in the business should be incentivised by leadership to harness some of their innate creativity to scale up circular material use. It's just a matter of priorities."²¹⁶

As an increasing number of fashion players commit to circular materials, scaling will be essential in collection, sorting and recycling. However, the rollout of industrial processes will drive down prices and boost demand for garments made from circular materials. To maintain a competitive advantage and secure access to circular textiles, fashion players may need to invest directly in recycling facilities and contribute to finding solutions for collection and sorting. Scaling, of course, will require capex and will mean decisionmakers will need to look past the still comparatively cheap costs of virgin materials.

07. CIRCULAR TEXTILES

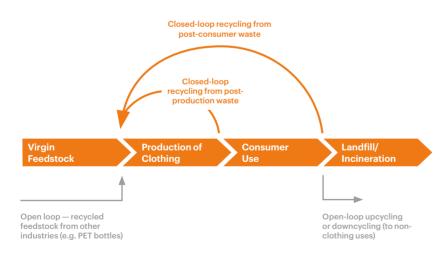
To be sure, closed-loop recycling processes also present environmental challenges, including greenhouse gas emissions and significant water use, with some critics suggesting that the reduction in impact from closed-loop processes will not be enough to slow down fashion's negative impact on climate change.²¹⁷ "[Closed loop] is not the silver bullet... the silver bullet is producing less stuff," said Bergkamp of Textile Exchange.²¹⁸

However, seen in the context of comparisons with open-loop — or indeed linear — models, closed-loop processes are an important part of a wider system change for circularity. "Recycled always has lower impact [than linear]. There's no questioning it," said Bergkamp. "It's probably a perfect solution for an imperfect situation."²¹⁹

While there is reason for optimism that many closed-loop technologies will reach industrial scale in 2022, fashion leaders will need to approach the challenge holistically, incorporating circular textile solutions into a wider effort to eliminate toxic chemicals, decarbonise the supply chain and reduce emissions, if the industry is to significantly reduce its levels of environmental harm.

Exhibit 12:

The shift from linear to circular models requires closed-loop recycling technologies to be scaled



In fashion, closed-loop recycling is when textile product waste (both post-production and postconsumer) is recycled into new textile products so that the materials remain in constant circulation (garment-to-garment).

This process contrasts with open-loop recycling, in which one product is recycled into a different product, simply delaying the material from going into waste once it cannot be recycled again.

SOURCE: SIMPLIFIED FORM OF A NEW TEXTILES ECONOMY: REDESIGNING FASHION'S FUTURE, ELLEN MACARTHUR FOUNDATION WITH ANALYSIS BY MCKINSEY, NOVEMBER 2017

EXECUTIVE INTERVIEW

Novetex: Encouraging Brands to Raise Their Game on Circularity



Ronna Chao Chairman, Novetex Textiles

As fashion brands look to pursue closed-loop recycling solutions, it is increasingly important to engage with suppliers who can help them move toward sourcing circular materials. Novetex Textiles has developed its own mechanical recycling process — a waterless, mostly automated system that produces no chemical waste — but the company's chairman Ronna Chao says reaching industrial scale and mass adoption of the new technology is a 'chicken-and-egg' conundrum.

Material innovations have long been front of mind for Novetex Textiles chairman Ronna Chao. but full circularity is a more recent endeavour at her family business, which spins yarns like Merino wool, cashmere and cotton to be shipped off to textile mills and knitters. In 2019, Chao negotiated a partnership with the Hong Kong Research Institute of Textiles and Apparel (HKRITA) and the H&M Foundation to develop a patented mechanical recycling-process: one that is waterless, chemical waste-free and almost entirely automated.

The six-step Billie System, named after Chao's late grandfather and Novetex's founder, sees unwanted fabric sanitised, separated from hardware like zippers and buttons, chopped to size, sorted by colour, shredded and sanitised again, then shipped as spools of fibre from Novetex's Hong Kong headquarters to be spun into new yarn at its other factories in

- by Rachel Deeley

nearby Zhuhai, mainland China. As fashion brands' interest in circular principles continues to grow, Chao discusses some of the remaining sticking points from the limitations of recycled fibres to logistical and regulatory roadblocks — and outlines where the industry's biggest players need to step up.

You've previously said that all your clients — both textile mills and consumer-facing brands — are now prioritising sustainability, and that Novetex's work is just one part of the bigger picture. What else needs to change across the value chain to create a truly circular economy for apparel?

I really think brands can do a great deal by sharing their stories, and the biggest barrier that I think we at The Billie [System] see nowadays is that when a lot of these brands come to us, they want to work with us, and they're very enthusiastic, but they do not want us to mention their names, they do not want to tell a story, and so the good work that they're doing in terms of sustainability and circularity is not widely known.

How could brands tell a better story about the closed-loop recycling that's now available from players like Novetex?

It's not just [about] having a label on the garment that says, "I used to be an old sock," it's more advocacy, maybe working with universities, working with research institutes... I think it's also good to tell the story of partnership, so if it's with a certain sorting company, or working with a certain logistics company, the story of different types of partnerships along the way, that could be very meaningful. The more people get involved [and] join this consortium, the better... Maybe storytelling is not the right term, and advocacy sounds too political – but really pushing it out. If somebody is doing something good, why don't they want to tell the world about it? That's what I want to say, because when they tell the world about it, that could really result in multiple layers of influence and a change in mindset and behaviour.

As a yarn producer, Novetex is quite far-removed from the final stage of garment manufacturing. How important is it that brands engage directly with you, rather than relying on the dialogue between yourselves and the next tier of suppliers?

It's very, very important, and I think over the last two decades our role has changed from just dealing with the knitter to very often dealing with the designer and the brands directly ... which is wonderful... We also have our role to play in pushing ... the movement forward. There are two [practical] ways to work with The Billie [System]. One is only to provide textiles for processing without buying any upcycled products from The Billie; the second is to purchase all the knitted products from the provided materials for a closedloop cycle.

What are some of the remaining challenges when it comes to integrating recycled materials into existing apparel supply chains?

That is a question that I would love to hear the answer to from the brands. For us, we're on the other side, trying to convince people, that "maybe [sourcing recycled materials] is a little bit pricier than what you'd expect, but this is something you must do." You may not be 100 percent circular or 100 percent sustainable from day one, but that has to be something that we move towards.

Are there issues with scaling and reaching that critical point of maturity in the technology?

Well, [brands] don't discuss scale with us, because they're not asking us for 20,000 pounds of upcycled textiles. In the few conversations that I've had with brands where we've gone a little bit beyond [that and] touched... on the topic of, "let's close the loop," what I've heard would be [questions about] quality and cost. Sometimes they do ask about scale, but it seems like they expect quality to be very, very high [and for] the cost to be much lower. They're giving us a mishmash of things, and they want something that comes out from all of that to be very useable and uniform. Perhaps there's a disconnect between what they're giving us, or what they think can be done with their textile waste, and what they're looking for.

Cost is certainly a factor; recycled fibres are typically more expensive than their virgin counterparts. When do you expect to see economies of scale, so that the cost of recycled fibres will be just as affordable, if not cheaper?

It's a real chicken-and-egg situation, because in order to reach that scale, we would need many, many more people to adopt using recycled fibres and yarns

in their design and production. Everything is connected; if consumers demand more of it, then the brands will make more, and then they'll place more such orders with us.

"In order to reach that scale, we would need many, many more people to adopt using recycled fibres and yarns in their design and production."

The Billie System currently secures most of its feedstock from B2B partnerships with fashion companies and hotel groups, which can provide unsold inventory, bedsheets or old uniforms, but is there an opportunity to bring postconsumer fashion waste into textile-to-textile recycling?

Right now, if there can be largerscale collection and sorting, that would help us tremendously. I have limited space where The Billie is housed, so I can't be the collector and the storer and the sorter all at once. We always talk about partnerships; if we can partner with, for instance, NGOs or other players within the industry [in other countries] where they can do the collection and the sorting, then let's say after six months they collect two tonnes of red sweaters, one tonne of beige sweaters, then we can process that in a more meaningful way.

It's interesting that you mention other key geographies. In Kenya and Ghana, for example, there are entire

industries and livelihoods built around buying and selling bundles of used clothing. How do these ecosystems form a part of a closed-loop, circular economy?

I think it's two separate things. I often say, The Billie System is not a garbage processing machine. We didn't create The Billie so that people can continue to make more, and sell more, and throw away more. It's really a tiny, tiny, tiny part of the solution. The greater effort needs to come from how we look at design, how we look at sourcing of materials, how we look at merchandising, production, marketing and sales, consumption and then disposal.

Where do you see the potential for the fashion industry to really adopt circular design in earnest?

I think the larger the brand - and this is a very personal observation based on my experiences talking to these people – the bigger the disconnect between the departments. For instance, I can have a very, very meaningful and enthusiastic conversation with the sustainability division of a brand. They're very helpful, they connect me with the different people in different locations to try to address the issue, but they may not be the ones to have any influence [over] design or merchandising. The design team may also have strong opinions or initiatives about sustainability, but they may not be as connected to the material sourcing part of the company. The smaller brands that we've worked with are more nimble, because the decision process and the range of influence is smaller. They can make decisions quickly, and the course of direction can change

very quickly, or they can just decide, "Okay, we're going to make 300 pieces of this using our textile waste." In most cases, they're willing to tell that story.

One challenge with mechanical recycling is that it produces shorter fibres that need to be blended with virgin fibres to bolster the quality. Is there a point where the technology will evolve enough so that it becomes truly selfsustaining?

We're constantly in discussion with HKRITA about how to upgrade the parts in The Billie System... Right now it's only under ideal situations that I can process the [maximum capacity of] three tonnes per day... I don't know when we can achieve that, where someday we will not have to use virgin fibres. Unless consumers don't mind [shorter, rougher fibres, but] I think [they] are very spoilt nowadays; everything has to feel good, be light, with all these performance qualities; it has to be cheap, and it has to be beautiful. I won't say it will never happen, but currently I don't see it happening within a short time.

Your system can recycle textiles made from 100percent natural fibres, but what about those blended with synthetics?

In order to produce high-quality recycled fibres, The Billie [System] prefers textiles from 100 percent natural fibres.

Can The Billie System process textiles containing natural fibre blends, like a cotton-wool blended sweater or linencotton blended T-shirt? Yes.

EXECUTIVE INTERVIEW

How are fibres separated out, if at all?

As a mechanical recycling system, we cannot separate the fibres through the upcycling process, so we prefer to collect items that have no more than two fibre combinations to maintain the purity of the recycled fibres.

Regulators are increasingly turning their attention to environmental policies that will implicate the fashion industry, both directly and indirectly. How do you think the apparel industry can really seize this as an opportunity to become circular?

Well, I'll take ourselves as an example. [We have] difficulty shipping our fibres directly from our Hong Kong factory to our Zhuhai factory because there's a rule against importation of waste. Now, I know that this rule probably came from many. many years ago when China was, like many developing countries, accepting other countries' garbage... [but] the rigidity of that rule affects us because what goes through The Billie is sanitised three times, but it's still labelled as waste. [As one company] it's very difficult for us to go and lobby [regulators] to change that rule, so ideally, if ... there are 20 people like us going to lobby them then it probably makes more sense for them to really take a stand, but if it's just me and The Billie it's harder for them to make a case. Those are the kind of things that we face, and it is frustrating.

This interview has been edited and condensed.



Time for Fashion to Raise Its Sustainability Ambitions to Deliver on COP26

Countries, companies and communities are mobilising around climate change. Amid mounting evidence of fashion's climate impact, and the gathering of nations at the COP26 Climate Change Conference, there is a renewed impetus behind the need for decarbonisation and a much sharper focus on the imperative to adapt and mobilise private-sector capital to fund the required changes. A new era of climate action will therefore be required, meaning fashion leaders must focus not only on decarbonisation but also on building resilience and reversing nature loss as the effects of climate change take hold.

by Harry Bowcott, Leigh Chantal Pharand and Libbi Lee

The COP26 meeting in Glasgow, UK that took place in October and November 2021 was the latest in the United Nations' series of conferences that aims to tackle climate change and its impacts. COP stands for "conference of the parties," which refers to the UN member states that are represented parties of the climate change convention, and this is the 26th year the secretariat met to discuss plans. Previous COPs have led to international climate treaties like the Kyoto Protocol and the Paris Agreement. The COP26 agenda focused on four goals: 1) securing global net-zero carbon emissions by 2050 and keeping the 1.5-degrees Celsius limit on global warming within reach, 2) adapting to protect communities and natural habitats, 3) mobilising finance, and 4) working together to deliver on commitments.

For the fashion industry, the run-up to the event galvanised companies such as Arezzo & Co, Cartier, New Look, Prada, Soorty Enterprises, Under Armour and YKK Corporation into making specific commitments or announcements of broader sustainability initiatives, and provided an opportunity for collective discussion and advocacy.²²⁰ Fifty textile, apparel and luxury companies announced their commitment to sciencebased targets in the six months before the event, which is more than three times the number in the same period in 2020.²²¹ Fashion-focused events were also planned for COP26, including The Fashion Dialogue, featuring prominent speakers from the global fashion industry, and the Fashion Industry on the Race to Zero.²²²

In addition, as COP26 heightened the focus on communities and natural habitats — both of which are for the most part negatively impacted by the fashion industry — many companies honed their biodiversity agendas through "nature positive" commitments, aimed at proactively enhancing the resilience of the planet against climate change and reversing nature and biodiversity loss.

While these commitments are all positive

indications that parts of the industry are keen to change, the proof will be in tangible actions taken over the next few years. While specific outcomes of COP26 are not included in our analysis owing to the time of writing, below we outline the main goals of COP26 and what the fashion industry will need to do to respond.

COP26 Goal 1: Secure global net-zero emissions by 2050 and keep the 1.5-degrees Celsius warming limit within reach

To get on the 1.5-degrees Celsius pathway – or, in other words, limit the increase in global temperature to 1.5 degrees Celsius above pre-industrial levels – and make progress towards net-zero carbon emissions by 2050, the world needs to cut CO₂-equivalent (CO₂-e) emissions in half before 2030.²²³ Yet, the UN's NDC Synthesis report published in September 2021, which aims to give a comprehensive picture of actions being planned or undertaken by governments that impact greenhouse gas emissions, projected a 16 percent *increase* in emissions by 2030.²²⁴

Within the fashion industry, key parts of the supply chain could still be at risk from climate change even if the 1.5-degree pathway is maintained. Despite these risks, fashion is still one of the least environmentally sustainable industries. It accounts for approximately 2.1 billion tonnes of CO₂-e emissions per year – that's 4 percent of annual global emissions. More than 70 percent of these emissions comes from production processes, with the remainder from retail, logistics and product use (such as washing and drying).225 The fashion industry is resource-intensive, using significant amounts of water, land, wood and pesticides for the farming of raw materials such as cotton. On top of this, 17.5 cubic metres of textiles - the equivalent of one garbage truck - is either burned or sent to landfill every second.226

Companies should consider both firming up and accelerating action on their near-term

commitments. Every sector needs to focus on its own breakthrough actions if it is to meaningfully and proportionately contribute to meeting the goal of halving emissions by 2030 and progress towards net-zero emissions by 2050. Within the fashion industry, many companies have already committed to ambitious reductions in greenhouse gas emissions. Some 125 companies have committed to drive the fashion industry towards net-zero greenhouse gas emissions by 2050 through the UN Fashion Industry Charter for Climate Action, which launched in 2018.227 Most public commitments made by fashion brands in the run-up to COP26 were to reduce emissions by 30 percent by 2030 (from 2015 levels or later). Some companies, such as Levi Strauss & Co., have committed to reducing emissions across their supply chain by 40 percent by 2025, while others, such as H&M, are striving to be "climate positive," reducing more greenhouse gas emissions than its value chain emits, by 2040.228

Every sector needs to focus on its own breakthrough actions if it is to meaningfully and proportionately contribute to meeting the goal of halving emissions by 2030.

Sourcing more sustainable materials, including fibres that are recycled and recyclable, regenerative and/or sourced responsibly, is a critical component of decarbonisation. As such, many brands are setting targets on their use of materials. For example, Lululemon has committed to making 100 percent of its products from "sustainable" materials (that are recycled, renewable, regenerative or sourced responsibly) by 2030, while Stella McCartney has committed to using 100 percent recycled polyester (from garments and plastic waste) by

2025.²²⁹ Various alternative materials that offer reduced environmental impact compared to virgin raw materials are also being developed: Nike, for example, is using a product called ELeather for its Flyleather shoes. ELeather is a reusable leather, originally developed for seat covers in the transportation industry, which is made from either used shoes or scrap material.²³⁰

Despite these commitments towards more sustainable materials, however, the reduction of environmental impact by some of the alternative materials currently available is not sufficient. The industry needs to scale up closed-loop recycling processes (see "Circular Textiles" on page 72) while acknowledging that no singular solution will offer the key to emissions reduction on its own. To achieve tangible improvements, fashion will also need to invest further in areas such as material innovation and improved industrial processes and manufacturing techniques to deliver on targets.

While commitments to source and use better materials are encouraging, fashion brands will need to understand and address emissions in the entire production and consumption process down to the deepest tiers of their supply chain. This includes establishing more sophisticated tracking of emissions across all tiers in order to be able to first quantify the impact at each stage, and second to design and implement mitigation measures. Technologies such as product passports (see "Product Passports" on page 88) are scaling up to help address these challenges.

Beyond decarbonisation of existing business models, brands and retailers will also need to decouple from current volume-driven measures of success. The Global Fashion Agenda and McKinsey & Company's "Fashion on Climate" report finds that if the industry could reduce the share of stock sold at a discount by 15 percentage points, it would achieve a volume and emissions decline of about 10 percent, without any impact on value growth. To realistically remain on a 1.5-degree pathway, the industry should reimagine a world with smaller individual wardrobes, with more focus on longer-life garments and a flourishing resale and rental market.²³¹

COP26 Goal 2: Adapt to protect communities and natural habitats

Although mitigating climate risk by reducing CO_2 -e will be critical in the long run, much of the warming likely to occur in the next decade will be the result of emissions that have already been produced.²³² Over the next decade, when experts agree that temperatures are likely to warm by 1.5 degrees Celsius, almost half of the world's population could be exposed to a heat-, drought-, flood- or water stress-related climate hazard, according to a recent McKinsey report.²³³

At their most extreme, these events could be life threatening. But another insidious impact is likely to be on people's wellbeing and livelihoods. In a scenario whereby the world were to warm by two degrees above pre-industrial levels by 2050, the number of people exposed to severe heat stress could increase to 15 percent of the global population, compared with less than 1 percent today.234 Chronic heat stress could make it impossible to work outdoors or in rooms without air conditioning in some places, including parts of India, a critical region for cotton production.235 As climate conditions change and become more extreme, yields of raw materials could also fall in their traditional growing regions, including the south of the United States, Pakistan and Australia.236 Meanwhile, coastal and riverine flooding could jeopardise manufacturing sites in parts of Southeast Asia, such as Bangladesh and Vietnam.237 This could significantly disrupt fashion supply chains and affect business continuity, not to mention raise the volatility of demand in these key consumer markets.

Therefore, in addition to accelerating action to decrease emissions, fashion leaders need to build resilience against climate hazards into their

IN-DEPTH

plans. This will require making some tough choices, particularly when resources are scarce, on where to invest now rather than later; where to either invest in protection of physical assets against growing climate risks, or consider a managed retreat; and, critically, how to include community voices in decision-making.

In addition to accelerating action to decrease emissions, fashion leaders need to build resilience against climate hazards into their plans.

COP26 has put resilience and adaptation to climate risks on a par with emissions reduction as a cornerstone of tackling climate change. Vulnerable countries and communities need significant help, and COP26 offered an opportunity for a moment of global solidarity. Even in regions less vulnerable to extreme climate hazards, such as Europe, the impact of climate change is so severe that the European Central Bank predicts a worst-case scenario of a 10 percent drop in the European Union's GDP and a 30 percent rise in corporate defaults as a result.²³⁸

Fashion companies need to move quickly to build resilience. In some cases, established technologies, such as flood defences or solar powered air-conditioned warehouses for workers, can be deployed in the supply chain. In others, fashion companies will need imaginative solutions, such as securing multiple raw material sources to mitigate the risk that extreme weather events destroy primary sources such as cotton. The faster companies build resilience, the better for employees, consumers and suppliers, and the greater competitive advantage established. There is, of course, a tension between creating business resilience by relocating parts or all of the supply chain while supporting vulnerable countries as they seek to secure the economic welfare of their populations. For example, as the use of virgin materials decreases and recycled materials increases, it will be the poorest and most vulnerable, including farmers and workers at virgin fibre mills, who will likely suffer the most financially. Business leaders should be prepared to make hard, long-term choices with the welfare of all stakeholders considered.

Establishing resilience is also about protecting and restoring natural environments, as biodiversity and climate agendas are critically interdependent. It is estimated that around half of greenhouse gas emissions could be eliminated through natural measures such as reforestation and limiting land degradation. However, the fashion industry contributes to significant biodiversity loss, with 23 percent of the world's insecticide used in cotton agriculture and 25 percent of industrial water pollution resulting from textile dyeing and treatment.239 Fashion companies that manage biodiversity in the same way they manage value creation use impact-weighted accounts (which reflect financial, social and environmental performance) and establish measurable biodiversity targets. For example, Gucci's "naturepositive" climate strategy aims to proactively protect forests and biodiversity by restoring mangroves, whilst investing in and incentivising farmers to shift to more sustainable practices, such as regenerative agriculture which supports soil health and water quality to enhance carbon sequestration.240

Shifting to alternative materials and investing in materials that reduce non-biodegradable waste are also critical actions for fashion companies to reduce their biodiversity impact. Several brands, including H&M, have been changing their dyeing processes in an attempt to eliminate the need for water and chemicals that pollute waterways.²⁴¹

Increasingly, investors will scrutinise companies' climate resilience as they scrutinise

decarbonisation efforts today and will expect companies to disclose their climate risk exposure and mitigation plans. Over the medium term, companies are likely to unevenly bear the cost of building resilience and transitioning to net-zero emissions, investing different amounts and causing the competitive landscape to shift. Customer demands are also changing, with environmental credentials becoming a prerequisite to compete, not a differentiating factor.²⁴² As such, companies should look to develop technological solutions to climate hazards across their ecosystems, whilst stimulating investment and assessing the carbon intensity of their full value chain.

The investments and actions required will not always demonstrate clear payback in the short term, meaning companies will have to update how they measure ROI by adjusting the time frames they assess and how they effectively incorporate competitive advantage into these decisions.

Increasingly, investors will scrutinise companies' climate resilience as they scrutinise decarbonisation efforts today and will expect companies to disclose their climate risk exposure and mitigation plans.

COP26 Goal 3: Mobilise finance

It is clear that decarbonisation and adaptation of operational practices both require significant investment. COP26 is the first major COP Climate Change Conference that has had such a sharp focus on the financial commitments needed to tackle climate change, especially by the private sector.

Climate finance tracked by the Climate Policy Initiative (CPI) reached an average of \$579 billion over the two-year period between 2017 and 2018, reflecting an average increase of 25 percent from the previous two years and a steady increase in financing from different types of investors despite many investment budgets being restrained during the Covid-19 pandemic. However, even though investment has reached record levels, the annual investment that would be required to achieve a 1.5-degree scenario is estimated to be between \$1.5 trillion and \$3 trillion. Such volumes of capital must come from mainstream finance: from corporations, banks and institutional investors. In 2017, only 1 to 2 percent of investments in climate adaptation projects came from the private sector.243 A core argument at COP26 is therefore that more money must be spent - up to 10 times more than in 2017 by 2030 for developing countries alone²⁴⁴ – and more of that money needs to come from the private sector. This implies a radical reallocation of capital and investment, with a particular focus on flows into countries whose economies are particularly vulnerable to climate change, as well as into the technologies needed both for decarbonisation and resilience.

Fashion companies are setting up grant and venture funds which aim to target specific sustainability challenges, in both their own operations and their supply chains. These vehicles present an opportunity to harness external innovation and build credibility and internal knowledge. For example, Kering's Regenerative Fund for Nature provides grants to farming groups, non-governmental organisations and other stakeholders to scale regenerative practices in leather, cotton, wool and cashmere production.245 Kering is also involved in a joint venture alongside Stella McCartney, Burberry and the Apparel Impact Institute, which focuses on improving the environmental impact of Italy's luxury fashion supply chain by establishing a platform for manufacturers to coordinate, fund and scale environmental programmes.²⁴⁶ At the same time, many companies are ramping up investments in

IN-DEPTH

recycling technologies (see "Circular Textiles" on page 72). One example is Infinited Fibre, which recently completed a funding round led by H&M Group and including players such as Adidas and Zalando, during which it raised €30 million (\$35 million) to boost production at its pilot plant and prepare for building its new 30,000 tonnes-peryear flagship factory.²⁴⁷

Fashion companies are setting up grant and venture funds which aim to target specific sustainability challenges, in both their own operations and their supply chains.

Beyond specific funding vehicles, company leaders across all sectors need to give significant attention to resource-reallocation issues. However, there is still a lack of awareness and acceptance of the urgency and scale of the risk and the opportunity. Climate is still not tightly enough integrated into organisational management — too often it is an individual agenda point and siloed into teams, rather than something that underpins every decision and that is supported by executive-level advocacy.

COP26 Goal 4: Work together to deliver on commitments

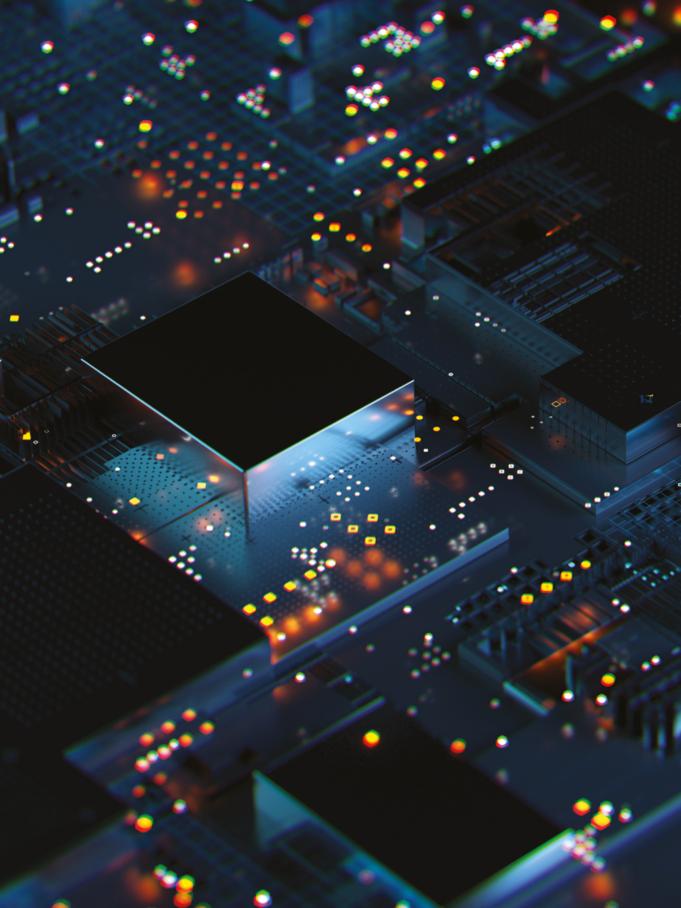
Fashion companies will need to work together with both upstream partners and downstream retailers to make real progress on sustainability, as well as collaborating with non-fashion companies and technological specialists to catalyse change. No one part of the value chain can make enough impact by itself; meaningful change requires a concerted effort across the industry and sufficient investment must be funnelled into relevant technologies.

Brands need to drive sustainable decision-making at the design stage, in their choice of materials, production of waste and adoption of recycling. In many cases, brands and retailers should consider joining together to invest in research fields such as alternative materials and regenerative farming to ensure progress is made fast enough to have a meaningful impact. Coalitions are starting to form across the value chain, including the Aura Blockchain Consortium, supporting the development of product passports for materials traceability and transparency, among other things, and the Higg Index, which aims to standardise the measurement of value chain sustainability. While multi-stakeholder initiatives can divide opinion, industry-wide collaboration will be required to drive progress beyond the current baseline.

Ultimately, business leaders in the fashion industry — as in other sectors — need to increase awareness of the environmental and social impact created by the industry and the end use of its products. This will mean embedding a climate strategy to reach net-zero emissions as a core part of corporate strategy; being conscious that there is a competitive advantage in becoming a leader in sustainability; forming an innovation ecosystem to support the development of new technological solutions; and finally, mitigating for the changes ahead, including the impact on workers and jobs, by building resilience. The agenda set by COP26 for fashion is multifaceted, but it is essential to secure the future of the industry.

Disclosure: As COP26 had not yet commenced at the time of writing, specific outcomes are not reflected in this text.

Harry Bowcott leads the Sustainability Practice in the McKinsey London Office, and Leigh Chantal Pharand manages the COP programme strategy. Libbi Lee focuses on Sustainability in Apparel, Fashion and Luxury, including McKinsey's research partnership with the Global Fashion Agenda on "Redesigning Growth."



08. PRODUCT PASSPORTS

In a bid to boost authentication, transparency and sustainability, brands are using a portfolio of technologies to store and share product information with both consumers and partners. To get the most from these digital 'product passports,' which can help brands tackle counterfeiting, differentiate themselves and build loyalty by enhancing consumer trust, businesses must coalesce around common standards and engage with pilot projects at scale.

Fashion businesses are pouring investment into digital technologies that allow unique identifiers and other digital information to be added to products. These "product passports" link information that is valuable to both consumers and partners to individual products by leveraging a combination of technologies centred around blockchain and supported by the likes of radiofrequency identification (RFID), QR codes and near-field communication (NFC). Indeed, these technologies are helping businesses to tackle significant industry pain points, such as counterfeiting and the need for more responsible and transparent business practices amid rising consumer engagement with climate change and labour conditions in fashion.

Demonstrating progress in sustainability is particularly important in gaining the trust of younger fashion consumers, as some 43 percent of Gen-Zers say they actively seek out companies that have a solid sustainability reputation.²⁴⁸ One way to store and transparently share information on a product's sustainability credentials is through technology-based product passports. This information could include details about the product's materials (providing a more detailed and permanent record than traditional sewn-on labels), where and how it was made, and the working conditions at the manufacturer.²⁴⁹

For example, Eon's Connected Product Platform allows companies such as Pangaia and Yoox Net-a-Porter to create "digital twins" for their products and private-label collections respectively, containing information that can be updated in real time, such as details on a product's provenance.²⁵⁰ Similarly, Reformation is partnering with blockchain platform FibreTrace to give customers QR-code access to information on the lifecycles of its denim garments, while TS Designs uses QR-enabled passports to certify garments are made in the US.251 Though product passports are not a silver-bullet solution to sustainability concerns - as companies still face the challenge of making sure the data they get from suppliers is accurate they are setting higher standards for supply chain transparency and traceability for fashion.

Product passports are also supporting circularity initiatives like resale and garmentto-garment recycling. In providing detailed data on materials, they facilitate easier collection and sorting of garments for recycling at scale. Like Eon, closed-loop recycling platform Circular Fashion

has developed an open data standard that can be read by a variety of applications along the product lifecycle. The company has launched a pilot project with fashion brands such as Armedangels, as well as stakeholders in used clothes collection and sorting, to test applications for scaling garmentto-garment recycling (see "Circular Textiles" on page 72).²⁵² Initiatives such as the European Commission's European Data Space for Smart Circular Applications and the American Apparel and Footwear Association (AAFA)'s call for the digitisation of apparel and footwear labelling are also supporting these kinds of efforts.²⁵³

"Consumers often remove labels from their garments, separating the garment from its legally mandated fiber content, identity, care, and origin information for the rest of its life," wrote AAFA president and chief executive Steve Lamar in a 2020 letter lobbying the US Federal Trade Commission to support digitised labels in a technology-agnostic way. "[This] would reduce the likelihood that the information gets separated from a product. Consumers, even secondhand consumers, would have constant access to the information over the life of the garment, without having to sacrifice the comfort of the garment."²⁵⁴

The growth of resale businesses means it has never been more important to prove authenticity and track a product's history, particularly in luxury. Analysis from the BoF Insights report "The Future of Fashion Resale" suggests that the resale market will reach \$57 billion in sales by 2025, up from \$27 billion today,²⁵⁵ while second-hand marketplace ThredUp estimates that resale will grow 11 times faster than the overall clothing retail sector over the next five years.²⁵⁶

As resale grows, product passports will ease operational processes by offering readily available digital twins and standardised product information. These will support authentication and valuation, as well as streamline a process that was historically manual, reducing reliance on authenticator specialists who have been in significant demand on industry jobs boards.²⁵⁷ For example, one feature of Eon's digital passport is to suggest the price of a garment based on its history, including who wore and owned the product, as well as repairs history and advice on marketing. Certainly, the digital authentication offered by product passports will help boost trust in second-hand luxury goods and collectibles, meaning resale platforms such as Vestiaire Collective and The RealReal stand to benefit.

The growth of resale businesses means it has never been more important to prove authenticity and track a product's history, particularly in luxury.

Another application of product passports is in anti-counterfeiting measures. Valued at around \$500 billion a year globally, counterfeiting generates more than 60 percent of that value from fashion and luxury goods.258 259 The China Certification and Inspection Group is among the organisations to be making strides in the battle against counterfeiting with product passport technology. Its "one item one code" technology allows customers to scan a code and see a simple confirmation of a product's authenticity.²⁶⁰ Brands are similarly ramping up their efforts. Chanel is launching a digital passport to replace physical authenticity cards in its bags, which will be accessible through a scannable metal plate in the product. This will enable the brand and consumers to immediately recognise authentic products and ensure after-sales services such as repairs are only provided for genuine bags.²⁶¹

Initiatives to develop product passports are emerging in both private and open-source forums. The Aura Blockchain Consortium, a shared private platform launched by companies including LVMH and Prada in spring 2021, leverages unique codes to

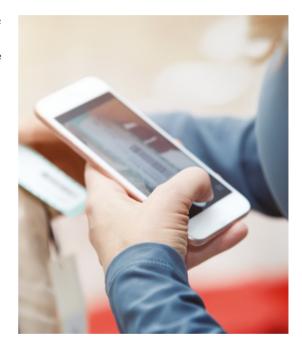
08. PRODUCT PASSPORTS

provide authenticated product records, including ownership history, product authenticity data and provenance of materials. When a customer buys a product, he or she receives an encrypted certificate containing information about the production process. In the open-source space, meanwhile, IBM and luxury and fashion non-fungible token (NFT) platform Arianee are partnering to pilot digital product passports for brands such as Swiss watchmakers Breitling and Vacheron Constantin.²⁶²

In addition to supporting authentication and traceability, several brands are leveraging these product technologies to drive brand engagement, loyalty and repeat purchasing. Prada is rolling out NFC solutions to offer personalised information and purchasing suggestions to customers who scan NFC tags embedded in products with their mobile devices. Meanwhile, Paco Rabanne has launched its first NFC-enabled fragrance, which allows customers to access digital content such as interactive games and educational features by connecting their smartphone to an NFC chip, and Breitling is leveraging digital passports to share promotions with customers and demonstrate authenticity.²⁶³

Pressure to establish supply chain transparency and adopt circular business models will fuel demand and help justify scaling pilot projects to mainstream applications.

Looking ahead to 2022, a growing number of fashion brands are set to ramp up development of product passports across various B2B, B2C and C2C use cases. Pressure to establish supply chain transparency and adopt circular business models will fuel demand and help justify scaling pilot projects to mainstream applications. At the same time, the growth of luxury e-commerce and resale markets and the need for authentication will encourage adoption, either as part of a collective initiative (such as Aura) or independently (as with Chanel). While the cost of some product passport technologies has historically been a pain point in scaling, costs are coming down: the price of an RFID tag has fallen by 80 percent over the past decade.²⁶⁴



A success factor for widespread adoption of product passports will likely be the industry's ability to establish common standards. "Brands are competitors, and there's a lack of cooperation," said Tyler Chaffo, sustainability manager at RFID labelling and supply chain solution company Avery Dennison.²⁶⁵ Currently, some digital passports only operate on closed platforms, while others are open-source and compatible across a range of applications. Still, there are signs that players are starting to converge around a few solutions, with Aura and Arianee frequently cited in many discussions.²⁶⁶

Accessibility and affordability will also be success factors in the burgeoning product passport ecosystem. "It's really important that there's been a democratic process so we could create a governance structure and a standard that works for both smaller brands and big brands," said Timothy Iwata-Durie, Cartier's global innovation director and a member of the Aura board.²⁶⁷

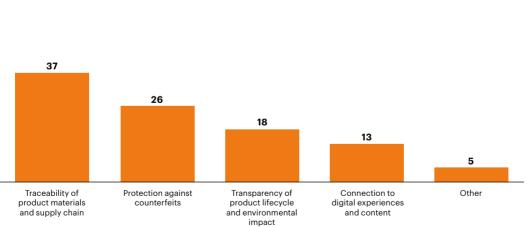
From a commercial perspective, product passports will deliver the most advantage to

players that can expand their functionality across use cases. For those who get it right, passport technologies will reinforce consumer trust, create exclusivity, support repurchase and enable more sustainable and responsible practices. To encourage scaling, standardisation and compatibility should be top priorities. As these dynamics play out, the key for brands will be to keep pace with innovation and consider collaborations selectively to meet their business objectives.

The State of Fashion 2022

Exhibit 13:

Effective use cases are emerging for product passports relating to sustainability and protection against counterfeits



MOST IMPACTFUL¹ USE CASE FOR PRODUCT PASSPORTS, % OF RESPONDENTS

1 Respondents ranked 3 most impactful use cases out of 7, based on order of impact from 1 to 3. Only ranking 1 (most impactful) is considered in the exhibit above.

SOURCE: BOF-MCKINSEY STATE OF FASHION 2022 SURVEY

EXECUTIVE INTERVIEW

Aura Blockchain Consortium: Uniting Rivals to Make Luxury Goods More Traceable



Daniela Ott General Secretary, The Aura Blockchain Consortium

It can't be easy to get a group of luxury firms that have only just put their rivalries aside for the common good to march to the beat of the same drum, but Daniela Ott is tasked with doing exactly that. As leader of the Aura Blockchain Consortium, the former Kering executive must now use delicate diplomacy to persuade others to join the shared digital platform used by LVMH, Prada and Richemont-owned Cartier which creates 'product passports' for luxury goods.

Three competitors joined hands in 2021 to create an unusual partnership in the form of the Aura Blockchain Consortium, LVMH, Prada and Richemont-owned Cartier united behind Aura, a blockchain originally developed by LVMH and technology partners ConsenSys and Microsoft, to solve critical challenges around the traceability of luxury goods by giving each product a digital identity that provides customers with a secure, verified means to see its entire life. from the raw materials through to secondhand sales.

Aura's general secretary is Daniela Ott, a luxury veteran who spent more than a decade with Kering. Expanding this groundbreaking but tricky alliance is not without challenges. For one, the emergence of competing blockchain technologies could fragment the burgeoning product passport ecosystem. Aura's effectiveness against

- by Marc Bain

counterfeiting is also unclear, and it has not yet persuaded some prominent brands to sign up. Ott is nonetheless determined to create a "digital twin" featuring theoretically tamper-proof digital certificates of authenticity for every product sold in the luxury industry — and to use Aura to do so.

Aura has been signing new companies up, but others remain hesitant to join. Two big names that remain absent are Kering and Chanel. Why is that? Are brands concerned about revealing sensitive information, such as their suppliers, to competitors, or do they see creating their own product passports as a competitive advantage if their system is somehow better?

Actually, it's an advantage to use one solution, especially if you have the same issues, you have the same suppliers, you have the same distributors, and you have the same needs. Having one system makes it easier for everybody. I think it's more that we just launched in April [2021], and blockchain in itself is hard. It's not just that you need to have your use case ready. You need to link it up internally in your organisation, to make sure you have the data you actually put on the blockchain. Your marketing teams have to know the message you want to pass [on]. We make it easy but still you must define what you want to do with your passport. [So] I think it's a journey.

Luxury companies are not known for jumping on emerging technologies. What gives the companies leading this charge confidence in blockchain? I think doing it together as a consortium helps. I would say also I think they learned the lesson of being too late in the e-commerce space. I think it helps that we have a private permission-based blockchain where they can decide which information to give access to or not. In a public blockchain, it's verv easy to see that you had a drop in production. But it's the brand who decides whether. "I'm giving access to the consumer this information," or "I don't give access to how many units I put on the blockchain today." I think that also gives some reassurance.

"Actually, it's an advantage to use one solution, especially if you have the same issues, you have the same suppliers, you have the same distributors, and you have the same needs."

Aura's member brands are at different stages in putting their goods on the blockchain. Customers can see the history of products from Bulgari and Hublot, for instance. But if I were to check the information on the products currently available, what sorts of details will I see?

There are brands who are showing basic information: when it was produced, the serial number, the price point, all the fabric which is involved, where the fabric is coming from -Iwould say classic information about traceability. In terms of a watch brand, they would add a guarantee, a certificate of authenticity, and they would be adding a specific certificate for watches that the watch actually keeps time. We are working right now on a diamond traceability certificate - this is the Aura diamond traceability committee we are putting together with our jewellerv brands. Once we go live with that over the next few months, you will be sure where the diamond has actually come from, and also the grading of the diamond.

What share of goods made by Aura's members are already on the blockchain?

What I can say is that we have double-digit millions of products on the blockchain.

Is the ambition to eventually reach 100 percent of products?

That's my end ambition, yes. I think every physical product needs a digital twin. I'm absolutely convinced about that.

Do these digital twins enable a new type of relationship with customers, or is it more about enhancing the methods brands were already using?

It's definitely a new relationship. It's on a different level, that kind of traceability which you can actually have from the beginning of the value chain down to resale. Having an authenticity certificate is new, having all these certificates in one place, being able to directly communicate, this is a whole new level of touchpoint. Especially for young consumers, authenticity and traceability are a must, so if [they're] a must, how do you get that in a cost-effective way to a large number of products? We couldn't do that before.

EXECUTIVE INTERVIEW

For the product passport ecosystem to work well for consumers, it's important to maintain a certain degree of compatibility, but what about the actual interface? Will there be any sort of standardised interface for all goods on Aura, or will individual brands each launch their own app or site?

Aura will be a non-profit, so our aim is always to be agnostic. If you want to show the information via an app or a website, this is really up to the brand to decide. I think most brands will integrate it into their own storytelling. It's important that it's the voice of the brand.

Could that storytelling be enhanced through blockchain, particularly around raw materials or production, by adding photos or video for instance?

What's really nice about blockchain is that you can put really high [quality], rich data on it in terms of videos. I have this dream that you can actually see the person who manufactured the watch or the person who manufactured the bag. The nice thing about it is this is not just for the first 10 customers. If I pass it down to my daughter, maybe she will be able to see that as well, or in resale.

What about the transparency aspect? Are luxury brands ready for the level of scrutiny into the environmental and social impact of their products that comes with showing a product's history at a very granular level, going back to the raw materials?

In luxury, I think this is less of a question than in premium

or other sectors. One of the limitations is if you don't have a good relationship with your suppliers, or if you don't have the information, it doesn't help vou to have a blockchain. It's not a magic wand which just makes it all good. You must know your suppliers down the line and then you can ask them to put the information on the blockchain. If they put false information on the blockchain, it's still going to be false and the blockchain doesn't help you anyway. It's garbage in and garbage out.

A customer of Hublot can see their watch's information and e-warranty simply by taking a photo through an app. Is that going to be the model for most goods, or will some require physical markers like QR codes or NFC chips?

We are agnostic. AI image recognition, which we are a big believer in. I think will work for perfumes. How are you actually going to recognise each perfume bottle? Because that's quite tricky, and it's really about the light when you take this picture of that bottle. This is the same for buying spirits. For watches, it's AI image recognition. For clothing, I think it's more QR code. For accessories like a bag, it's easier to put a chip in. For precious carpets, we are looking at an NFC tag. There are these different tagging solutions, and it depends on the product itself.

One of the main advantages of using blockchain — and indeed one of the main motivations for competitors to unite around this technology in the first place — is that it can give shoppers an easy way to verify authenticity. But some consumers knowingly buy fakes for their lower cost and counterfeiters continue to get more sophisticated in the ways they dupe shoppers, like some who have sold fake bags complete with fake NFC tags. Is the arms race between counterfeiters and luxury companies just going to continue, no matter what Aura does?

I would say especially OR codes. that's probably the easiest, because you literally can cut it out. For a tag in a handbag, you literally would need to destroy the handbag. The beauty of having a consortium is that we have the time to vet these different solutions or actually invest in some of the solutions, advance them further and try them out at separate brands. I think the technology which we are investing in will always be more advanced, but definitely there are things to take account of.

"The beauty of having a consortium is that we have the time to vet these different solutions."

What new developments are there around the corner?

We are going live very soon with Aura Light. We signed on a few members, which we will also announce over the next few months. We are also working on our NFT platform, which we hope will go live in a few months.

What is Aura Light?

Aura Light is sort of our plugand-play. The [membership] fee is much lower. Our standard [version] you can actually

customise much more, so that is more for larger brands. The APIs and the [software development kits] are pretty much the same, but for Aura Light we have, for instance, landing pages which are available and the whole process is much easier. We actually manage the cloud for you.

How can brands measure their return on the investment for joining Aura?

Given that blockchain is so new, we don't have ROI figures as such yet. If you want to have a quick ROI, it's definitely a digital product, because that gives you additional revenue. When I say digital product, that can go either from digital collectibles like NFTs or virtual products. In terms of how much more you're selling because you can provide a certificate of authenticity, ownership, a diamond traceability certificate, I think that will still take a little bit of time to have an BOL

This interview has been edited and condensed.



The State of Fashion 2022

09. CYBER RESILIENCE

As the digitisation of fashion businesses reaches new heights, companies face more threats of cyber attacks and growing risks relating to improper data handling. Amid increased sophistication in cyber crime and rises in consumer and regulatory pressure, brands need to act urgently to shore up their defences and invest more to make digital security a strategic imperative.

Arguably, it has never been more urgent for fashion leaders to build resilience against cyber attacks. Cyber crime is becoming increasingly common and sophisticated, and consumers are shopping online more frequently and enthusiastically, giving businesses access to valuable data in the process. The concurrent growth of both activities leaves companies increasingly vulnerable to risks associated with data security and – ultimately – with company reputation.

The pandemic-induced acceleration of e-commerce uptake has played a role in heightening these risks. With e-commerce's share of global fashion sales nearly doubling between 2018 and 2020 in some regions,²⁶⁸ momentum has been building for further growth. By 2025, e-commerce is expected to account for one third of all global fashion sales, reaching 40 percent and 45 percent in the US and China respectively. A record number of cyber attacks took place worldwide in 2020, resulting in significant data losses across industries.²⁶⁹ Retail, including fashion retail, was the fourth most-attacked industry, with companies across different categories and value segments suffering breaches.

Events compromising the integrity,

confidentiality or availability of data in retail rose by 152 percent in 2020 compared to 2019, and the number of security breaches increased by 33 percent.²⁷⁰ Several fashion companies have already experienced severe attacks, such as Hudson's Bay Company's Saks Fifth Avenue and Lord & Taylor, which were victims of the theft of more than 5 million credit and debit card numbers in 2018,²⁷¹ and Neiman Marcus, which more recently suffered a data hack on the personal and payment data of 4.6 million online customers in 2021.²⁷²

"[Cyber crime] is getting worse for two reasons," said Lance Spitzner, senior instructor at the US-based SANS Institute, a cooperative for cyber security professionals. "It's becoming more and more profitable, so cyber criminals are going to follow the money... [and they] are getting much better at it, too. It's become an entire industry now... [with] the cyber criminal community specialising in different fields."²⁷³

If fashion leaders are to protect their e-commerce growth in 2022 and beyond, they must shore up their cyber defences. That means reducing data risks throughout the data handling lifecycle, through collection, use and disposal, and in operations spanning the entire value chain.

In product development, for example,

processes including design, drafting of manufacturing standards, certification, sketching and prototyping have been widely digitised, and the data is now routinely stored online, meaning that intellectual property (IP) in the digital realm requires more robust protection. With the rise of valuable digital assets such as NFTs, the need to protect online assets will only intensify.

In the e-commerce sales environment, distributed denial-of-services (DDoS) or ransomware attacks could lead to entire website or app shutdowns, directly impacting revenues. For example, one of Brazil's largest clothing store chains, Lojas Renner, faced a ransomware attack on its e-commerce system in August 2021 which resulted in the shutdown of its systems and operations.²⁷⁴

Digital risks associated with sales are not confined to e-commerce, however. Stores are increasingly augmented with technology, both on the shop floor and at checkout. Premises with virtual fitting rooms, in-store tablets and customer apps are vulnerable to attacks that can cause operational failures. In food retail, the supermarket chain Coop Sweden was the victim of a ransomware attack on a software supplier in 2021, which led to the closure of around half of its physical stores. The attackers demanded \$70 million to restore data from all companies affected by the attack.²⁷⁵ Similarly, South Korean fashion conglomerate E-Land suffered a ransomware attack in 2020 that caused 23 of its 50 stores to close.²⁷⁶

Another critical weak spot for fashion businesses is in customer data collection and handling. With the personalisation of customer experience increasingly playing a role in online interactions and companies seeking out an even wider array of data points to inform which products are brought to market, customers are sharing more personal data than ever before. This includes their names, addresses, location history, preferences, payment card data, shopping history, loyalty programme information and even information about their body shape and size. Not only does this increase the risk of improper data handling internally, it can also expose companies to risk externally when they share customer data with third parties — and when those third parties are located in different legal jurisdictions, they are subject to different privacy and data laws.

Another critical weak spot for fashion businesses is in customer data collection and handling.

The shift to direct-to-consumer business models has both increased the potential to collect consumer data and made brands more vulnerable to breaches and attacks. In September 2021, fashion and beauty subscription service FabFitFun agreed to a monetary settlement of \$625,000 in response to a claim that it failed to adequately protect and secure consumer data against hacker data scraping, which resulted in a data breach that compromised customers' payment card information.²⁷⁷

Attackers can harvest such data to sell to third parties or to attack customers directly. Furthermore, fashion brands' presence on a growing array of social media platforms across international markets exposes both companies and employees to additional threats, including the accidental or deliberate leaking of data that could cause harm to brands.

"Whatever cyber protection you had last year, last quarter, last month, yesterday, it's not going to be enough for tomorrow," said Stefan Larsson, chief executive of PVH Corporation, the parent company of Calvin Klein and Tommy Hilfiger. "To me, it starts with an awareness that the risk is... increasing, and getting really close to it, [and then] getting humility across the organisation that this is a continuous ongoing work of improvement."²⁷⁸

Alongside financial and reputational drivers, there is growing regulatory pressure

09. CYBER RESILIENCE

on fashion companies to tighten cyber and data security, largely sparked by Europe's General Data Protection Regulation (GDPR). The consequences for non-compliance can be severe. In July 2021, a Luxembourg government entity alleged that the EU law had been breached by Amazon, prompting it to level a \$886.6 million fine against the e-tailer.²⁷⁹

In the US, one example of increased legislation is the California Consumer Privacy Act (CCPA) which took effect in July 2021. It gives consumers the right to know what personal data a company has access to and who it is shared with.²⁸⁰ In Brazil, the Lei Geral de Proteção de Dados (LGPD) came into force in 2021. The law imposes penalties of up to 2 percent of annual revenues on companies that fail to protect customer data.²⁸¹ Meanwhile, China's new data security law which came into effect in November 2021 will regulate how companies collect and handle personal data. It also aims to ensure data is protected when transferred outside the country.²⁸²

Alongside financial and reputational drivers, there is growing regulatory pressure on fashion companies to tighten cyber and data security.

"There's a great deal of confusion, because there are so many standards out there [across different jurisdictions]... as well as a desire to — if we can — get global harmonisation, or at least within the US have a federal standard that supersedes state standards," said Susan Scafidi, founder and academic director of the Fashion Law Institute at Fordham Law School in New York. "Hanging over all of this is this question of who owns our personal data, and who has the right to exploit it, and how."²⁸³

There is evidence that consumers are increasingly aware of their data rights. In 2019, around 60 percent of European consumers knew that rules exist to regulate the use of their data, an increase from around 40 percent in 2015.²⁸⁴ However, consumer attitudes remain uneven across jurisdictions. Consumers in the US and Europe are more concerned about corporate accumulation of personal data, while those in Brazil and China are more comfortable trading data privacy for personalised services.²⁸⁵

In aggregate, the costs of data breaches and ransomware attacks are significant. Direct costs could include penalties and fees, lawsuits, remuneration to customers and the cost of recouping data. Experience shows that significant data breaches can cost companies tens of millions of dollars.²⁸⁶ There are also indirect costs associated with a potential loss of consumer trust and the struggle to acquire new customers following an incident.

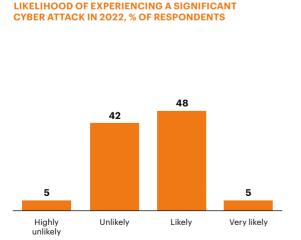
Though complex cyber security measures often require significant investment, there are ways for SMEs and companies with fewer resources to take steps to improve their security. According to Spitzner, since the majority of attacks are still somewhat rudimentary, company leaders should at least focus on the basics. "If you don't know where to start, start improving your defences in phishing and passwords," he said.²⁸⁷

In an increasingly complex online ecosystem, there is an imperative for fashion companies to boost their operational resilience when it comes to cyber security and allocate a greater proportion of their budget to such defences. That means assessing and actively managing cyber and data risk exposure in the business itself, its third parties and its value chain. Leaders will need to take a risk-based approach, building in-house knowledge and resources while also considering leaning on external support from cyber security firms. Other industries have concentrated these efforts around a dedicated role such as the chief information security officer, who closely ties into legal and privacy teams.

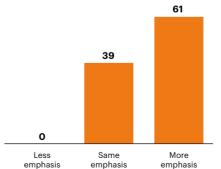
Data is becoming both a strategic asset and a source of financial, reputational and operational risk. To meet customer expectations and comply with regulation, companies should put in place clear standards for the collection, use and storage of data. Moreover, they need to increase awareness of – and accountability for – threats while testing their cyber resilience through initiatives such as training frontline personnel on the sensitivity and handling of data. To prepare employees for the occurrence of a breach or attack, they should regularly organise cyber-attack simulations to test their response practices in real time, including the handling of communications to internal and external stakeholders. While there are many competing items on the C-suite agenda, cyber risk cannot be neglected.

Exhibit 14:

Investment in cyber security and data handling has ramped up, reflecting the risk perceived by fashion executives







SOURCE: BOF-MCKINSEY STATE OF FASHION 2022 SURVEY

IN-DEPTH

Five Imperatives to Protect Fashion Businesses from Cyber Risk

In an increasingly digitised fashion economy, cyber risks are rising fast. To protect their customers, business operations and creative assets, fashion companies need to strengthen their defences, test regularly and embed cyber resilience into decision-making across the business. The benefits of getting this right will include both a reduction in risk and an uptick in performance.

by Benjamin Klein

Cyber attacks and data breaches are among the top risks for fashion companies, their customers and the wider economy. The theft of corporate, customer and employee data or funds can reverse years of hard work, undermine relationships and have a significant impact on reputation and performance.

The number of cyber incidents — including attempts to gain illegal access to a system, network, infrastructure or device for the purpose of causing damage or harm — is rising fast. Publicly reported US data breaches were up 38 percent in the second quarter of 2021 compared with the first quarter, and breaches in the first half of the year alone reached 76 percent of the total reported in 2020.²⁸⁸

Cyber security risks exist across a range of fashion industry processes, from digital design and data analytics to online transactions and supply chain operations. Many back-office systems have only recently been digitised, meaning they present a potential point of weakness for fashion leaders and security teams who had not previously been required to identify, assess and mitigate potential risks in those areas. Indeed, shifting ways of working create constant challenges, requiring flexible decision-making muscle and continuous re-invention of defences. There are two recent evolutions in fashion industry practices that have increased cyber vulnerabilities.

The first is a movement toward more agile ways of working. New products and services are increasingly developed and brought to market through fast-paced iterations using agile methods, where rapid timelines often do not allow for rigorous risk checks. Security teams must be involved early in the development process and embedded into the full digital lifecycles of new products and services. The second is the ongoing evolution of technologies. Increasing use of cloud computing, artificial intelligence and machine learning is exposing companies to more cyber risks by widening the scope for attack. Security teams must be innovative in finding ways to apply common security patterns and methods to new technologies.

Cyber risk is on a long-term upward trend that accelerated during the Covid-19 pandemic, partially as a result of widespread adoption of workfrom-home patterns and technologies and soaring demand for e-commerce. Indeed, online retail has been one of the most attacked sectors over the past year, accounting for 10.2 percent of all attacks across industries.²⁸⁹ Given the growing

frequency and severity of incidents, regulators are requiring businesses to protect themselves, their partners and their customers, and punishing those that fail to do so. Europe's General Data Protection Regulation (GDPR) imposes fines for non-compliance of as much as 4 percent of a company's global annual revenues.

A challenge for companies looking to invest in cyber defences is that the cost of initiating an attack is significantly lower than that of protection. This creates an asymmetric battlefield in which hackers, companies, state-sponsored agencies and other perpetrators can enter systems with relative ease. Moreover, for victims, the cost of being attacked continues to rise. The average cost of a data breach rose by nearly 10 percent year on year in 2021 to \$4.24 million, the largest single annual increase in seven years, according to IBM's Annual Cost of Data Breach Report 2021.²⁹⁰ In addition, the longer that systems remain compromised the more the costs mount.

A challenge for companies looking to invest in cyber defences is that the cost of initiating an attack is significantly lower than that of protection.

Across industries, corporate approaches to cyber security are maturing, with companies acquiring new capabilities and bolstering their resilience. Banking and healthcare are among the most mature industries when it comes to cyber resilience, while fashion has a long way to catch up. In response, fashion decision-makers need to adopt a dual mindset, reconciling short-term needs created by the pandemic with the longer-term demands of the digital economy. To increase resilience, security should be embedded into products and processes, while customers, partners, third parties and regulators should also be incorporated into enterprise-resilience management.²⁹¹ The rewards of doing so are clear for decision-makers: there is a direct relationship between cyber resilience and business performance. According to a recent McKinsey survey, higher cyber security maturity correlates with better margins, so the payoff from strong risk management extends beyond security.²⁹²

A successful roll out of improved cyber capabilities should be predicated on action across five key areas:

Identify the playing field and risk environment.

Cyber security leaders should focus on identifying relevant cyber risks (including potential "black swan" events) across their value chains. That starts with understanding legal and regulatory ground rules, and moving to a risk-based approach. This recognises that not all assets are created equal, and not all can be equally protected. It is vital for business leaders to take a global view of both the company's operations and its supply chains, and to communicate cyber security requirements to suppliers and third parties. Insurance against cyber attacks is an option, but it is worth reading the small print; there are likely to be areas of risk that are not covered, and market conditions are changing rapidly.

Build capabilities to prevent cyber attacks.

Rules and standards should be developed (such as acceptable use policies for email and anti-phishing guidelines) and technical prevention measures should be deployed across systems, including data encryption and next-generation firewalls. While some systems may need an extra level of protection, a general baseline is essential, such as keeping software up to date and regularly scanning systems for vulnerabilities. Where the cyber risk extends to production and manufacturing systems or other connected devices, measures should be expanded into those areas, too.

IN-DEPTH

Reinforce the ability to detect and respond to cyber attacks.

The traditional focus of cyber security has been on prevention, but the spotlight is now moving towards detection and response, acknowledging that attackers will inevitably succeed in breaching systems. Internally, that means closely monitoring systems and applications, as well as encouraging employees to report suspicious activities. Customers, partners and third parties should be fully incorporated into both detection and response measures. Externally, businesses should keep a close eye on cyber threat intelligence and be on constant alert, even if their own mechanisms have not yet triggered an alarm.

The traditional focus of cyber security has been on prevention, but the spotlight is now moving towards detection and response.

Clarify responsibilities across the business.

Clear roles and responsibilities are vital to cyber resilience. Companies need to define what "good" looks like, who owns which part of cyber security and how relevant capabilities and skills should be developed. It is essential for the company's front line personnel and anyone who is not an IT or security professional to understand their role in identifying and mitigating cyber risk, and to know what level of support they can rely on. Some companies have created the role of chief information security officer (CISO), an executive who defines and leads the overarching approach to cyber security, establishes central cyber security capabilities and helps to build capabilities across the business. While companies will need to build in-house capabilities in certain areas, they can also consider external support.

Simulate the worst case and build muscle memory.

Leading organisations test their plans and prepare for the worst by carrying out attack simulations. The aim is to assess decision-making, ensure clarity of roles and responsibilities, including decision-making power, and identify weaknesses. This enables companies to develop an effective response mechanism and improve upon their reaction speed in the event of a real attack.

Companies that lead in cyber security are defined by their outstanding performance in several key areas, including maintaining a low "click rate" in employee phishing programmes;²⁹³ regularly revisiting and updating cyber security priorities; deploying solutions for managing applications; scanning the IT environment for vulnerabilities; and sourcing intelligence on threats. As an overarching principle, senior managers should incorporate cyber risk into all decision-making. In this way, they will get on the front foot and ensure the organisation's defences are as resilient as possible.

The author of this article focuses on cyber security strategy and transformation at McKinsey. This article draws on a larger body of research on cyber security. The latest report in this series is Organizational Cyber Maturity: A Survey of Industries.²⁹⁴



10. TALENT CRUNCH

Companies that rely on brand appeal or the allure of fashion to attract and retain talent will need to raise their game as competition from both within and outside the industry intensifies, leading to more vacancies next year. As employees from upper management to the retail front line reconsider their priorities, companies must refresh their talent strategies for an increasingly flexible, diverse and digitised workplace.

Fashion companies face a talent deficit in the year ahead.²⁹⁵ Amid all-time-high vacancy rates, businesses are struggling to attract and retain talent – particularly in digital, creative and commercial roles. Employees now have more choice than ever about where, when and how to work in a rapidly evolving job market. To complicate matters further, shifting employee priorities are changing the way people think about job satisfaction. As a result of these and other challenges, there will continue to be a shortage of interested, qualified workers in 2022.

Fashion's public image is only adding to the challenge. Employee concerns over the industry's environmental and social impact, in addition to inadequate progress on diversity, equity and inclusion (DE&I), are having a real effect on its desirability.²⁹⁶ Indeed, 49 percent of fashion professionals believe the industry has lost some appeal as an employer in the past 18 months, a BoF survey shows, with the industry's reluctance to change and poor sustainability credentials cited as common reasons. In the C-suite, the proportion rises to 56 percent.²⁹⁷ Given these attitudes, fashion companies need to adapt to stay competitive, improving employment conditions and reimagining workplace cultures to reflect changing talent needs. "There [may be] a perception among some fashion companies that they are 'too big to fail,' ... [or a notion that employees should feel] 'lucky enough to be here,''' said Caroline Pill, London-based partner at fashion and retail executive placement firm Kirk Palmer Associates. "[But] people are now attracted to [factors like] 'what is my impact in the bigger scheme of things?' [so]... companies who are not going to adapt are going to struggle."²⁹⁸

One contributor to the talent crunch is the impact of the Covid-19 pandemic on business models. With e-commerce's share of global fashion sales nearly doubling between 2018 and 2020 in some regions,²⁹⁹ as even digital laggards got in on the act, the imperative to secure the best digital talent became more urgent.³⁰⁰ With online acceleration came a plethora of new vacancies, as companies scrambled to hire for roles such as authenticators for fashion resale platforms, analysts and data scientists, reflecting brands' increasing emphasis on big data.³⁰¹ Other specialist roles, such as those relating to sustainability, have also proved challenging to fill.

At senior levels, brands saw a wave of resignations in 2021, with some company leaders leaving fashion for other sectors like technology.³⁰²

Indeed, a significant proportion of C-suite executives remain on alert for opportunities in other industries, with 34 percent saying they have considered leaving the fashion industry in the past 18 months.³⁰³ This is a common sentiment across job levels, with nearly half of all fashion professionals in the BoF survey reporting that they have considered moving to another sector.³⁰⁴ Among this group of potential leavers, 60 percent cite a desire for a deeper sense of purpose as one of their top three reasons, followed by 45 percent citing better salary and benefits.³⁰⁵ Tellingly, only 14 percent of this group indicate that industry prestige is one of their top three reasons to leave or remain in fashion.

Brands saw a wave of resignations in 2021, with some company leaders leaving fashion for other sectors like technology.

These trends are reflected in the wider economy. Across sectors, a significantly higher proportion of the global workforce is considering leaving their employer this year compared to previous years. Coupled with the specific challenges facing fashion, this suggests a refreshed approach to employer branding and retention strategies will be required in the year ahead.³⁰⁶ In particular, revised policies will be needed on the front line.

Retailers have struggled to staff their stores and distribution centres in 2021, while rising e-commerce order volumes have challenged in-store fulfilment.³⁰⁷ Additionally, there were waves of redundancies in the same year amid widespread company restructuring and store and department closures. As a result, some workers re-evaluated their priorities and opted to move away from arduous, low-paid work.

One critical factor in the talent crunch is wage levels: 51 percent of fashion professionals in

the BoF survey rate the industry's competitiveness in salary and benefits as "poor" or "very poor."308 With many retail floor and entry-level jobs offering close to minimum wage at a time when inflation is set to rise in major economies, attracting and retaining staff has become a real challenge.309 Meanwhile, on the first rung of the career ladder, unpaid internships are still commonplace in the US and elsewhere, despite many other industries largely ending the practice. While these challenges are likely to continue throughout 2022, some companies are taking steps to secure a pipeline of future talent, such as LVMH, which plans to recruit 25,000 people under the age of 30 across internships, apprenticeships and permanent positions by the end of 2022.310

In e-commerce, negative headlines about low wages and poor working conditions have hit multiple e-commerce companies around the world.³¹¹ At some digital giants in China, a new generation of employees and consumers are campaigning against excessive "996" work culture, prompting both pay increases and local labour regulator interventions. Pressures to increase minimum wage in the US have resulted in some retailers increasing average starting salaries in an attempt to fill vacancies.³¹²

In the coming year, fashion companies will no longer be able to rely upon the appeal of their brands or the glamour of the industry to attract talent. Instead, to compete with other sectors, companies will need to reimagine their talent strategies and move away from some unhealthy entrenched practices, such as hiring from inner circles. In addition, they should broaden their talent pools, embrace objective candidate assessments and leverage cutting-edge software, such as resume screening and job simulation tools, to safeguard fairness.³¹³

Post-recruitment, leading companies will foster a sense of belonging and equity of opportunity, engaging more closely with employees to develop comprehensive recruitment, retention and inclusion policies. This will include clearly articulating their corporate purpose, values and career development opportunities.

In 2022, authenticity, flexibility and employee wellbeing will prove to be stronger pulls than ever. Some companies have already made public moves to demonstrate these values: Nike closed its offices for a week to give staff a "mental health break,"³¹⁴ while Tapestry plans to extend remote working as long-term solutions for some employees.³¹⁵ Hybrid home and office working can also boost loyalty. Some 46 percent of fashion respondents to the BoF survey say flexible working is one of their top three most important factors when choosing to remain with their employers.³¹⁶ Hybrid working is set to become table stakes in some markets, alongside flexible working hours, and reluctant or slow-moving brands are likely to lose out to their more adaptable peers.³¹⁷ Where hybrid working is not possible, on-site employees will demand other flexible conditions.

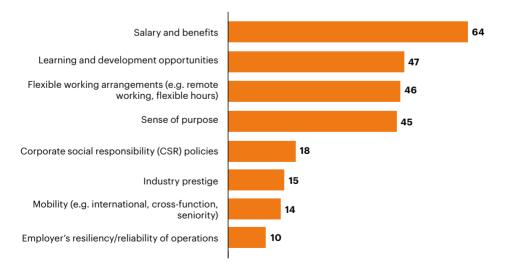
In 2022, authenticity, flexibility and employee wellbeing will prove to be stronger pulls than ever.

Employees today want their employers to reflect their values, meaning that a company's position on corporate social responsibility (CSR) issues, including sustainability and DE&I, will play a big role in attracting and retaining talent. Indeed, one recent study revealed that 64 percent

Exhibit 15:

Employees cite learning and development, flexible working and sense of purpose as important retention factors after salaries

MOST IMPORTANT ¹ CONSIDERATIONS FOR EMPLOYEES IN 2022, % OF RESPONDENTS



1 Respondents selected top 3 most important factors when choosing to remain at their current employer or to seek employment elsewhere.

SOURCE: BOF COMMUNITY SURVEY 2022

of Millennials said they would not take a job if the employer did not have a strong CSR policy.³¹⁸ In addition, some 83 percent say they would be more loyal to an employer that helps them contribute to social and environmental causes.³¹⁹ That said, when putting their values into practice in different markets and working cultures, companies need to ensure they take local sensitivities and priorities into account.

"[Our values] are not different in any region [and] that's very important to us... but there may be nuances to the way that a goal is achieved... [in markets as distinct as China and Brazil, for example, so we have] a level of independence in each geographical region, to do what's right by that culture and that country. The end goal is still aligned," said Sian Keane, chief people officer of luxury e-tailer Farfetch.³²⁰

"[We have] a level of independence in each geographical region, to do what's right by that culture and that country."

There is plenty of evidence to show that gender-diverse and ethnically diverse companies financially outperform their peers.321 However, there is still little diversity at the top of fashion companies, with senior roles regularly dominated by white men - one of the only exceptions being the chief diversity officer role.322 Some 42 percent of fashion professionals rate the industry's performance as "poor" or "very poor" in prioritising DE&I as a core value, the BoF surveys shows.323 According to a separate survey by the Council of Fashion Designers of America (CFDA) and PVH, industry professionals most frequently describe the state of DE&I in fashion as "evolving" and "improving," while less than half of respondents believe actions taken in 2021 will lead to lasting

change.³²⁴ Furthermore, some 50 percent of employees of colour say that a career in fashion is not equally accessible to all qualified candidates.³²⁵

Still, some companies are taking steps to show employees, consumers and investors that improving DE&I is a priority. In 2021, Target and Nordstrom were among the companies to publish more detailed employee demographic information, taking responsibility for the lack of diverse representation at leadership level and committing to regular updates on progress. Prada, working with the Dorchester Industries Experimental Design Lab, launched a three-year programme for artists of colour, aiming to recruit talent from outside the company's regular Italian fashion school recruiting grounds.³²⁶

Over the coming year, the fashion industry's progress on DE&I and sustainability will continue to be put under the spotlight, with brands held accountable by their employees for putting their public values into practice.³²⁷ Listening and responding to these shifts will be crucial for many brands that are aiming to attract a new, diverse generation of talent. Companies that lose momentum and fail to demonstrate progress, conversely, could end up closer to the bottom of employer league tables. These measures are also key to ensuring the relevance of their brands with customers.

While many of the forces currently shaping the fashion industry employment landscape have evolved slowly over time, there is now an urgency to implement changes. Companies that have long relied on the inherent allure of the industry and the power of their brands to secure the best talent will need to accelerate their efforts to improve workplace culture — ensuring that employees are sufficiently represented in key decision-making processes and that the company is "walking the talk" when it comes to demonstrating their values. In the years ahead, these actions will draw a line between employers that win the battle for talent and those left behind.

EXECUTIVE INTERVIEW

Farfetch: Adapting to the New Talent War



Sian Keane Chief People Officer, Farfetch

Farfetch chief people officer Sian Keane is passionate about 'not encouraging microcultures within the business,' especially between creative and tech specialists, as she believes that weakens the luxury e-tailer's common thread of values. But with the fashion industry facing a talent deficit in the year ahead and workers expecting more flexibility, it will be hard for companies to strike the right balance across recruitment and retention strategies as different specialists expect different things from workplace culture. E-commerce companies like Farfetch have long prided themselves on an ability to attract a healthy mix of talent from both the tech sector and the fashion industry, but the war for talent has only intensified in recent years. It could get even tougher next year, as fashion companies battle to secure the specialists they need. A tighter labour market, where workers scrutinise everything from a company's sustainability record to its inclination to offer flexible working environments, means it will be just as important for people leaders to have an ironclad recruitment and retention strategy as it is for them to be ready to pivot on a dime.

Sian Keane, the UK-based luxury e-tailer's chief people officer, believes that the talent

- by Sheena Butler-Young

FASHION SYSTEM

challenges that have arisen from the pandemic are not necessarily more difficult than those of the past, but simply different in nature. Among her concerns for the future are the number of women leaving the workforce and the challenges associated with building and replenishing pipelines that feed diverse talent into a business whose workers and consumers are increasingly global. But despite the pressures that are likely to mount across the industry in 2022, Keane sees opportunities in the "borderless society" that has emerged since remote and hybrid working took hold. "Now we've got access to people who may not have considered leaving their job before," she says.

A lot has been said about the impact of the Covid-19 pandemic on people's values and their attitude towards work. How has this played out at Farfetch?

The two things we really think about are around meaning. People need to be connected to meaningful work. The second is making sure that we create a very strong sense of belonging. That's something that has always been an important factor at Farfetch and is something that we know our people value, as we've learned through our employment engagement surveys. But creating a sense of belonging in a hybrid world is a new challenge.

How have you done that – created a sense of meaning and belonging – with remote work in play?

Learning is something we had always invested in, but as soon as we went into working-from-home mode, we really fast-tracked a lot of our digital learning tools so that

people could learn remotely and still be able to access that level of training. Thinking about how we can make sure that people feel they're continuing to grow their own careers and thrive in a hybrid and remote world is something that we've really leaned into. We just launched a very structured programme around personal development plans for everyone and that started from some of the work that we were doing under diversity and inclusion. Then, we accelerated that for all our [employees], because I think ensuring that everyone feels as though they're connected to their future career is quite important.

In what significant ways have recent social justice movements and protests, especially those in the summer of 2020, changed how you think about recruitment and employee retention?

The first thing we did is host listening sessions with our internal communities to find out what they're really experiencing and feeling in their personal lives as well as their professional lives. Then we built a "positively inclusive" strategy against that, so that we are responding to not just what we're hearing externally, but what our people are really feeling and experiencing internally. We created our Farfetch commitments, which are about creating a values-driven experience for all our [employees]. One of those commitments is around increasing the pipeline of diverse talent and increasing senior representation internally. The second thing is trying to [address] the skills gap. This is really important because the challenge that we have faced, with regards to hiring and recruiting

more diverse talent. is how to access talent in the first place. So that may be thinking about partnerships with external businesses and organisations; it might be broadening where you look for talent to access a broader set of demographics and people from socio-economic backgrounds. We will be watching very closely and monitoring the impact of some of those partnerships on the diversification of the way that we recruit. Internally, we're making sure that we're collecting the data – and we're still on a journey with this - to be able to ensure that our promotions, progression, development and the decisions that we make are having a positive effect on the diverse pipelines that we already have.

Broadly speaking, is it harder for you to recruit now than it was a year ago?

I don't think it's harder for us to recruit now than it was a year ago; we just have different challenges than we did a year ago. We've certainly increased and leaned into the hiring, training and development of our talent acquisition team more than ever. We're seeing that shine through in some of the numbers. However, some of the challenges that we are facing are the compensation strategy and the challenges that we see around competitors from a remote working point of view. We want to have a very strong balance between home and officebased work because we think socialisation and collaboration is critically important to our long-term culture, so we're not a remote business. There's also a number of new start-ups and businesses that have been born out of the pandemic that may be attractive to people as they're

EXECUTIVE INTERVIEW

considering job moves. Then we see things like saturated talent markets. There are geographies where we need to keep shifting and moving to be able to access talent from different sources. Of course [having] avenues for a more diverse pipeline of talent is something that is hard for businesses to do [but] they really have to make an effort. This kind of sentiment - the war for talent - is something that has been around my entire career, [but what's different now is where the] demand is, and where you're seeing it pivot, and being fast enough to make decisions and adapt your processes and hiring policy practices to support that.

As both an e-commerce company and a fashion player, Farfetch must recruit from both tech and fashion circles. How do employees' expectations tend to differ from these groups, and are they evolving in different ways now?

Fashion businesses are starting to look for people who come from a technology background, and technology businesses are looking for people who come from a fashion background. Whereas for Farfetch, that's been front of mind since day one as we've always been a mixture of both. Our ultimate aim is to create one community at Farfetch, although we're not blind to the fact that there might be differences in desires of how those things come to life from an employee experience. For example, some of the initiatives or ways of working that we put in place for our technology community and our engineers would differ greatly from the experience that we might have for the commercial or the fashion side

of the business. But one thing that we have done that we felt quite strongly about is not encouraging microcultures within the business. Farfetch values... are Farfetch values [across the entire business]. They're not different in any region and we believe it's a common thread between the broad range of specialists that we have within the business because we really have come together as both fashion and technology specialists. That's very important to us. Another thing is that we actually embrace our difference. We don't try to be Slack, Google, Facebook or anything else like that.

Farfetch has more than a dozen offices and locations across 10 countries, which employ more than 5,000 people. With such a global view, would you say that the talent shortage is palpable right now, especially in terms of digital and technical skills?

When I joined Farfetch, there were 100 people and now there's more than 5,000. There are more vacancies than ever in the world right now, certainly in the UK. It's already quite easy for people to think about leaving a company. Then, when you add on the digital expertise side of the equation, put Brexit on top of that, and the fact that it's much harder to travel now, these are all the sorts of things that are starting to erode access to talent. By the same token, businesses can benefit from movements of talent. We've certainly seen increases in success in hiring, because now we've got access to people who may not have considered leaving their job before.

Is diversifying how you look for tech talent as well as

engaging underrepresented groups helping Farfetch avoid the talent shortage?

Absolutely. Then there's the other side of things; our consumers are increasingly becoming more global. In order to engage with your consumers, you need access to more native-language speakers than you had before. We're seeing demand for stylists from Germany, Romania, Bulgaria, Poland and places that we hadn't seen before. It's about being able to access talent from other regions that we may not have been heavily leaning into before the pandemic.

What are the most concerning issues surrounding talent recruitment and retention for the fashion industry, as we head into 2022?

The movement of talent. We put a huge amount of effort into hiring, nurturing and growing our Farfetchers internally, so our talent pool is very precious to us. Being such a values- and culture-driven business, we want to ensure that we have as much as possible in place so people don't feel as though their heads need to be turned to other businesses. That's why we have our internal engagement surveys and things set up around access to our people communities and our people processes. Those things allow us to understand why people may get itchy feet and be able to mitigate that before they're considering leaving the business. The other concern is the rate of females leaving the workforce and what might therefore happen in the long term to the successes that come from business investments in increasing gender balance within the workforce.

This interview has been edited and condensed.

MACKINSEYGLOBALGLOBALFASHIONINDEX

Sportswear and Luxury Emerge as Star Sectors Amid Broader Value Destruction

As the industry comes to terms with record levels of value destruction, a subset of players tapping into shifting consumer behaviour and resilient geographies will consistently outperform the market.

Key Insights

- The impact of the pandemic in 2020 meant the industry posted negative economic profit for the first time in at least a decade, causing record levels of industry consolidation in 2020 and 2021.
- A record 69 percent of fashion companies destroyed value in 2021, reaching new depths of negative economic profit and dragging down overall industry performance.
- Fashion's recovery looks set to be V-shaped, as performance in the first half of 2021 points to a possible return to positive economic profit by 2022.
- The companies on this year's 'Super Winners' list remained relatively stable in comparison to the list published in The State of Fashion 2020, with particularly strong performance from sportswear and luxury players.

The McKinsey Global Fashion Index (MGFI) offers a bird's-eye view of the fashion industry, tracking financial development and value creation across regions, value segments and product categories. The index, comprised of a proprietary data set of over 350 public companies, was created to track the industry's performance through the key financial metrics that provide decision-makers with an informative and holistic benchmark.

In this sixth edition of the MGFI, we continue our exploration of economic profit – a measure of value creation defined as operating profit less adjusted taxes and cost of capital. The metric measures absolute value created over time, taking into account how much each company invests to generate its performance. First, we unpack 2019-2020 economic profit composition and development across the industry. We then explore the devastating impact of Covid-19, which has caused value destruction across the industry. Finally, we look at stock market valuations and their implications for what it will take to succeed in 2021 and 2022. This year, we revised our analysis of drivers of economic success (which we did not assess in The State of Fashion 2021 due to the pandemic) and determined which companies are the industry's "Super Winners." The deep analysis of these leading companies extrapolates the driving

The industry was hit hard in 2020 causing negative economic profit



TOTAL ECONOMIC PROFIT (EP), INDEX (2010 = 100)

SOURCE: MCKINSEY GLOBAL FASHION INDEX (MGFI)

Exhibit 17:

Despite steep declines in 2020, investors are optimistic about the value of future earnings growth in fashion

Value attributable to future earnings growth **Current earnings** 46 43 49 56 57 discounted to perpetuity² 77 57 54 51 43 44 23 2016 2017 2018 2019 2020 2021E1

ENTERPRISE VALUE, % SHARE OF TOTAL

1 Estimate based on forecasts for net operating profit after tax as per analyst consensus

2 Based on net operating profit after tax for the industry and the weighted average cost of capital weighted by enterprise value SOURCE: MCKINSEY GLOBAL FASHION INDEX (MGFI) forces behind their success and explains how these forces have evolved over time.

Looking Back at 2020

The fashion industry posted significant revenue declines in 2019-2020, and companies were unable to compensate through significant adjustments to costs or capital intensity. Within our sample of listed companies, revenues declined by 14 percent, although losses in the rest of the industry are estimated to be even more severe, particularly as a few large players pulled up the sample average. As a result of these drops, average earnings before interest, taxes and amortisation (EBITA) margins declined by 3.4 percentage points to 6.9 percent, the lowest levels in the 10-year period. Invested capital fell by 6 percent, while capital intensity rose from 75 percent in 2019 to 83 percent in 2020.

As a result of these economic challenges, the industry posted negative economic profit in 2020, declining to minus 63 percent of 2010 levels; a momentous decline of 133 percentage points compared to 2019.³²⁸ With this unprecedented destruction of economic profit, around 7 percent of listed companies left the market from January 2020 to September 2021, either due to bankruptcy or consolidation through acquisition. This rate is roughly three to four times higher than the average exit rate observed prior to 2020.

In September 2020, for the previous edition of The State of Fashion report, we predicted a drop in economic profit of 93 percent for the full year of 2020, but the outcome was much more devastating than originally anticipated. High consumer and investor confidence in September were soon replaced by a winter of lockdowns, second and third waves of Covid-19 infections and a significant hit to retail.

Signs of a V-Shaped Recovery

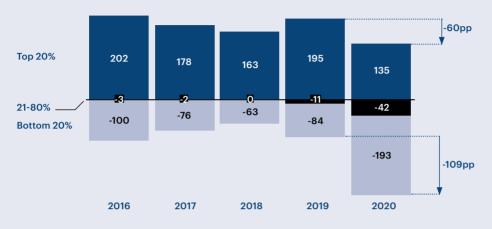
Despite the losses experienced in 2020 and 2021, investors are optimistic about the industry's earnings potential, ascribing some 43 percent of enterprise value to reported earnings projections discounted to perpetuity in 2021,³²⁹ and 57 percent to future earnings growth. In most other consumer industries, this ratio is typically closer to 50:50, which suggests investors in the fashion industry are bullish on its value-creating potential in the long run. Still, to drive long-term value creation, fashion companies have their work cut out. The pressure is on for decision-makers to focus on scaling growth, as well as finding operational and capital efficiencies.

Recent evidence suggests that the worst is over in many markets, with positive signs that the industry is delivering on investor expectations. In the first half of 2021, 280 listed companies that published results reported aggregate top-line growth of 5.3 percent, compared with the same period in 2019. The luxury segment outperformed, posting growth of 16 percent, compared with the rest of the market at around 4 percent.³³⁰ Digital pure play companies also outperformed, as did sportswear brands and some discounters. On the other hand, offline players such as large department stores and some mid-market fashion brands lagged.

Among the same cohort of companies, net operating profit after tax was up 22.7 percent from 2019 levels in the first half of 2021, resulting in a corresponding aggregate 1.4 percentage point improvement in margins. Looking ahead to the remainder of 2021 and beyond, profits are expected to see a stronger recovery than revenues because the cost base remains lower than 2019. This follows significant cost cutting in 2020, much of which will persist for the next few years. However, cost uncertainties will remain in the short to medium term, as input cost rises due to ongoing supply chain congestion could temper margins.³³¹

Given the significant declines in invested capital in 2020, we could assume that stronger revenues and operating profits have been achieved with less invested capital in 2021 than in 2019. Total invested capital fell by 6 percent between 2019 and 2020, partly because of bankruptcies and restrained investments. The evolution of investment patterns over 2021 also remains Unlike previous years, the destruction of economic profit caused by the bottom 20% of players could not be offset by the performance of the top 20%

FASHION COMPANIES' CONTRIBUTION TO INDUSTRY ECONOMIC PROFIT BY RANKED QUINTILE, % SHARE OF TOTAL



Note: Due to rounding, numbers presented may not add up precisely to 100. Total in 2020 is -100 due to negative economic profit. SOURCE: MCKINSEY GLOBAL FASHION INDEX (MGFI)

Exhibit 19:

The share of value destroyers reached record heights of 69% in 2020

VALUE CREATORS VS. VALUE DESTROYERS PER YEAR, % SHARE OF TOTAL



SOURCE: MCKINSEY GLOBAL FASHION INDEX (MGFI)

MCKINSEY GLOBAL FASHION INDEX

uncertain however, partly because market consolidation could contribute to a rise in invested capital through creation of goodwill.

Overall, strong revenues and operating profits combined with potentially lower invested capital in 2021 means we anticipate positive economic profit overall in 2021, with some possibility that it will even exceed 2019 levels. However, factors such as the impact of ongoing supply chain disruptions mean that predictions are inherently uncertain, as some companies are already noting.

Growth observed among listed companies in the first half of 2021 is in line with the McKinsey Fashion Scenarios predictions for the full year, which takes a more conservative view of H2 2021 in light of supply chain concerns, and accounts for lower top-line performance of non-listed companies and revenues lost through bankruptcies. Overall, McKinsey Fashion Scenarios project the total industry to reach 96 to 101 percent of 2019 levels in 2021, with luxury driving recovery and reaching 105 to 115 percent in the same period.

Further Polarisation — New Depths in the Industry's Bottom Performers

Until this year, the evolution of economic profit within performance quintiles has reiterated an established narrative: economic profit gravitating towards the most successful companies.

While all quintiles saw declines in economic profit in 2020, the relative impact on the top versus the bottom contributed to further polarisation, driven by dramatic declines in economic profit for the bottom quintile, which fell by 109 percentage points from 2019 levels. This is relative to the 60percentage-point drop of the top quintile. Unlike previous years, where the story was one of "winners take all," the story in 2020 shifted to one of severe value destruction.

Similarly, 2020 revealed a steadily expanding group of value destroyers that delivered negative economic profit. Accelerating a trend that has been developing for a decade, a record 69 percent of companies destroyed value in 2020, compared with 61 percent in 2019 and just 28 percent in 2011. Underlying this longer-term polarisation is a continuing shift in consumer behaviour, with the highly populated mid-market suffering at the expense of a relatively few dominant luxury, value and sportswear players.

Companies that transformed from value creators in 2019 to significant value destroyers in 2020 strongly represented the mid-market, alongside discount players and department stores, which all rely heavily on physical channels and therefore have been disproportionately impacted by lockdowns. As in-store retailing rebounds, some of these players will return to value creation, as already observed in the discount segment.

Last year, we warned that the increasing share of value destroyers could imply that companies will struggle to re-finance, as they cannot earn their cost of capital. This has played out in the 7 percent of fashion companies in our dataset that either filed for bankruptcy or were sold in 2020 and 2021. Given the high proportion of value destroyers, financial distress and resulting consolidation is likely to continue.

Drivers of Value Creation in 2020

Luxury and sportswear have consistently contributed a large share of positive economic profit to the fashion industry, each contributing some 20 percent of economic profit among value creators every year in the past five years.

Sportswear has been growing steadily for some time, with total economic profit by the sector's value creators growing every year from 2012, doubling in total over the eight-year period. Given the destruction of value in other sectors, 2020 was a breakout year for sportswear, with 42 percent of positive economic profit contributions in the industry coming from sportswear companies and making it the largest contributor by far.³³² Showing their resilience, 14 sportswear companies were value creators in 2020, and 15 were value creators in 2019. By comparison, in many other sectors, the propensity

MCKINSEY GLOBAL FASHION INDEX

to become value destroyers in 2020 was much higher.

The geographic distribution of economic profit contributions in sportswear is also shifting eastwards. China-based companies contributed 16 percent of positive economic profit in 2020 compared to 9 percent in 2017, driven largely by Anta Sports and Li Ning. Outside China, the largest value creators were North American players, including Nike, Lululemon and Dicks Sporting Goods.

Luxury also demonstrated resilience in 2020. EBITA margins in luxury and affordable luxury dipped from a 10-year average of around 19 percent to 16 percent, but remained within their historic range, contrary to other value segments.

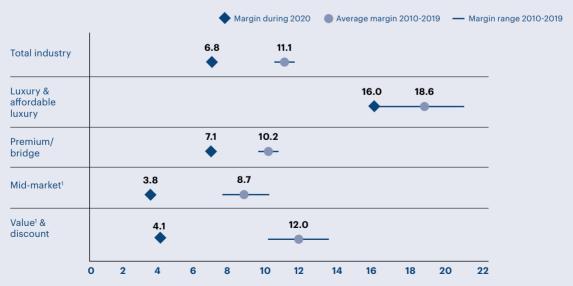
Luxury top lines fared relatively well, with the smallest revenue declines in 2020 compared with other segments. Underlying this was strong performance in China, as well as the fact that most luxury companies succeeded in accelerating digital sales through 2020. Another factor was cost control, where the luxury segment successfully maintained costs roughly in line with revenues, with the aggregate ratio of selling, general and administrative expenses (SG&A) to revenue only increasing by 1.4 percentage points from 2019 to 2020.

Margins in other segments were under pressure in 2020, trending below historic ranges. Within our sample of listed companies, value and discount revenues fell by around 17 percent from 2019, amid weak consumer sentiment and the segments' reliance on physical store networks. The cost of maintaining stores also prevented companies from reducing costs in line with

Exhibit 20:

In 2020, luxury was the only value segment that, as a whole, managed to maintain margins within its 10-year historic range

EBITA MARGINS BY VALUE SEGMENT IN 2020, AVERAGE FROM 2010-2019, AND RANGE FROM 2010-2019, %



1 Adjusted for outliers that are structurally unprofitable due to business model. SOURCE: ANNUAL REPORTS, MCKINSEY GLOBAL FASHION INDEX (MGFI)

MCKINSEY GLOBAL FASHION INDEX

revenues, and there was an increase in the share of SG&A to revenue of around 4 percentage points from 2019 to 2020. The mid-market and premium segments, meanwhile, saw revenue declines of 17 percent and 13 percent respectively. However, these segments were able to manage costs more effectively and saw increases in SG&A to revenue ratios of 1 to 2 percentage points in 2020.

Internet retailers also outperformed in 2020 and 2021, reflecting the massive shift to e-commerce. In market capitalisation terms, internet retailers were trading 112 percent higher in September 2021 than in December 2019, compared with the rest of the industry which was trading 28 percent higher. Still, this was a much narrower gap than during the height of lockdowns, when valuations of online players peaked and those across the rest of the industry reached their nadir.

Super Winners — A Mostly Consistent Story

In previous versions of the MGFI, we have highlighted a winner-takes-all trend in the fashion industry that has created a group of "Super Winners." In last year's report, we were unable to publish the list, due to different reporting periods for financial year results, which distorted economic profit results due to varying levels of exposure to the pandemic during the months captured in full-year results. This year, we are taking a different approach, calculating the average economic profit contributed by each company over a two-year period, covering financial years 2019 and 2020. This approach helps to smooth distortions created by market disruption over the past 18 months. To supplement this view, we also ranked the top 20 based on market capitalisation to identify trends emerging beyond current performance indicators.

Our latest group of Super Winners reflects the resilience of luxury and the spectacular growth of sportswear. The top five Super Winners, based on average economic profit over 2019 and 2020, were Nike, Inditex, Kering, LVMH (including Tiffany) and Hermès. The luxury players in this group continue to benefit from demand for bags, luxury jewellery and ready-to-wear from wealthy customers, whose earnings were less impacted by the pandemic and whose funds saved on travel and entertainment were reallocated towards luxury goods. A new entrant on the list from The State of Fashion 2020 report, ranking at number 19, was Moncler with strong growth in China and e-commerce channels.³³³ In addition, jewellery players contributed significant economic profit during the period, boosted by Pandora, which saw excellent turnaround performance, doubling their online sales during the pandemic — a result of the previous years' investments in digital capabilities and data, and increased brand desirability.³³⁴

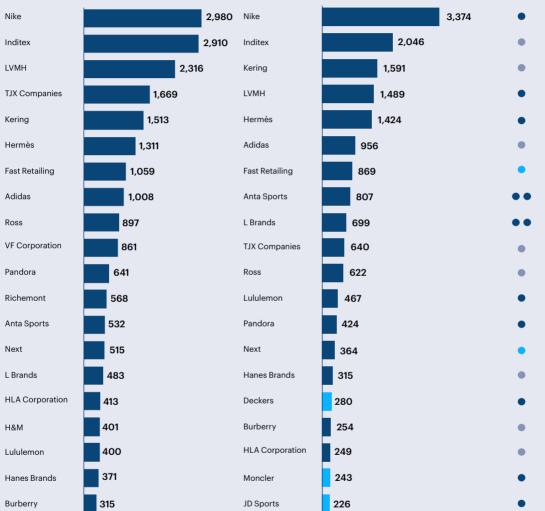
The changes in category focus of some shoppers accelerated existing strengths in sportswear, athleisure and outdoor brands as people sought out comfortable work-from-home and home workout attire. Sportswear giants Nike, Adidas, Anta Sports and Lululemon remain on the Super Winners list this year, with Anta Sports moving up the ranking and posting more economic profit than observed in the 2020 report, benefitting from Chinese breakout growth and domestic spend on local brands. In addition, all new entrants to the list this year, namely JD Sports, Deckers and Moncler, come from the sports and outdoors category. Other players benefitted from a strong business in underwear, nightwear and casualwear during the period.

Some Super Winners saw declines in economic profit during the period, with market valuations also growing slower than the industry average. Indeed, value and discount players saw earnings drop due to their physical stores halting sales during the pandemic. Additionally, mid-market fashion players saw economic profits decline in 2019 and 2020 compared to 2018, and saw their valuations grow in line with or slower than the industry average. These players saw revenue fall as spending in the category decreased overall. Particularly in Europe and the US, where lockdowns were extensive, shoppers also shifted some of their spend on clothing to essential retailers such as grocers.

Several of the Super Winners from 2018 have maintained their leading status

TOP 20 PLAYERS FROM THE 2018 LIST IN THE STATE OF FASHION 2020 EDITION, ECONOMIC PROFIT, USD MN

TOP 20 PLAYERS BASED ON FINANCIAL YEARS 2019 AND 2020, ECONOMIC PROFIT, USD MN Change in MCAP Dec '19 – Sep '20 compared to industry average



2018 Super Winners

New entrants

- Market Capitalisation (MCAP) grew above market average (>2x)
- MCAP grew above market average (1.4 to 2x)
- MCAP grew with market average (1.2 to 1.3x)
- MCAP grew below market average (<1.2x)

SOURCE: MCKINSEY GLOBAL FASHION INDEX (MGFI)

Looking Ahead — Big Bets for 2022

This year, we also assessed the top 20 companies by their market capitalisation, to identify where valuations have grown above market levels and understand future trends based on investor expectations. In addition to the continued strength of sportswear and luxury, three additional focus areas for investors were jewellery, Chinese companies and disruptive business models.

Jewellery companies (particularly fine jewellery) saw gains in market capitalisation that reflected overall luxury resilience and rising consumer demand for investment pieces.³³⁵ The branded fine jewellery segment is expected to grow by between 8 and 12 percent from 2019 to 2025.³³⁶ Richemont saw its valuation increase by 40 percent from December 2019 to September 2020, and Chow Tai Fook doubled its market capitalisation in the same period. Titan, a leading Indian jewellery player, realised the fruits of its pre-pandemic investment in omnichannel and continued formalisation of the Indian jewellery market and saw an increase in market capitalisation of 80 percent.³³⁷

Overall, three Chinese companies, Anta Sports, Li Ning and Chow Tai Fook, were among the top 20 and showed the highest market capitalisation growth across all players. For example, Li Ning increased its market capitalisation by a multiple of 3.9 during the period. These players benefited from the repatriation of Chinese spend as consumers embraced local brands, particularly as global travel was restricted.³³⁸ As travel disruptions are likely to continue through to the beginning of 2023, meaning consumers increasingly shop local via domestic travel and duty-free shopping, China's local fashion sales growth will continue to benefit through 2022 and beyond.

Finally, companies with business models that aligned with accelerated shifts in consumer behaviour during the pandemic are being rewarded. For example, online clothing marketplace Zalando saw its market capitalisation rise by a factor of 1.9 amid surging consumer demand for e-commerce. Majority private-equity owned Burlington also crept into the top 20 on a market capitalisation basis, as investors rewarded its big bets on the value segment, taking advantage of the reshuffle of market share, consumer loyalties and retail space that is likely to continue to play out among players in the industry in 2022 and beyond. Burlington opened 100 discount stores in 2021 alone.³³⁹

In terms of outright stock market performance, the top 20 by market capitalisation outperformed the rest in 2020, reflecting comparatively lower revenue declines (minus 4 percent, compared with minus 20 percent across the industry). Several of the top 20, and particularly sportswear and jewellery players, even saw revenues rise. The EBITA margins of the top 20 were around 12 percent on average in 2020, compared with 3 percent across the industry. Meanwhile, profit margins of both groups saw similar 3 to 4 percentage point declines.

While the tide is turning with 2021 and 2022 looking significantly more positive for the global fashion industry than the previous two years, the shakeout is not over as weaknesses exposed during the Covid-19 pandemic will continue to plague the industry. However, those that are able to pivot quickly to meet the changing expectations of consumers, while appropriately managing inventory and supply chain costs, will leapfrog ahead into a new dawn of recovery.

THE STATE OF BEAUTY 2022

Beauty's Cautious Recovery

After being hit significantly by the pandemic, all categories within the beauty sector are performing strongly, driven partly by burgeoning social commerce channels for which beauty products are perfectly suited. Amid the growth, the sector's competitive intensity shows no signs of abating, as luxury fashion houses continue to expand their beauty ranges at pace in a bid to boost revenues and attract new customers without eroding their brand values.

by Vanessa Goddevrind, Dale Kim, Sakina Mehenni, Michael Straub, Samantha Phillips and Kristi Weaver

Consumers cut spending on discretionary items amid Covid-19 stay-at-home restrictions, and sales of beauty products plunged. In 2020, global sales fell 15 percent from \$538 billion in 2019 to \$458 billion. In 2021, as lockdowns ease, the sector is close to reversing that fall. A 13 percent increase in sales to \$518 billion is projected for 2021 and, in 2022, sales should top 2019 levels.

Asia Pacific and North America should be the first regions to completely recover 2019 sales performance, followed by Europe, while Latin America, the Middle East and Africa will take longer. China, where the beauty market continued to grow during the pandemic, will pick up speed, fuelled by skin care and colour cosmetics.

In terms of product categories, sales of fragrance and colour cosmetics predictably fell abruptly in 2020. Although both categories are growing again, we expect consumers to continue to indulge in the "self-care" categories of skin care and hair care, which remained in demand during the pandemic. These categories do not rely on in-store trialling and lend themselves well to online discovery and purchase. Skin care will see the strongest performance, growing 22 percent in 2021 and a further 10 percent in 2022. By 2024, we estimate skin care will account for 34 percent of the global beauty market.

One overarching category that both brands and retailers are betting big on is "clean beauty." The category has grown fast as independent brands claiming to use safe, natural and crueltyfree formulas flourished. Traditional players have started expanding their ranges to meet the demand, with some even reformulating hero products. When Dior launched Capture Totale C.E.L.L. Energy as an update to its established anti-ageing product line, it claimed both eco-friendly packaging and to be made from 85 percent natural ingredients.340 Retailers have also visibly invested in clean beauty in their choice of brands, products and store layouts. Sephora's flagship Champs Élysées store in Paris, for example, has a large space dedicated to the category. However, some leading skin care influencers, such as Dieux Skin founder Charlotte Palermino, have expressed scepticism around

the clean beauty trend, claiming specifically that non-natural ingredients are not intrinsically harmful. Both her social media posts and her own line of "non-clean" beauty products have proved highly successful.³⁴¹

One overarching category that both brands and retailers are betting big on is "clean beauty."

The pandemic had a varied impact across value segments. The premium segment was hit more in the short-term as its traditional physical channels were closed. The mass segment, however, was not only more readily available online but it also skews more towards the hair and personal care products that better withstood the crisis. Premium products, including those from luxury fashion houses, are nevertheless expected to gain market share in the long run, exceeding their 2019 share by 2023, and growing at 13 percent per annum between 2021 and 2024 (see "Competition Intensifies in Luxury Beauty" on page 128).

In terms of channels, digital continues to grow fast and is taking share from bricks-andmortar retail. Online sales will account for 23 percent of the beauty market by 2022 and will become the most important channel by 2024. In China, where digital channels are more embedded in the consumer consciousness and integrated into heavily used social apps, we expect more than half of all sales to take place online by 2023. Globally, digital sales constitute a diverse group of channels encompassing social selling on platforms such as Instagram, TikTok, WeChat, Xiaohongshu and others; marketplaces such as Amazon and Lookfantastic; and traditional retail and brand e-commerce sites. Company announcements show the extent to which the beauty industry anticipates a digital future: L'Oréal, for example, has said very publicly that it is aiming for half of its sales to be generated via digital channels.342

Physical stores have seen a bounce-back as lockdown restrictions lifted, and some beauty brands have even reinforced their physical presence. In the US, for example, Sephora has opened dedicated spaces in some Kohl's department stores, while Ulta Beauty now sells a curated product range at Target.³⁴³ The nature of beauty products – especially colour cosmetics – means that, while customers will browse online, in-person testing is still hard to beat. As Margaret Mitchell, chief merchandising officer at UK beauty chain Space NK, explains, a customer "may want to try something from a VR perspective on a website, but... that's not replacing coming into a store for a complexion match."³⁴⁴

The desire to see and try a product, and the enjoyment of trialling and shopping for beauty products in person, should help to boost physical sales. However, in the long run, all non-digital channels, except travel retail, are expected to maintain market share at best, while most will lose.

One digital channel attracting a lot of attention and investment is social commerce, whereby brands and retailers use social media platforms throughout the sales and marketing funnel to drive discovery, conversion and purchase. Social commerce has been a popular sales channel in China for some years, already accounting for more than 13 percent of total e-commerce sales (see "Social Shopping" on page 65). Meanwhile, in the West, many customers are comfortable with social media for discovery, but sales are yet to take off due to a lack of platform functionality and some hesitance among shoppers. However, times are changing: both customer attitudes and technology are evolving quickly, and brands are starting to capture this opportunity.

The beauty sector is particularly well-placed to maximise the potential of social commerce. It is a highly engaging category: consumers are already familiar with online beauty tutorials, and the majority of Gen-Z and Millennials in the US prefer to discover beauty products through social media ahead of any other channel.³⁴⁵ Beauty companies



must prioritise these new channels and ensure they have the right capabilities in place to ride the next wave of growth by converting social users into social shoppers.

The popularity of social commerce in China is enabled by seamless payment methods within apps such as WeChat. Brands that get social commerce right in this market have seen astonishing growth rates. Revenues at Chinese beauty company Yatsen Holdings Limited multiplied by more than 50 from 2017 to 2020, reaching over RMB 500 million (\$78 million),³⁴⁶ with its local "C-beauty" brand Perfect Diary, which focuses on sales via its social direct-to-consumer model on WeChat, making up the majority of revenues.

Social commerce sales in the West are expected to grow, though the pace of adoption and direction of travel may differ from China, owing to the plethora of platforms in the West and the lower levels of seamless payment integration compared with China. The lack of an established livestreaming culture in the West also means brands will need to devise new strategies to attract customers. Nevertheless, there is potential for growth: half of US TikTok users have purchased a product or service from a brand after seeing it advertised, promoted or reviewed on the platform.³⁴⁷ Overall, social commerce sales in the US are expected to double from 2020 to 2023, reaching \$53 billion.³⁴⁸

To succeed with social commerce, brands and retailers will need platforms to deliver the experiences that both they and their customers want. The underlying technology needs to evolve fast to keep pace with trends, and beauty companies must innovate both their marketing and customer engagement techniques as they move customers seamlessly from discovery to purchase.

The popularity of social commerce in China is enabled by seamless payment methods within apps such as WeChat.

Platforms that recognise the potential of the beauty sector are partnering with beauty brands to pilot their latest social commerce offerings. For example, TikTok now offers tools that enable

THE STATE OF BEAUTY 2022

brands to manage marketing campaigns via their existing Shopify dashboards, and is piloting the concept with Kylie Cosmetics.³⁴⁹ Pinterest is enabling influencers to add shopping links via its Shopify partnership and is specifically targeting the beauty market by deploying augmented reality try-on technology that allows users to test different shades of makeup.³⁵⁰ Meanwhile, Amazon Live is attempting to re-energise the home-shopping format with livestreaming shows that give influencers the ability to tag promotions, chat with users and earn commission on sales.³⁵¹

Emerging alongside these large and established players are smaller, niche platforms. US beauty shopping start-up Flip, for example, has invested heavily in the short video experience. Launched in 2019, Flip's content is focused exclusively on beauty and includes built-in shopping links for featured products. Flip currently sells more than 200 brands and aims to feature more than 500 by the end of the year.³⁵²

Platforms that recognise the potential of the beauty sector are partnering with beauty brands to pilot their latest social commerce offerings.

Ulta Beauty, meanwhile, has invested in livestream shopping by partnering with beauty app Supergreat.³⁵³ Supergreat has a large and enthusiastic beauty audience that skews heavily towards young women. Users spend an average of 20 minutes a day on the app, and it has received investment from celebrities such as Hailey Bieber, Kate Hudson and Karlie Kloss. The potential for social commerce has also attracted third-party capital. For example, private-equity firm Permira recently invested in CommentSold, a US-based software company that lets influencers sell directly via livestreams. Permira said that "live selling will be the next wave of e-commerce."³⁵⁴ Meanwhile, brands are trialling a wide range of innovative approaches. Luxury cosmetics company L'Occitane, for example, had success in South Korea using KakaoTalk Gift, an offshoot of a popular messaging app that lets users give and receive gifts. In China, Yves Saint Laurent (YSL) Beauté opened a flagship store on Alibaba-owned Tmall. YSL broke records on the platform when it launched in 2018 and continues to make it a priority in China.³⁵⁵

Newer entrants to social commerce are also testing fresh ideas. For example, after experiencing high conversion rates with one-on-one virtual consultations offered on its website in 2020, Charlotte Tilbury director of digital Harminder Matharu said, "it is encouraging us to explore social commerce further."³⁵⁶ Meanwhile, specialist US clean beauty retailer Beautycounter has partnered with payments company Klarna to host a series of livestream shopping events from Beautycounter's Los Angeles flagship store.

The rise of social commerce in the West is no longer a question of "if" but rather "how fast." Brands will need to invest now to remain relevant as customer comfort with shopping on social channels accelerates. Consumers will increasingly seek entertainment and engagement in their shopping experience, and brands will have to prepare for a shortened consumer decision funnel. Content will continue to grow in importance, and brands will need to deliver relevant and entertaining shoppable content paired with seamless e-commerce logistics. Winners will invest early and dive in with both feet to ensure they capture the attention of the Gen-Z consumer.

After a challenging couple of years, beauty players should be more optimistic about the future. But even though revenue is expected to grow across all categories, the companies that will secure long-term growth will have clear strategies on which product categories to target and which channels to prioritise. These strategies must sit alongside ambitious and tangible targets on environmental and social sustainability as well as a

IN-DEPTH

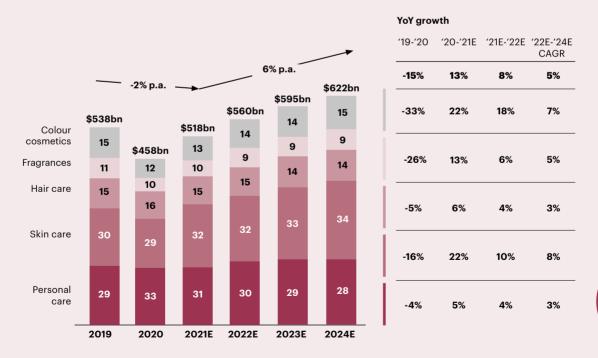
sharper focus on diversity, equity and inclusion.

Although the picture for the global beauty market in 2022 is relatively bright, players will of course be wary of supply chain issues, and the macroeconomic and geopolitical uncertainty within the broader global economy. These stresses point to a need for prudence, especially for companies with very niche or limited ranges, those who lack a clear purpose-driven story, and those who are over-reliant on offline distribution. At the heart of the mission for the most successful players will likely be a commitment to listen to customers, and to engage with them in a variety of authentic ways across a wide range of platforms.

Exhibit 22:

Global beauty sales are expected to exceed 2019 levels in 2022, with share shifting to skin care

CATEGORY DEVELOPMENT, RETAIL SALES USD BN, % SHARE OF TOTAL

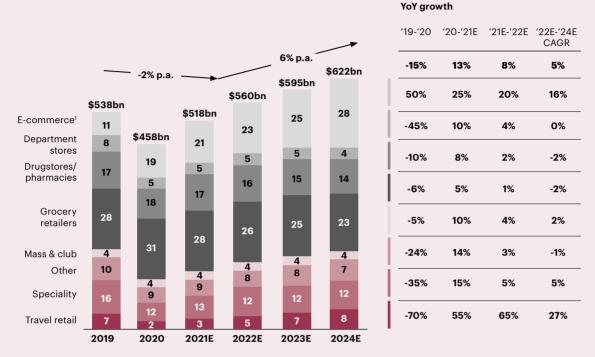


Note: Due to rounding, numbers presented may not add up precisely to 100.

SOURCE: MCKINSEY ANALYSIS BASED ON MCKINSEY GLOBAL INSTITUTE MACROECONOMIC SCENARIOS, EUROMONITOR, NPD, NIELSEN, IRI, AMAZON STACKLINE AND PUBLICLY REPORTED COMPANY FINANCIALS

E-commerce is the fastest-growing channel for beauty sales

CHANNEL DEVELOPMENT, RETAIL SALES USD BN, % SHARE OF TOTAL



1 Includes all e-commerce sales (brand.com, retailer.com, marketplace, and buy-online-pick-up-in-store sales) Note: Due to rounding, numbers presented may not add up precisely to 100.

SOURCE: MCKINSEY ANALYSIS BASED ON MCKINSEY GLOBAL INSTITUTE MACROECONOMIC SCENARIOS, EUROMONITOR, NPD, NIELSEN, IRI, AMAZON STACKLINE AND PUBLICLY REPORTED COMPANY FINANCIALS

Competition Intensifies in Luxury Beauty

The prestige beauty and personal care market is worth \$115 billion — approximately a quarter of the total beauty market. It is a lucrative but crowded space, and the growing presence of luxury fashion houses in the market is intensifying the competition. Some have a long-established presence in beauty (Chanel No.5 launched in 1924, after all), but other luxury fashion entries are far more recent, like Valentino Beauty which launched in 2021. Now, as they seek to grow revenues and build brand loyalty among younger customers, almost all the leading luxury fashion brands have a range of beauty products that extends beyond fragrance. In Chanel's case, beauty products are believed to account for a third of its revenues.³⁵⁷

However, given the number of players competing in this market, luxury houses will need to target the right sub-categories and listen to their customers, while staying true to their brand.

Skin care is likely to be the next category move for many players. It is a challenging market as consumers tend to be more cautious about skin care products than colour cosmetics. Therefore, according to Mario Ortelli, managing partner of luxury advisors Ortelli & Co., most brands are likely to focus initially on skin care products such

IN-DEPTH

as cleansers and primers, rather than the more "science-oriented" skin care categories such as anti-ageing.

To appeal to a sufficiently wide customer base, luxury houses will need to move away from trading solely on a sense of unattainable exclusivity. Today's beauty consumers expect to engage in a two-way conversation with brands. Communitybased direct-to-consumer brands such as Glossier and Drunk Elephant have established significant momentum by tapping into customers' desire to be included in the product co-creation process. Luxury houses will therefore need to rethink customer engagement by building or strengthening communities, hosting live events (virtually or otherwise) and seeking out (and being receptive to) feedback.³⁵⁸

Working with influencers who can more readily reach their customers is one route, but brands may also consider tapping into the views of younger employees in their workforce — and hiring more young talent like LVMH is doing — to better understand how to target their next generation of customers.³⁵⁹

A significant concern for any brand entering new markets and targeting new customer segments is not diluting their brand or confusing their brand values. But expanding into new categories inevitably carries some risk of brand dilution, so it is essential that the essence of the brand remains anchored.

The connection of a luxury fashion brand's DNA to its beauty products may be price-based, with a premium price tag to match its fashion offering, but it can also be more intrinsic. For example, the matte lines of Hermès' Rouge Hermès lipsticks feature shades inspired by its classic Birkin bag, where the texture alludes to the soft leather, while the satin shades pay homage to its classic silk scarves.³⁶⁰

The connection should also be apparent and consistent in brand messaging, especially in relation to consumer values around sustainability, gender fluidity and inclusivity. For example, if a brand's fashion shows feature models with a variety of body shapes, or of varying ages, then a beauty campaign that features exclusively young models with flawless skin could muddle the brand's core values for consumers. Similarly, if a brand uses organic cotton in garments and recycled paper for packaging, but then uses parabens for its beauty products, the brands' values can be seen as a mismatch.

The risk of brand dilution should also be a consideration when deciding whether to produce beauty products and categories in-house or outsource expertise by licensing the brand name to a third party. Chanel, for example, produces all its beauty products in-house, while Valentino, Prada and Giorgio Armani license their brands to L'Oréal.³⁶¹ Luxury players need to consider the scale of distribution networks, expertise in developing formulations and production capabilities when making such decisions. However, it is not an either/ or decision: different stages of the value chain from product development to sales may be better suited to a certain approach. Hermès, for example, develops its skin care and cosmetics products in-house but outsources production to third parties.362

The authors would like to thank Annabel Morgan, Natalia Lepasch and Simona Kulakauskaite for their contribution to this article.

GLOSSARY

1.5-degree pathway

A scientific estimate that indicates limiting global warming to 1.5 degrees Celsius above pre-industrial levels would reduce the odds of initiating the most dangerous and irreversible effects of climate change.

Artificial intelligence (AI)

Computer systems performing tasks by mimicking the problem-solving and decision-making capabilities of the human mind, often used to process large amounts of data for predictive purposes.

Augmented reality (AR)

The use of technology to create an enhanced version of the physical world, through the use of digital items such as visuals and audio.

Athleisure

A hybrid clothing category that combines athletic with casual, everyday styles, for example jogging bottoms in athletic fabrics.

Avatar

A digital image or graphic representation of a user, often deployed in online games, chats, etc.

Baby boomers

Demographic cohort born circa 1946-1964, following the "Silent Generation."

Belonging

The feeling of acceptance and of being valued experienced by employees and fostered by a company's culture and work environment.

Biodegradable

Material capable of being decomposed naturally by bacteria when discarded as waste.

"Black Swan" events

A metaphor for a rare event that is unpredictable and has far-reaching consequences.

Blockchain

A digital database containing encrypted information that can be simultaneously used and shared within a large, decentralised, publicly accessible network.

BoF-McKinsey State of Fashion 2022 Survey

Proprietary joint survey by *The Business of Fashion* and McKinsey. The survey asks international fashion executives and experts to rate their business sentiment, investment plans and industry trends. 222 respondents participated in the State of Fashion Survey for the State of Fashion 2022 report in September 2021.

Capital intensity

A measure of profitability used to assess how much invested capital a company turns into revenue.

Carbon neutrality

Balancing the level of carbon emissions produced with an equal level of carbon removal through the shift to new energy sources, changes in industry processes, circular business models and carbon offsetting.

Circularity

An economic system aimed at eliminating waste and promoting the continual use of resources, minimising resource inputs and the creation of waste, pollution and carbon emissions. In apparel, we refer to the six Rs: reducing the materials needed and waste created when making products; recycling the materials used to produce new products; refurbishing deadstock and used products into new products - without re-processing the raw materials; reselling second-hand or used products with no refurbishment: renting products through one-off rental or subscription models; and repairing products, by professional or amateur means during the product's use-phase - without changing ownership.

Closed-loop recycling

A recycling process where textile product waste (both post-consumer and post-production) is recycled into new textile products so that the materials remain in constant circulation (garment-to-garment).

Consumer sentiment

An indicator that measures how optimistic consumers feel about their finances, the state of the economy and purchasing behaviour.

Conversion

The process of completing a desired action, such as a consumer purchasing a product or signing up for a service (often related to sales generation).

COP26

The UN's 26th Climate Change Conference, which took place in Glasgow, UK in October and November 2021.

Cost of goods sold (COGS)

An income statement item stating the total costs used to create a product or service, which has been sold.

Covid-19

Coronavirus disease 2019 (Covid-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 and was classified a pandemic by the World Health Organization on March 11, 2020.

Cyber attack

An attempt to gain illegal access to a system, network, infrastructure or devices for the purpose of causing damage or harm.

Cyber threat

The possibility of a malicious attempt to damage or disrupt a computer network or system, to damage or steal data, or to disrupt digital operations.

Daigou

Grey-market surrogate shoppers who buy goods overseas to sell on the Chinese mainland.

Data breach

An incident that results in information being taken from a system without authorisation.

Deadstock

Old, leftover and over-ordered fabric often purchased from other designers or warehouses, which is diverted into new garments rather than landfill.

Deleveraging

The process of reducing a company's debt by paying existing debt and obligations on its balance sheet. Deleveraging allows companies to reduce the riskiness of their business.

Digital material libraries

A central repository for all available raw materials and components of a product, enabling designers to have full visibility over the options they can use to complete a design.

Digital twin

A virtual asset associated with a physical object or process. A digital twin can include an object or garment's full history from manufacturing to transportation (e.g. a level of detail that extends to dyeing, production and distribution facilities), as well as information about the purchase aftercare, repairs or resale.

Direct-to-consumer (DTC)

Selling products directly to the end consumer instead of through retailers, wholesalers etc.

Distributed denial of services (DDoS)

A type of cyber attack in which online services are made unavailable by overwhelming the page with internet traffic.

Diversity

Involving individuals with a range of human differences including, but not limited to: gender, race, ethnicity, sexual orientation, age, origin, nationality, social background, physical ability, religion and political beliefs.

Duty-free

The ability to purchase items without paying import, sales, value-added tax (VAT) or other taxes.

EBITA

An income statement item that deducts amortisation from earnings before interest and taxes (EBIT). An alternative measure of income a firm makes from its core operations.

EBITA margin

A measurement of a company's EBITA as a percentage of its total revenue.

EBITDA

An income statement item that deducts depreciation and amortisation from earnings before interest and taxes (EBIT). An alternative measure of income a business makes from its core operations.

Economic profit

A measure of value-add created by businesses, whereby opportunity costs are deducted from revenues earned. A company creates value when its operating profit exceeds the dollar cost of capital. Defined as Net Operating Profit, Less Adjusted Taxes (NOPLAT) minus Capital Charge (Weighted Average Cost of Capital, WACC, multiplied by Invested Capital).

Endemic virus

An outbreak of a virus that is limited to a particular region or country.

Equity

Equality of opportunities and resources relative to the unique needs of individuals and groups.

European Union (EU)

A political and economic union of 27 member states that are located primarily in Europe.

EV/sales

A measure that compares a company's enterprise value to its annual sales. It is typically used as a metric that quantifies the purchasing cost of a company's sales. Enterprise value accounts for market capitalisation, debt and cash.

Extended producer responsibility

Extended producer responsibility (EPR) is a policy approach under which producers are given a significant responsibility — financial and/or physical — for the treatment or disposal of post-consumer products.

Fiscal response

The use of government spending and taxation (e.g. taxes or tax cuts) to influence the economy.

Freight

Goods transported from place to place, by land, sea or air.

G20

International forum bringing together the world's major economies accounting for more than 80 percent of world GPD. G20 members are Argentina, Australia, Brazil, Canada, China, France, Germany, Japan, India, Indonesia, Italy, Mexico, Russia, South Africa, Saudi Arabia, South Korea, Turkey, the United Kingdom, the United States, and the European Union. Spain is also invited as a permanent suest.

Generation-Z (Gen-Z)

Demographic cohort born circa 1996–2012, following the Millennial generation.

General Data Protection Regulation (GDPR)

The European Union's law on data protection and privacy.

Government support scheme / subsidy

Actions by governments to support small and large businesses during the Covid-19 crisis. Relevant government aid to brands and retailers includes rental support, salary support for furloughed staff and loans on good terms.

Greenhouse gas emissions

Greenhouse gases vented to the Earth's atmosphere as a result of human activity; includes carbon dioxide and equivalents that can cause climate change.

Gross Domestic Profit (GDP)

The total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period and thus serving as a measure of economic health.

Hybrid working

Flexible work structure in which employees can split their working hours between working from a central office and working remotely from their homes.

Inclusion

The exercised decision by an organisation to involve diverse people and perspectives.

Intellectual property (IP)

Property that includes intangible creations of the human intellect. For fashion companies, this can include designs, trademarks, copyrights, prototypes, manufacturing instructions, etc.

Inventory turnover

A ratio showing the number of times a company has sold and replaced inventory during a given period. A decreasing turnover implicates lower sales and potentially a build-up of excess inventory.

Key opinion leader (KOL)

A term often used in China and other markets to describe influencers or brand ambassadors.

Last-mile logistics

Also known as last-mile delivery, this is the final step of the delivery process or supply chain which involves the shipment of goods from the (often local) distribution centre to the end consumer.

M&A activity

The consolidation of companies through various types of financial transactions, including mergers, acquisitions, consolidations, tender offers or the purchase of assets.

Machine learning

A form of artificial intelligence that automates analytical model building, enabling systems to "learn" with minimal human intervention.

McKinsey Fashion Scenarios

Covid-19 recovery scenarios in the fashion industry across regions and segments based on holistic fact-bases and key sources of intelligence; includes fashion, accessories and shoes; last updated on October 20, 2021 as per Edition XIII.

McKinsey Global Fashion Index (MGFI)

Proprietary and copyrighted McKinsey tool that provides a global and holistic industry benchmark for the entire fashion industry. The MGFI was first created for The State of Fashion 2017 to track industry performance through three key variables: sales, operating profit and economic profit, MGFI comprises an extensive list of public companies spanning market segments, product categories and geographies. The analysis of public companies is built with data from McKinsey Corporate Performance Analytics (McKinsey CPAT)

Metaverse

The envisioned future iteration of the internet that is made up of 3D virtual spaces linked within a perceived virtual universe. In a broader sense, it often refers not just to virtual worlds, but rather the full spectrum of virtual worlds, augmented reality and the internet.

Microplastics

Very small pieces of plastic, typically less than 5mm in length, that shed from items such as garments and pollute the environment. Their environmental harm is caused by their slow degradation, which occurs over hundreds if not thousands of years.

Millennials (Generation-Y/Gen-Y)

Demographic cohort born circa 1982–1995, also commonly referred to as Generation-Y (this name is based on Generation-X, the generation that preceded them).

Near-field communication (NFC)

Wireless short-range communication technology allowing rapid information transfer between two devices containing NFC chips.

Non-fungible token (NFT)

A unique digital asset, e.g. a photo, video, audio or other digital item that can represent art, music, in-game items etc. Blockchain technology is used to establish a verified and public proof of ownership.

Open-loop recycling

A recycling process in which one product is recycled into a different product, thereby delaying the material from going into waste once it cannot be recycled again.

Open-source

A software for which the original code is made freely available and may be redistributed and modified.

Phishing

A method of deceiving individuals into revealing personal information e.g. passwords and credit card numbers by sending fraudulent emails purporting to be from reputable parties.

Price segments

As definitions of market segments often vary across sources, all companies in the MGFI are categorised based on a Sales Price Index, providing a range of prices for a standard basket of products within each segment and home market thereby relying only on a quantitative measure, whereby companies in each segment price their items similarly.

QR codes

Matrix barcodes that contain information about an item or the location it is attached to, which can be read by smartphones.

Radio-frequency identification (RFID)

A wireless system of tags that uses radio waves to identify and track an object, e.g. when tracking items along a supply chain.

Ransomware attack

A type of malware that blocks access to a system, files, databases and demands a ransom payment in order to provide access.

Reach

The estimated number of potential customers a brand can reach with a specific marketing campaign or initiative to generate awareness.

Regenerated fibre

Fibre created from pre-existing fibres whose cellulose areas are dissolved in chemicals and rebuilt into new fibres by viscose method.

Repatriation

Sending money back to one's own country; in relation to shopping, this is spending money domestically rather than abroad.

Resale

Buying or selling clothing secondhand, often via online platforms or vintage / consignment stores.

Retention

Keeping employees at a business through a number of satisfaction measures, to reduce turnover.

Revenge buying

A phenomenon where customers indulge in buying goods after being deprived of shopping and social events during a crisis such as a pandemic.

Return on investment (ROI)

Assesses the benefit of an investment by comparing the cost of an investment to its return. For stores, this relates to comparing store investments and costs in store operations to the store's profitability.

S&P 500

A stock market index that tracks the stocks of 500 large-cap US companies.

Seasonality

Increased demand for certain products due to the season or weather, e.g. warmer jackets due to colder temperatures.

Selling, general & administrative expenses (SG&A)

An income statement item stating all costs not directly tied to making a product or service.

Skins

An item that an online game player can acquire to change the appearance of an avatar, e.g. a digital piece of clothing.

SKU productivity

A measure of the effectiveness and profitability of an assortment by measuring stock keeping units against strategic and financial targets.

Social commerce

The use of social networking apps and platforms such as Facebook, Instagram, TikTok and Twitter to promote and sell products and services.

GLOSSARY

Super Winners

The top 20 fashion players by economic profit (average economic profit 2019-2020 for the 2020 Super Winners, and economic profit in 2018 for the 2018 Super Winners) according to The State of Fashion Report.

Sustainability

Within a business context, sustainability refers to businesses making decisions in terms of environmental, social, human and corporate governance impact for the long term and relates to how a company's products and services contribute to sustainable development.

Tariff

A tax or duty to be paid on particular classes of imports or exports.

Travel retail sector

Retail located in travel hubs and key tourist destinations, such as airports, airlines, cruises, train stations, downtown locations and border shops.

Value creator

A company generating positive economic profit.

Value destroyer

The State of Fashion 2022

A company generating negative economic profit.

Value segment

The company segmentation based on a Sales Price Index, which provides a range of prices for a standard basket of products within each segment and company's home market. The companies in the McKinsey Global Fashion Index and the BoF-McKinsey State of Fashion Survey are categorised into six segments, which are based on a price index across a wide basket of goods and geographies. The segments range from lowest to highest price segment. discount, value, mid-market, premium/bridge, affordable luxury, luxury.

VAT

Value-add tax, referring to the tax added on all purchases in many countries. VAT reductions or breaks for tourists may be added as a savings incentive to shop abroad.

Virgin material

Textile fibres used in their virgin state and not based on recycled material (e.g. virgin cotton versus recycled cotton, virgin polyester versus recycled polyester).

Virtual fashion

Visual representation of fashion items built using technology and 3D software e.g. to be worn by avatars in online games. Intangible objects traded in online communities or marketplaces. Objects are purchased for use in online communities or online games.

Zero-based approach

An approach that seeks to link organisational designs to strategic priorities (e.g. areas for investment compared to efficiency optimisation) instead of a "one-size-fits-all" solution across the business.

INFOGRAPHICS AND EXHIBITS

The State of Fashion 2022 infographics:

1. Uneven Recovery Source: "WHO extends call for a moratorium on Covid booster doses until the end of the year", CNBC, September 8, 2021, https://www.cnbc.com/2021/09/08/ who-extends-call-for-a-moratorium-on-covidbooster-doses-until-the-end-of-the-year.html

2. Logistics Gridlock Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

3. Domestic Luxuries Source: "Update: COVID-19 global air traffic demand scenarios" – McKinsey Travel, Logistics & Infrastructure analysis; PAX-18, July 2021

4. Wardrobe Reboot Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

5. Metaverse Mindset Source: Newzoo, Key Numbers 2021

6. Social Shopping Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

7. Circular Textiles Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

8. Product Passports Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

9. Cyber Resilience Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

10. Talent Crunch Source: BoF Community Survey 2022, N=630 Exhibits:

Exhibit 1: Industry Outlook Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

Exhibit 2: Industry Outlook Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

Exhibit 3: Industry Outlook Source: McKinsey Fashion Scenarios, McKinsey analysis, expert interviews

Exhibit 4: Industry Outlook Source: McKinsey Fashion Scenarios, McKinsey analysis, expert interviews

Exhibit 5: Uneven Recovery Source: McKinsey Recovery Scenarios, in partnership with Oxford Economics, June 2021

Exhibit 6: Logistics Gridlock Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

Exhibit 7: Domestic Luxuries Source: "Update: Covid-19 Global Air Traffic Demand Scenarios" – McKinsey Travel, Logistics & Infrastructure Analysis; PAX-IS, July 2021

Exhibit 8: Wardrobe Reboot Source: Lyst, August 2021

Exhibit 9: Metaverse Mindset Source: Newzoo, Key Numbers 2021

Exhibit 10: Social Shopping Source: eMarketer, January 2021

Exhibit 11: Circular Textiles Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

Exhibit 12: Circular Textiles Source: Simplified form of A New Textiles Economy: Redesigning Fashion's Future, Ellen MaCarthur Foundation with Analysis by McKinsey, November 2017

Exhibit 13: Product Passports Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

Exhibit 14: Cyber Resilience Source: BoF-McKinsey State of Fashion 2022 Survey, N=222

Exhibit 15: Talent Crunch Source: BoF Community Survey 2022, N=630

Exhibit 16-19: McKinsey Global Fashion Index Source: McKinsey Global Fashion Index (MGFI)

Exhibit 20: McKinsey Global Fashion Index Source: Annual reports, McKinsey Global Fashion Index (MGFI)

Exhibit 21: McKinsey Global Fashion Index Source: McKinsey Global Fashion Index (MGFI)

Exhibit 22-23: The State of Beauty 2022 Source: McKinsey analysis based on McKinsey Global Institute Macroeconomic Scenarios, Euromonitor, NPD, Nielsen, IRI, Amazon Stackline and publicly reported company financials

END NOTES

1 McKinsey Fashion Scenarios, October 2021

2 BEA; Eurostat; Oxford Economics; McKinsey Global Institute analysis

3 McKinsey & Company Covid-19 US Consumer Pulse Survey Feb 8–22, 2021, N=2,076

4 McKinsey & Company Covid-19 Consumer Pulse Survey, 2022 Global Sentiment Survey

5 BoF-McKinsey State of Fashion 2022 Survey

6 BEA; Eurostat; Oxford Economics; McKinsey Global Institute analysis

7 "Meet your future Asian consumer", McKinsey, July 28, 2021, https://www. mckinsey.com/featured-insights/ future-of-asia/meet-your-futureasian-consumer

8 National Bureau of Statistics

9 McKinsey Fashion Scenarios, October 2021

10 McKinsey Fashion Scenarios, October 2021

11 BoF-McKinsey State of Fashion 2022 Survey

12 BoF-McKinsey State of Fashion 2022 Survey

13 BoF-McKinsey State of Fashion 2022 Survey

14 BoF-McKinsey State of Fashion 2022 Survey

15 BoF-McKinsey State of Fashion 2022 Survey

16 BoF-McKinsey State of Fashion 2022 Survey

17 Rich Mendez, "WHO Extends Call For a Moratorium on Covid Booster Doses Until the End of the Year", CNBC, September 8, 2021, https://www.cnbc.com/2021/09/08/ who-extends-call-for-a-moratoriumon-covid-booster-doses-until-the-endof-the-year.html

18 Sarun Charumilind, Matt Craven, Jessica Lamb, Adam Sabow, Shubham Singhal, Matt Wilson, "When Will the Covid-19 Pandemic End?", McKinsey, August 23, 2021, https://www. mckinsey.com/industries/healthcaresystems-and-services/our-insights/ when-will-the-covid-19-pandemic-end

19 "Post-COVID-19 recovery must not leave anyone behind — DG Okonjo-Iweala at Aid for Trade event", World Trade Organization, March 23, 2021, https://www.wto.org/english/news_e/ news21_e/aid_23mar21_e.htm

20 Zoe Suen, "What Vietnam's Factory Closures Mean for Fashion", The Business of Fashion, September 10, 2021, https://www.businessoffashion. com/articles/global-markets/ what-vietnams-factory-closures-meanfor-fashion

21 Genevieve LeBaron, Penelope Kyritis, Perla Polanco Leal, Michael Marshall, "The Unequal Impacts of Covid-19 on Global Garment Supply Chains", June 2021, https://www.workersrights.org/ wp-content/uploads/2021/06/ The-Unequal-Impacts-of-Covid-19-on-Global-Garment-Supply-Chains.pdf; Queennie Yang, "China's Shoemaking Hub Locks Down Following Covid-19 Outbreak", The Business of Fashion, September 14, 2021, https://www. businessoffashion.com/news/china/ chinas-shoemaking-hub-locked-downfollowing-rise-in-covid-19-infections

22 Julian Gething, Sam Hodgkinson, Richard Hudson, Matt Johnston, David O'Neill, Marta Wlodar, "Road to recovery: The state of corporate restructuring in Europe", McKinsey, March 16, 2021, https://www. mcKinsey.com/business-functions/ transformation/our-insights/ road-to-recovery-the-state-ofcorporate-restructuring-in-europe

23 Annie Nova, "Pandemic-era relief is drying up. But families still have options", CNBC, August 6, 2021, https://www.cnbc.com/2021/08/06/ unemployment-benefits-stimuluschecks-pandemic-era-aid-is-ending-. html; Faisal Islam, "Furlough scheme ends with almost 1 million left in limbo", BBC, October 1, 2021, https:// www.bbc.com/news/business-58735209

24 Macroeconomic scenarios, including GDP projections, in this article are based on McKinsey Recovery Scenarios, developed in partnership with Oxford Economics and published in July 2021

25 Sven Smit, Martin Hirt, Ezra Greenberg, Susan Lund, Kevin Buehler, Arvind Govindarajan, "Looking beyond the pandemic: Could the world economy gain more than it lost to COVID-19?", McKinsey, June 14, 2021, https://www.mckinsey.com/ business-functions/strategy-andcorporate-finance/our-insights/ looking-beyond-the-pandemic-couldthe-world-economy-gain-more-thanit-lost-to-covid-19

26 Ibid.

27 Ibid.

28 Ibid.

29 McKinsey & Company Covid-19 US Consumer Pulse Survey Feb 8–22, 2021, N=2,076, sampled and weighted to match the US general population 18+ vears

30 Cathaleen Chen, Tamison O'Connor, "The Revenge Shopping Opportunity", The Business of Fashion, March 15, 2021, https://www. businessoffashion.com/articles/retail/ the-revenge-shopping-opportunity

31 McKinsey Fashion Scenarios, November 2021

32 Ibid.

33 Sarun Charumilind, Matt Craven, Jessica Lamb, Adam Sabow, Shubham Singhal, Matt Wilson, "When will the Covid-19 pandemic end?", McKinsey, August 23, 2021, https://www. mckinsey.com/industries/healthcaresystems-and-services/our-insights/ when-will-the-covid-19-pandemic-end

34 Leticia Miranda, "India's Covid crisis has ripple effects for garment industry worldwide", NBC News, June 2, 2021, https://www.nbcnews.com/ business/business-news/india-s-covidcrisis-has-ripple-effects-garmentindustry-worldwide-nl269306; Anirban Nag, "India Consumer Confidence Drops to Record Low, RBI Survey shows", Bloomberg, June 4, 2021, https://www.bloomberg. com/news/articles/2021-06-04/ india-consumer-confidence-drops-torecord-low-rbi-survey-shows

35 Macroeconomic scenarios, including GDP projections, in this article are based on McKinsey Recovery Scenarios, developed in partnership with Oxford Economics and published in July 2021

36 Maria Eloisa Capurro, "Brazil's Economy Seen Growing Less After Disapointing Quarter", Bloomberg, September 1, 2021, https://www.bloomberg.com/ news/articles/2021-09-01/ brazil-s-economy-shrinks-in-secondquarter-as-investment-froms

37 "Nigeria Economic Update: Resilience through Reforms", The World Bank, June 2021, https://www. worldbank.org/en/country/nigeria/ publication/nigeria-economic-updateresilience-through-reforms

38 Gita Gopinath, "Transcript of October 2021 World Economic Outlook Press Briefing", International Monetary Fund, October 12, 2021, https://www.imf.org/en/News/ Articles/2021/10/13/tr101221transcript-of-october-2021-worldeconomic-outlook-press-briefing

39 "Transcript: World Bank Group Press Conference by President David Malpass at the 2021 Annual Meetings", The World Bank, October 13, 2021, https://www.worldbank. org/en/news/speech/2021/10/13/ transcript-world-bank-group-pressconference-by-president-davidmalpass-at-the-2021-annual-meetings

40 Paul Sweeney, "Levelling up: so you want to level up?", Centre for Cities, June 17, 2021, https://www.centreforcities. org/levelling-up/ 41 "OECD Economic Surveys: Brazil", The Organisation for Economic Co-operation and Development, December 2020, https://www.oecd. org/economy/surveys/Brazil-2020-OECD-economic-survey-overview.pdf

42 BoF Interview with Carlos Jereissati Filho, October 2021

43 Laura Turquet, "Gender equality, sustainability and social justice: A roadmap for recovery", May 31, 2021, https://www.weforum.org/ agenda/2021/05/sustainabilitysocial-justice-women-recovery/; "Intersectional inequities in COVID-19 mortality by race/ ethnicity and education in the United States, January 1, 2020-January 31, 2021", The Harvard Center for Population and Development Studies, February 23, 2021, https:// www.hsph.harvard.edu/populationdevelopment-dev/wp-content/ uploads/sites/2623/2021/02/21_Chen_ covidMortality Bace Education HCPDS_WorkingPaper_Vol-21_No-3_ Final_footer.pdf

44 Bruce D. Meyer, James X. Sullivan, Jeehoon Han, "Real-time Poverty Estimates During the COVID-19 Pandemic through November 2020*", December 15, 2020, https://harris.uchicago.edu/files/ monthly_poverty_rates_updated_thru_ november_2020_final.pdf

45 "Government panel warns of widening gender gap in Japan due to pandemic", Japan Times, May 16, 2021, https://www. japantimes.co.jp/news/2021/05/16/ national/social-issues/ gender-gap-growing-pandemic/

46 Anna Andrianova, "Wealth Gap Widens as Pandemic Hits Russia's Poorest Regions Hard", Bloomberg, November 30, 2020, https://www.bloomberg.com/ news/articles/2020-11-30/ pandemic-widens-gap-between-russias-richest-and-poorest-regions

47 "In Argentina, nearly half in poverty as coronavirus deepens economic crisis", Reuters via NBC News, October 1, 2020, https://www.nbcnews.com/ news/latino/argentina-nearlyhalf-poverty-coronavirus-deepenseconomic-crisis-nl24I704

48 Greg Iacurci, "The legacy of 2020: Riches for the wealthy, well educated and often White, financial pain for others", CNBC, January 1, 2021, https://www.cnbc.com/2021/01/01/ the-covid-recession-brought-extremeinequality-in-2020.html

49 Daniel Gerszon Mahler, Nishant Yonzan, Christoph Lakner, R. Andres Castaneda Aguilar, Haoyu Wu, "Updated estimates of the impact of COVID-19 on global poverty: Turning the corner on the pandemic in 2021?", World Bank Blogs, June 24, 2021, https://blogs.worldbank.org/opendata/ updated-estimates-impact-covid-19-global-poverty-turning-cornerpandemic-2021

50 "The State of Fashion 2021 2021", The Business of Fashion and McKinsey, December 2, 2020, https://www. businessoffashion.com/reports/ news-analysis/the-state-of-fashion-2021-industry-report-bof-mckinsey

51 Sarah Kent, "Fashion Is Still Failing on Workers' Rights", The Business of Fashion, March 22, 2021, https:// www.businessoffashion.com/articles/ sustainability/fashion-is-still-failingon-workers-rights

52 Chase Peterson-Withorn, "Nearly 500 People Became Billionaires During The Pandemic Year", Forbes, April 6, 2021, https://www.forbes.com/ sites/chasewithorn/2021/04/06/ nearly-500-people-have-becomebillionaires-during-the-pandemicyear/?sh=3facdc8325c0

53 Rakesh Kochhar, "The Pandemic Stalls Growth in the Global Middle Class, Pushes Poverty Up Sharply", Pew Research Center, March 18, 2021, https://www.pewresearch.org/ global/2021/03/18/the-pandemicstalls-growth-in-the-global-middleclass-pushes-poverty-up-sharply/

54 Jonathan Cheng, "China Is the Only Major Economy to Report Economic Growth for 2020", The Wall Street Journal, January 18, 2021, https://www. wsj.com/articles/china-is-the-onlymajor-economy-to-report-economicgrowth-for-2020-11610936187

55 Stella Yifan Xie, "China Beat Back Covid-19, but It's Come at a Cost– Growing Inequality", The Wall Street Journal, October 21, 2020, https:// www.wsj.com/articles/china-beatback-covid-19-but-its-come-at-acostgrowing-inequality-11603281656

56 Ibid.

57 "China Should Brace for Higher Luxury Goods Taxes, Analysts Say", Bloomberg via The Business of Fashion, October 20, 2021, https:// www.businessoffashion.com/news/ china/china-should-brace-for-higherluxury-goods-taxes-analysts-says

58 Casey Hall, "Could a Chinese Crackdown on 'Excessive Incomes' Damage Luxury Sales?", The Business of Fashion, August 24, 2021, https:// www.businessoffashion.com/ briefings/china/will-chinas-calls-fora-crackdown-on-excessive-incomesdamage-luxury-sales

59 Ibid.

60 "The World Bank in South Africa", The World Bank, March 18, 2021, https://www.worldbank.org/en/ country/southafrica/overview#1

61 "Recovering from COVID-19 and inequality: the experience of South Africa.", United Nations, May 2021, https://www.un.org/development/ desa/dspd/wp-content/uploads/ sites/22/2021/05/Futshane_paper.pdf 62 "How Unequal is South Africa", Stats SA, February 4, 2020, http://www. statssa.gov.za/?p=12930

63 Dibyendu Chaudhuri, Parijat Ghosh, "Why inequality is India's worst enemy", Down To Earth, March 5, 2021, https://www.downtoearth.org.in/blog/ economy/why-inequality-is-india-sworst-enemy-75778

64 "Indian states by GDP", Ministry of Statistics and Programme Implementation, March 1, 2021, https://statisticstimes.com/economy/ india/indian-states-gdp.php

65 "An uneven and gender-unequal COVID-19 recovery: Update on gender and employment trends 2021", International Labour Organization, October 26, 2021, https://www.ilo.org/employment/ Whatwedo/Publications/policy-briefs/ WCMS.824865/lang-en/index.htm

66 "We must prioritize a genderresponsive recovery from COVID-19", United Nations Human Rights Office, July 27, 2021, https://www.ohchr. org/EN/NewsEvents/Pages/Women-Covid19.aspx

67 Anu Narayanswamy, Emily Rauhala, Júlia Ledur, Youjin Shin, "How the pandemic set back women's progress in the global workforce", The Washington Post, August 28, 2021, https://www.washingtonpost. com/world/interactive/2021/ coronavirus-women-work/

68 Johannes Koettl, Nayib Rivera, Sofia Gomez Tamayo, "The spectacular surge of the Saudi female labor force", Brookings, April 21, 2021, https://www.brookings.edu/blog/ future-development/2021/04/21/ the-spectacular-surge-of-the-saudifemale-labor-force/

69 Johannes Koettl, Jumana Alaref, "Why are Saudi women suddenly starting to take jobs?", Brookings, May 19, 2021, https://www.brookings.edu/ blog/future-development/2021/05/19/ why-are-saudi-women-suddenlystarting-to-take-jobs/

70 Ibid.

71 Oxford Economics, Global Risk Survey, "Supply-chain disruption to persist", September 14, 2021

72 Caila Schwartz, "U.S. Retailers Face Extra \$223B in Costs of Goods This Holiday Shopping Season", Salesforce, July 20, 2021, https://www.salesforce. com/blog/holiday-shoppingpredictions/

73 BoF-McKinsey State of Fashion 2022 Survey

74 BoF Interview with Joseph Phi, September 2021

75 Olaf Storbeck, "Pandemic supply chain problems could cost Adidas €500m in sales this year", Financial Times, August 5, 2021, https://www. ft.com/content/907df1b9-abe0-487e-96b1-164b82df7c87 76 Paul Berger, "Where Did All the Shipping Containers Go?", The Wall Street Journal, August 4, 2021, https://www.wsj.com/ articles/where-did-all-the-shippingcontainers-go-11628104583

77 McKinsey analysis

78 "US Bans All Xinjiang Cotton Products", Bloomberg via The Business of Fashion, January 13, 2021, https://www.businessoffashion. com/news/global-markets/ us-bans-all-xinjiang-cotton-products

79 "China and the world: Inside the dynamics of a changing relationship", McKinsey Global Institute, July 1, 2019, https://www.mckinsey. com/featured-insights/china/ china-and-the-world-inside-thedynamics-of-a-changing-relationship

80 Justin Harper, "Suez blockage is holding up \$9.6bn of goods a day", BBC, March 26, 2021, https://www.bbc. co.uk/news/business-56533250

81 BoF Interview with Joseph Phi, September 2021

82 Darren Dodd, "Supply chain woes leave companies struggling to cope", Financial Times , August 23, 2021, https://www.ft.com/ content/3b35a981-d17e-450d-ac30ec2ab8a60951; Primrose Riordan, Harry Dempsey, Chris Giles, "Shipping bottlenecks set to prolong supply chain turmoil", Financial Times, August 16, 2021, https://www.ft.com/ content/el263950-1173-4832-a011ad04df1693c

83 Annachiara Biondi, "Supply chain disruption: Fashion's Christmas concern", Vogue Business, September 13, 2021, https://www. voguebusiness.com/consumers/ supply-chain-disruption-fashionschristmas-concern

84 Joanna Konings, Rico Luman, "5 reasons global shipping costs will continue to rise", ING, June 7, 2021, https://think.ing.com/articles/ the-rise-and-rise-of-global-shippingcosts

85 Jaana Remes, Steve Saxon, "What's going on with shipping rates?", McKinsey, August 20, 2021, https://www.mckinsey. com/industries/travel-logisticsand-infrastructure/our-insights/ whats-going-on-with-shipping-rates

86 Brian Baskin, Alexandra Mondalek, "Why Price Inflation Is Coming to Fashion", The Business of Fashion, August 4, 2021, https://www. businessoffashion.com/articles/ retail/why-price-inflation-is-comingto-fashion; Vikram Alexei Kansara, "Why Luxury Brands Are Raising Prices in a Pandemic", The Business of Fashion, May 15, 2020, https://www. businessoffashion.com/briefings/ luxury/why-luxury-brands-are-raisingprices-in-a-pandemic

87 Kathrin Hille, John Reed, "Covid surge in Vietnam hits global supply chains", Financial Times, August 8, 2021, https://www.ft.com/ content/d6726026-e4ce-466f-975f-6e9983d33d72; Song Jung-a, "Strikes at Korea's global shipping giant threaten supply chain 'turmoil'", Financial Times, September 1, 2021, https:// www.ft.com/content/a0ae694b-9b4f-4601-90c1-4bd974e89950; "Nike and Adidas supplier suspends production at Vietnam plant due to COVID". Reuters. July 14, 2021, https://www.reuters. com/world/asia-pacific/vietnamoperations-footwear-giant-pou-chenhit-by-covid-19-curbs-2021-07-14/: Delphine Strauss, "Supply chain disruption threatens to hold back UK economic recovery", Financial Times, August 26, 2021, https://www.ft.com/ content/3befa5f6-e80a-4f83-b608-28f1682af856

88 Sarah Kent, "Sustainability Comes At a Cost. Fashion Isn't Paying", The Business of Fashion, April 8, 2021, https://www.businessoffashion.com/ articles/sustainability/sustainabilitycomes-at-a-cost-fashion-isnt-paying. Emily Chan, "Why Isn't Sustainable Fashion More Affordable?", Vogue, August 1, 2020, https:// www.orgue.co.uk/fashion.affordable

89 Danny Parisi, "American Eagle, Walmart invest in direct shipping to avoid third-party carrier congestion", Glossy, September 3, 2021, https://www.glossy.co/fashion/ american-eagle-walmart-invest-indirect-shipping-to-avoid-third-partycarrier-congestion/

90 Daphne Milner, "Turkish Fashion Exports Surpass Last Year's Sales", The Business of Fashion, February 19, 2021, https://www.businessoffashion.com/ news/global-markets/turkish-fashionexports-surpass-last-years-sales

91 Saskia Hedrich, Julian Hügl, Patricio Ibanez, Karl-Hendrik Magnus, "Revamping fashion souring: speed and flexibility to the fore. McKinsey Apparel CPO Survey 2021", McKinsey, November 15, 2021, https://www. mcKinsey.com/industries/retail/ how-we-help-clients/apparel-fashionluxury

92 BoF Interview with Stefan Larsson, October 2021

93 Kim Bhasin, Jordyn Holman, and Henry Ren, "US Retailers See Millions in Sales Delays Amid Shipping Logjam", Bloomberg, February 26, 2021, https://www.bloomberg.com/ news/articles/2021-02-26/u-sretailers-see-millions-in-sales-delaysamid-shipping-logjam; James Davey, "ASOS boss exits as fast fashion retailer warns on profit", Reuters, October 11, 2021, https://www.reuters.com/world/ uk/asos-says-ceo-nick-beighton-stepdown-2021-10-11/

94 Erik Nordstrom, Nordstrom Q2 2021 Earnings Call, August 24, 2021

95 Knut Alicke, Elena Dumitrescu, Markus Leopoldseder, Max Schlichter, "How great supply-chain organizations work", McKinsey, September 24, 2020, https://www.mckinsey.com/businessfunctions/operations/our-insights/ how-great-supply-chainorganizations-work

96 Primrose Riordan, Harry Dempsey, Chris Giles, "Shipping bottlenecks set to prolong supply chain turmoil", Financial Times, August 16, 2021, https://www.ft.com/ content/e1263950-1173-4832-a011ada04dfle93c

97 "VF Corporation Announces Regional Transformation Plan to Enable Long-term Growth in Asia", Business Wire, January 11, 2021, https://www.businesswire.com/ news/home/2021011005417/en/ VF-Corporation-Announces-Regional-Transformation-Plan-to-Enable-Longterm-Growth-in-Asia

98 "Helena Helmersson, CEO at H&M, finds purpose in retail", The Do, https:// thedo.world/helena-helmersson-ceoat-hm-finds-purpose-in-retail/

99 Luca Solca, "The Anatomy of Travel Retail", The Business of Fashion, July 31, 2015, https://www. businessoffashion.com/opinions/ retail/the-anatomy-of-travel-retailmarket-luxury-goods

100 Urs Binggeli, Margaux Constantin, Eliav Pollack, "COVID-19 tourism spend recovery in numbers", McKinsey, October 20, 2020, https:// www.mckinsey.com/industries/ travel-logistics-and-infrastructure/ our-insights/covid-19-tourism-spendrecovery-in-numbers

101 Limei Hoang, "Is The Future of Luxury Global Or Local?", Luxury Society, June 15, 2021, https://luxurysociety. com/en/articles/2021/06/ future-luxury-global-or-local

102 Zoe Suen, "How 'Revenge Travel' Will Impact Luxury Sales", The Business of Fashion, April 30, 2021, https://www.businessoffashion.com/ articles/china/what-will-revengetravel-look-like-for-luxury

103 Caoimhe Gordon, "Tourism to localism – how retailers in prime cities are shifting strategies", Retail Week, August 26, 2021, https://www. retail-week.com/customer/tourismto-localism-how-retailers-in-primecities-are-shifting-strategies/7040441. article

104 Queennie Yang, "Hainan's Duty-Free Retail Sales Surge 257% in H1", The Business of Fashion, August 10, 2021, https://www. businessoffashion.com/news/china/ hainans-duty-free-retail-sales-surge-257-in-h1

105 Aimee Kim, Alex Sawaya, and Michael Straub, "Hainan's \$40 Billion Prize: The New Battleground for Global Luxury", McKinsey, July 22, 2021, https://www.mckinsey. com/cn/our-insights/our-insights/ hainans-40-billion-prize-the-newbattleground-for-global-luxury

106 Queennie Yang, "Shenzhen Plans to Be a Duty Free Retail Hub", The Business of Fashion, March 19, 2021, https://www.businessoffashion.com/ news/china/shenzhen-plans-to-be-aduty-free-retail-hub

107 Chavie Lieber, "How Fashion is Targeting the Travel Rebound", The Business of Fashion, June 2, 2021, https://www.businessoffashion.com/ articles/luxury/how-fashion-istargeting-the-travel-rebound

108 Sarah Joseph, "Dior's first exhibition in the Middle East is all set to take place in Qatar", Emirates Woman, August 4, 2021, https://emirateswoman.com/ diors-first-exhibition-middle-east-settake-place-qatar/

109 Maghan McDowell, "Europe is still a bargain for luxury shoppers", Vogue Business, August 14, 2019, https:// www.voguebusiness.com/companies/ global-luxury-price-discrepancieslouis-vuitton-gucci-balenciaga

110 Casey Hall, "The Real Reason Louis Vuitton is Launching its Global Exhibition in Wuhan", The Business of Fashion, October 29, 2020, https:// www.businessoffashion.com/articles/ china/the-real-reason-louis-vuittonis-launching-its-global-exhibitionin-wuhan

111 Ritsuko Ando, Kim Coghill, "More stores shutter in Tokyo's high-end Ginza Six mall amid travel bans", Reuters, January 20, 2021, https://www.reuters.com/business/ healthcare-pharmaceuticals/morestores-shutter-tokyos-high-end-ginzasix-mall-amid-travel-bans-2021-01-20/

112 "Q1 2021-2022 Earnings release - New financial materials on Global Blue website", Global Blue, September 3, 2021, https://www.globalblue. com/corporate/media/press/ q1-2021-2022-earnings-release

113 "Americans - and Advertisers - are hopeful about travel", Nielsen, April 22, 2021, https://www.nielsen.com/us/en/ insights/article/2021/americans-andadvertisers-are-hopeful-about-travel/; Chavie Lieber, "How Fashion is Targeting the Travel Rebound", The Business of Fashion, June 2, 2021, https://www.businessoffashion.com/ articles/luxury/how-fashion-istargeting-the-travel-rebound

114 Martin Moodie, "Dufry awarded new duty free & duty paid contracts at Salgado Filho International Airport, Brazil", The Moodie Davitt Report, March 25, 2021, https:// www.moodiedavittreport.com/ dufry-awarded-new-duty-free-dutypaid-contracts-at-salgado-filhointernational-airport-brazil/

115 "Dufry Wins New Duty-Free and Duty-Paid Concession Contracts at Salgado Filho International Airport in Porto Alegre, Brazil", Dufry, March 21, 2021, https://www.dufry.com/ en/press_release/2021-03-25/dufrywins-new-duty-free-and-duty-paidconcession-contracts-salgado-filho

116 Chantal Fernandez, "What Luxury Can Do About the Tourism Crisis", The Business of Fashion, July 20, 2021, https://www.businessoffashion. com/articles/luxury/ travel-luxury-coronavirus-ecommercechina-luxury-tourism-duty-free

117 Louise Nichol, "The Real Reason Luxury Brands Are Investing in the Dubai Expo", The Business of Fashion, September 30, 2021, https://www.businessoffashion. com/articles/global-markets/ the-real-reason-luxury-brands-areinvesting-in-the-dubai-expo

118 Ibid.

119 BoF interview with Shaway Yeh, October 2021

120 BoF Interview with Avinash Wadhwani, October 2021

121 Annachiara Biondi, "When will European Luxury Recover?", Vogue Business, June 14, 2021, https://www.voguebusiness.com/ consumers/european-luxury-marketrecovery-2022

122 Maria Rugolo, "Time to Buy: Current Wardrobes No Longer Getting Us By", NPD, April 28, 2021, https:// www.npd.com/news/blog/2021/ time-to-buy-current-wardrobes-nolonger-getting-us-by/

123 Lyst data analysis, September 20, 2021, Lyst

124 StyleSage e-commerce analytics, StyleSage, https://app.stylesage.co/ dashboard/home/trends/radar/ top-100

125 Cathaleen Chen, Tamison O'Connor, "The Revenge Shopping Opportunity", March 15, 2021, https://www.businessoffashion. com/articles/retail/ the-revenge-shopping-opportunity

126 StyleSage e-commerce analytics, StyleSage, https://app.stylesage.co/ dashboard/home/trends/radar/ top-100

127 Ibid.

128 StyleSage e-commerce analytics, StyleSage, https://app.stylesage.co/ dashboard/home/trends/radar/ top-100

129 Cathaleen Chen, "The Shoe Styles That Will Rule the Summer", The Business of Fashion, April 30, 2021, https://www.businessoffashion.com/ articles/retail/the-shoe-styles-thatwill-rule-the-summer

130 Ibid.

131 Chavie Lieber, "Selling 'Office' Clothes to the Work-From-Home Woman", The Business of Fashion, May 4, 2021, https://www. businessoffashion.com/articles/retail/ selling-office-clothes-to-the-workfrom-home-woman

132 Lauren Cochrane, "Returning office workers seek sweet spot between casual and formal", The Guardian, August 2, 2021, https://www.theguardian. com/fashion/2021/aug/02/ returning-office-workers-seek-sweetspot-between-casual-and-formal

133 BoF-McKinsey State of Fashion 2022 Survey. Rounded to the nearest whole number.

134 StyleSage e-commerce analytics, StyleSage, https://app.stylesage.co/ dashboard/home/trends/radar/ top-100

135 BoF Interview with Geraldine Wharry, October 2021

136 StyleSage e-commerce analytics, StyleSage, https://app.stylesage.co/ dashboard/home/trends/radar/ top-100

137 Cathaleen Chen, "Why Retailers Are Embracing Fashion Week's Sexiest Trends", The Business of Fashion, September 20, 2021, https://www. businessoffashion.com/articles/retail/ why-retailers-are-embracing-fashionweeks-sexiest-trends

138 BoF Interview with Libby Wadle, October 2021

139 Cathaleen Chen, "Why Retailers Are Embracing Fashion Week's Sexiest Trends", The Business of Fashion, September 20, 2021, https://www. businessoffashion.com/articles/retail/ why-retailers-are-embracing-fashionweeks-sexiest-trends

140 StyleSage e-commerce analytics, StyleSage, https://app.stylesage.co/ dashboard/home/trends/radar/ top-100

141 Ashley Armstrong, "Shining a light on Shein, the fastest riser in online fashion", The Times, September 13, 2021, https:// www.thetimes.co.uk/article/ shining-a-light-on-shein-the-fastestriser-in-online-fashion-qnw3h5hd2

142 Priya Elan, "Worst of the worst': why is fast fashion retailer Shein launching a reality show?", The Guardian, August 29, 2021, https:// www.theguardian.com/fashion/2021/ aug/29/fast-fashion-retailer-sheindesign-reality-show

143 BoF Interview with Geraldine Wharry, October 2021

144 "Global trends among Generation Z", Global Web Index, 2021, https://www.gwi.com/reports/ global-trends-among-gen-z

145 A term first coined by Sara Wilson in Harvard Business Review, April 2020

146 BoF interview with Robert Triefus, September 2021

147 "Global Games Market Forecast", Newzoo, June 2021, https://newzoo. com/key-numbers/

148 Christopher Travers, "Epic Games to Pour \$1 Billion Into Metaverse Development, Crushing Traditional Social Networks", Virtual Humans, April 20, 2021, https:// www.virtualhumans.org/article/ epic-games-to-pour-1-billion-intometaverse-development-crushingtraditional-social-networks

149 "Transcendent Retail: APAC", Jing Daily & Wunderman Thompson Intelligence, July 15, 2021, https:// jingdaily.com/downloads/ transcendent-retail-apac/; Jack Stanley, "Balenciaga Invites Players to Explore the 'Afterworld' for Fall 2021 Collection", Hypebeast, December 7, 2020, https://hypebeast.com/2020/12/ balenciaga-fall-2021-collectionafterworld-age-of-tomorrow-videogame

150 Marc Bain, "Balenciaga and Fortnite Are a Match Made in the Metaverse", The Businesso & Fashion, September 20, 2021, https://www. businessoffashion.com/articles/ luxury/balenciaga-and-fortnite-are-a match-made-in-the-metaverse

151 McKinsey interview with Daria Shapovalova, October 2021

152 BoF interview with Daria Shapovalova, September 2021

153 Whitney Bauck, "Immaterial gains: the NFT boom comes for fashion", Financial Times, August 25, 2021, https://www.ft.com/content/556efec9c391-4a40-84a0-76231b4ce065

154 Sophie Soar, "How I Became... Managing Director at Dimension Studio", The Business of Fashion, May 10, 2021, https:// www.businessoffashion.com/ articles/workplace-talent/ how-i-became-executive-producer-ofbalenciagas-afterworld

155 Rachel Douglass, "Tommy Hilfiger partners with virtual marketing company for future digital ventures", Fashion United, September 23, 2021, https:// fashionunited.uk/news/fashion/ tommy-hilfiger-partners-with-virtualmarketing-company-for-future-digitalventures/2021092357870

156 Angelica Villa, "Beeple NFT fetches unprecedented \$69,3m at Christies", Art News, March 11, 2021, https:// www.artnews.com/art-news/market/ beeple-makes-69-million-1234586424/

157 Yashu Gola, "OpenSea trading volume explodes 76,240% YTD amid NFT boom", Cointelegraph, August 13, 2021, https://cointelegraph.com/news/ opensea-trading-volume-explodes-76-240-ytd-amid-nft-boom

158 "What the NFT Gold Rush Means for Fashion", The Business of Fashion, May 14, 2021, https://www. businessoffashion.com/podcasts/ technology/nft-fashion-podcast

159 Chunk Dobrosielski, "Digital-Only Fashion Firm Teams With Adidas, Karlie Kloss on NFT Auction", Sourcing Journal, March 24, 2021, https://sourcingjournal.com/topics/ technology/the-fabricant-nftdigital-fashion-karlie-kloss-adidasblockchain-269822/ 160 Harriet Lloyd-Smith, "Louis Vuitton marks 200th birthday with art video game", Wallpaper, August 3, 2021, https://www.wallpaper.com/ art/louis-vuitton-video-game-200thanniversary; Scott Nover, "Months after the Beeple sale, Christie's is still betting on NFTs", Quartz, July 30, 2021, https:// qz.com/2039099/christies-is-ridingthe-nft-wave-beyond-the-beeple-sale/

161 "Burberry Drops NFT Collection in Mythical Games' Blankos Block Party", Burberry, August 4, 2021, https:// www.burberryplc.com/en/news/ brand/2021/Blankos.html

162 "Farfetch teams with DRESSX for pre-order collection campaign", Retail Tech Innovation Hub, August 26, 2020, https://retailtechinnovationhub. com/home/2021/8/26/ farfetch-teams-with-dressx-for-preorder-collection-campaign; Dana Thomas, "Dolce & Gabbana Is Bringing NFTs to the Traditional World of Couture", Vogue UK, August 27, 2021, https:// www.vogue.co.uk/fashion/article/ dolce-and-gabbana-nfts-couture; "Farfetch teams with DRESSX for pre-order collection campaign", Retail Tech Innovation Hub August 26 2020, https://retailtechinnovationhub. com/home/2021/8/26/ farfetch-teams-with-dressx-for-preorder-collection-campaign

163 Tanzeel Akhtar, "Dolce & Gabbana's First NFT Collection sells for \$5.7m", Coindesk, September 30, 2021, https://www.coindesk.com/ business/2021/09/30/dolce-gabbanasfirst-nft-collection-sells-for-57-m/

164 M.C. Nanda, "The Limits of Virtual Fashion", The Business of Fashion, April 26, 2021, https://www.businessoffashion. com/articles/technology/ the-limits-of-virtual-fashion

165 Joe Tidy, "Fake Banksy NFT sold through artist's website for £244k", BBC News, August 31, 2021, https://www.bbc.co.uk/news/ technology-58399338

166 M.C. Nanda, "The Limits of Virtual Fashion", The Business of Fashion, April 26, 2021, https://www.businessoffashion. com/articles/technology/ the-limits-of-virtual-fashion

167 Sanika Gothivarekar, "Social media: As much for shopping as for socializing", Bazaarvoice, May 18, 2021, https://www.bazaarvoice.com/blog/ social-media-is-for-shopping/

168 "US social commerce sales 2019-2025", eMarketer, May 2021, https://www.emarketer.com/ chart/247601/us-social-commercesales-2017-2023-billions-change

169 "Global Social Commerce Market Worth \$604.5 Billion by 2027 - COVID-19 Updated", GlobeNewswire, September 7, 2020, https://www.globenewswire.com/ news-release/2020/09/07/2089546/0/ en/Global-Social-Commerce-MarketWorth-604-5-Billion-by-2027-COVID-19-Updated.html

170 Casey Hall, "Weibo Enters the E-Commerce Race. Should Brands be Excited or Cautious?", The Business of Fashion, May 4, 2020, https://www. businessoffashion.com/articles/china/ weibo-enters-e-commerce-raceshould-brands-be-excited-or-cautious

171 Andrew Lipsman, "US social commerce is following in China's footsteps", eMarketer, https://www. emarketer.com/content/us-socialcommerce-following-chinas-footsteps

172 Jasmine Enberg, "Social Commerce Forecasts 2021; How a Trend 'Made in China' Is Shaping Up in the US", eMarketer, June 28, 2021, https:// www.emarketer.com/content/ social-commerce-forecasts-2021

173 Kathryn Lundstrom, "Nearly Half of TikTokers Are Buying Stuff From Brands They See on the Platform", AdWeek, May 3, 2021 https://www. adweek.com/brand-marketing/ nearly-half-of-tiktokers-are-buyingstuff-from-brands-they-see-on-theplatform/

174 "Social Commerce 2021: Social media and ecommerce convergence trends bring growth opportunity for brands", Insider Intelligence, July 27, 2021, http://www.insiderintelligence. com/insights/social-commerce-brandtrends-marketing-strategies

175 Zoe Suen, "Livestreaming: How Brands Can Make It Work", The Business of Fashion, September 9, 2021, https://www.businessoffashion. com/case-studies/technology/ livestreaming-how-brands-can-makeit-work-download-the-case-study

176 Arun Arora, Daniel Glaser, Aimee Kim, Philipp Kluge, Sajal Kohli, Natalya Sak, "It's showtime! How live commerce is transforming the shopping experience", McKinsey, July 21, 2021, https://www. mckinsey.com/business-functions/ mckinsey-digital/our-insights/ its-showtime-how-live-commerce-istransforming-the-shopping-experience

177 Zoe Suen, "Livestreaming: How Brands Can Make It Work", The Business of Fashion, September 9, 2021, https://courses.businessoffashion. com/courses/take/case-studylivestreaming-global-ecommerce/ pdfs/27711527-livestreaming-howbrands-can-make-it-work

178 Nazmul Islam, Oscar Orozco, "Some brand new Q2 forecasts, NCAA brand deals, and is now the right time for OOH ads", eMarketer, July 29, 2021, https://www.emarketer.com/ content/podcast-some-brand-new-q2forecasts-ncaa-brand-deals-now-righttime-ooh-ads?ECID=SOC1001

179 Rimma Kats, "UK Social Buyer Audience Will Grow to 10 Million This Year", eMarketer, June 4, 2020, https://www.emarketer.com/content/ uk-social-buyer-audience-will-growto-10-million-this-year 180 Sarah Perez, "Instagram launches a new section for shopping product drops", TechCrunch, May 26, 2021, https://techcrunch.com/2021/05/26/ instagram-launches-a-new-sectionfor-shopping-product-drops/

181 Maghan McDowell, "Snapchat boots AR try-on tools: Farfetch, Prada dive in", Yogue Business, May 21, 2021, https://www.voguebusiness.com/ technology/snapchat-bootst-ar-try-ontools-farfetch-prada-dive-in

182 William White, "Walmart Doubles Down on TikTok Shopping, Hosts All-New Live Stream Shopping Event", Walmart, March 9, 2021, https://corporate.walmart. com/newsroom/2021/03/09/ walmart-doubles-down-on-tiktokshopping-hosts-all-new-live-streamshopping-event

183 Sarah Perez, "TikTok expands Shoping in US, UK and Canada", TechCrunch, August 24, 2021, https:// techcrunch.com/2021/08/24/tiktokexpands-shoping-partnership-pilotstiktok-shopping-in-us-uk-and-canada/

184 M.C. Nanda, "The Gamer Chat App Influencing Menswear", The Business of Fashion, June 21, 2021, https:// www.businessoffashion.com/articles/ technology/the-gamer-chat-appinfluencing-menswear

185 Zoe Suen, "Livestreaming: How Brands Can Make It Work", The Business of Fashion, September 9, 2021, https://www.businessoffashion. com/case-studies/technology/ livestreaming-how-brands-can-makeit-work-download-the-case-study

186 Casey Hall, "H&M Invests in Indian Social Commerce Player Trel", The Business of Fashion, July 15, 2021, https://www.businessoffashion.com/ news/global-markets/hm-invests-inindian-social-commerce-player-trell

187 "#BoFLIVE: Fashion's New Paths to Purchase", The Business of Fashion, November 5, 2020, https:// www.businessoffashion.com/videos/ retail/boflive-fashions-new-paths-topurchase

188 Zoe Suen, "Impulsive, Addictive Social Commerce Is China's Latest Crazes", The Business of Fashion, May 1, 2018, https://www. businessoffashion.com/articles/china/ impulsive-addictive-social-commerceis-chinas-latest-craze

189 Lauren Thomas, "Nordstrom debuts platform for shoppable shows as more retailers experiment with livestreaming", CNBC, March 17, 2021, https://www.cnbc.com/2021/03/17/ nordstrom-jwn-to-launch-shoppablelivestreaming-network-.html

190 "Fashion's new tastemakers", Vogue Business June 9, 2021, https:// www.voguebusiness.com/fashion/ fashions-new-tastemakers

191 "A new textiles economy: Redesigning fashion's future", Ellen MacArthur Foundation, 2017, https://ellenmacarthurfoundation. org/a-new-textiles-economy

192 "Increasing the circularity in textiles, plastics and/or electronics value chains", European Commission, June 22, 2021, https://ce.europa. eu/info/funding-tenders/ opportunities/portal/screen/ opportunities/topic-details/ horizon-cl6-2021-circbio-01-04

193 "Fashion on Climate – How the industry can urgently act to reduce its Greenhouse gas emissions", McKinsey & Company and Global Fashion Agenda, August 26, 2020, https:// www.mckinsey.com/industries/retail/ our-insights/fashion-on-climate

194 "Preferred Fiber & Materials Market Report 2021", Textile Exchange, August 17, 2021, https://textileexchange.org/ textile-exchange-preferred-fiber-andmaterials-market-report-2021/

195 Jasmin Malik Chua, "Fashion Can't Solve the Ocean Plastic Problem", The Business of Fashion, December 22, 2020, https://www.businessoffashion. com/articles/sustainability/fashioncant-solve-the-ocean-plastic-problem

196 "EU strategy for sustainable textiles", European Commission, https://ec.europa.eu/info/law/ better-regulation/have-your-say/ initiatives/12822-EU-strategy-forsustainable-textiles_en

197 "Parliamentary questions", European Parliament, November 16, 2020, https://www.europarl.europa.eu/ docco/document/E-9-2020-004882-ASW_EN.html

198 BoF Interview with Patrik Lundstrom, September 2021

199 "Facilitating a Circular Economy for Textiles", NIST, September 2021, https://www.nist.gov/ news-events/2021/09/ facilitating-circular-economy-textiles

200 "Brands join forces for circularity in Bangladesh", Innovation in Textiles, April 23, 2021, https://www. innovationintextiles.com/brands-joinforces-for-circularity-in-bangladesh/

201 "Preferred Fiber & Materials Market Report 2021", Textile Exchange, August 17, 2021, https://textileexchange.org/ textile-exchange-preferred-fiber-andmaterials-market-report-2021/

202 "About The Billie system", The Billie Upcycling, https:// thebillieupcycling.com/meet-billie/

203 "Renewcell and Beyond Retro partner on textile-to-textile recycling", Renewcell, November 3, 2020, https://www.renewcell.com/en/ renewcell-and-beyond-retro-partneron-textile-to-textile-recycling/; Brett Mathews, "Levi's and Re:newcell partner on Circulose jeans", Apparel Insider, July 22, 2020, https:// apparelinsider.com/levis-andrenewcell-partner-on-circulose-jeans/ 204 Prachi Patel, "Shay Sethi talks about the future of fabric recycling", C&en, March 14, 2021, https://cen. acs.org/environment/recycling/ Shay-Sethi-talks-future-fabric/99/ i9; John Mowhray, "Eastman eyes textile for chemical recycling", Ecotextile, February 4, 2021, https:// www.ecotextile.com/2021020427337] materials-production-news/eastmaneyes-textiles-for-chemical-recycling. html

205 "Two champions of postconsumer textile recycling joining forces", Lenzing, June 2, 2021, https:// www.lenzing.com/newsroom/ press-releases/press-release/ two-champions-of-post-consumertextile-recycling-joining-forces

206 "HKRITA Green Machine for Isko", Innovation in Textiles, July 7, 2021, https://www. innovationintextiles.com/ hkrita-green-machine-for-isko/

207 Tanuvi Joe, "Circular fashion: HKRITA, H&M Set Up Green Machine To Produce Garments Out of Recycled Polyester", Green Queen, January 25, 2021, https://www.greenqueen.com. hk/circular-fashion-hkrita-hm-set-upgreen-machine-to-produce-garmentsout-of-recycled-polyester/

208 Ben Smee, "Recycling textile waste: 'A solution exists, we can't go backwards", The Guardian, May 29, 2021, https://www.theguardian. com/environment/2021/may/30/ recycling-textile-waste-a-solutionexists-we-cant-go-backwards

209 BoF Interview with Ronna Chao, September 2021

210 "Textiles 2030 Roadmap", WRAP, April 25, 2021, https:// wrap.org.uk/resources/guide/ textiles-2030-roadmap

211 "Fibersort launches to revolutionise recycling of post-consumer textiles", Innovation in Textiles, March 11, 2020, https://www.innovationintextiles.com/ fibersort-launches-to-revolutioniserecycling-of-postconsumer-textiles

212 BoF Interview with Patrik Lundstrom, September 2021

213 BoF Interview with Claire Bergkamp, October 2021

214 "The Jeans Redesign: Insights from the first two years", Ellen MacArthur Foundation, 2021, https:// ellenmacarthurfoundation.org/ the-jeans-redesign

215 "Our Circular Design Software helps your fashion brand become sustainable", Circular Fashion, https:// circular.fashion/en/software/brands. html

216 BoF Interview with Shaway Yeh, October 2021

217 Brooke Roberts-Islam, "Fashion Is Overselling Circularity And Recycling— But There Is Hope", Forbes, October 1, 2021, https://www.forbes.com/sites/ brookerobertsislam/2021/10/01/ fashion-is-overselling-circularityand-recycling-but-there-ishope/?sh=267787605d95

218 BoF Interview with Claire Bergkamp, October 2021

219 Ibid.

220 "Companies Taking Action", Science Based Targets, October 29, 2021, https://sciencebasedtargets.org/ companies-taking-action

221 "Companies Taking Action", Science Based Targets, October 19, 2021, https://sciencebasedtargets.org/ companies-taking-action#table

222 "Global Climate Action at COP26", United Nations Climate Change, https://unfccc.int/climate-action/ global-climate-action-at-cop-26

223 "AR6 Climate Change 2021: The Physical Science Basis", IPCC, August 9, 2021, https://www.ipcc.ch/ assessment-report/ar6/

224 "Nationally determined contributions under the Paris Agreement. Synthesis report by the secretariat", UNFCCC, September 17, 2021, https://unfccc.int/ documents/306848

225 "Fashion on Climate – How the industry can urgently act to reduce its Greenhouse gas emissions", McKinsey & Company and Global Fashion Agenda, August 26, 2020, https:// www.mckinsey.com/industries/retail/ our-insights/fashion-on-climate

226 "A new textiles economy: Redesigning fashion's future", Ellen MacArthur Foundation, 2017, https://ellenmacarthurfoundation. org/a-new-textiles-economy

227 "Fashion Industry Charter for Climate Action: Progress Report", Fashion Charter, https://www. fashioncharter.org/

228 "Climate Action Strategy 2025", H&M Group, July 2018; https:// hmgroup.com/sustainability/circularand-climate-positive/climate/; "Climate Action Strategy 2025", Levi Strauss & Co, August 2018, https:// www.levistrauss.com/wp-content/ uploads/2018/07/LSCO_Climate_ Action_Strategy_2025.pdf

229 Lululemon Impact Agenda, October 2020, https://pnimages. lululemon.com/content/dam/ lululemon/www-images/Footer/ Sustainability/lululemon. ImpactAgenda_October202023. pdf; "Recycled Nylon and Polyester", Stella McCartney, https://www. stellamccartney.com/gb/en/ sustainability/recycled-nylonpolyester.html

230 "A brief history of Flyleather and Nike's partnership with ELeather", ELeather, https://www.eleathergroup. com/a-brief-history-of-nikespartnership-with-eleather/

231 "Fashion on Climate – How the industry can urgently act to reduce its Greenhouse gas emissions", McKinsey & Company and Global Fashion Agenda, August 26, 2020, https:// www.mckinsey.com/industries/retail/ our-insights/fashion-on-climate

232 Jonathan Woetzel, Dickon Pinner et al, "Climate risk and response: Physical hazards and socioeconomic impacts", McKinsey & Company, January 16, 2020, https://www. mcKinsey.com/business-functions/ sustainability/our-insights/ climate-risk-and-response-physicalhazards-and-socioeconomic-immacts

233 "Global Warming of 1.5 degrees", IPCC Special Report, 2019, https:// www.ipcc.ch/srl5;/Harry Bowcott, Lori Fomenko, Alastair Hamilton, Mekala Krishnan, Mihir Mysore, Alexis Trittipo, Oliver Walker, "Protecting people from a changing climate: The case for resilience", McKinsey, November 8, 2021, https://www. mckinsey.com/business-functions/ sustainability/our-insights/ protecting-people-from-a-changingclimate-the-case-for-resilience

234 For further details on how a changing climate will impact lives and livelihoods, see "Protecting people from a changing climate: the case for resilience", McKinsey, November 8, 2021, https://www. mcKinsey.com/business-functions/ sustainability/our-insights/ protecting-people-from-a-changingclimate-the-case-for-resilience

235 Jonathan Wectzel, Dickon Pinner et al, "Will India get too hot to work?", McKinsey Global Institute, November 25, 2020, https://www. mckinsey.com/business-functions/ sustainability/our-insights/ will-india-get-too-hot-to-work

236 Uma Pal, Amanda Rycerz and Álvaro Linares, "Physical Climate Risk for Global Cotton Production", Global Analysis by Acclimatise UK, June, 2021, http://www.acclimatise. uk.com/wp-content/uploads/2021/06/ Cotton2040-GAReport-FullReporthishres.ndf

237 For further details on how a changing climate will impact lives and livelihoods, see "Protecting people from a changing climate: the case for resilience", McKinsey, November 8, 2021, https://www. mckinsey.com/business-functions/ sustainability/our-insights/ protecting-people-from-a-changingclimate-the-case-for-resilience

238 "ECB economy-wide climate stress test", ECB Occasional Paper Series No. 281, September, 2021, https://www. ecb.europa.eu/pub/pdf/scpops/ecb. op281-05a7735blc.en.pdf

239 "Handle with Care: Understanding the hidden environmental costs of cotton", World Wildlife Magazine, Spring, 2014, https://www. worldwildlife.org/magazine/issues/ spring-2014/articles/handle-with-care; "Environmental impact of the textile and clothing industry", European Parliamentary Research Service, January, 2019, europarl.europa.eu. 240 "Presenting Gucci's Nature Positive Climate Strategy", Equilibrium, January 26, 2021 https:// equilibrium.gucci.com/naturalclimate-solutions-portfolio-projects/

241 "The Colour Story Collection", H&M, March 29, 2021, https:// www2.hm.com/en_gb/life/culture/ inside-h-m/colour-story-innovation. html

242 Anna Granskog, Libbi Lee, Karl-Hendrik Magnus, Corinne Sawers, "Consumer Sentiment on Sustainability in Fashion", McKinsey, July 2020, https://www.mckinsey. com/industries/retail/our-insights/ survey-consumer-sentiment-onsustainability-in-fashion

243 "Global Landscape of Climate Finance, 2019", Climate Policy Initiative, November 7, 2019, https:// www.climatepolicyinitiative.org/ publication/global-landscape-ofclimate-finance-2019/

244 "UNEP Adaptation Gap Report", 2016, https:// unepdtu.org/publications/ the-adaptation-finance-gap-report/

245 "Regenerative Fund for Nature", Kering, https://www. kering.com/en/sustainability/ safeguarding-the-planet/ regenerative-fund-for-nature/

246 Emily Farra, "Stella McCartney, Burberry, and Kering Forge a New Kind of Sustainable Partnership", Vogue Business, January 22, 2021, https://www.vogue.com/article/ apparel-impact-institute-kering-stellamccartney-burberry-sustainablefashion-partnership

247 "Zalando Invests in Textile Regeneration Technology Group Infinited Fiber Company", Zalando, September 28, 2021, https://corporate. zalando.com/en/newsroom/ news-stories/zalando-invests-textileregeneration-technology-groupinfinited-fiber-company

248 Catherine Salfino, "How to Cultivate Loyalty with Next Gen Shoppers", Sourcing Journal, August 12, 2021, https://sourcingjournal. com/topics/lifestyle-monitor/ customer-loyalty-gen-z-shopperstiktok-salesforce-covid19-cottonclothing-295476/

249 Douglas Broom, "This start-up is making digital passports... for clothes. Here's what that means for the fashion industry", World Economic Forum, May 18, 2021, https://www. weforum.org/agenda/2021/05/ tracking-fashion-clothes-sustainable/

250 Whitney Bauck, "Immaterial gains: the NFT boom comes for fashion", Financial Times, August 25, 2021, https://www.ft.com/content/556efec9c391-4a40-84a0-76623lb4ce065; McKinsey proprietary analysis

251 Ibid

252 Circularity.ID White Paper, December 2019; Simone Preuss, "Armedangels integrates Circularity.ID into clothing", Fashion United, September 2, 2021, https://fashionunited. de/nachrichten/business/ armedangels-integriert-circularity-idin-kleidung/2021090242580

253 "Digital Passports for Clothing", The Fast Forward BSR, 2021, https:// www.bsr.org/en/emerging-issues/ digital-passports-for-clothing

254 "AAFA Advocates for Labeling Modernization", American Apparel & Footwear Association, June 10, 2021, https://www.aafaglobal. org/AAFA/AAFA_News/2020_ Letters_and_Comments/ AAFA_Advocates_for_Labeling_ Modernization.aspx

255 Diana Lee, Rahul Malik, "The Future of Fashion Resale", BoF Insights, July 2021, https://www. businessoffashion.com/reports/retail/ the-future-of-fashion-resale-reportbof-insights

256 Chavie Lieber, "Resale Sites Race to Staff Up in the Fight Against Fakes", The Business of Fashion, July 15, 2021, https://www.businessoffashion.com/ articles/luxury/resale-sites-race-tostaff-up-in-the-fight-against-fakes

257 Chavie Lieber, "Resale Sites Race to Staff Up in the Fight Against Fakes", The Business of Fashion, July 15, 2021, https://www.businessoffashion.com/ articles/luxury/resale-sites-race-tostaff-up-in-the-fight-against-fakes

258 "U.S. Men are More Likely than Women to Buy Counterfeits, According to New Survey", The Fashion Law, August 27, 2021, https://www. thefashionlaw.com/u-s-men-aremore-likely-than-women-to-buycounterfeits-according-to-new-survey/

259 "Trade in fake goods is now 3.3% of world trade and rising", OECD, March 18, 2019, https://www.oecd.org/ newsroom/trade-in-fake-goods-isnow-33-of-world-trade-and-rising.htm

260 "LVMH, Richemont and Prada Team Up for New Blockchain Venture Aimed at Tracing, Authenticating Luxury Goods", The Fashion Law, April 21, 2021, https://www.thefashionlaw.com/ lvmh-richemont-and-prada-team-upfor-new-blockchain-venture-aimed-attracing-authenticating-luxury-goods/; "China Inspection Group first launched the luxury identification and traceability signature, opening a new era of authenticity protection", PR Newswire, April 20, 2020, https://www. prnasia.com/story/277861-Lshtml

261 Joelle Diderich, Natalia Theodosi, "Why Luxury Brands Are Sitting Out the Resale Market Boom", WWD, September 1, 2021, https://wwd. com/fashion-news/designer-luxury/ luxury-brands-reluctant-to-joinresale-market-123489876/

262 "IBM and Arianee join forces", Arianee Press Release, July 8, 2021, https://www.arianee.org/newsfeed/ ibm; Paige Reddinger, "Vacheron Constantin Will Certify All Watches With Blockchain Technology Starting in 2021", November 5, 2020, https:// robbreport.com/style/watch-collector/ vacheron-constantin-blockchaincertification-1234579311/

263 Tom Phillips, "Prada to leverage NFC to authenticate fashion products". NFCW. August 31, 2021, https://www.nfcw.com/ nfc-world/prada-to-leverage-nfcto-authenticate-fashion-products/; Tom Phillips, "Paco Rabanne launches first NFC-enabled 'connected fragrance", NFCW, July 6, 2021, https://www.nfcw.com/nfc-world/ paco-rabanne-launches-first-nfcenabled-connected-fragrance/; Nazanin Lankarani, "Tell your Watch to Hold that Pose", The New York Times, November 3, 2020, https:// www.nytimes.com/2020/11/03/ fashion/watches-authentication-appsswitzerland.html

264 Gerry Hough, Praveen Adhi, Tyler Harris, "RFID's Renaissanse in Retail", McKinsey, May 7, 2021, https://www.mckinsey.com/ industries/retail/our-insights/ rfids-renaissance-in-retail?cid=soc-web

265 Rachel Deeley, "Fashion's Untapped Opportunity to Fight Climate Change", The Business of Fashion, February 4, 2021, https:// www.businessoffashion.com/articles/ sustainability/fashions-untappedopportunity-to-fight-climate-change

266 "LVMH partners with other major luxury companies on Aura, the first global luxury blockchain", LVMH Press Release, April 20, 2021, https://www. lvmh.com/news-documents/news/ lvmh-partners-with-other-majorluxury-companies-on-aura-the-firstglobal-luxury-blockchain/

267 M.C. Nanda, Robert Williams, "Cartier, Prada Link Up with LVMH in Blockchain Alliance", April 20, 2021, https://www.businessoffashion.com/ articles/technology/cartier-prada-linkup-with-lvmh-in-blockchain-alliance

268 "The State of Fashion 2021", The Business of Fashion and McKinsey, December 2, 2020, https://www. businessoffashion.com/reports/ news-analysis/download-the-reportthe-state-of-fashion-2021

269 Patricia Stainer, "Alarming Cybersecurity Statistics for 2021 and the Future", April 29, 2021, https://www.retarus.com/blog/en/ alarming-cybersecurity-statistics-for-2021-and-the-future/

270 Data Breach Investigations Report 2021, Verizon, 2021

271 Rachel Abrams, Vindu Goel, "Card Data Stolen From 5 Million Saks and Lord & Raylor customers", The New York Times, April 1, 2018, https://www. nytimes.com/2018/04/01/technology/ saks-lord-taylor-credit-cards.html

272 "Neiman Marcus says notified 4.6 mln customers about data breach", Reuters, September 30, 2021, https://www.reuters.com/business/ retail-consumer/neiman-marcus-saysnotified-46-mln-customers-aboutdata-breach-2021-09-30/

273 BoF Interview with Lance Spitzner, October 2021

274 "Site da Renner sai do ar após ataque hacker – entenda o caso" [Translated "Renner's website goes down after hacker attack – understand the case"], CNN Brasil, August 20, 2021, https://www.cnnbrasil.com.br/ business/site-da-renner-continuafora-do-ar-apos-ataque-hacker/

275 Supantha Mukherjee, Colm Fulton, "Coop, other ransomware-hit firms, could take weeks to recover, say experts", July 5, 2021, https:// www.reuters.com/technology/ coop-other-ransomware-hit-firmscould-take-weeks-recover-sayexperts-2021-07-05/

276 "Retail giant E-Land closes nearly half of stores due to ransomware attack", The Korea Times, November 22, 2020, https://www.koreatimes. co.kr/www/tech/2020/11/694_299692. html

277 Kathryn Rattigan, "FabFitFun Settles Class Action for \$625,000 for Alleged Data Security Failures", The National Law Review, September 16, 2021, https://www.natlawreview.com/ article/fabfitfun-settles-class-action-625000-alleged-data-security-failures

278 BoF Interview with Stefan Larsson, September 2021

279 Theo Leggett, "Amazon hit with \$886m fine for alleged data law breach", BBC, July 30, 2021, https://www.bbc. co.uk/news/business-58024116

280 Dimitri Sirota, "Why U.S. Companies Should Know About The CCPA And New York SHIELD Act", September 15, 2020, https://www.forbes.com/sites/ forbestect.council/2020/09/16/ why-us-companies-should-knowabout-the-ccpa-and-new-york-shieldact?/sh-6d7c5f0e32e1

281 Noah Ramirez, "Brazil's national data privacy legislation comes into force", Osano, July 20, 2021, https://www.osano.com/articles/ lgpd-enforcement-begins

282 Josh Horwitz, "China passes new personal data privacy law, to take effect Nov. 1", Reuters, August 20, 2021, https://www.reuters.com/ world/china/china-passes-newpersonal-data-privacy-law-take-effectnov-1-2021-08-20/

283 BoF Interview with Susan Scafidi, October 2021

284 Henning Soller, James Kaplan, Lisa Donchak, Venky Anant, "The consumer-data opportunity and the privacy imperative", McKinsey, April 27, 2020, https://www. mckinsey.com/business-functions/ risk-and-resilience/our-insights/ the-consumer-data-opportunity-andthe-privacy-imperative 285 McKinsey Future of Wellness Survey, August 2020, N=1,500+ per market

286 "Cost of a Data Breach Report 2021", IBM, 2021

287 BoF Interview with Lance Spitzner, October 2021

288 "Data breaches up 3 percent in Q2 2021", Identity Theft Resource Center, July 8, 2021, https://www.idtheftcenter. org/data-breaches-are-up-38-percentin-q2-2021-the-identity-theftresource-center-predicts-a-new-alltime-high-by-years-end/

289 "2021 Data Breach Investigations Report", Verizon, https://www.verizon. com/business/resources/reports/ dbir/; "X-Force Threat Intelligence Index-2021", IBM Security, February, 2021, https://ibm.ent.box.com/s/ hs5pcayhbbhiyi8di5sqdpbbd88tsh89

290 "Cost of a Data Breach Report 21", IBM, July 2021, https://www.ibm.com/ security/data-breach

291 Kevin Eiden, James Kaplan et al, "Organisational cyber maturity: A survey of industries", McKinsey & Co, August 4, 2021, https://www. mckinsey.com/business-functions/ risk-and-resilience/our-insights/ organizational-cyber-maturity-asurvey-of-industries

292 Kevin Eiden, James Kaplan et al, "Organisational cyber maturity: A survey of industries", McKinsey, August 4, 2021, https://www. mckinsey.com/business-functions/ risk-and-resilience/our-insights/ organizational-cyber-maturity-asurvey-of-industries

293 Training employees to avoid clicking on phishing emails aimed at tricking individuals into revealing personal information e.g., passwords and credit card numbers through fraudulent emails

294 Kevin Eiden, James Kaplan, Bartlomiej Kazimierski, Charlie Lewis, Kevin Telford, "Organizational Cyber Maturity: A Survey of Industries", August 4, 2021, https://www. mckinsey.com/business-functions/ risk-and-resilience/our-insights/ organizational-cyber-maturity-asurvey-of-industries

295 Kevin Sneader, Shubham Singhal, "Trends that will define 2021 and beyond: Six months on", McKinsey, July 21, 2021, https:// www.mckinsey.com/industries/ public-and-social-sector/our-insights/ Trends-that-will-define-2021-andbeyond-Six-months-on

296 "State of Diversity, Equity & Inclusion in Fashion", CFDA, PVH Corp., February 2021, https:// s3.amazonaws.com/cfdaf.mrhenry. be/2021/01/CFDA-PVH_State-of-DEIin-Fashion_02-2021.pdf

297 BoF Community Survey 2022, N=630

298 Sheena Butler-Young, "Can Fashion Compete with Tech for Executive Talent?", The Business of Fashion, September 2, 2021, https://www.businessoffashion. com/articles/workplace-talent/ can-fashion-compete-with-tech-forexecutive-talent

299 "The State of Fashion 2021", The Business of Fashion and McKinsey, December 2, 2020, https://www. businessoffashion.com/reports/ news-analysis/download-the-reportthe-state-of-fashion-2021

300 "The future of work after COVID-19", McKinsey Global Institute, February 18, 2021, https:// www.mckinsey.com/featured-insights/ future-of-work/the-future-of-workafter-covid-19

301 Chavie Lieber, "Resale Sites Race to Staff Up in the Fight Against Fakes", The Business of Fashion, July 15, 2021, https://www.businessoffashion.com/ articles/luxury/resale-sites-race-tostaff-up-in-the-fight-against-fakes

302 Sheena Butler-Young, "Can Fashion Compete with Tech for Executive Talent?", The Business of Fashion, September 2, 2021, https://www.businessoffashion. com/articles/workplace-talent/ can-fashion-compete-with-tech-forexecutive-talent

303 BoF Community Survey 2022, N=630

304 Ibid.

305 Ibid.

306 "The Next Great Disruption Is Hybrid Work – Are We Ready?", Microsoft, March 22, 2021, https:// www.microsoft.com/en-us/worklab/ work-trend-index/hybrid-work

307 Cathaleen Chen, "The Retail Workforce of the Future", The Business of Fashion, April 14, 2021, https://www. businessoffashion.com/articles/retail/ the-retail-workforce-of-the-future

308 BoF Community Survey 2022, N=630

309 Chris Giles, Martin Arnold, "ECB official and OECD warn of rising inflation risks", Financial Times, September 21, 2021, https://www. ft.com/content/55300c7b-ab06-40c4a5f4-ed02ddb31374

310 Sheena Butler-Young, "Why LVMH is on a Gen-Z Hiring Spree", The Business of Fashion, September 24, 2021, https://www.businessoffashion. com/articles/workplace-talent/ why-lvmh-is-on-a-gen-2-hiring-spree

311 Daria Labutina, "Russia's Online Fashion Leader Wildberries Under Fire From Staff", The Business of Fashion, September 17, 2021, https://www.businessoffashion. com/news/global-markets/ russias-online-fashion-leaderwildberries-under-fire-from-staff 312 "Amazon hiring 125,000 US workers at increased average hourly wage," AlJazeera.com, September 14, 2021, https://www. aljazeera.com/economy/2021/9/14/ amazon-to-hire-125000-us-workersat-increased-hourly-wage

313 Cathaleen Chen, "When Your Corporate Diversity Strategy Isn't Enough", The Business of Fashion, June 22, 2020, https://www. businessoffashion.com/articles/ workplace-talent/fashion-diversityinclusion-corporate-strategies

314 Kelsie Sandoval, "Nike closes corporate head office for a week to allow employees to focus on mental health", Independent, August 30, 2021, https://www.independent.co.uk/news/ world/americas/nike-mental-healthemployees-break-paid-b1911380.html

315 Danny Parisi, "With prolonged WFH, fashion brands are rethinking office life", Digiday, September 14, 2021, https://digiday.com/marketing/ with-prolonged-wfh-fashion-brandsare-rethinking-office-life/

316 BoF Community Survey 2022, N=630

317 "The Next Great Disruption Is Hybrid Work—Are We Ready?", Microsoft, March 22, 2021, https:// www.microsoft.com/en-us/worklab/ work-trend-index/hybrid-work

318 Afdel Aziz, "The Power for Purpose: The Business Case for Purpose (All the Data You Were Looking For Part 2)", Forbes, March 20 2020, https://www.forbes.com/ sites/afdhelaziz/2020/03/07/ the-power-of-purpose-thebusiness-case-for-purpose-allthe-data-you-were-looking-for-pt-2/?sh=53d08e0a3cf7

319 Ibid.

320 BoF Interview with Sian Keane, October 2021

321 Diversity Matters Data Set

322 State of Diversity, Equity & Inclusion in Fashion, CFDA, PVH Corp., February 2021, https:// s3.amazonaws.com/cfdaf.mrhenry. be/2021/01/CFDA-PVH_State-of-DEIin-Fashion_02-2021.pdf

323 BoF Community Survey 2022, N=630

324 "State of Diversity, Equity & Inclusion in Fashion", CFDA, PVH Corp., February 2021, https:// s3.amazonaws.com/cfda.f.mrhenry. be/2021/01/CFDA-PVH_State-of-DEIin-Fashion_02-2021.pdf

325 Ibid.

326 Robert Williams, "Prada and Theaster Gates Launch Experimental Design Hub in Chicago", The Business of Fashion, September 1, 2021 https://www. businessoffashion.com/news/luxury/ prada-and-theaster-gates-launchexperimental-design-hub-in-chicago 327 Chantal Fernandez, "Retailers Pledged Action on Diversity. Delivery Is Proving More Elusive", The Business of Fashion, February 8, 2021, https://www. businessoffashion.com/articles/retail/ retailers-pledged-action-on-diversitydelivery-is-proving-more-elusive

328 Baselined to 2010

329 Estimated for the companies with NOPAT forecast based on analyst consensus. Based on NOPAT for industry and WACC weighted by EV

330 The number quoted will not translate directly into total industry revenue growth due to survivor bias and the fact that listed companies are likely outperforming smaller players, for one due to stronger digital capabilities

331 Lauren Thomas, "Nike shares fall as supply chain havoc leads retailer to slash revenue forceast", CNBC, September 23, 2021, https://www. cnbc.com/2021/09/23/nike-nke-q1-2022-earnings.html, "Boohoo Warn on Supplies as Business Faces Christmas Crunch", Bloomberg via The Business of Fashion, September 30, 2021, https:// www.businessoffashion.com/news/ retail/hm-booho-warn-on-suppliesas-business-faces-christmas-crunch

332 Kellie Ell, "One Year of Playing in Lockdown, the Activewear Market continues to Grow", WWD, March 17, 2021, https://wwd.com/fashion-news/ activewear/activewear-in-lockdownone-year-later-1234779475

333 Julienna Law, "Moncler Can Thank China For its Comeback", Jing Daily, April 22, 2021, https://jingdaily.com/ moncler-ql-2021-china-remo-ruffini/

334 Pandora Annual Report 2020

335 Emily Chow, "Dragons Fly as Chinese millennials take a shine to gold". Reuters, August 30, 2021, https:// www.reuters.com/world/china/ dragons-fly-chinese-millennials-takeshine-gold-2021-08-29/

336 "The State of Fashion: Watches and Jewellery Report", The Business of Fashion and McKinsey, June 14, 2021, https://www.businessoffashion. com/reports/luxury/state-of-fashionwatches-jewellery-industry-report

337 Tanya Krishna, "How Titan Jewellery has Virtually Brought the Store to Customer's Home?", Indianretailer.com, June 4, 2021. https://www.indianretailer.com/ interview/retail-people/profiles/ how-tanishq-is-navigating-throughsecond-covid-wave-with-utmost-ease. i0850/

338 Emily Chow, "Dragons fly as Chinese millennials take a shine to gold", Reuters, August 30, 2021, https://www.reuters. com/world/china/dragons-fly-chinesemillennials-take-shine-gold-2021-08-29/; Arnold Ma, "3 Ways Foreign Luxury Brands Can Tap Into China's Gaucho Trend", Jing Daily, June 17, 2021, https:// jingdaily.com/china-guochao-westernbrands-dior-lining/ 339 Nathaniel Meyersohn, "Stores are closing, This discount chain plans to move in", CNN, March 5, 2021, https://edition.cnn.com/2021/03/04/ business/burlington-store-openings/ index.html

340 Emilie Veyretout, "Dior mise sur une cosmétique écoresponsable avec sa ligne Capture Totale C.E.L. Energy", Madame Figaro, January 8, 2020, https://madame.lefigaro. fr/beaute/dior-mise-sur-unecosmetique-ecoresponsable-aveccapture-totale-cell-energy-giselebundchen-080120-178967

341 Rachel Strugatz, "The Face Changing TikTok Skin Care", The Business of Fashion, September 15, 2021, https://www.businessoffashion. com/articles/beauty/ the-face-changing-tiktok-skin-care

342 "L'Oréal Targets 50% Digital Sales with New E-Commerce Tie-Ins", Brainfstation, November 6, 2020, https://brainstation.io/magazine/ loreal-targets-50-digital-sales-withnew-e-commerce-tie-ins

343 Rachel Strugatz, "Sephora and Ulta Battle for the Big-Box Retail Market", The Business of Fashion, December 20, 2020, https://www. businessoffashion.com/articles/ beauty/sephora-and-ulta-battle-forthe-big-box-retail-market

344 Diana Pearl, "Beauty Testers are Back", The Business of Fashion, August 11, 2021, https://www. businessoffashion.com/articles/ beauty/beauty-testers-are-back

345 "The State of Smoooth Report: Fresh Faces and Full Carts", Klarna, 2021, https://www.klarna.com/us/ business/fresh-faces-full-carts-report/

346 Yatsen Holdings Limited 2020 annual report

347 Kathryn Lundstrom, "Nearly Half of TikTokers Are Buying Stuff From Brands They See on the Platform", AdWeek, May 3, 2021, https://www. adweek.com/brand-marketing/ nearly-half-of-tiktokers-are-buyingstuff-from-brands-they-see-on-theplatform/

348 Andrew Lipsman, "Social Commerce 2021: Media and Commerce Convergence Creates Growth Opportunity for Brands", eMarketer, February 3, 2021, https:// www.emarketer.com/content/ social-commerce-2021

349 "Scaling social commerce: Shopify introduces new in-app shopping experiences on TikTok", Shopify, August 24, 2021, https://news.shopify. com/scaling-social-commerce-shopifyintroduces-new-in-app-shoppingexperiences-on-tiktok

350 Liz Flora, "Pinterest doubles down on social commerce", Glossy, August 11, 2021, https://www.glossy.co/beauty/ pinterest-doubles-down-on-socialcommerce/ 351 Audrey Schomer, "Amazon is launching a live-streaming video version of a home shopping network", Business Insider, February 12, 2019, https://www.businessinsider.com/ amazon-launches-amazon-live-2019-2

352 Liz Flora, "Social commerce app Flip emerges as the TikTok of online beauty shopping", Glossy, September 7, 2021, https://www.glossy.co/beauty/ social-commerce-app-flip-emerges-ashe-tiktok-of-online-beauty-shopping/

353 Liz Flora, "Ulta Beauty partners with livestream shopping app Supergreat", Glossy, July 23, 2021, https://www.glossy.co/beauty/ ulta-beauty-partners-with-livestreamshopping-app-supergreat/

354 Matthew Townsend, "Live-Selling Provider CommentSold Gains Big Backer in Permira", Bloomberg, August 18, 2021, https://www.bloomberg. com/news/articles/2021-08-18/ live-selling-powered-by-commentsoldlivestream-gets-permira-investment

355 Amanda Lim, "Human approach to beauty: L'Occitane online sales grow 69% thanks to social selling initiatives", Cosmetics Design-Asia, June 29, 2021, https://www.cosmeticsdesign-asia. com/Article/2021/06/29/L-Occitaneonline-sales-grow-69-thanks-to-socialselling-initiatives

356 McKinsey interview with Harminder Matharu, October 2021

357 Lauren Sherman, "Chanel Surpasses \$11 Billion in Sales, Dismisses Rumours of Imminent Sale", The Business of Fashion, June 17, 2019, https://www.businessoffashion.com/ articles/luxury/chanel-11-billion-salesdismisses-rumours

358 Pamela N. Danziger, "5 Reasons That Glossier Is So Successful", Forbes, November 7, 2018, https://www.forbes. com/sites/pamdanziger/2018/11/07/5keys-to-beauty-brand-glossierssuccess/?sh=310a7c5d417d; Mila Wenin, "Tiffany Masterson on beauty and the thinking process behind Drunk Elephant", Prestige, September 23, 2020, https://www.prestigeonline. com/th/beauty-wellness/beauty/ tiffany-masterson-drunk-elephant/

359 Sheena Butler-Young, "Why LVMH Is On a Gen-Z Hiring Spree", The Business of Fashion, September 24, 2021, https://www.businessoffashion. com/articles/workplace-talent/ why-lvmh-is-on-a-gen-z-hiring-spree

360 Charlotte Bitmead, "Hermès Are Launching A Beauty Line Inspired By Their Iconic Birkin Bag", January 17, 2020, https://www.elle.com/ uk/beauty/make-up/a30561451/ hermes-makeup-line/

361 "L'Oréal and Valentino announce a worldwide license agreement for fine fragrances and luxury beauty", May 28, 2018, https://www.lorealfinance.com/eng/news-release/ loreal-and-valentino-announceworldwide-license-agreementfine-fragrances-and-luxury; "Prada and L'Oreal: Long-Term License Agreement", December 2019, https://www.pradagroup.com/en/ news-media/news-section/prada-andloreal.html; "L'Oréal and Armani renew their partnership in beauty", March 22, 2018, https://www.loreal-finance.com/ eng/news-release/loreal-and-armanirenew-their-partnership-beauty; Emma Sandler, "How Chanel's Beauty products propel its continued growth", July 22, 2019, https://www.glossy.co/ beauty/how-chanels-beauty-productspropel-its-continued-growth/

362 Laure Guilbault, "Hermès to Launch Skincare, Cosmetics", The Business of Fashion, March 21, 2019, https://www.businessoffashion. com/articles/news-analysis/ hermes-to-launch-skincare-cosmetics



The Business of Fashion is a next-generation media company recognised around the world for its authoritative, analytical point of view on the global fashion industry. Serving members in more than 125 countries, BoF combines independent, agenda-setting journalism with practical business advice, online learning, career-building tools and immersive events and experiences designed to open, inform and connect the global fashion community.

FOR EDITORIAL ENQUIRIES PLEASE CONTACT:

Imran Amed Founder, CEO & Editor-in-Chief ceo.office@businessoffashion.com

Vikram Alexei Kansara Editorial Director vikram.kansara@businessoffashion.com

Robb Young Global Markets Editor robb.young@businessoffashion.com Brian Baskin Deputy Editor brian.baskin@businessoffashion.com

Janet Kersnar Executive Editor janet.kersnar@businessoffashion.com

Sarah Kent London Editor sarah.kent@businessoffashion.com

FOR COMMERCIAL ENQUIRIES PLEASE CONTACT:

Nick Blunden President nick.blunden@businessoffashion.com

Joan Cheng Managing Director, North America & Head of Organisations

joan.cheng@businessoffashion.com

Johanna Stout Head of Brand & Community Partnerships johanna.stout@businessoffashion.com

Matthew Cullen Senior Director of Business Development matthew.cullen@businessoffashion.com

FOR PRESS ENQUIRIES PLEASE CONTACT:

Jael Fowakes Senior Brand Marketing Manager

jael.fowakes@businessoffashion.com

Max Tobias Director, Camron Public Relations max.tobias@camronpr.com

McKinsey & Company

For questions on the report or further discussions, please contact a member of McKinsey's Apparel, Fashion & Luxury global leadership team:

FOR REPORT ENQUIRIES:

Achim Berg Senior Partner, Global achim_berg@mckinsey.com

Anita Balchandani Partner, EMEA/United Kingdom anita_balchandani@mckinsey.com

FOR PRESS ENQUIRIES PLEASE CONTACT:

Adriana Clemens Senior Communication Specialist adriana_clemens@mckinsey.com

FOR REGIONALLY FOCUSED ENQUIRIES:

Carlos Sanchez Altable Partner, Iberia carlos sanchez altable@mckinsey.com

Pamela Brown Partner, North America pamela_brown@mckinsey.com

Raphael Buck Senior Partner, EMEA raphael_buck@mckinsey.com

Gemma D'Auria Senior Partner, Mediterranean gemma_dauria@mckinsey.com

Sandrine Devillard Senior Partner, North America sandrine_devillard@mckinsey.com Antonio Gonzalo Partner, Iberia antonio_gonzalo@mckinsey.com

Holger Harreis Senior Partner, Germany holger_harreis@mckinsey.com

Fernanda Hoefel Partner, Latin America fernanda_hoefel@mckinsey.com

Naoyuki Iwatani Senior Partner, Japan naoyuki_iwatani@mckinsey.com

Aimee Kim Senior Partner, Asia Pacific aimee_kim@mckinsey.com

Patrick Klinkoff Partner, Austria patrick_klinkoff@mckinsey.com

Sajal Kohli Senior Partner, North America sajal_kohli@mckinsey.com

Franck Laizet Senior Partner, France franck_laizet@mckinsey.com

Karl-Hendrik Magnus Senior Partner, Germany karl-hendrik_magnus@mckinsey.com

Emanuele Pedrotti Partner, Mediterranean emanuele_pedrotti@mckinsey.com Madeleine Tjon Pian Gi Partner, Benelux madeleine_tjon_pian_gi@mckinsey.com

Felix Rölkens Partner, Germany felix roelkens@mckinsey.com

Jennifer Schmidt Senior Partner, North America jennifer_schmidt@mckinsey.com

Raphael Speich Partner, France raphael_speich@mckinsey.com

Alex Sukharevsky Senior Partner, Russia and CEE alex_sukharevsky@mckinsey.com

Alexander Thiel Partner, Switzerland alexander_thiel@mckinsey.com

Cyrielle Villepelet Partner, France cyrielle_villepelet@mckinsey.com

Nitasha Walia Partner, Middle East nitasha_walia@mckinsey.com

Daniel Zipser Senior Partner, Greater China daniel_zipser@mckinsey.com The State of Fashion 2022