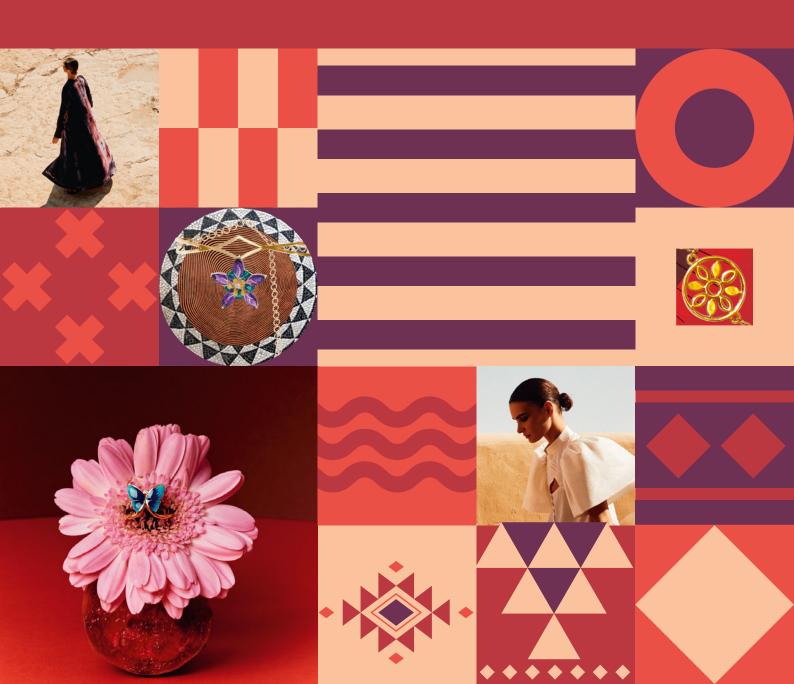


The State of Fashion in the Kingdom of Saudi Arabia 2023



Acknowledgements









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List of acronyms

| Al | Artificial Intelligence |
|--------|--|
| CAD | Computer Aided Design |
| CMT | Cut Make and Trim |
| CTFL | Clothing, Textile, Footwear and Leather |
| EBITDA | Earnings before interest, taxes, depreciation and amortization |
| EU | European Union |
| FY | Financial Year |
| GCC | Gulf Cooperation Council |
| GDP | Gross Domestic Product |
| GSCRI | Global Supply Chain Resilience Initiative |
| GVA | Gross Value Addition |
| HS | Harmonised System |
| KAUST | King Abdullah University of Science and Technology |
| KSA | Kingdom of Saudi Arabia |
| MFC | Micro-fulfilment centre |
| MVA | Manufacturing Value Added |
| MWAN | The National Center for Waste Management |
| RFID | Radio Frequency Identification |
| SABIC | Saudi Arabia Basic Industries Corporation |
| SAR | Saudi Riyal |
| UAE | United Arab Emirates |
| USA | United States of America |
| US\$ | United States Dollar |
| UK | United Kingdom |
| UN | United Nations |
| | |



EXECUTIVE SUMMARY

Fashion's golden thread to Vision 2030

The scale of the opportunity that now exists for Saudi Arabia's nascent domestic fashion industry can hardly be overstated.

By cultivating within the Kingdom a thriving fashion sector capable of overseeing and executing all aspects of the fashion value chain - from design and manufacture to logistics and retail - Saudi Arabia will reduce reliance on overseas fashion imports and create a wide range of fulfilling creative and non-creative fashion-related employment opportunities.

For context, in 2021, the Kingdom spent \$7.3 billion (SAR 27 billion) on imported fashion goods.

As it becomes increasingly mature, Saudi Arabia's domestic fashion industry will contribute strongly toward the realisation of the medium-term Vision 2030 strategic goals, particularly as they relate to non-oil GDP growth, job creation and cultural enrichment.

Certainly, the environment within which Saudi Arabia's domestic fashion industry will develop appears highly conducive to rapid growth. In 2022, the Kingdom's fashion industry contributed 1.4% of GDPa, or US\$12.5 billion (SAR 46.9 billion)*, and employed 230,000 people - equivalent to 1.8% of Saudi Arabia's total workforce. In 2021, the industry was valued at US\$24.6 billion (SAR 92.2 billion).

Developing a comprehensive fashion value chain in Saudi Arabia will naturally require the creation of a deep and diverse talent pipeline. This is to ensure that enough talent is produced to supply a growing workforce across all segments of the fashion value chain. The Kingdom has already demonstrated the ability to produce world-class designers, as showcased by the Saudi 100 Brands program developed by the Saudi Fashion Commission (read more in chapter 3). The Kingdom has additionally invested significantly in its talent pipeline through wellfunded scholarship programs to enable students to study at some of the world's most prestigious universities. The next frontier will inevitably be the development of production-related talent, as explored in chapter 5.

As sustainability awareness grows, Saudi Arabia recognises the importance of developing a fashion ecosystem that puts sustainability at its core, most notably by weaving sustainability practices into business models.

Read more about this growing awareness and emerging opportunity in greener fashion materials in chapter 6.

It is clear that Saudi Arabia's fashion industry is well positioned to succeed. Already, a solid foundation for future growth has been created, and design and product development capabilities continue to be rapidly established. Importantly, local supply chain bottlenecks are steadily being resolved. As highlighted in chapter 8, a high-value fashion industry that supports Vision 2030's goals while celebrating and putting a modern, international twist on the Kingdom's diverse culture and heritage is not only realisable, but realistic.

In the words of Saudi Fashion Commission CEO Burak Cakmak: "We are building the foundations for the future of fashion right now, here in Saudi Arabia."

In 2022, the Kingdom's fashion industry contributed

1.4% of GDP^b and employed 230,000 people



ab The analysis undertaken as part of this study adopts a broad definition of fashion, which is in line with international research and aligns with the Fashion Commission's strategy. This broad definition includes activities that contribute to the fashion industry as well as elements that are broader than a cultural definition of fashion.

^{*} SAR3.75/\$1 exchange rate utilized throughout the Report



FASHION IN THE KINGDOM: PLAYING A CRUCIAL ROLE IN DRIVING VISION 2030

Saudi Arabia's Vision 2030¹ is a transformative and deeply ambitious strategy to unlock the Kingdom's vast potential.

Built on three pillars: an ambitious nation, a thriving economy and a vibrant society (see Figure 1

below), Vision 2030 will create an economically diversified, innovative, and competitive Kingdom, for the benefit of current and future Saudi generations.

Vision 2030 will increase non-oil gross domestic product by as much as 50% while increasing

the Kingdom's private sector contribution to GDPc from 40% to 65%. It will likewise increase the labour force participation of women from 22% to 30%². A key Vision 2030 objective is to increase household spending on culture and entertainment from 2.9% to six percent³.

The Vision was cascaded into **strategic objectives** to enable effective implementation through Vision Realization Programs.

Ambitious Nation

Thriving Economy

Vibrant Society

Enhance government effectiveness

Enable social

responsibility



Grow & diversify the economy Increase employment



Strengthen Islamic & national identity Offer a fulfilling & healthy life



Level 1
Overarching Objectives

FIGURE 1

The Kingdom of Saudi Arabia's Vision 2030 which is based on three pillars and six overarching objectives.

SOURCE: VISION 2030 WEBSITE, KINGDOM OF SAUDI ARABIA

Saudi Arabia has the opportunity to develop a thriving fashion ecosystem in support of the realisation of Vision 2030. In pursuit of this goal, it is crucial the Kingdom leverages its large domestic market, excellent strategic geographic location and the immense depth and wealth of its history and heritage.

Saudi Arabia's fashion industry in 2022 comprised 52% female employees. A total of 66% of all fashion jobs within the kingdom were held by Saudi nationals⁴. Of the total 230,000 fashion jobs, 90,000 were in core fashion occupations (where employment is strictly supporting the fashion industry) and 140,000 in non-core (supporting/ancillary occupations existing in the fashion sector as well as in other sectors)⁵.

In the Kingdom, fashion is considered an integral part of the cultural economy. Data from the Ministry of Human Resources and Social Development indicated that in 2022, there were 73 fashion occupations of which 13 were core (100% included in employment counting, e.g. tailor, model, and jewellery designer) and 60 linked occupations (partially counted: only jobs identified as cultural or linked with culture included in job counting, e.g. clothes seller, textile machine operator and tanner)⁶. Within these occupations, there were a total of 23,963 jobs in 2022, of which 8,345 were in core occupations and 15,618 in linked occupations7.

Saudi Arabia's fashion industry in 2022 comprised

52% female employees

From 2021 to 2025, fashion sales in Saudi Arabia are expected to surge by

48% representing an annual growth rate of

13%



FIGURE 2 Fashion sub-sector sales in Saudi Arabia during 2020-2025.

SOURCE: STATISTA (2021)

Fashion sales in Saudi Arabia are expected to surge by 48% from 2021 to 2025, representing an impressive compounded annual growth rate of 13%8. This growth is expected to be fuelled by the Kingdom's economic expansion and a growing population, with apparel, accessories, footwear, and luxury goods all poised for significant gains, as illustrated in Figure 2.

Saudi Arabia's fashion industry

is at a crossroads. The multiplier effect of strong consumption growth within the Kingdom will depend on the development path now chosen by the industry. The first option is purely consumerorientated, where products are imported and sold, with little value addition created for the Kingdom. The second option is to leverage rapidly growing demand as a catalyst for increased local value adding activities, as shown in Figure 2.

Given the boldness of Vision 2030 and its focus on growing non-oil GDP, the contribution of the private sector to the Saudi economy and the greater inclusion of women in economic activity, fashion has the potential to be a major driver of the strategy. Maximising the abundant opportunities for the Kingdom's fashion industry is therefore vital.



KEY INSIGHTS AND OPPORTUNITIES

- Retail is expected to grow by a compounded annual growth rate of 13% through to 2025.
- **Sportswear is expected to grow by 21%** through to 2027, driven by increased health consciousness and global sports brands such as Adidas and Nike's strong marketing in the region.
- Trade data shows a promising opportunity for import substitution, as well as an opportunity for local brands to export into the wealthy Gulf Cooperation Council (GCC) economies. This is especially true for competitive categories such as abayas, thobes and jewellery.
- Luxury goods continue to perform impressively in the GCC, with sales reaching US\$9.7 billion (SAR 36.4 billion) in 2021, representing a cumulative growth of approximately 23% from 2019 levels.
- At 9% of total retail sales in Saudi Arabia, e-commerce has the potential to significantly increase its market share.

Saudi Arabia's promising fashion industry

Saudi Arabia is the world's 18th largest economy⁹ with an evaluated GDP per capita of US\$27,941¹⁰ (SAR 104,778) in 2023, making it one of the wealthiest nations in the world.

The economy is driven by the oil sector which accounts for 80% of all export earnings¹¹ and 43% of the nation's GDP¹². As a result of Vision 2030, the economy is now undergoing significant structural

transformation to reduce dependence on oil through economic diversification.

The Saudi fashion ecosystem is illustrated in Figure 3 below. It is a broad ecosystem that accounts for 1.4% of the Kingdom's GDP^d and that is responsible for approximately 230,000 jobs, or 1.8% of the total labour force¹³. A full 60% of all ecosystem value is presently created within the retail and wholesale value chain components ("the market" as shown in Figure 3 below)^e.



Skills development providers, Regulatory support, Industry Associations

FIGURE 3:

12

The full fashion ecosystem in Saudi Arabia

SOURCE: ADAPTED FROM KAPLINKSY, R. AND MORRIS, M. (2000) A HANDBOOK FOR VALUE CHAIN RESEARCH. IDRC.

^d The analysis undertaken as part of this study adopts a broad definition of fashion, which is in line with international research and aligns with the Fashion Commission's strategy. This broad definition includes activities that contribute to the fashion industry as well as elements that are broader than a cultural definition of fashion.

Despite the challenges posed by the Covid-19 pandemic, the retail sector in Saudi Arabia has remained healthy. Retail sales are expected to achieve an average compound annual growth rate of 13%% through to 2026¹⁴.

Confidence in the sector is strong, with 70% of the Fashion Commission Outlook Survey respondents reporting that they expect to see Saudi fashion sales grow over the next three years (see Figure 4 below).



FIGURE 4:

Saudi Fashion ecosystem growth sentiment over next financial year

SOURCE: FASHION COMMISSION FASHION OUTLOOK SURVEY (2023)

The Kingdom's shopping basket is growing and diversifying

E-commerce sales, as a percentage of total sales in the Kingdom, are expected to grow from 9% in 2022 to 13% by 2025¹⁵.



The shift to online retailing is occurring, spurred on by the rapid expansion of e-commerce during the outbreak of Covid-19. The national policy environment has also driven this expansion, with Vision 2030 aiming to achieve 70% cashless payments by 2025¹⁶.

For women, shirts and blouses are the largest product category (\$1.1bn, SAR 4.1bn) followed by jeans (\$958m, SAR 3.8bn, refer to Figure 5 for a full breakdown of women's product categories). The women's apparel market is forecast to grow by 20% by 2027. While the dominant men's product category is underwear (\$626m, SAR 2.3bn) and other outerwear (\$499m, SAR 1.9bn) which includes thobes (see Figure 6 for a full breakdown of men's product categories). The men's market, although smaller than women's (\$3.5bn, SAR 13.1bn vs \$7.4bn, SAR 27.8bn), is expected to grow by 27% from 2022 to 2027¹⁷.

Vision 2030 is aiming to

70%

cashless payments by 2025

The women's apparel market is forecast to grow by

20%

by 2027

The men's market, although smaller than women's, is expected to grow by

27%

from 2022 to 2027

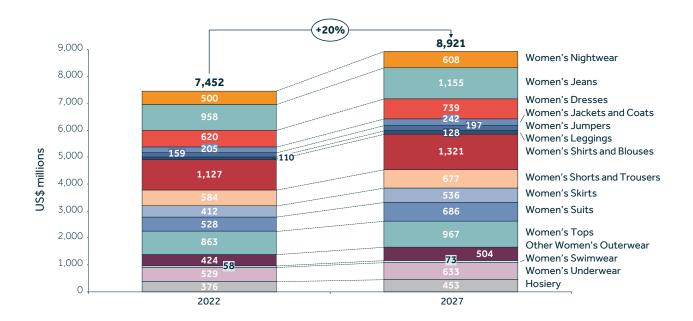


FIGURE 5: Women's apparel market, 2022 and 2027 (in US\$ millions)

SOURCE: EUROMONITOR INTERNATIONAL (2023)

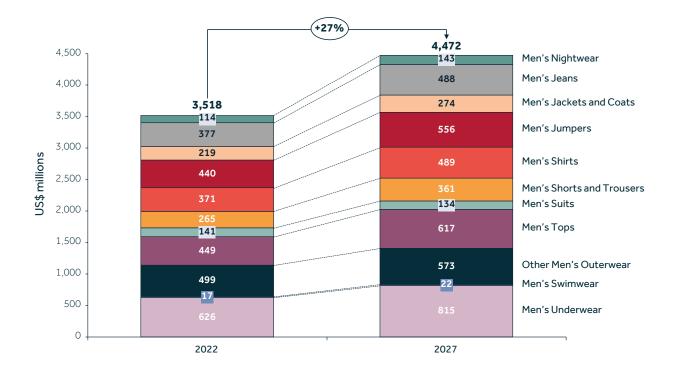


FIGURE 6: Men's apparel market, 2022 and 2027 (in US\$ millions)

SOURCE: EUROMONITOR INTERNATIONAL (2023)

The fast-growing category of Saudi sportswear

In line with Vision 2030, the government of Saudi Arabia prioritises the creation of a healthy and vibrant society.

The Ministry of Sport aims to raise physical activity levels in the Kingdom by 40% by the end of the decade¹⁸, not least through high participation events such as the Riyadh and Jeddah marathons. As a result of these initiatives and others like them, sportswear and general athleisure apparel has become a dynamic product category with US\$1.3 billion (SAR 4.9 billion) in sales in 2022¹⁹. The category is expected to grow 21% by 2027, with this growth anticipated across both performance and 'sports-inspired' apparel and footwear

categories (See Figure 7 below).

In 2022, Adidas group, Nike and Puma goods accounted for more than 50% of total sales in Saudi Arabia²⁰. While Adidas is the market leader (accounting for 29% of Saudi sportwear sales), Nike has seen significant growth following its sponsorship of the Saudi Arabia Football World Cup team in 2022. Other brands, such as FILA, have also expanded into the Kingdom, with pop-up shops and local celebrity partnerships as key components of their strategy.

The growing sportswear market is ripe for new opportunities – across both established and emerging brands.



FIGURE 7:

Saudi sportswear market value compared between 2022 and 2027 (in US\$ millions)

SOURCE: EUROMONITOR INTERNATIONAL (2023)

A resilient market in the face of global challenges

In addition to its major growth prospects, the Saudi market has also demonstrated it is far more resilient than comparator economies, including its regional neighbours. Private consumption only decreased 8.1% during the height of the Covid-19 pandemic in 2020 relative to 12.5% in the UAE, 13.2% in the United Kingdom (UK) and 8.1% in France²¹ (see

Figure 8). Moreover, the Saudi market showed strong recovery post-Covid, growing by 9.4% in 2021 relative to 5.2% in France and 6.2% in the UK. This resilience is partly the result of strong underlying economic fundamentals, and partly the result of an increasing shift towards domestic consumption by Saudi nationals. The rapid expansion of retail

in the Kingdom, driven by the opening of new, ultra-modern malls, and the increasing level of sophistication and service capability of e-commerce platforms has led to the increased purchasing of fashion products within the Kingdom.

These improvements include mobile-phone capabilities, predictive product placement, integration into social media platforms and improved delivery logistics.

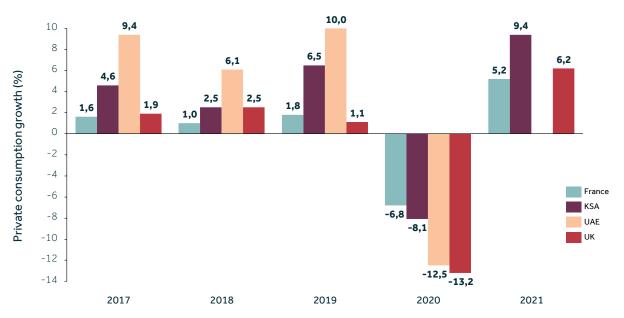


FIGURE 8:

Comparison of private consumption growth in 2020

SOURCE: ECONOMIST INTELLIGENCE UNIT (2022)
DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

Import substitution can increase economic diversification and promote domestic production and innovation

Saudi Arabia's retail sourcing profile is overwhelmingly import dependent.

The total trade deficit for the Kingdom's finished goods fashion industry was US\$6.5 billion (SAR 24.4 billion) in 2021, an increase from US\$5.1 billion (SAR 19.1 billion) in 2017²² (refer Table 1 below).

The bulk of the trade deficit is driven by apparel and footwear (refer to Table 2 below). Apparel exports experienced 11% growth from 2012 to 2021, with imports surging 42% over the period, widening the trade deficit significantly²³.

Footwear exports grew 14% from 2012 to 2021, although off a low base of only US\$5.1 million (SAR 19.1 billion) in 2012 (see Table 2). Furthermore, while US\$16 million (SAR 60 million) was exported

in 2021, imports increased to US\$882 million (SAR 3.3 billion). This represents a 43% increase on 2012 importing levels, widening the trade deficit²⁴.

Jewellery and jewellery inputs such as pearls, precious and semi-precious stones and metals have also traditionally skewed towards imports, although the Kingdom's growing jewellery sector is starting to make progress internationally, with exports growing 8% from 2012 to 2021²⁵ (see Table 2).

Trade data for handbags and leather accessories follows a consistent trend relative to the other fashion categories. Small levels of exporting are evident, but imports dominate, resulting in a large trade deficit of US\$453 million (SAR 1.7 billion) in 2021²⁶ (see Table 2).

| Trade Flow (US\$m) | 2017 | 2018 | 2019 | 2020 | 2021 |
|--------------------|----------|---------|----------|----------|----------|
| Exports | 1,69 | 2,40 | 1,27 | 8,44 | 11,32 |
| Imports | 5094,21 | 4987,44 | 6100,94 | 4454,62 | 6533,69 |
| Trade Balance | -5092,52 | -4,99 | -6099,67 | -4446,18 | -6522,37 |

TABLE 1:

Fashion trade balance in Saudi Arabia, 2017-2021

SOURCE: UN COMTRADE (2023)^f

DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

There are multiple underlying reasons for the Saudi fashion market's dependence on imports, including the Kingdom's open trade system, the market's global connectivity, and local cost and skills challenges. The growth and size of the domestic market reveal major domestic market opportunities for firms looking to invest behind the bold objectives of Vision 2030. This is demonstrated in Table 2, which reveals the extent of fashion import displacement opportunities in the Kingdom, and niche export opportunities, most notably into the Gulf Cooperation Council (GCC). As highlighted, even a 20% displacement of imports will result in substantial local production gains. Based on the data presented in Table 2,

over US\$1.4 billion in local sales would be generated annually.

| Fashion category | Imports (US\$m) | Import displacement @ 20% (US\$m) | Exports (US\$m) | Balance of Trade (US\$m) | Export Growth (2012-2021) | Three major export markets |
|---|--------------------|---|--------------------|--------------------------------|---------------------------------|----------------------------------|
| Apparel (HS 61, 62) | 3,943 | 789 | 131 | -3,812 | 11% | UAE, Bahrain, Yemen |
| Textiles (HS 5111, 5112, 5113, 52, 53, 54, 55, 60) | 593 | 119 | 172 | -421 | 8% | UAE, Kuwait, USA |
| Footwear (HS 64) | 882 | 176 | 16 | -866 | 14% | UAE, Bahrain, Kuwait |
| Handbags and accessories (HS 42) | 463 | 93 | 10 | -453 | 9% | UAE, Qatar, Oman |
| Jewellery (HS 7113) ⁹ | 1,437 | 287.4 | 2,046 | 609 | 8% | UAE, Switzerland, India |
| Totals | 7,318 | 1,437 | 2,375 | -4,943 | 40% | |

TABLE 2:

Domestic market import displacement opportunities within the Saudi fashion value chain in 2021

DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

h Excludes coins

Saudi Arabia's largest fashion export markets in 2021 were Switzerland (US\$332 million or SAR 1.2 billion), the UAE (US\$175 million or SAR 656 million) and France (US\$115 million or SAR 431 million). Fashion exports to Switzerland are dominated by jewellery, which accounts for 99.8% of all exports from the Kingdom. A total of 96% of fashion exports to France are also jewellery, while 63% of fashion exports to the UAE are jewellery and 36% are apparel²⁷.

Saudi Arabia's largest fashion export markets in 2021 were

Switzerland, the UAE and France

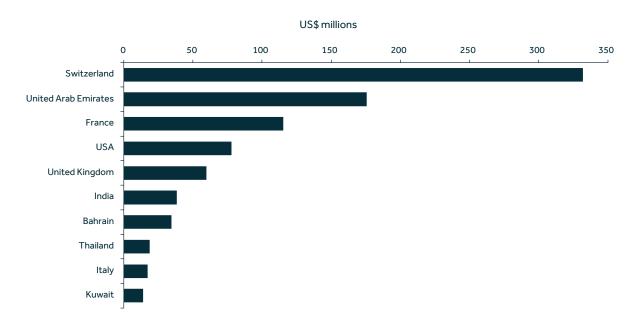


FIGURE 9:

The top 10 fashion export locations for Saudi Arabia in 2021

SOURCE: UN COMTRADE (2023)¹ DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

Regarding imports, China is Saudi's most important import market for finished fashion products.

In 2021, the Kingdom imported US\$2.6 billion (SAR 9.75 billion) of fashion good from China, ahead of imports from India (US\$807 million or SAR 3 billion) and the UAE (US\$618 million or SAR 2.3 million, refer to Figure 10 below). The largest apparel import category saw US\$1 billion (SAR 3.75 billion) imported in 2021. This import category comprised: suits, ensembles, jackets, dresses, skirts, women's or girls' (not knitted or crocheted). The second largest apparel category (t-shirts, singlets and other vests; knitted or crocheted) saw US\$392 million (SAR 1.5 million) imported in 2021. This was made up of an estimated 64 million units²⁸, highlighting the considerable size and attraction of the domestic market.



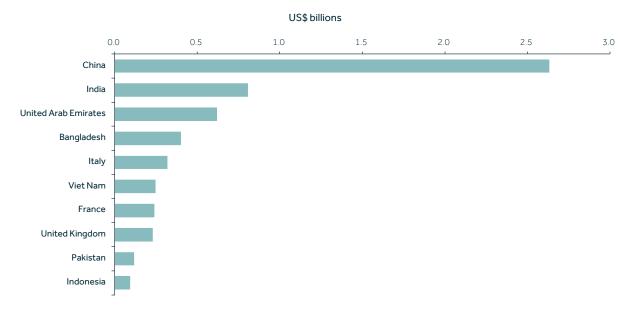


FIGURE 10:

The top 10 fashion import locations for Saudi Arabia in 2021

SOURCE: UN COMTRADE (2023)¹
DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

Saudi Arabia is well positioned to trade into the fastgrowing GCC fashion region

Saudi Arabia is a member of the Gulf Cooperation Council (GCC), a regional, free-trade economic community that aims to effect co-ordination, integration and inter-connection between its member states: KSA, Qatar, Oman, Kuwait, Bahrain, and the United Arab Emirates²⁹.

Spending in some of the GCC states is among the highest on a per capita basis globally, with Dubai in the UAE considered the region's present shopping capital³⁰.

Richemont's sales into the region increased by 53% for the financial year ending 31 March 2022, making it the group's fourth largest region globally.

The GCC's growth in luxury spending is contrary to global trends and has been described as a "glimmer of hope" for luxury brands' global revenue for FY23³¹.

The value of luxury fashion purchases in the GCC reached US\$9.7 billion (SAR 36 billion) in 2021³². Saudi Arabia made a major contribution to this growth, with its luxury fashion market growing by

approximately 19%³³. The Kingdom is expected to drive the growth of the luxury market in the GCC, which is anticipated to reach US\$11 billion (SAR 41.2 billion) by 2030³⁴. The top two differentiators in respect of Saudi luxury consumer spending were found to be the limited-edition nature of purchases and, critically, the inclusion of Middle Eastern collections in purchases³⁵.

The contemporary and luxury ready to wear fashion segments are growing strongly in the Middle East, increasing with the growth of the professional female workforce³⁶. As illustrated in Figure 11, fashion apparel revenue for the region is expected to grow by 52% from 2020 to 2026.

Interestingly, this growth is not projected to be exclusively driven by imported products. Regionally made fashion could account for up to 30% of the ready to wear fashion market by 2025³⁷. Modest wear continues to be a key driver within the regional fashion industry; and analysis indicates that the rapidly growing consumer base in the region is looking to combine modest fashion and homegrown labels to better reflect the region's diverse culture³⁸.

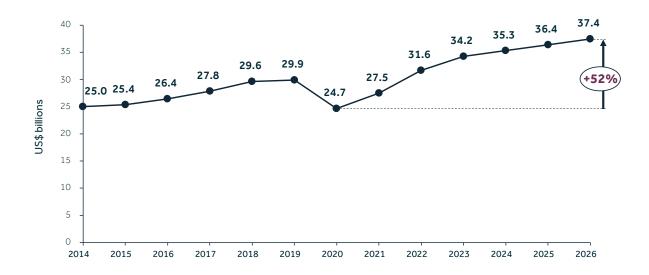


FIGURE 11: GCC apparel revenue, 2014-2026

SOURCE: STATISTA (2022)

A key emerging development in the GCC is the rapid growth of e-commerce, which has grown by 32% since 2015.

The largest e-commerce market in the region by a wide margin is Saudi Arabia, followed by the UAE. As a share of total retailing, e-commerce has grown from under 2% to 8% of regional sales. In comparison, e-commerce in the USA accounted for 14.6% of total retailing in 2020, growing to 20.4% in 2021, mainly due to Covid restrictions. This comparison highlights that e-commerce in the region has the potential to significantly increase its market share and is currently far from reaching its full potential.

Importantly, internet access within the region continues to support the growth potential of e-commerce, with 99% connectivity in the UAE and 89% in KSA³⁹. To protect consumer rights, the Saudi government and GCC officials have agreed on the United Strategic Framework of E-Commerce. These Guidelines include an agreement on information exchange, promoting transparency, facilitating cross-border e-commerce, and unifying the rules of e-commerce relating to consumer protection⁴⁰.

During 2020-2022, the number of surveyed individuals who indicated they were shopping for products online doubled, with 42% of individuals receiving deliveries of groceries, consumer



electronics, and/or clothing at least once a week⁴¹. The same survey also found that younger consumers are 'price sensitive, digitally savvy and socially responsible' and thus are looking to support brands which have a certain level of environmental and ethical credence value⁴². A demand for sustainable packaging was explicitly noted throughout the consumer sentiment survey⁴³.

Gildo Zegna, CEO of Italian luxury group Zegna recently stated that "The new Hong Kong is Dubai. And next it will be Saudi Arabia⁴⁴."

However, the question remains to what extent Saudi Arabia will develop its own fashion value chain and associated ecosystem in response to this retail opportunity.

SAUDI FASHION PIONEER INTERVIEW:



Burak Cakmak

CEO of the Saudi Arabia Fashion Commission

The Fashion Commission is playing a catalytic role in shaping the future of the fashion industry in the Kingdom. As the head of the Fashion Commission, Burak Cakmak brings a wealth of experience across the entire fashion value chain and is making waves in the global fashion scene while staying true to the rich traditions of Saudi Arabia. With a clear vision for the future of fashion in the Kingdom, Burak highlights the industry's strengths and opportunities, and emphasises the crucial role that young, talented individuals will play in driving the sector forward.

From traditional dress to global fashion player: What are the defining moments in the evolution of fashion in the Kingdom?

In terms of pre-Vision 2030, you have to think about the diverse cultural history. The Saudi state has existed for three centuries allowing for a deep and diverse cultural heritage. Environmental and social factors continuously influenced and changed how people dressed, from the materials they used to the designs they created. When travelling in Saudi Arabia, this variation in traditional dress is something that everyone notices. Then, 40-50 years ago, there was more exposure to international fashion, allowing for an evolution in fashion here. And

that evolution is now peaking thanks to Vision 2030, and also thanks to the large, young population. Many have studied abroad and are coming home to be part of the Vision 2030 evolution. With that international exposure, they are bringing back different cultures and mixing it with their own: this is one of many influences that is shaping what fashion looks like in the Kingdom today.

What do you perceive as the most significant advantage for potential growth in the fashion sector in the Kingdom presently?

The biggest strength right now is that we have a very young, well-educated population that is engaged in technology. When you

are building new economies, you need that strength of the young mind and the energy to push for things to be done. The Kingdom has been investing heavily in educating its youth for more than a decade, sending students overseas on full scholarships to study at the best academic institutions in the world. And that investment is now paying off with a fresh vision from leadership. Linked to this however is the challenge that the youth have not been able to access the full fashion value chain - meaning there has been little opportunity to turn creativity into actual fashion products. So, although the youth are technologically advanced and connected, the new fashion sector would benefit by having them gain experience in the whole value chain.



Most people in the industry also haven't yet had the opportunity to gain experience on how fashion sectors in other countries work. This is where the biggest opportunity lies: connecting the people in the fashion industry to international institutions and vocational training programs with a deep understanding of the global fashion system. By doing this, we can rapidly develop a full value chain locally.

We also see a major opportunity to internationalise the market. We are already doing this through our Saudi 100 Brands program (see chapter 3) giving visibility on the international stage in Milan, New York and Paris. We also held our first ever international wholesale event with 100 Brands during Milan Fashion Week in September, 2022. And we will continue participating in international fashion events twice a year to allow our brands to have a presence for retail,

wholesale, and also simply for increased visibility on the global stage.

Sustainability is transforming the global industry. How is the Fashion Commission assisting players in the industry to become more sustainable?

We are leveraging education to assist at all levels of the value chain. From the design perspective, we are providing training in digital fashion tools. As we speak, we are running a program for 100 creatives in fashion design to learn 3D software that can do their full pattern making, sampling all the way through to tech pack so that they can partner with any international factory in the world. If you think about just the sampling, this alone generates a lot of material waste. But by doing the sampling digitally, we are helping to cut down on the amount of waste. Over the last two years we have brought in international experts focussed on sustainable design. We are infusing their knowledge into all fashion education, including masterclasses and workshops that we hold during our annual Fashion Futures event.

We also invest in innovation in a big way as a Kingdom. Key focus areas for us are sustainable material solutions, from recycled materials and other alternative materials. We made a big commitment to this objective by setting up a sustainable materials research centre at King Abdulaziz University's Science and Technology Center (KAUST). This will support researchers to scale up their solutions to make more sustainable materials not just for the benefit of Saudi Arabia but for the rest of the world.

One of the biggest elements that we care about is raising consumer awareness. During Fashion Futures, in collaboration with our private sector partners we hosted a Swap Shop in November 2022. We have already hosted two and we will continue with these in future. These events allow us to reflect on what we already have and it's a way of saying: let's try together to keep these pieces in circulation but also have fun while doing it. Because fashion has to be about the joy of the experience.

Fast forward to 2050, what does the Saudi Fashion Industry look like?

A robust value chain set up in the Kingdom with all elements that are locally relevant, but also fully networked internationally. We need to develop the technical back-end of the industry as the retail front-end grows. That includes everything from what material we produce here and how much of it is circular and sustainable, to what products we design, develop and even manufacture here. The vision would also include that we have a robust regulatory system in place that supports all the efforts, that will also allow us to be able to document and track all of the progress being made. We play a key role in supporting the GDP of the Kingdom all the way from retail to brands and all of the elements across the value chain. 2050 will see local brands sharing their journey and their identity to the rest of the world.

As the Commission, we are proud to be the enabler of this exciting vision, and we look forward to seeing local brands take centre stage on the global stage.



HARNESSING THE POWER OF RETAIL

KEY INSIGHTS AND OPPORTUNITIES

- As a major contributor to the national economy, the retail sector represents a core focus of Saudi Arabia's Vision 2030. The Kingdom's bold strategy has already resulted in an increase in tourism, the burgeoning development of shopping malls, and surging economic growth.
- Demand for fashion products is forecast to increase by 48% to US\$32 billion (SAR 120 billion) in 2025 and was valued at US\$24.6 billion (SAR 92.3 billion) in 2021. This growth will be driven across the fashion sub-sectors, encompassing apparel, accessories, footwear, and luxury goods.
- The growth in e-Commerce and social media platforms is creating a new digital-first
 opportunity for emerging designers that holds the potential to significantly disrupt the retail
 market.

Retail in the Kingdom is showing substantial growth and demand, presenting opportunities for businesses to capitalize on the expanding customer market

The large and rapidly growing domestic market has supported the growth of both brick and mortar and online retail stores. This is evident in respect of the state-of-the-art shopping malls established throughout the Kingdom⁴⁵, and the rapid expansion of e-commerce sales, which surged over the Covid-19 period.

More traditionally, however, it also encompasses the continued flourishing of traditional souk markets, which play a key role in the local market. The Saudi retail market consequently comprises every fashion segment: from haute couture exclusivity to mainstream local and international fashion brands that compete across the high, mid and value segments of the market, to high quality traditional products sold in traditional markets.

With low import tariff levels, and a wealthy, growing population, Saudi Arabia has a thriving fashion retail market.

Demand for fashion products is forecast to increase to US\$32 billion (SAR 120 billion) in 2025⁴⁶ and was valued at US\$24.6 billion (SAR 92.2 billion) in 2021. This will represent an average compounded annual growth rate (CAGR) of 13% from 2021 to 2025, constituting total growth of 47.9% over the period⁴⁷. This growth will be driven across the fashion subsectors, encompassing apparel, accessories, footwear, and luxury goods, as illustrated previously in Figure 2.

There are no other large, highincome markets globally with these projected growth rates across the various fashion market categories, highlighting the extent of the opportunity for the fashion industry in Saudi Arabia. This is demonstrated in Figure 12 below⁴⁸.

Demand for fashion products is forecast to increase to

US\$32 billion

representing an average compounded annual growth rate (CAGR) of

13% from 2021 to 2025

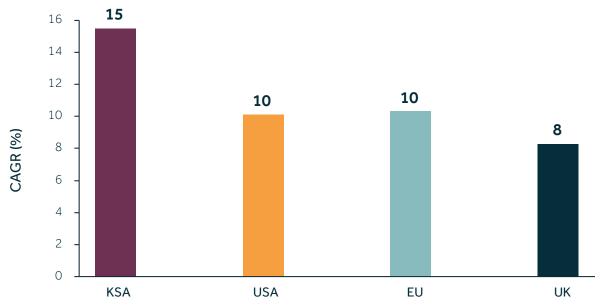


FIGURE 12:

Projected Compound Annual Growth Rates (CAGR) for the fashion market for 2023-2027

SOURCE: STATISTA (2023)

Established retailers are well positioned to capitalize on increased local consumption

As an important contributor to the national economy, the development of the retail sector represents a core focus of Saudi Arabia's Vision 2030.

The Kingdom's bold strategy has already resulted in an increase in tourism⁴⁹, the burgeoning development of shopping malls⁵⁰, and surging economic growth. The increase in tourism, and the shift towards local consumption by Saudi citizens is substantially raising the local consumption of fashion products. As illustrated in Figure 2, both apparel and footwear sales are continuing to grow in the Kingdom due to several factors, including people following the latest fashion trends, the increase of women entering the labour force, and the Kingdom's efforts to encourage sport and exercise.

Athleisure is a key and growing market segment. Footwear sales are, for example, being propelled by a shift to more active lifestyles. Fuelling this shift, local governments are focusing on stimulating sports and physical health by establishing more



public gyms and health clubs, thereby ensuring access to exercise opportunities. This has ensured growing demand for a broader range of footwear. The sale of apparel accessories has also been positively affected by growing levels of health consciousness.

Shopping has been identified as a key tourist activity in the Kingdom, with many tourists looking

to obtain apparel accessories when visiting. This includes scarves, which go hand in hand with abayas. With different variations of abayas proliferating, so too is demand for scarves. Many brands, such as Aldo Accessories, Monsoon and Zara, are now producing colourful and elegant scarves, opening up the market in Saudi Arabia for apparel accessories.

The Saudi market has several, significant retail holding companies. These companies operate a mix of private label, joint venture and franchising stores with international brands. Leading fashion retail holding companies in Saudi Arabia include Kamal Osman Jamjoom, Chalhoub Group, Al Abdul Karim, Al Bandar Trading Co, Cenomi, and M H Alshaya Co. Al Bandar Trading Co is the leading apparel and footwear retailer in Saudi Arabia with a portfolio that includes brands such as Max, Juniors and Lee Copper. Its closest rival is Cenomi Retail which is the local distributor for global fashion brands such as Zara, Bershka and Mango, among others.

Based on the Kingdom's previous licensing system, which required joint venture operations in the Kingdom, retail holding companies often hold multiple mid-retail and luxury brand distribution licenses. More recently, however, the licensing system has changed, and direct foreign ownership of retail operations is allowed. This expands Saudi Arabia's potential to become a major fashion shopping destination, as directly owned branded stores are typically cheaper than joint venture or licensed operations where wholesaling and retailing stakeholders require a margin. Directly owned international brands that have recently directly invested in the Kingdom include Adidas Group and Nike Inc.

In response to the entry of international brands into the Kingdom, and following international fast fashion trends, several retailers have successfully focused on developing own-brand products, often with major success.

Kamal Osman Jamjoom is a case in point. This large retailer, which also sells international brands in Saudi Arabia, has several inhouse brands, including Nayomi, Mikyajy, Mihyar, Moda by Nayomi, and Dream. Nayomi, which means 'soft and delicate' in Arabic, was founded in Saudi Arabia in 1992, and has evolved into the leading lingerie brand in the Middle East, with 184 stores and a successful e-commerce website. The brand encompasses fashionable lingerie, nightwear, bridalwear, robes and slippers in a range of fabrics, including cotton, satin, silk and chiffon. Seasonal collections are also complemented by an extensive beauty and fragrance range. "Developing our own brands has helped us deeply connect to the Saudi market" notes Hisham Al Amoudi, CEO of Kamal Osman Jamjoom. "Rapidly evolving market dynamics have driven the development of our product and broader fashion offer, ensuring we are well positioned to benefit from future market growth."

Similarly, Al Abdul Karim, which also sells international brands in the Kingdom, has launched its own branded stores, Blue Age and Rina. These brands have grown significantly, with Blue Age stores now operating in several Gulf countries. The success of Blue Age demonstrates the potential of establishing private label retail brands in the Kingdom, and then using the platform to expand more broadly into the region. As articulated by Abdullah Alabdulkarim, Buying Manager for Al Abdul Karim: "Blue Age has been a huge success for us. Its customers are looking for both quality and fashionability, inspiring the brand continuously to improve both its value and fashion position. This has provided us with an invaluable platform for regional market growth."



FEATURE 1

AL ABDUL KARIM

Founded in 1957, Al Abdul Karim was established in Riyadh as one of the first garment stores in the region⁵¹. The shop gained popularity as a distributer of leading European brand names and became a destination store across the Kingdom. A few years later, its wholesale distribution began to serve other garment shops within Saudi Arabia.

During the early 1970s the business went through a period of rapid expansion with larger distribution and a wider store network. In 2000, the company modernised its offerings, and the company now has five in-house brands including 'Balabala' that specialises in children's clothing, 'Calliope' for low-cost men's and women's fashion, 'Rina' for women's fashion, 'Terranova' for youth and urban fashion and 'Blue Age' for urban and street fashion⁵².

Al-Abdul Karim now has over 1 000 employees and a footprint of 150 stores⁵³. Working toward the realisation of the Kingdom's Saudisation vision, Al Abdul Karim supports women at work in Saudi, having established a development program called AK Retail Passport to train and qualify Saudi women to successfully work in the retail sector⁵⁴.

AlShiaka, the largest ready-made thobe retailer (with 53 stores) and wholesaler in Saudi Arabia, has similarly been looking to expand its brand off its successful traditional market base. It is doing this in two ways. First, by incorporating contemporary fashion elements into its thobe designs, it is ensuring broader market reach for its traditional product range. And second, using its understanding of the evolution of the thobe market, it is introducing other fashion menswear products into its retail stores. Its strong brand, broad store presence in the Kingdom, and most importantly, its understanding of its customer base, has led AlShiaka to recognise the potential of the traditional and the contemporary markets within Saudi Arabia. As argued by Hussain bin Saleem, CEO of AlShiaka:

"The thobe market is rapidly developing in Saudi Arabia, with both traditional and contemporary fashion trends shaping its trajectory. At the same time, we see major opportunities for traditional trends to shape the contemporary fashion market."

Jewellery retailer and manufacturer, Almohaisen, emphasises similar opportunities in the Kingdom's jewellery retailing market. Whereas domestic customers previously purchased jewellery largely as investments and therefore focused on the gold content and weight of their purchases, this has shifted over time, with more customers looking for



differentiated and more elaborate jewellery art that blends traditional and modern design aesthetics. This has fundamentally changed the nature of the Saudi jewellery market, creating a new competitive landscape for both local and international brands.

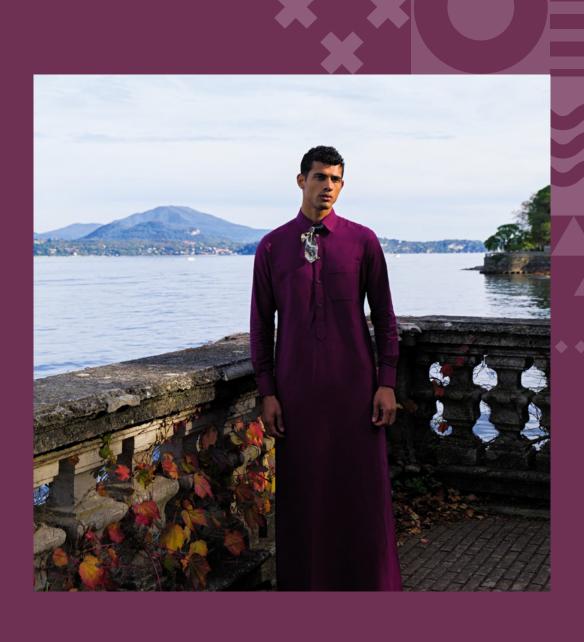
Design-led retailers such as Yataghan Jewellery and DarAl Hanouf Bridal have demonstrated the potential for boutique retailing in the Kingdom at a smaller scale, but representing an emerging rich design ecosystem that holds huge potential in Saudi Arabia. These brands have however faced challenges that include the cost of brand development, securing market access and brand exposure, and not having sufficient cash flow to fund long supply chains. Despite these challenges, many notable successes have been achieved in respect of emerging brand development and the Saudi Fashion Commission is working hard to remove such obstacles identified by the emerging design community.

Excitingly, the growth in e-commerce and social media platforms is creating a new digital-first

opportunity for emerging designers that holds the potential to significantly disrupt the retail market. As argued by Sarah Abu Dawood, Founder and CEO of Yataghan Jewellery:

"As more Saudi customers start to see the underlying quality and design strength of local brands, and we are able to connect seamlessly to them, there will be an explosion of local brand growth. This is a huge challenge, but some of our emerging brands across the fashion spectrum are already truly world class and deserve to be noticed".

This bold view sits at the heart of the Saudi 100 Fashion Brands program (see chapter 3) and is supported by a host of emerging designers who see the rapidly growing domestic retail market and its omni-channel^k evolution as a major opportunity for sustainable growth and development.



SAUDI DESIGN ENTERS THE GLOBAL STAGE

KEY INSIGHTS AND OPPORTUNITIES

- Saudi Arabia is no longer separate from, but increasingly an integral part of, the global fashion market.
- A range of local product development opportunities are arising from leapfrog technologies.
 These range from the broader use of advanced Computer Aided Design (CAD) and digital pattern and marker making, to digital twinning, additive manufacturing, and new materials developments.
- Whereas the Kingdom's unique designs were previously solely domestic market focused, there is now a **strong focus on developing Saudi brands** for the domestic, regional, and international fashion markets.

Developing advanced design and product development capabilities lies at the heart of the Kingdom's emerging fashion ecosystem.

Encompassing ideation, product design, materials science, and the various stages of product development, the Kingdom has both traditional and international design aesthetics that potentially uniquely position it within the global fashion value chain. This is visible from the global presence of haute-couture designer Mohammed Ashi, the niche jewellery being developed by leading companies such as Almohaisen, the Saudi bridalwear of DarAl Hanouf Bridal, and the international design infusions that are being incorporated into traditional Saudi products such as thobes and abayas. This is further evident at the top end of the bespoke market, which is led by firms such as Lomar, through to mass-market ready-made

thobes, such as those made by AlShiaka, the Kingdom's largest thobe retailer.

The opening of the Kingdom's market and its broader society is unleashing a new set of designs created by younger Saudis emerging from local design schools and universities, such as King Abdulaziz University, Princes Nourah Bint Abdul Rahman University and The Future Women's Institute. It is also being driven by the Kingdom's generous educational bursaries which have enabled many highly skilled and creative Saudis to study fashion internationally. These Saudis have returned to the Kingdom with not only heightened skills and creativity, but an understanding of both the international and local design aesthetic. The potential of the Kingdom to become a centre of design excellence within not only the region, but globally, is clear. This is the objective of the Fashion Commission and its Saudi 100 Brands program.

Building Saudi-inspired designs



Inspiration from Saudi Arabia's unique culture and natural environment provides designers in the Kingdom with an aesthetic reaching both into the Kingdom's vast history, and to the future as the Kingdom embraces technology and invests in its future.

Ahmad Almohaisen from Almohaisen highlights the abundant potential of this inspiration, when showing the beautiful craftwork incorporated into the desert inspired necklace from the company's latest jewellery collection. With 60 years of experience operating in the Kingdom, Ahmad emphasises the beauty of the Saudi natural environment in shaping the company's jewellery designs and inspiring the company's design team. This inspiration is reinforced by Sarah Abu Dawood, the CEO and founder of Yataghan Jewellery, who argues passionately that the Kingdom's opening to the global fashion industry is enabling a new set of designers with the potential to showcase to the world Saudi Arabia's design excellence framed by a distinctive fashion, encompassing patterns and colours that are subtly to strikingly different from those found in other parts of the world.

The global fashion industry represents another major opportunity for the infusion of Saudiinspired ideas. The rapid evolution of the thobe and abaya markets represent a domestic case in point. These traditional products remain the bedrock of Saudi identity; but are changing fundamentally as international fashion influences shape their design aesthetic and open new paradigms of thinking relating to the definition of traditional dress. At the same time, these new paradigms are rapidly opening opportunities for Saudi designs, patterns, and colours to infuse international fashionwear. This is illustrated in Saudi designs, colour motifs and patterns being incorporated into international fashionwear that captures the essence of both the modern and traditional Saudi aesthetic.

Increasing local design capabilities

The explosion of design creativity in Saudi Arabia was easy to observe at the Fashion Commission's latest Futures Fashion event, held in Riyadh in November, 2022. An emerging blend of traditional and contemporary international design revealed the distinctive position that Saudi Arabia could hold within the rapidly evolving global fashion value chain.

Whereas the Kingdom's unique designs were previously solely domestic market focused, there is now a strong focus on developing Saudi brands for the domestic, regional, and international fashion markets. It is recognised that the Saudi market is no longer separate from, but increasingly an integral part of the global fashion market, and that while traditional products will continue to thrive

locally, so will international fashion products. The fusion of the traditional and the contemporary is therefore not only unavoidable, but a process to be celebrated and nurtured in support of an evolving and sustainable Saudi design aesthetic. Most importantly, it also opens major export opportunities for Saudi brands and companies that are able to offer their unique designs to the region and globally.

The establishment of the Fashion Commission represents a seminal point in the development of Saudi Arabia's global fashion position. This is illustrated by the Commission's flagship Saudi 100 Brands program.

Saudi 100 Brands Program

Saudi 100 Brands is an initiative of the Fashion Commission that was launched in 2021⁵⁵. It offers a year-long mentorship program that has professional development at its core. The focus of Saudi 100 Brands is to allow Saudi and fashion

brands to reach their full potential. It offers oneon-one mentorship, masterclasses, workshops, exhibitions, retail and wholesale opportunities. Learning is supported by a team of experts from leading fashion houses. In addition, the program



provides educational experience from leading academic institutions⁵⁶.

The program seeks to empower entrepreneurs to build their brand sustainably. The program consequently covers topics such as branding, sales and marketing, product development and commercialisation, public relations and communication strategy, as well as a strategy to tap into the global market⁵⁷. The program has had

an immediate positive impact, with participants in the program gaining exposure to the global stage through the Saudi 100 Brands participation during the international fashion weeks of NYC, Milan, and Paris among others.

The program is offered to designers, brands and entrepreneurs who actively work in bridal wear, couture, ready-to-wear, jewellery, bags, footwear, and fragrances⁵⁸.

Product development is key

Creativity and design need to be underpinned by deep technical product development capabilities. This encompasses CAD, digital twinning and additive manufacturing in the design and development of fashion products, to digital pattern making and marker making in the apparel fashion value chain, to materials developments across the spectrum of the fashion ecosystem.

Key to the future success of fashion product development in the Kingdom is the ability to produce both luxury and mass market quality products that meet constantly evolving international market requirements. This does not only relate to exceptional quality levels, but also competitive pricing, guaranteed delivery reliability, and short product development lead times. As the fashion value chain evolves both locally and globally, 'Quick Response' capabilities following environmentally sustainable practices will become increasingly important (refer to chapter 4 for more on Quick Response). Saudi Arabia is well positioned to meet this challenge through the establishment of end-to-end design and product development capabilities in the Kingdom.

The potential of product development in Saudi Arabia is exemplified by a firm like Lomar, which has an advanced design centre in Jeddah, designing and developing truly inspirational traditional thobes, with contemporary international design infusions. All aspects of Lomar's product development

take place in Saudi Arabia, including thobe and abaya design and product development, fabric trend development and selection, and even experimentation with nanotechnologies to improve product coolness, breathability, and fragrance. This excellence is evident in the Lomar attire worn by Saudi's Olympic sports team.

Similarly, AlShiaka, which specialises in the design and retailing of ready-made thobes is able to compete successfully with individually tailored products in Saudi Arabia by engineering quality products in a range of size and style variants that appeal to a wide variety of Saudi customers. These products are ideated, designed, and developed in Saudi Arabia, with volume production then taking place offshore.

Bridalwear is another area of emerging design and product development excellence within the Kingdom. The bridal design pieces developed and manufactured by Dar Al Hanouf Bridal in Jeddah reveals the outstanding ability of Saudi fashion designers to compete in the haute couture market.

This is further exemplified by the advanced product development capabilities of jewellery manufacturers, such as Almohaisen. Based in Riyadh, Almohaisen offers a range of fine jewellery that is fully ideated, designed, developed, and manufactured in Saudi Arabia.

These examples of product development excellence highlight the abundant potential for greater levels of product development in the Kingdom. This potential ranges from bespoke haute couture pieces to the volume market situated

on both sides of the traditional and international fashion market segments.

The growth of retail in Saudi Arabia provides local and international designers looking to establish operations in the Kingdom with a solid foundation for future growth and prosperity. The competitive nature of the domestic market means that firms that can compete locally are likely to thrive both regionally and internationally. This applies to the top end, haute couture market, and the rapidly growing mass fashion market for on-trend, quality merchandise.

Both Riyadh and Jeddah are large cosmopolitan centres ideally positioned to host the

establishment of design studios and sourcing offices looking for unique suppliers of fashion products. As the domestic market grows and these emerging centres of design excellence expand, a full range of technical service providers are expected to establish operations in support of growing opportunities. This will enable deeper product development capabilities in the Kingdom, enabling firms to ideate, create and develop a full array of fashion products in Saudi Arabia.

The Fashion Commission is keenly aware of the importance of both deepening and broadening product development capabilities in Saudi Arabia, hence its focus on both the creative and technical dimensions of the fashion value chain.

Facing future challenges



The Kingdom faces several design and product development challenges that the Fashion Commission is determined to overcome. These relate to the comparatively small scale of design and product development operations, the lack of a sufficiently large talent pipeline for technical specialist skills, and limited supply chain capacity (for key associated manufacturing activities). This is compounded by a general lack of market awareness of the Kingdom's rapidly emerging design and

product development capabilities. This often leads domestic customers to favour international brands and internationally sourced designs over local designs and products that are often of an equal or even superior quality. This lack of awareness is slowly changing, and an increasing shift towards local sourcing can be expected with the continued improvement of design and product development capabilities in the Kingdom, as well as the continued development of globally competitive Saudi brands.



MANUFACTURING THE FULL FASHION ECOSYSTEM

KEY INSIGHTS AND OPPORTUNITIES

- In support of Vison 2030, the Saudi fashion value chain is expected to **develop deep** manufacturing and related services capabilities over the next decade.
- Local firms highlight that clothing manufacturing is possible in the Kingdom and critical to offering customers the right mix of quality, agility, and price.
- US\$7 billion (SAR 26.3 billion) of fashion products are imported annually. Manufacturing locally
 even just a small fraction of this amount would open up massive opportunities for the local
 value chain.
- Developing Quick Response manufacturing and associated supply chain capabilities in the Kingdom represents a major opportunity within the fashion value chain. Local and regional production is a key enabler of this opportunity.

The global fashion industry is estimated to employ 430 million people, or 12.6% of the global workforce⁵⁹. This profound contribution to global economic activity is driven by the labour intensity of fashion production and the many layers of value adding activity that contribute to the development and supply of fashion products.

The global fashion industry is estimated to employ

12.5%

of the global workforce

While the Kingdom's fashion value chain has largely been dominated by retailing activities to date, this is changing.

In support of Vision 2030, the Saudi fashion value chain is expected to develop deep manufacturing and related services capabilities over the next

decade. This growth will be built off established production, emerging designers looking to establish local production capabilities using advanced technologies, and foreign direct investors, who are expected to invest in the Kingdom in support of growing demand throughout the Kingdom's rapidly emerging fashion value chain.

Saudi Arabia's existing production capacity

Despite the dominance of fashion retailing within the Kingdom and its continued dependence on imports, there are many small-scale manufacturers operating in Saudi Arabia. For example, domestic clothing and textiles manufacturing value addition was valued at US\$2.1 billion (SAR 7.9 billion) in 2020⁶⁰. The value of clothing and textiles manufacturing value addition peaked at US\$3.2

billion (SAR 12 billion) in 2016 (Figure 13). This change appears to be driven by economic shifts towards services within the Kingdom, along with increased connectivity to international markets improving the ability to import. Despite this, the Kingdom has a solid foundation upon which fashion production can grow.



FIGURE 13: Saudi clothing and textiles Manufacturing Value Added

SOURCE: WORLD BANK (2022)
DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

Data from the Saudi Central Bank indicates that the apparel manufacturing portion of the fashion supply chain alone employed 52,611 people in 2021. Following the Manufacturing Value Added (MVA) trend for clothing and textiles production, as depicted in Figure 14, this represents a decline on the 80,367 people employed in 2016 (see Figure 14), but still a substantial base for further

growth and development⁶¹. As further highlighted in Figure 14, 7,281 Saudis are employed in in the clothing manufacturing segment of the fashion supply chain, with 66.7% of the Saudi total (4,855) comprising Saudi women⁶². This is aligned with global fashion trends, indicating the value of the supply chain to bolstering female participation in the Saudi labour market.

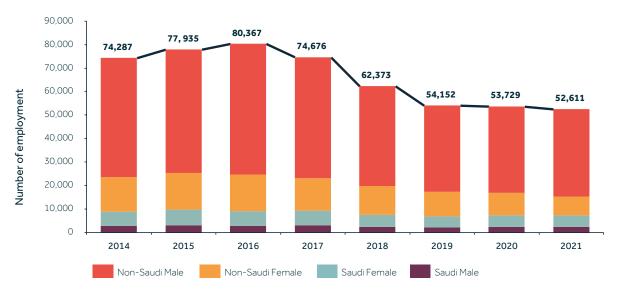


FIGURE 14: Saudi clothing manufacturing employment numbers by gender and nationality (2014-2021)

SOURCE: SAMA (2022)

DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

Several Saudi brands have a deep history of production in the Kingdom

Almohaisen is a case in point. Established 60 years ago in the capital city of Riyadh, the firm is still successfully designing, developing and manufacturing jewellery. This family-owned business employs a team of jewellery operators, producing a range of fine jewellery for the Saudi and regional market. While acknowledging the challenges of manufacturing jewellery in the Kingdom, co-owner Ahmad Almohaisen indicates the value created by the business is substantial, and that the firm's proximity to its core market allows it not only to intimately understand the evolving needs of its clientele, but also to manufacture product quickly and efficiently for customers. This speed to market capability gives it a major advantage in the domestic market.

The advantages of local manufacturing are evident in the haute couture bridalwear market, as exemplified by Dar Al Hanouf Bridal. With two small workshops located in Jeddah, the brand imports beadwork and fabrics, while employing over a dozen skilled artisans to craft exquisitely designed products. This unique approach to fashion production provides a potential blueprint for the development of a design-intensive fashion value

chain, supported by small-scale manufacturing workshops equipped with the latest technologies for the efficient and reliable production of high-quality fashion products.

Al Hanouf Mazen, the Founder of Dar Al Hanouf Bridal, highlights that local manufacturing offers a significant competitive advantage for her design-intensive business model. The ability to manufacture bridalwear quickly and efficiently, once styling iterations have been reviewed and confirmed, allows for additional design time and the flexibility to accommodate design changes before finalising products. This approach enables brides and their bridal parties to secure the exact look they desire for their special day, while ensuring that the finished products meet the brand's high standards of quality and design excellence.

A similar perspective is shared by Lomar, which has a factory in Jeddah, producing bespoke thobes and abayas for the top end of the Saudi market. Operating to short lead times and exact customer requirements, Lomar can manufacture individually styled, quality thobes and abayas within a few weeks. Each customer's profile is kept on a digital





file and updated when new fittings are required, allowing the firm to operate a tailoring-type service within a volume production environment. This has enabled major growth at Lomar over the last few years. The firm presently manufactures 140,000 thobes and 14,000 abayas a year; and anticipates major market growth over the next few years.

Lomar has used its manufacturing capabilities as a competitive strength in the domestic market. As a result of its deep understanding of fabrics used and the thobe manufacturing process itself, Lomar has found ways to continuously innovate and advance its product value offering to customers. For example, using nanotechnology, Lomar has introduced thobes that incorporate scented fabrics and enhanced garment breathability. This ensures its products are not only aesthetically attractive, but also extremely comfortable and functional to wear. Despite the abundant potential for growth, the firm recognises that the increasingly competitive domestic market for thobes cannot be taken for granted. The thobe may be considered a traditional product but the key success factors in the domestic market are changing rapidly, and this is where local manufacturing represents such a strategic advantage. Fashion shifts can be responded to almost immediately, and improvements to products can be developed, tested, and then rolled out quickly in the domestic market. In combination, these two elements provide Lomar with a major competitive advantage over importers and individual tailors in the thobe market.

Sondos specialises in haute couture, embroidery, and the supply of clothing to government. Employing over 200 people across its three manufacturing plants, and with a bespoke boutique store in the heart of Riyadh, Sondos is an example of successful Saudi entrepreneurship in the broader fashion industry. Established 20 years ago as a bridal and occasion wear company, Sondos' President, Ms Tarfa Abdulrahman Al Motari, was continuously frustrated by the unavailability of local embroidery. With embroidery having to be imported, long product development lead times were a continuous problem. Seeing this challenge as a market opportunity, Ms Al Motari made the decision in 2010 to import 20 embroidery machines and establish an embroidery capability in the Kingdom. This capacity and capability was soon recognised by prospective clients such as the government and corporate entities, resulting in major expansion of the business, as well as ISO 9001 accreditation.

Ms Al Motari, acknowledges that the path to growth has been challenging, and that the company's success can be attributed to determination and perseverance. To establish credibility, Sondos has attended product shows and showcased their emerging capabilities at every opportunity. However, the lack of backward integration into the fabric value chain remains a significant challenge. Ms Al Motari emphasizes that importing fabrics on long lead times ties up cash flow that could be used elsewhere, which is a crucial resource for any emerging business.

"Importing greige fabric that is then dyed, printed and finished in Saudi Arabia will give us a further competitive advantage in the domestic market", argues Ms Al Motari. In addition, Sondos aims to develop more advanced design skills in technical product areas and establish more advanced equipment maintenance capacity. However, Ms Al Motari highlights that specialist machinery suppliers are needed in Saudi Arabia to support their growth and development. "Specialist machinery suppliers are needed in Saudi Arabia to support our growth and development. We can successfully undertake more local production for domestic and international markets, but we need the latest machinery and associated technical support to do so." Driven by Vision 2030 and its potential to further empower Saudi women, the success of Sondos highlights the vast potential of the fashion value chain in the Kingdom.

SAUDI FASHION PIONEER INTERVIEW:



Loai Naseem

Founder of Tafaseel International Trading Limited company (Lomar)

Loai Naseem, a pioneer in the traditional Saudi men's apparel market, has received multiple accolades, including two wins on the prestigious Saudi Fast Growth Startup 100 list. In 2014, Forbes ranked Loai #2 on its list of Leaders Inspiring Saudi's Entrepreneurial Elite. In an exclusive interview, Loai shares his insights on how Lomar was established and how the company is leveraging technology to shape its future.

Tell us more about yourself and how Lomar was founded.

I graduated from the Institute of Houston as a graphic designer and worked in an advertising agency for eight years. I then spent the next nine years as a creative director and while working I also had this hobby on the side of making my own thobes. I had the assistance of a tailor, and we would work together to bring my own design ideas to life. After three years I was producing thobes for other people and had fifteen tailors working for me. So, it was this natural progression that had taken place, and I decided to resign from the advertising company so that my wife and I could start our own business in the fashion industry making

thobes. And that is how we founded Lomar, back in 2002. It was a bold decision, but we felt it was the right one. We saw a big opportunity and took it.

Back then, there was this gap in the market for custom-made thobes. At that time, all the thobes were very classic looking, very traditional. They were typically one colour, one cut, and had almost no accessories at all. The only element that changed was the fabric. We decided to offer a new kind of service to the top end of the market: different thobes for different occasions such as day functions, night events, weddings, and other kinds of categories. We wanted to change the look and feel of each product. We used different colours, embroidery,

and accessories, like cufflinks, as differentiators.

With these changes came a higher price, and our thobes were costing three times more than the average thobe in the market back then. You wouldn't believe me but back then we had very little support, maybe one out of every 100 people that we spoke to supported our ideas. Now we have a strong following and our customers trust our brand.

The thobe market is undergoing an evolution. Currently, 90% of thobes are custom-made, and 10% ready-made. We are at a turning point in the market now, where we see people wanting to buy something quickly, and so ready-made is starting to become a lot more popular. The

problem is that custom-made thobes can take up to two weeks to be manufactured and some people simply don't want to wait that long. It's also to do with the price-point: ready-made thobes are much cheaper and so a lot more people want to buy these. Now, fast delivery and cheaper prices are strong selling points. So, I imagine the market will shift more and more toward ready-made in the next decade.

Lomar uses innovations such as nano technology, to create new value in its product lines. Tell us a bit more about what you currently offer?

This is an interesting question since it also relates to an important factor around how international fashion influences our ideas and designs...this desire to keep thobes traditional but bringing in elements from international fashion. What we have seen is that we can bring the traditional and couple this with the international very well.

It's about wanting to keep the Thobes alive, and fashionable, which is very good for our customers and of course for business. Our cooling collar is very popular, which cools the area around your neck as you sweat, which in our climate is very useful. We were also the first to try fabrics with nanocapsules that contain perfume oils. When you move, the scent starts infusing around you. We also use nanotechnology to make our thobes waterproof, and to offer 30% sun protection. We also started to make some of our thobes more elastic, for more active wear. So, these are some of the advances we are making in the design of the thobe.

How are you incorporating this new technology into your manufacturing processes?

One of the most useful ways that technology has helped our manufacturing processes is the automation of the cutting process. This process traditionally takes 45 minutes to do by hand, but now, using technology, we have cut this down to just three minutes.

Technology has allowed us to not only reduce the time, but also to make the process more accurate and consistent. You can imagine how useful this is when needing to manufacture larger quantities, so it can really support our business to expand.

Do you see growth opportunities beyond traditional wear for Lomar?

This is the benefit of having a factory, and having a big name, a big brand that people trust. It allows us to explore more opportunities, allowing us to expand. We are looking to expand more into offerings like jackets, pants and shirts that are inspired by Saudi heritage. We want to keep listening to our customers and make sure that always offering them what they desire in fashion.

The potential of Quick Response manufacturing

The potential benefits of local manufacturing are widely recognised across the Saudi fashion value chain.

The benefits of Zara's established Quick Response capabilities internationally, and the e-Commerce speed and flexibility of vertical retailermanufacturers like Shein (who has established a strong presence in Saudi Arabia) are well understood by Saudi retailers and design houses. Long production lead times and large minimum purchase orders from Eastern sources of supply are recognised as highly problematic and antithetical to sustainable competitiveness in the domestic market. Developing Quick Response manufacturing and associated supply chain capabilities in the Kingdom consequently represents a major opportunity within the fashion value chain.

AlShiaka, which sells 1.4 million ready-made thobes in the Saudi market annually, indicates that advancing its supply chain capabilities is one of the key challenges facing the firm as it looks to expand its footprint in the rapidly growing domestic market. Market expansion, especially at the base of the fashion pyramid, will significantly increase demand for ready-made products, but only for those products that are on-trend, quality-assured, and of the right size and price. AlShiaka is one of several retailers in Saudi Arabia that is consequently looking at closer sources of supply, whether from neighbouring countries or within the Kingdom. "Speed and flexibility are becoming universal competitiveness drivers. We need to establish these capabilities to take full advantage of the abundant opportunities in the Saudi market", argues Hussain Bin Saleem, CEO of AlShiaka.

Near-shoring is only possible if more production capacity is developed in the Kingdom

Near-shoring refers to the relocation of global supply chains closer to the point of final market consumption. The advantages of this approach include increased full price sales, less markdowns, less slow-moving stock in expensive selling spaces, improved stock turns and operating margins, and ultimately stronger business performance.

Having the right mix of products in the right selling space and at the right time appears to be a key challenge for almost all Saudi retailers. Supply chain speed and flexibility are widely recognised as key competitiveness drivers, with those retailers and design houses establishing production capabilities

and capacity within the Kingdom likely to secure an edge over their competitors. It is clear that Saudi Arabia is set to join the near-shoring movement over the next decade.

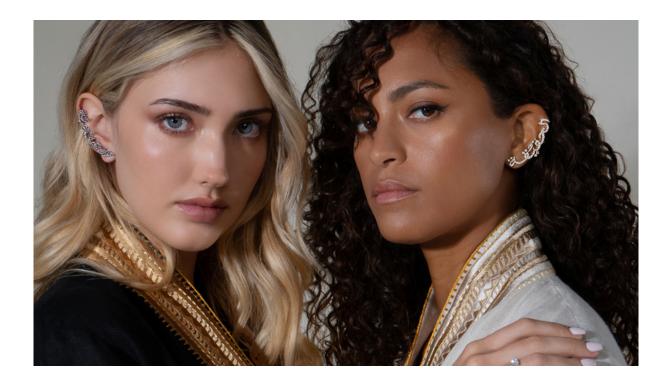
The development of a substantially larger local production capability in Saudi Arabia will require the deepening of technical services currently provided locally. Fortunately, this is already happening with local firms securing the rights to supply and support a range of leading fashion machinery brands in the Kingdom. This type of development is critical, as leading fashion ecosystems globally comprise dense technical service provision in support of finished product and materials production. There is consequently scope for substantially greater technical services provision as the fashion supply chain grows.

Local market opportunities are substantial

Previously, we highlighted the opportunity that exists for import substitution. Indeed, the local production displacement of only a fraction of the US\$7.3 billion (SAR 27.4 billion) imported annually within the fashion value chain, opens huge opportunities for firms in the domestic supply chain, including manufacturers, logistics and transport service providers, and specialist machinery suppliers. For example, even a 20% displacement of fashion imports into the Kingdom at 2021 levels would generate additional local manufacturing sales of US\$1.4 billion (SAR 5.25 billion).

Local production opportunities do not only relate to the local market. There is substantial fashion product consumption in the Middle East which opens major prospects for Saudi supply into the region. There is already some supply from the Kingdom into the GCC states and North Africa, but this could be significantly increased given the import dependence of these economies and the volumes these markets could add to the much larger Saudi domestic market opportunity.

It is important to emphasise that Saudi's clothing and textiles MVA of US\$2.3 billion (SAR 8.6 billion) in 2019 was substantially larger than any other GCC economy, and nearly a full US\$1 billion (SAR 3.75 billion) higher than the next largest GCC producer, the United Arab Emirates (UAE). This indicates that a much larger base production capability exists in the Kingdom, making it the ideal location for the development of a regional fashion value chain.



There are established niche exports in the Kingdom across all product categories, with most exports destined for neighbouring countries (refer to Figure 9). The most successful export category relates to Apparel HS code 6211, which covers a range of items including Thobes and Abayas^m. Thobes and

abayas are therefore the likely major contributor to apparel exports. Substantially growing local production will support Vision 2030 and provide further opportunities for the participation of Saudi women in the increasingly dynamic domestic labour market.



Fashion 4.0 in the Kingdom

Supply chain opportunities are likely to be boosted by the rapid adoption of Industry 4.0 technologies in the Kingdom's fashion value chain. To compete with lower labour cost operating environments, the Saudi fashion industry will need to embrace the range of digital technologies presently disrupting established global supply chains. A range of opportunities have been identified such as:

- 1. Additive Manufacturing for rapid prototyping and even volume production;
- 2. Digital twinning to enhance product development and optimise production processes;
- 3. Artificial Intelligence to enhance design processes, assure product quality, and improve production processes;
- 4. The Internet of Things (IoT) to connect the supply chain to markets, and to connect firms within the supply chain;
- 5. Blockchain technology which can be used to securely store and verify the authenticity of goods.

The Saudi Fashion Commission has identified the adoption of Industry 4.0 technologies within the domestic supply chain as a strategic priority. As noted by its CEO, Burak Cakmak, the lack of large-scale legacy operations, combined with the emergence of young, technology savvy designers, and a rapidly growing market, creates the perfect environment for advanced technology adoption. He argues that: "a future Saudi fashion ecosystem comprising highly innovative design and product development and a wide range of niche production capabilities using the latest technologies is not just exciting for the local industry, it sets us up in the international market".

In the manufacturing segments of the fashion value chain, Saudi Arabia has also established materials capabilities in several key fashion areas. Most notably, the Kingdom's leading position in the global petrochemicals sector creates opportunities for synthetic fibre and associated yarn and fabric production, as well as the supply of dyes and inks for the dyeing and printing operations that sit at the interface of the assembly of finished fashion products and the materials they use. The importance of dyeing, printing and

finishing fabrics is particularly important to the apparel industry. These activities determine the colour, pattern detail and handle properties of the fabrics used in garment assembly. With advanced materials science representing one of the most exciting themes of Industry 4.0, the Kingdom's leading position in synthetic materials opens a major opportunity to create a distinct competitive advantage for local fashion production.

Finally, as the world's leading petrochemicals producer, Saudi Arabia also has the potential to play a critical production role in the emerging circular fashion economy. The Kingdom's polymer science base provides it with the opportunity to position itself as a polyamide re-using, reworking and recycling centre. Combined with the Kingdom's abundant solar energy potential, and the use of desalinated water, Saudi Arabia is ideally positioned to become a major global player in the supply of renewable and fully circular synthetic fabrics and yarns (see chapter 6). The verification of supply chain sustainability elements is emerging as a key supplier differentiator across major international markets and Saudi Arabia is expected to closely follow this trend.

Creating an enabling environment is crucial to supply chain development

The future dynamism of the Saudi fashion supply chain will be driven by entrepreneurs, Saudi corporations that identify emerging opportunities in the fashion supply chain, and foreign investors, who bring their brands, technical skills, and global resources to the Kingdom. Supporting this dynamism is critical.



It is therefore notable that the Crown Prince of Saudi Arabia, HRH Mohammed bin Salman, launched the Global Supply Chain Resilience Initiative (GSCRI) in 2022. The objective of the GSCRI is to attract global industrial companies to the Kingdom, with the Kingdom allocating SAR 40 billion (US\$10.6 billion) towards the initiative within two years of launch. This is allocated in financial and non-financial incentives for investors. The objective is to improve the position of the Kingdom within the global economy and to decrease the effects of any global disruptions. This is carried out by showcasing the Kingdom's resources, infrastructure, and geographical location to investors, as this will also benefit the surrounding economies. The Kingdom provides investors with a resilient economy which is the largest among the Arab countries and has the highest growth rate in the G20. Saudi Arabia has a goal to be one of the top fifteen global economies and the GSCRI is a means of doing so. Specific to the development of a globally competitive fashion

ecosystem, the GSCRI could support the Kingdom to become a global source of raw materials for fashion manufacturing 64 .

The Fashion Commission has itself identified and is executing a range of support initiatives for the fashion supply chain, including brand development and product development. However, perhaps its most critical intervention is to create an enabling environment for the development of a fashion ecosystem. To improve the ease of doing business in the Kingdom, the Commission is leading a review of regulations related to the fashion sector. The Commission has launched fourteen strategic initiatives within education, design, regulation and marketing to increase the economic contribution of fashion. Burak concludes: "through our initiatives we are creating a snowball effect and hopefully this will drive a lot of new businesses to come to market."



DEVELOPING THE FASHION ECOSYSTEM'S TALENT PIPELINE

KEY INSIGHTS AND OPPORTUNITIES

- The Kingdom's investment in education is unmatched in the region. A full 19% of total government expenditure is on education initiatives such as scholarships. This is 4% higher than the nearest GCC comparator economy, UAE.
- Twelve universities in the Kingdom offer fashion programs.
- There is a growing demand for skilled local professionals in the more technical areas of the fashion industry.

'Education and creativity' is one of the seven strategic pillars of the Saudi Fashion Commission.

This is fully aligned with the Kingdom's 2030 Vision, which is focused on fully realising the potential of all Saudi citizens, through world class education and skills development processes that empower individuals,

enabling them to contribute to the further growth and development of the Kingdom.

As highlighted by Vision 2030, any country that is deeply committed to building a dynamic fashion industry must focus on education and creativity. The Kingdom has a rich history of design and craftmanship, but there is a clear need to further develop these skills, while simultaneously attracting skilled

professionals into the domestic workforce, particularly in the various technical areas of the fashion industry.

19%

of the Saudi government's total expenditure is on education

The Kingdom's investment in education is unmatched in the region

As shown in Figure 15, the Kingdom spends 19% of total government expenditure on education⁶⁵ which is significantly higher than both regional and global comparator economies⁶⁶.

Since the earliest group of six Saudi students were sent by King Abdul Aziz to acquire higher education in Cairo in 1927, the Kingdom's investment it is people has continued to grow.⁶⁷. The Kingdom now provides significant opportunities to students of all disciplines wanting to study abroad. At its peak in 2016, there were over 100,000 students abroad funded by the King Abdullah Scholarship Program⁶⁸.

This program has been enhanced by several others, the biggest of which is the Custodian of the Two Holy Mosques Scholarship Program, run by the Ministry of Education. By 2030, this scholarship program aims to send 70,000 students annually from all disciplines to top-ranked international universities and training institutes⁶⁹.

Understanding the need to support students wanting to study fashion design, in 2019 the Ministry of Culture announced the start of a new full academic scholarship for Saudi fashion designers at leading US fashion schools⁷⁰.

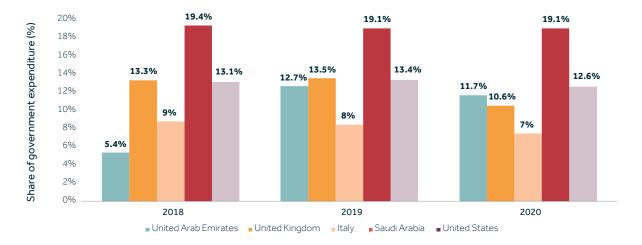


FIGURE 15:

Government spending on education as a percentage of total expenditure

SOURCE: WORLD BANK (2023)
DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

Saudi fashion education centres on creative skills

Fashion education programs in Saudi Arabia are critical to the advancement of the fashion industry.

Currently, there are twelve universities in the Kingdom offering Bachelor's, Master's, and PhD programs in fashion-related fields. These institutions have become a critical source of essential skills, knowledge transfer and innovation. Notably, the regions of Riyadh, Makkah, Medinah



and Al Qassim⁷¹ have the most substantial educational capacity, as illustrated in Figure 16.

While nine of the twelve universities typically offer 1-2 programs in fashion, with fashion design being the most widely offered, three universities - Umm Al Qura University, Al Qussaim University, and King Abdulaziz University - offer six, seven, and eight programs, respectively⁷². These courses primarily focus on three areas of the fashion value chain: design, production, and education. The enrolment rate in design courses has been on an upward trajectory, increasing from 800 students in 2017 to over 1,300 students in 2021, as depicted in Figure 17. However, the enrolment rate in production has remained largely unchanged over the same period, with an annual enrolment rate of approximately 250-300 students.

Saudi Arabia stands to benefit from the increasing interest among students to pursue creativity-centred programs like Fashion Design. This interest is a positive sign for the talent pipeline, which will undoubtedly help bolster the workforce in the value chain's creative segment. Nonetheless, there is still much room for growth in the talent pipeline for the production and education segments of the fashion ecosystem. Developing this pipeline will be instrumental in localising a growing portion of the fashion value chain.

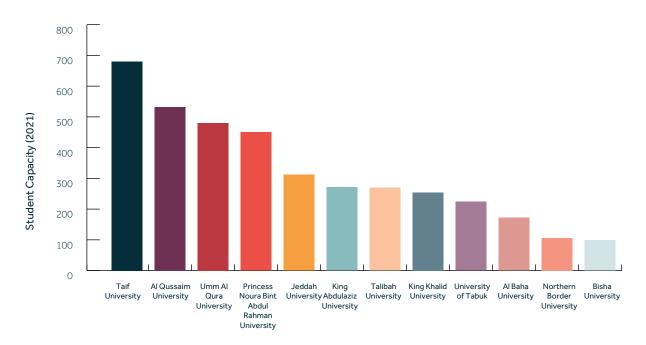


FIGURE 16: Universities in Saudi Arabia offering fashion programs and their respective student capacities.

SOURCE: MINISTRY OF EDUCATION (2022) $^{\rm o}$ DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION



FIGURE 17:

Capacity in fashion education programs at universities in Saudi Arabia during 2017-2021.

Technical and Vocational Training Colleges data unavailable

SOURCE: MINISTRY OF EDUCATION (2022)°
DISCLAIMER: FIGURE CONTAINS THE LATEST DATA AVAILABLE AT THE TIME OF PUBLICATION

Preparing for Vision 2030

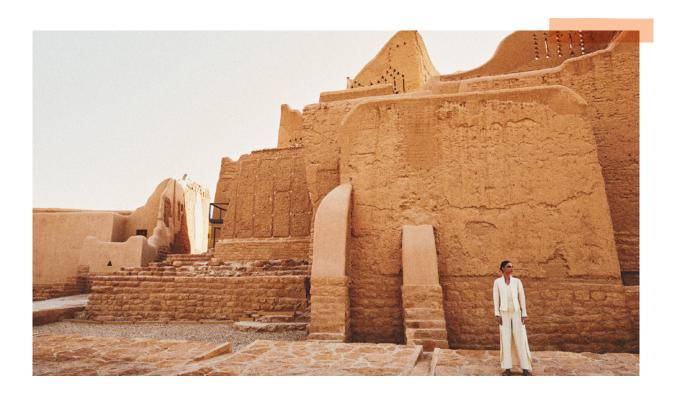
As the Saudi fashion industry continues to grow, there is a pressing need to address the mismatches between skills supply and demand in the industry.

While the Kingdom is producing more design graduates than currently required, there is a shortage of technical skills in areas such as pattern making, grading, garment technology, and fabric technology. The current demand for production-related skills greatly exceeds supply⁷³, and this presents a significant opportunity for the Kingdom to attract students to the more technical areas of the fashion ecosystem and fill the supply gap.

As observed by Ms Rajaa Moumena, the CEO of the Future Institute of Higher Education and Training, there is: "a much greater interest in students wanting to work as fashion designers than in the technical areas". Given the surplus of design students, Ms Moumena sees a real need for jobplacement opportunities for young graduates. By exposing design graduates to the workplace, Ms Moumena believes they are likely not only to show their potential value to employers, but also to gain invaluable experience that may direct them to other

specialised fields in the fashion industry. There already exist connections between universities and job placement opportunities, such as the partnership between the large retailer Al Abdul Karim and fashion design graduates from Princess Noura University that see graduates enter Al Abdul Karim as interns to help them gain valuable work experience.

While this is improving design capabilities in the Kingdom and fostering the potential for rapid design growth, there is presently a constrained supply of associated technical skills that typically lie at the heart of advanced fashion ecosystems. There is already movement in this space, with the Saudi Fashion Commission partnering with King Abdullah University of Science and Technology to establish a research centre within the university's research and technology department to drive technical innovation towards sustainable solutions in textiles and fashion⁷⁴. Ms Moumena believes another way to attract students into studying required technical subjects is to bring those subjects into the high school curriculum, thereby providing students with early exposure to the major opportunities in the fashion supply chain.



Strength in design

The fashion education system in Saudi Arabia is currently strongest in the fields of merchandising and design.

The Kingdom offers a variety of design courses, including apparel, jewellery, and textiles design, with institutions such as The Future Institute providing one- or two-year diplomas in fashion design and jewellery design. To further strengthen the pool of locally trained graduates, Ms. Moumena suggests providing scholarships for students to study at institutions that demonstrate an education at international standards. Additionally, allowing male students to enrol in design and related courses presents a significant opportunity to grow the local talent pool.

Recognising the Kingdom's design potential and growth in design skills, the Fashion Commission launched the Saudi 100 Brands program in 2021. This program targets young design professionals with an entrepreneurial mindset and offers mentorship programs aimed at developing and growing their brands. Many emerging brands and designers have participated in this program, including Mashael Alfaris, Founder and CEO of MOUSHI, an haute couture designer, and Sara Abu-Dawood, Founder and CEO of Yataghan Jewellers, a jewellery designer. The Saudi 100 Brands program has provided a platform for home-grown designers to gain international exposure and display their talents on a global stage. For more details, please refer to chapter 3.

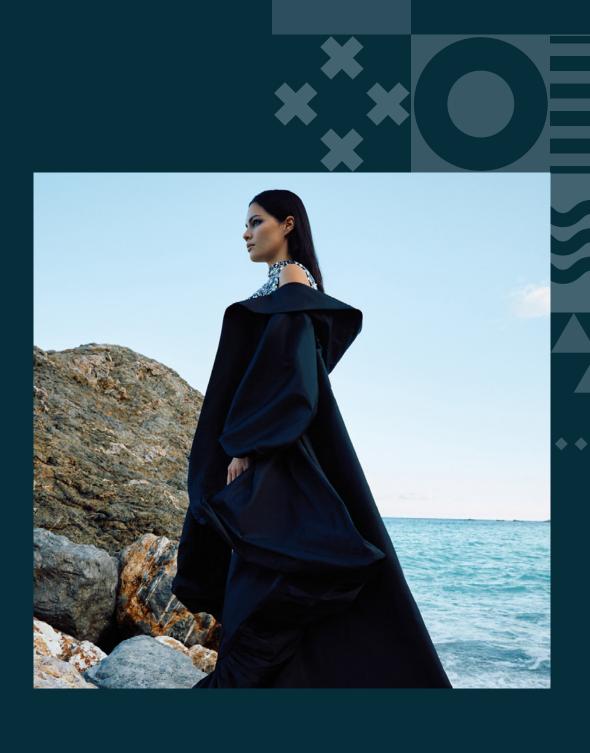
Recognising the need to integrate the latest technologies in the field of design, the Fashion Commission has also launched its Digital Fashion Program in collaboration with Instituto Marangoni. This program offers online training courses that allow learners to discover the latest fashion design techniques and develop their creative skills. It also includes exposure to the latest digital design technologies, such as CLO, through which 3D fashion designs can be created, virtually fitted, and rendered.

Importantly, there appears to be a shared interest



amongst emerging local designers in creating a connection between the old and new: keeping traditional Saudi culture alive by embedding facets of deep cultural heritage in their pieces while also bringing their designs very much into the 21st century. These designs are inspired by Saudi Arabia's rich cultural heritage, but they are ultimately the product of a skills development process working to uplift and develop the Kingdom's design skills to leading international standards.

The rapid growth of the fashion industry in Saudi Arabia is opening exciting new opportunities for local fashion designers, as well as a range of fashion related technical occupations. As Saudi's fashion ecosystem grows and matures, further skills in supply chain management, quality inspection and supplier auditing will need to be developed. The Saudi talent pipeline will need to be dynamic- a challenge the Kingdom recognizes and is ready for.



WEAVING SUSTAINABILITY INTO THE SAUDI FASHION ECOSYSTEM

KEY INSIGHTS AND OPPORTUNITIES

- According to the United Nations Environment Program the global fashion industry is estimated
 to account for eight to ten percent of global emissions, more than the aviation and shipping
 industries combined.
- 84% of survey respondents view sustainability as important to their customers. However, the Saudi market remains price sensitive with 58% of industry respondents noting that customers would not be willing to pay more for a sustainable fashion product.
- Material science, reuse and recycling of fashion garments and increased consumer awareness of sustainable practices and materials are noted **opportunities to green the fashion ecosystem**.

Following the launch of Vision 2030, Saudi Arabia is taking decisive steps towards a more sustainable future.

In 2021, the Kingdom announced the national transition towards net zero by 2030 as part of the Saudi Green Initiative⁷⁵. The Saudi Green Initiative unites environmental protection, energy transition and sustainability programs with the overarching aims of offsetting and reducing emissions, increasing the Kingdom's use of clean energy and addressing climate change.

Fashion has a key role to play in supporting the Kingdom's green ambitions.

According to the United Nations Environment Program the global fashion industry is estimated to account for eight to ten percent of global emissions, more than the aviation and shipping industries combined. This is predominantly driven by the use of raw materials with cotton accounting for 2.5% of the world's farmlands and clothing production processes, such as dyeing and finishing, requiring the consumption of 43 million tonnes of chemicals per year⁷⁶. Given the sizable impact fashion has on the environment, the greening of the industry could play a crucial role in addressing climate change⁷⁷.

In a recent analysis of the polyester value chain⁷⁸, specific points for sustainability-based

improvements were identified during the production phase. Two key recommendations that presented the most impact for the widest range of the value chain were (1) the reduction of fossil fuels as an energy source and a materials source, and (2) the correct management of waste to ensure a closed loop fashion cycle.

This approach aligns with the Saudi Carbon Circular Economy approach which seeks to "reduce, reuse, recycle, and remove" in terms of managing carbon emissions.

The reuse and recycling of clothing for textiles has already been noted in the Kingdom. The National Center for Waste Management (MWAN) announced in mid-2022 that they would start recycling ihram clothing discarded after the Hajj pilgrims that take place each year⁷⁹. After collecting the Ihrams, the centre sorts them, sterilizes them, washes them, and puts them in transparent bags. They repair damaged Ihrams to be used again.

Additionally, in a bid to increase awareness of circular principles and to increase acceptance of second-hand clothing, the Fashion Commission also introduced a public "swap shop" to encourage sustainable consumption at the annual Fashion Futures event⁸⁰.

Sustainability awareness is growing in Saudi Arabia

A 2022 survey conducted at the Fashion Future's event that included fashion designers, governmental officials and education providers revealed that 84% of respondents view sustainability as important to their customers. However, the market remains price sensitive with 58% of industry respondents noting that

customers would not be willing to pay more for a sustainable fashion product (see Figure 18). This is consistent with global trends, with 33% of young people in a London Fashion Retail Academy survey noting they would not pay more than SAR 23 extra for sustainable garments⁸¹.

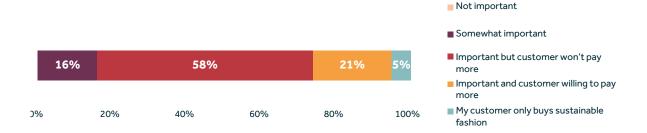


FIGURE 18:

Survey responses to how important sustainability is to Saudi customers

SOURCE: FASHION FUTURES SUSTAINABILITY WORKSHOP SURVEY (2022)

Surveyed fashion stakeholders expect to see an awareness of different sustainability practices increasing within the Saudi fashion industry.

Notably resold and repaired products along with low carbon footprint products are expected to see significant growth in the local market. This is driven by increasing awareness of the impact of the fashion industry on global carbon emissions, along with an increasing acceptance of circular products.

Interestingly, sustainable materials are expected to see slightly less value attributed by customers by 2027; with stakeholders believing the use of sustainable materials will become standard practice versus a unique value addition. Most Saudi fashion stakeholders are at the early stages of becoming more sustainable and are undertaking research to understand rapidly emerging opportunities in sustainability (see Figure 19).

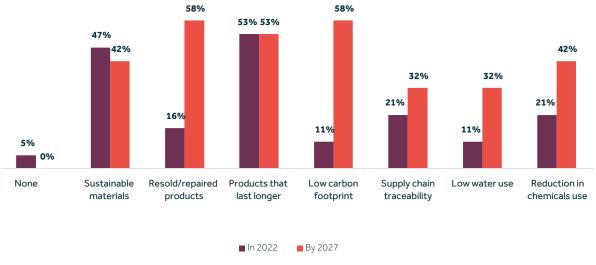


FIGURE 19: Survey responses to how customers value fashion sustainability practices

SOURCE: FASHION FUTURES SUSTAINABILITY WORKSHOP SURVEY (2022)

Increasing customer awareness is expected to result in growing demand for sustainable fashion products in the Kingdom. The Saudi fashion ecosystem appears to be gearing up to respond. A full 60% of survey respondents noted they were undertaking research to understand opportunities, with 26% noting they were already offering sustainable products to customers. A few

respondents (eight percent) also noted they are currently investing resources into developing more sustainable products. As shown in Figure 20 below, the use of environmentally sustainable materials, securing zero waste to landfill, and designing recyclable products, represented the top three areas of focus for the Saudi fashion ecosystem.

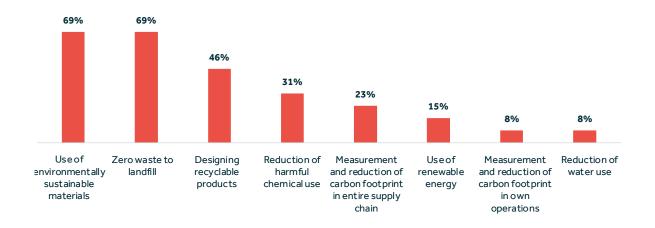


FIGURE 20:

Sustainability focus areas for the Saudi fashion ecosystem

SOURCE: FASHION FUTURES SUSTAINABILITY WORKSHOP SURVEY (2022)

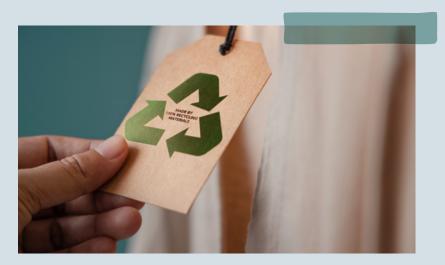
The evidence is clear: sustainability will undoubtedly become a key strategic driver of the Saudi fashion industry. Positively, Saudi's local Green Initiative is likely to encourage the local fashion ecosystem to adopt more sustainable practices, including use of eco-friendly materials and production methods that reduce waste and energy consumption. Opportunities exist on both the demand and supply side of the fashion

ecosystem. In terms of demand, these factors are expected to shift the Saudi consumer's perception on sustainable fashion products, growing the local market for greener products. On the supply side, given Saudi Arabia's leading role in polymer science the Kingdom has a potentially critical role to play in the development of advanced fashion materials and carbon reducing circular practices.

DEEP DIVE:

LEVERAGING LEADING KNOWLEDGE ON PETROCHEMICALS FOR GREENER FASHION MATERIALS

Saudi Arabia holds a leading position within the global petrochemicals industry. Aramco is the Kingdom's petrochemicals leader, and one of the world's largest energy and chemicals firms.



The Saudi Basic Industries Corporation (SABIC) which Aramco has a 70% shareholding in, has invested heavily in polymer-based materials science over the last few years, and has developed a range of materials and environmentally sustainable processes that offer major potential value to the fashion value chain. This includes foams for footwear (polyolefin elastomer foam) and low carbon emitting recycling processes for polyethylene and polypropylene.

SABIC is a chemicals manufacturing company founded in 1976⁸². A total of 70% of the company's shares are owned by Saudi Arabia Oil Company (Aramco) and 30% is listed on the Saudi Stock Exchange⁸³. It is the second largest public company in Saudi Arabia and employs over 31,000 people. Its products include chemicals and intermediates, industrial polymers, fertilizers, and metals⁸⁴.

SABIC invests heavily in innovation. The company has established twenty Technology and Innovation Centres around the world that together employ around 1,660 employees⁸⁵. In 2022, the company received the international science and innovation 'R&D 100 Award' due to its specialist contributions

to helping meet changing needs in the global market, including contributing to carbon net-zero goals in multiple industries⁸⁶.

The company has advanced capabilities in several downstream industries including agriculture, automotive manufacturing, and healthcare. SABIC produces polypropylene materials used in the manufacturing of non-woven fabrics that are used in medical disposables such as gowns and facemasks⁸⁷. In 2020, during the onset of the Covid-19 pandemic, the company ramped up its production of polypropylene materials to meet global demand for personal protective equipment⁸⁸.

SABIC is looking for sustainable solutions. Waste from discarded single-use face masks raised environmental concerns globally⁸⁹. Furthermore, discarded facemasks represented the loss of valuable feedstock for new materials⁹⁰. Looking to find effective solutions, SABIC and partners in 2022 demonstrated the circular capabilities of its polypropylene materials through its closed-loop, face-mask recycling pilot project⁹¹ and continues its sustainability research in other critical areas.

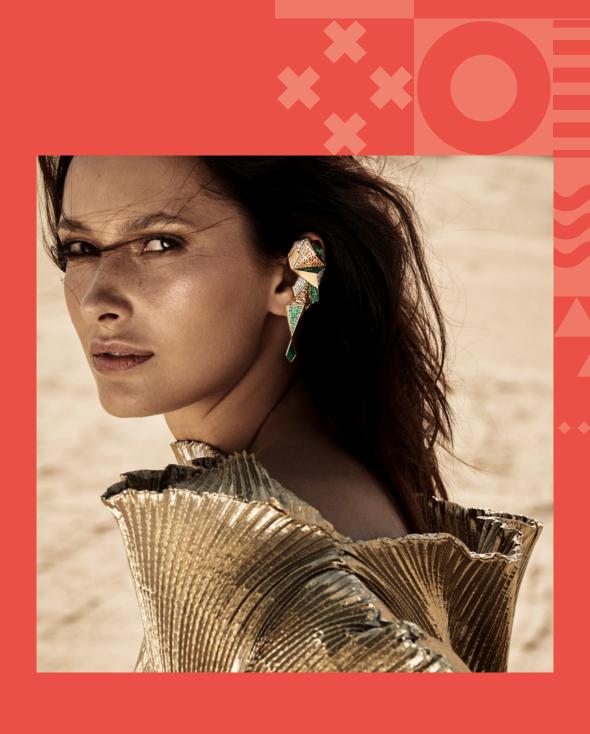


The Kingdom's strength in the chemicals industry provides the emerging fashion value chain with a strong starting position in respect of access to polyamide-based materials developments.

Whether using virgin materials, or increasingly recycled material, Saudi Arabia is ideally positioned to contribute to the greening of the global fashion value chain. With its abundance of solar energy, a growing skills base, and advanced chemistry capabilities, the Kingdom's fashion economy is poised to become increasingly circular. This will ensure its sustainability, as it grows over the next few decades.

In 2022 the Fashion Commission signed a memorandum of understanding (MoU) with the King Abdullah University of Science and Technology to study the possibility of setting up a local research centre within the university's research and technology department to innovate sustainable solutions in textiles and fashion. The MoU includes the possibility of the commission providing resources and logistical support to boost emerging technologies in small enterprises, as well as local and international companies that offer sustainable technologies, smart textiles, and technical clothing.

The potential of materials to transform the sustainability of the Kingdom's emerging fashion value chain was further exemplified by the fabric exposition at the Fashion Commission's Fashion Futures event in November 2022. From organic cotton to the emerging use of a range of cellulosic fibres, such as citrus and sugar cane, to the use of recycled polyamide and cellulosic-based materials, the exposition highlighted the growing commercial value of sustainable fabrics.



THE FUTURE OF SAUDI FASHION

KEY INSIGHTS AND OPPORTUNITIES

- The growth of the Kingdom's ecosystem lies in a sustainable future, driven by verified supply chain circularity and associated green supply chain credentials, the use of advanced technology and the empowerment of people operating within the various linkages of a circular, knowledge-based fashion economy.
- The global fashion industry is pivoting towards a **digitally blended model**. This potentially plays to the advantage of the digitally savvy and rapidly emerging Saudi Arabia fashion industry.
- The centrality of digital fashion is being embraced in Saudi Arabia, suggesting the Kingdom is ideally positioned to benefit from both physical and digital fashion shifts.

The significant future growth and successful development of the Saudi fashion industry is promising. As highlighted in the chapters of this first State of the Kingdom Fashion Report, the underlying foundations for the future success of the fashion supply chain are being firmly established. Domestic and broader regional market growth trends are extremely positive, Saudi design and product development capabilities are being rapidly established, and local supply chain bottlenecks are steadily being resolved.

Embracing sustainability and innovation

Fundamental changes are occurring in the global fashion industry which will likely inspire the future Saudi fashion industry. As the industry evolves, there are critical questions to consider, such as the balance between brick-and-mortar and digital marketplaces, the potential impact of the metaverse, and the role of sustainable materials

and technologies in fashion production.

Tackling these questions and embracing the emerging technology and sustainability practices within the industry will be crucial for the Kingdom as it looks to position itself as a significant global fashion economy.

Fashion as a force for good

The fashion industry's impact on the environment is well understood^{92,93}. On the other hand, the fashion industry (including retail and associated logistics and transport services) provides 12.5% of the global workforce⁹⁴, with the fashion industry's

global revenue in 2019 (pre the advent of the Covid pandemic) calculated at US\$2.5 trillion (SAR 9.4 trillion)⁹⁵.

How does the Kingdom's fashion industry develop

itself for a positive socio-economic contribution, as opposed to potentially negative environmental and social effects? The answer lies in a sustainable future, driven by verified supply chain circularity and associated green supply chain credentials, the use of advanced technology wherever appropriate, and the empowerment of people operating within the various linkages of a knowledge-based fashion economy. This is fully aligned with The Saudi Green Initiative, which is working on increasing Saudi Arabia's reliance on clean energy, offsetting emissions, and protecting the environment.

The growing importance of environmental sustainability to the Saudi Arabia fashion industry is evident from recent retailing initiatives. Al Abdul Karim has, for example, launched the Love Earth collection, which has been well received in the market. Using cotton sourced from the Better Cotton Initiative, and recycled yarns in the collection, while simultaneously supporting the return and recycling of old garments, the Love

Collection demonstrates the major potential for change within the Saudi fashion market. Insights from fashion stakeholders indicate how 79% of Saudi customers see sustainability in fashion as important (see Figure 18) and how a wider range of sustainability practices are going to be valued in a few years compared to what is currently valued (see Figure 19).

In the thobe market, Lomar has similarly focused on raising awareness of the environment amongst its customers by previously offering a complimentary envelope of tree seeds with each product sold. Intended as a carbon offset, the seeds raised considerable awareness of their product's carbon footprint amongst customers. The firm also offers a full repair service on its thobes, thereby encouraging long-term ownership and re-use of its products. At the end of their lifecycle thobes can also be returned to Lomar, thereby encouraging recycling.

Transforming towards digitally blended retail models

The technology revolution reshaping the fashion industry is evident at each segment of the fashion chain.

Global retail technology funding more than doubled in 2021 relative to 2020 levels⁹⁶, while brand digital strategies are accelerating alongside growing investments in fashion technology. Aside from the explosion in e-commerce sales from either multibrand or retailer/brand specific online sites, which compete directly with brick-and-mortar stores, a more fundamental shift is being driven by the consumption habits of Gen Z'ers and Millennials who have grown up in a fully digital economy. The extent of this change is exemplified by how leading fashion brands like Dior, Zara and Prada secure a substantially smaller number of average Instagram likes per post relative to digital first brands such as I.AM.GIA, Everlane and Supreme 97. The investment community appears keenly aware of this trend,

with online retailers securing higher market capitalisations relative to their earnings before interest, taxes, depreciation, and amortization (EBITDA) multiples compared to traditional retailers⁹⁸.

The global fashion industry is pivoting towards a digitally blended model. This potentially plays to the advantage of the digitally savvy and rapidly emerging Saudi fashion industry.

As consumers become more likely to purchase online, based on positive reviews made by online influencers and trust with the brand⁹⁹, brands and designers are increasingly using niche platforms to connect to narrow audiences that align with their distinctive brand positions. This creates the space for new market exposure and a range of associated niche brand development opportunities.

New fashion market channels

As digital markets shift into the social media space, brands are also now extending into entirely new fashion market channels, such as live stream e-commerce, where fashion events are livestreamed with integrations allowing for immediate purchases by viewers.

Even more strikingly, the fashion industry is seeing growing engagement with the creator economy. The traditional design process is being challenged by new models where styling trends are being tested with, and even co-created through,

brand-connected creator communities. In this process, the traditional boundaries between fashion designers and fashion customers are increasingly blurred, with fashion consumers directing the evolution of designs, to the point of even co-owning them through creative commons licenses, and pre-buying them in sufficient volumes to trigger the production of limited batches. Entire brands such as Threadless, Betabrand, and Redbubble have emerged using these types of community-based business models. Similar opportunities clearly exist in Saudi Arabia.

Supply chain shifts

Major technology disruptions are occurring across the various segments of the fashion supply chain. This encompasses information flows from market selling channels through the supply chain

and covering product design, development, and manufacturing for supply into the market.

Design processes are, for example, increasingly being powered by Artificial Intelligence (AI). This AI powered generative design software market could be worth US\$44 billion (SAR 165 billion) by 2030¹⁰⁰. Examples of AI powered design include:

- Amazon's Style Snap, which allows users to upload an outfit photograph, detects shoppable elements and recommends similar items listed on Amazon.
- Project Muze, where Google and Zalando have experimented with AI to create designs based on users' general interests and styling preferences.
- Virtusize, which has helped 30 million shoppers to find perfectly sized products by comparing the size of a desired product with an item they already own. Virtusize allows shoppers to create a digital silhouette and to virtually try items on.
- CLO is a 3D garment visualisation software that allows firms to use real time Al insights to modify their fashion offering right up until products are about to be produced in volume.

In combination, these AI powered design platforms effectively allow a consumer to interact with a virtual stylist that suggests personalised options, translates these options into a set of consumer inputs based on real time style trends and online behaviour, presents these options to consumers

via virtual fitting rooms and then once purchase decisions are made, renders the garments selected for optimal production within a supply chain. Essentially, all key design elements are covered for the fulfilment of manufacturing orders.

Stores of the future

A key question that emerges, is what happens when a consumer experiences the power of a hyper-personalised digital fashion engagement? Will they shift to digital only purchases of physical products or will they blend their fashion experiences between the physical and digital? Evidence provided below suggests that the latter will occur.

The development of new malls¹⁰¹ suggests that physical stores are prospering in the Kingdom, based on a new value proposition to fashion consumers in spaces where retail meets entertainment. Rather than carrying vast product line-ups, stores are expected to become apex brand builders, immersing consumers in a blend of physical and digital experiences that showcase the best of what the brand has to offer the market.

Containing top end products and shop fittings that make clear statements about the position and future direction of the brand, physical stores are expected to include Augmented Reality (AR) and Virtual Reality (VR) shopping experiences. By blending the physical and the digital, stores are expected to attract foot traffic and increase the time customers spend in stores, thereby building strong brand connection to consumers.

As a practical example of this trend, it was estimated that 100 million people used smart mirror technology in 2019, with Topshop, Neiman Marcus, and H&M all investing in smart mirror technology ¹⁰². Similarly, brands such as ASOS, Gucci, Converse, Gap, Lacoste and Nike have launched AR-powered "try on" cellular applications. Consequently, it has been estimated that VR and AR technologies in the retail market could be worth as much as US\$17.9 billion (SAR 67.1 billion) by 2028¹⁰³.

What about the physical supply chain?

To ensure fashion product orders are rapidly manufactured to the technical specifications that have been set for a customer, the physical supply chain will increasingly need to execute purchase orders in the space of a few weeks (even eventually days) as opposed to many months, which is presently the case for most fashion supply chains.

This requires a major reduction in production and distribution lead times, which is only possible through near shoring and automation. These two

elements are mutually complementary in increasing agility and productivity, as well as reducing the impact of differential wages on product costs. As the physical supply chain moves from a push model to one based on market pull and full circularity, manufacturing will be increasingly driven by the convergence of emerging, general-purpose technologies, such as the Industrial Internet of Things, cloud computing, big data, AI, robotics and additive manufacturing (also called 3D printing).

As a result of these developments, the automation of sewing in the apparel value chain could help reduce processing times by 40% to 90%, while 60% of apparel procurement executives expect at least 20% of their sourcing requirements to be nearshored by 2025¹⁰⁴. Examples of advanced technology use within the global fashion industry are abounding:

- Adidas' Futurecraft combines a robot woven sneaker with a 3D printed sole, allowing for the precision measurement of each pair based on an athlete's unique data, thereby securing greater performance for the athlete
- New Balance, Hewlett Packard and Super Feet have collaborated on 3D printed insoles that are tailored to a customer's specific biometric data
- Softwear Automation has developed fully automated sewing robots (sewbots) that enable on-demand manufacturing with localised supply chains

Less dramatically, but as important as the major structural changes identified, thousands of smaller technology disruptions are changing the nature of how fashion supply chains operate. These range from the optimisation of material yields using Al, to automated quality assurance processes using Industrial IOT to validate and guarantee the quality of products, to the verification of manufacturing processes using blockchain technologies, to digital twins allowing for sampling and production line optimisation, to AR glasses permitting the off-site maintenance and repair of advanced

production equipment. In combination these Industry 4.0 technologies are changing the nature of fashion production, whether in the apparelfabric value chain, or the footwear or jewellery industries. Barriers to market entry are shifting, while the underlying nature of competition within the fashion industry's various supply chains are also fundamentally changing. The requirements for an abundant cheap labour supply and the availability of deep mechanical skills to maintain large inventories of machines are shifting, and often quite dramatically.

This opens potentially major opportunities for further fashion activity in the Kingdom, an opportunity that has been identified internationally. As an example, it has been argued that "manufacturers fully leveraged to produce large volumes of limited numbers of products will likely be at a disadvantage, forcing them to rethink their place in the manufacturing landscape and the value they bring the consumer."105 Using new, advanced manufacturing technologies, the future manufacturing ecosystem could comprise many smaller technology-enabled firms operating in close proximity to their end market, and being hyper-responsive to shifting consumer demands¹⁰⁶. Large volumes of staple production (such as certain base materials) may still be produced in large factories, with these concentrated in specific geographical locations, but where there is a need for differentiation, and an opportunity to respond to difficult to predict consumer preferences, manufacturing will cluster closer to end markets, following a distributed manufacturing model that is far more capable of meeting market requirements.

Fashion inventory and distribution

In addition to manufacturing technology shifts, moving physical product within the supply chain is also being revolutionised by new technologies.

Zara uses RFID tags on all of their products to track sales, stocks, and availability relative to demand. Each time a product is sold Zara's system prompts the restocking of either the same or similar products. Critically, each product at Zara has a set of identifiable fashion attributes (colour, pattern, silhouette, material and trim detail, pricing, size, etc.) that is then fed into an Al application, triggering a set of merchandising engagements that ensure data-driven design decisions.

The streamlining of supply chains, in line with direct-to-consumer strategies has led to the rise of micro-fulfilment centres (MFCs). MFCs complement large traditional distribution centres,

which are typically located on the periphery of urban areas, by only storing fast moving orders, thereby allowing for reduced last mile delivery costs and same day deliveries. MFCs essentially combine the speed of localised, in-store pick-up, with the efficiency of smart warehousing. Given the value of



this type of distribution within a digital first selling environment, the MFC market is expected to reach US\$10 billion (SAR 37.5 billion) globally by 2026¹⁰⁷.

In response to the rise of e-commerce, and amid severe labour shortages in Japan, Uniqlo has automated almost 100% of its Tokyo warehouse¹⁰⁸. It has done so using robots and fully automated handling equipment powered by Al that also enables rapid product throughput in support of the firm's high stock turn strategy.

These disruptive manufacturing and distribution technologies open major potential opportunities in Saudi Arabia. Supported by the Kingdom's large and growing demand for fashion products, complemented by broader regional market opportunities, there appears to be a unique window for the development of a technologically advanced fashion manufacturing ecosystem in the Kingdom. This ecosystem will not only lie at the heart of a large, vibrant domestic market, but potentially a much larger regional and even niche international market.

Two major additional areas of technology disruption are reshaping the fashion industry and require consideration. The first relates to materials science developments that are changing what fashion products are made of and even how they function; and the second, to the development of the metaverse, a digital-only fashion space that potentially revolutionises the entire fashion industry. Each of these is considered below.

Materials science developments

Many of the base materials being used in the current fashion industry are under serious threat.

In part, this is because of critical environmental considerations (as covered in chapter 6) and in part it is because of nanotechnology and other smart material breakthroughs that are changing the characteristics and functionality of materials being used in fashion products. This has potentially profound impacts on the entire ecosystem:

challenging designs, product development, manufacturing, and even how fashion products are used.

Wearable technology that can monitor body temperature, muscle use, and blood flow is already being widely used in the athleisure fashion market segment to monitor physical activity and individual health, while there are an increasing number of fashion events showcasing garments, footwear and accessories that are made of 3D printed natural materials, or conductive polyamide-

based materials that are able to change colour and print details based on a wearer's preferences. These examples suggest that the smart material revolution has arrived, and that it will play an increasing role in the fashion value chain, initially, largely at the luxury end of the market, but then increasingly throughout the entire market.

One can therefore expect a veritable explosion of new materials use in the fashion industry. This was demonstrated at the Saudi Fashion Commission's 2022 Fashion Futures event in Riyadh. A range of non-traditional fashion materials were highlighted. However, technology will not only allow the broader use of a range of cellulosic and protein-based fibres, and recycled polymers in future, it will also infuse fashion products with new aesthetic qualities, handle properties, and functional value.

Using nanotechnology, Lomar in Jeddah is already infusing perfume scents in their thobes and improving the breathability of their neck lines. Although subtle, these value-added developments improve the functionality of Lomar's high quality thobes, delivering an important point of difference for their products over tailored alternatives.

As Saudi Arabia invests heavily in science and technology; and as leading global chemicals firms such as SABIC explore further polyamide solutions for a greener future, there is a major opportunity for the Kingdom to connect its burgeoning fashion industry to its underlying excellence in polymer and fibre science. As the fashion industry embraces its circular future, materials science will become an increasingly important part of the fashion value chain, positioning the Kingdom as a major potential source of materials innovation.



The next frontier: fashion in the Metaverse

The digital fashion market globally is predicted to be worth US\$190 billion (SAR 712.5 billion) by 2025¹⁰⁹.

This ranges from consumers purchasing digital fashion for their virtual avatars in the metaverse, to

companies such as Dress X, Tribute and Replicant Fashion selling digital garments that can be fitted to a person's social media photographs, and which are indistinguishable from physical clothes. The growth of this virtual fashion market has led firms like Dress X to predict that every fashion designer will soon have a digital fashion business unit. This is based on

projections that fashion will become increasingly entrenched in the metaverse and that core Gen Z customers will spend more of their time playing, shopping and socialising in virtual spaces.

The strength of the emerging fashion ecosystem in Saudi Arabia is that it is being led by Gen Z designers and aspirant brands that have been

born in a digital age. Whereas established brands are having to manage both legacy businesses and newly emerging opportunities in a blended physical/digital space, the same tension does not exist in Saudi Arabia's fashion sector. The centrality of digital fashion is being embraced, suggesting the Kingdom is ideally positioned to benefit from both physical and digital fashion shifts.

Future proofing Saudi's fashion ecosystem

An ability to embrace technology is a key Kingdom strength.

The Fashion Commission is incorporating the latest technology in several new and innovative initiatives that are currently underway or already in the pipeline. Burak Cakmak, the CEO of the Saudi Arabia Fashion Commission notes that the most important benefactor of these initiatives is the entire fashion community. It provides the opportunities where "the community finally can gather to share industry knowledge, which didn't exist until now."

This year, there are two exciting projects in the pipeline to move the Saudi fashion industry rapidly into the future: a Product Development Studio and a Creative Space. Burak shares insights on these new developments: "The new Product **Development Studio will contain the latest** technology. As we speak, we are ordering the equipment, and this should be up and running by the end of the year. We have already started construction. This will be a big game changer because this is a place where we can do product innovation and really push the limits of the designs and techniques and materials. When you have a technical place like this, you're able to bring international technical experts to engage directly with local creators and brands and really grow the entire industry from there. We are also opening our first Creative Space for content production. During 2023, we will open it as a dedicated space for fashion photoshoots, content production and many more, that's accessible to all local brands. Again, this kind of space in the way we are designing didn't exist until now."

Burak sees collaboration with international experts

to come and share their knowledge as key: "a local-global mix bring expertise from both sides to create what is really relevant." This connection with international experts is also being leveraged in the Fashion Commission's Masterclasses that see experts come to the Kingdom and share the knowledge and ideas on trending topics such as sustainability which will set business up for success when navigating their paths in this period of exciting change in the fashion industry in the Kingdom.

"All of these programs and the fact that we are continuously supporting over 100 brands through the 100 Brands program ensures we are refreshing the pool of brands involved in our initiatives every year." Burak sees the potential for Brands to catalyse the fashion market hence the Commission's strong commitment to growing robust brands in the Kingdom. Burak is confident: "we know that brand is the most valuable element in the fashion value chain. Brand-building is going to add the biggest value to the Kingdom's long term vision. It helps not only grow the sector and grow the GDP, but it will also help grow the visibility of the Kingdom to the rest of the world."

Best stated by Burak: "we are focused on innovation in a big way as a Kingdom, it gives us a chance to invest in new technologies to push to the limits of what is possible. And with this there is a clear sustainability agenda. There are very few countries where future technologies are so eagerly embraced. The passion to design, test and innovate is sewn into this industry. We're not trying to build a replica of another Kingdom's fashion sector. We're building an ecosystem which will thrive for 50 to 100 years. We're building the foundations for the future of fashion right now, here in Saudi Arabia."

References

- ¹ Vision 2030 Website, Kingdom of Saudi Arabia. Available for download: https://www.vision2030.gov.sa/v2030/overview/
- ² Vision 2030 Website, Kingdom of Saudi Arabia. Available for download: https://www.vision2030.gov.sa/v2030/overview/
- ³ Vision 2030 Website, Kingdom of Saudi Arabia. Available for download: https://www.vision2030.gov.sa/v2030/overview/
- ⁴ Kingdom of Saudi Arabia Ministry of Human Resources and Social Development (2022).
- ⁵ Kingdom of Saudi Arabia Ministry of Human Resources and Social Development (2022).
- ⁶ Kingdom of Saudi Arabia Ministry of Human Resources and Social Development (2022). Cultural jobs analysis. Data obtained: December 2022.
- ⁷ Kingdom of Saudi Arabia Ministry of Human Resources and Social Development (2022). Cultural jobs analysis. Data obtained: December 2022.
- 8 Statista (2021) Data Download facility. Available: https://www.statista.com/
- ⁹ International Monetary Fund (2023) GDP, current prices. Available: https://www.imf.org/external/datamapper/NGDPD@ WEO/OEMDC/ADVEC/WEOWORLD,
- ¹⁰ International Monetary Fund (2023) GDP Per Capita, Current prices. Available: https://www.imf.org/external/datamapper/NGDPDPC@WEO/SAU.
- ¹¹ Kingdom of Saudi Arabia General Authority of Statistics. (2022) Internal Trade Q2. Available: https://www.stats.gov.sa/sites/default/files/ITR%20Q22022E.xlsx.
- ¹² Kingdom of Saudi Arabia General Authority of Statistics. (2022) Quarterly GDP by Institutional Sectors 2010-2022. Q2. Available: https://www.stats.gov.sa/sites/default/files/Quarterly%20GDP%20by%20Institutional%20Sectors%202010-2022EN.xlsx.
- ¹³ Kingdom of Saudi Arabia Ministry of Human Resources and Social Development (2022)
- ¹⁴ Statista (2021) Data Do

wnload facility. Available: https://www.statista.com/

- ¹⁵ Euromonitor International. (2023) Apparel and Footwear in Saudi Arabia Country Report. Available: https://www.euromonitor.com/
- ¹⁶ Kingdom of Saudi Arabia. (2023) Vision 2030. Available for download: https://www.vision2030.gov.sa/v2030/overview/.
- ¹⁷ Euromonitor International (2023) Data Download facility. Available: https://www.euromonitor.com
- ¹⁸ Sports for All. (2023) Who We Are. Available: https://sportsforall.com.sa/about-us/
- 19 Euromonitor International (2023) Data Download facility. Available: https://www.euromonitor.com
- ²⁰ Euromonitor International (2023) Data Download facility. Available: https://www.euromonitor.com
- ²¹ Economist Intelligence Unit (2022) Data Download facility. Available: https://www.eiu.com/n/
- ²² UN Comtrade (2023) Data Download facility. Available: https://comtrade.un.org/data.
- ²³ UN Comtrade (2022) Data Download facility. Available: https://comtrade.un.org/data.
- ²⁴ UN Comtrade (2023) Data Download facility. Available: https://comtrade.un.org/data.
- ²⁵ UN Comtrade (2023) Data Download facility. Available: https://comtrade.un.org/data.
- ²⁶ UN Comtrade (2023) Data Download facility. Available: https://comtrade.un.org/data.
 ²⁷ UN Comtrade (2023) Data Download facility. Available: https://comtrade.un.org/data.
- ²⁸ UN Comtrade (2023) Data Download facility. Available: https://comtrade.un.org/data.
- ²⁹ Britannica, The Editors of Encyclopaedia. (2022) Gulf Cooperation Council. Available: https://www.britannica.com/topic/Gulf-Cooperation-Council. Accessed 16 March 2023.
- ³⁰ Chalhoub Group. (2022) GCC Personal Luxury in: a story of early recovery and growth. Market Report.
- ³¹ IBISWorld (2023). Available at: https://www.ibisworld.com/
- ³² Chalhoub group (2022). GCC Personal Luxury in 2021: A Story of Early Recovery and Growth. Market Report. Available from:

https://chalhoubgroup.com/chalhoub-api//uploads/pdf/GCC Personal Luxury in 2021 vFOR UPLOAD NEW 1.pdf

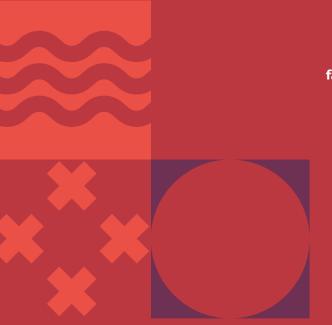
- 33 IBISWorld (2023). Available at: https://www.ibisworld.com/
- ³⁴ Chalhoub group (2022). GCC Personal Luxury in 2021: A Story of Early Recovery and Growth. Market Report. Available from: https://chalhoubgroup.com/chalhoub-api//uploads/pdf/GCC_Personal_Luxury_in_2021_vFOR_UPLOAD_NEW_1.pdf
- ³⁵ IBISWorld (2023). Available at: https://www.ibisworld.com/
- ³⁶ Vogue Business (2019). The Middle East embraces ready-to-wear. Available: https://www.voguebusiness.com/fashion/middle-east-ready-to-wear-arab-fashion-kage-mrs-keepa
- 37 Fashion Forward Dubai (2019)
- ³⁸ Who What Wear (2021). The Complete Guide to Modest Fashion, from a Modest dresser. Available: https://www.whowhatwear.com/modest-fashion
- ³⁹ McKinsey. (2019) A closer look at the fashion industry in gulf Cooperation council markets. Available: https://www.mckinsey.com/industries/retail/our-insights/a-closer-look-at-the-fashion-industry-in-gulf-cooperation-council-markets
- ⁴⁰ PWC. (2020) How GCC e-commerce can lay the foundations for sustainable growth. Available: <u>How GCC e-commerce can lay the foundations for sustainable growth | Strategy& Middle East (pwc.com)</u>
- ⁴¹ Iftahy, A., Jham J., Khairallah, S., Lambert, M. (2022) How to win in the Gulf's dynamic consumer and retail sectors. Available: https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/how-to-win-in-the-gulfs-dynamic-consumer-and-retail-sectors
- ⁴² Iftahy, A., Jham J., Khairallah, S., Lambert, M. (2022) How to win in the Gulf's dynamic consumer and retail sectors. Available: https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/how-to-win-in-the-gulfs-dynamic-consumer-and-retail-sectors
- ⁴³ Iftahy, A., Jham J., Khairallah, S., Lambert, M. (2022) How to win in the Gulf's dynamic consumer and retail sectors. Available: https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/how-to-win-in-the-gulfs-dynamic-consumer-and-retail-sectors
- ⁴⁴ Biondi, A. 2022. Business of Luxury lessons: the rise of the Middle East and hope for sustainability. Financial Times. Available: https://www.ft.com/content/0a77a689-a8f9-4247-85b8-e5b35fce7022.
- ⁴⁵ Omairh, M.B. (2022) The Future of Malls In Saudi Arabia Post-Pandemic: How Can Shopping Centers Can Encourage People To Return. Available: https://www.linkedin.com/pulse/future-malls-saudi-arabia-post-pandemic-/
- ⁴⁶ Statista (2021) Data Download facility. Available: https://www.statista.com/
- ⁴⁷ Statista (2021) Data Download facility. Available: https://www.statista.com/
- ⁴⁸ Statista (2023) Data Download facility. Available: https://www.statista.com/
- ⁴⁹ WorldData. (2019) Tourism in Saudi Arabia. Available: https://www.worlddata.info/asia/saudi-arabia/tourism.php
- ⁵⁰ Omairh, M.B. (2022) The Future of Malls In Saudi Arabia Post-Pandemic: How Can Shopping Centers Can Encourage People To Return. Available: https://www.linkedin.com/pulse/future-malls-saudi-arabia-post-pandemic-/
- ⁵¹ Al Abdul Karim. (2022) About Us. Available: https://ak.com.sa/AboutUsEn.html
- ⁵² Al Abdul Karim. (2022) About Us. Available: https://ak.com.sa/AboutUsEn.html
- ⁵³ Al Abdul Karim. (2022) About Us. Available: https://ak.com.sa/AboutUsEn.html
- ⁵⁴ Al Abdul Karim. (2022) About Us. Available: https://ak.com.sa/AboutUsEn.html
- ⁵⁵ Ministry of Culture. (2021) Saudi 100 Brands. Available: https://fashion.moc.gov.sa/en/public-engagements/saudi-100-brands
- ⁵⁶ Ministry of Culture. (2021) Saudi 100 Brands. Available: https://fashion.moc.gov.sa/en/public-engagements/saudi-100-brands
- ⁵⁷ Ministry of Culture. (2021) Saudi 100 Brands. Available: https://fashion.moc.gov.sa/en/public-engagements/saudi-100-brands
- 58 Ministry of Culture. (2021) Saudi 100 Brands. Available: https://fashion.moc.gov.sa/en/public-engagements/saudi-100-brands
- ⁵⁹ Arella, S. (2022) 28 Dazzling Fashion Industry Statistics [2023]: How Much Is the Fashion Industry Worth. Available: https://www.zippia.com/advice/fashion-industry-statistics/#:~:text=Out%20of%20the%20global%20workforce,world's%20clothes%2C%20shoes%2Oand%20accessories
- ⁶⁰ World Bank (2022) World Development Indicators. Databank. Available: https://databank.worldbank.org/source/world-

development-indicators

- 61 World Bank (2022) World Development Indicators. Databank. Available: https://databank.worldbank.org/source/world-development-indicators
- 62 SAMA (2022)
- 63 UN Comtrade. (2022) Data Download facility. Available: https://comtrade.un.org/data.
- ⁶⁴ Kamel, D. (2022). Saudi Arabia launches supply chain initiative to attract \$10.6bn of investments. Available: https://www.thenationalnews.com/business/economy/2022/10/23/saudi-arabia-launches-supply-chain-initiative-to-attract-106bn-of-investments/
- ⁶⁵ Saudi Gazette. (2019) Four scholarships for Saudis announced at Fashion Futures launch. Available: https://saudigazette.com.sa/article/581847
- 66 Khamis, J. (2022) How young Saudis can get a leg up on the competition for studying abroad. https://arab.news/6w5rj
- ⁶⁷ Ahmed, M.A. (2015) Saudi students abroad. https://www.universityworldnews.com/post.php?story=20151208190817896
- ⁶⁸ Taylor, C., Albasri, W. (2014) The Impact of Saudi Arabia King Abdullah's Scholarship Program in the U.S. Open Journal of Social Sciences, 2, 109-118. http://dx.doi.org/10.4236/jss.2014.210013
- ⁶⁹ Saudi Gazette. (2019) Four scholarships for Saudis announced at Fashion Futures launch. https://saudigazette.com.sa/article/581847
- ⁷⁰ Khamis, J. (2022) How young Saudis can get a leg up on the competition for studying abroad. https://arab.news/6w5rj
- ⁷¹ Ministry of Education (2021) Education. Available from: https://www.moe.gov.sa/ar/Pages/default.aspx
- ⁷² Ministry of Education (2021) Education. Available from: https://www.moe.gov.sa/ar/Pages/default.aspx
- ⁷³ Ministry of Education (2021) Education. Available from: https://www.moe.gov.sa/ar/Pages/default.aspx
- ⁷⁴ Nair, A.M. (2022) Saudi's Fashion Commission to establish research center in KAUST. Available: https://www.gccbusinessnews.com/saudis-fashion-commission-to-establish-research-center-in-kaust/
- ⁷⁵ Saudi Green Initiative (2021). His Royal Highness the Crown Prince announces the Kingdom of Saudi Arabia's aims to achieve net zero emissions by 2060.
- ⁷⁶ BBC (2022) Fast Fashion: How clothes are linked to climate change. Available: https://www.bbc.com/news/science-environment-60382624.
- ⁷⁷ BBC (2022) Fast Fashion: How clothes are linked to climate change. Available: https://www.bbc.com/news/science-environment-60382624.
- ⁷⁸ Palacios-Mateo, C., van der Meer, Y. and Seide, G., (2021). Analysis of the polyester clothing value chain to identify key intervention points for sustainability. Environmental Sciences Europe, 33(2).
- ⁷⁹ Indonesia Window, 2022. Saudi Arabia launches program on Hajj Ihram Cloth Recycling. Indonesia Window. Available at: https://indonesiawindow.com/en/saudi-arabia-launches-program-on-hajj-ihram-cloth-recycling/
- ⁸⁰ Alturki, N (2022) Saudi creatives take international center stage at Fashion Futures event in Riyadh. Arab News. Available: https://www.arabnews.com/node/2202176/saudi-arabia.
- 81 BBC (2022) Fast Fashion: How clothes are linked to climate change. Available: https://www.bbc.com/news/science-environment-60382624.
- 82 SABIC. (2023) Our Company. Available: https://www.sabic.com/en/about
- 83 SABIC. (2023) Our Company. Available: https://www.sabic.com/en/about
- ⁸⁴ SABIC. (2023) Our Company. Available: https://www.sabic.com/en/about
- 85 SABIC. (2023) Our technology and Innovation Centers. Available: https://www.sabic.com/en/about/innovation/our-technology-innovation-centers
- 86 SABIC. (2022) SABIC recognized for research excellence, wins R&D award for innovative speciality solutions. Available: https://www.sabic.com/en/news/36818-sabic-recognized-for-research-excellence-wins-r-and-d-award-for-innovative-speciality-solutions
- ⁸⁷ SABIC. (2022) Healthcare. Available: https://www.sabic.com/en/industries/healthcare
- 88 Innovation Textiles. (2020) Sabic Purecares offers solutions for medical disposables. Available: https://www.innovationintextiles.com/sabic-purecares-offers-solutions-for-medical-disposables/
- 89 Selvaranjan, K., Navaratnam, S., Rajeev, P., Ravintherakumaran, N. (2021) Environmental challenges induced by extensive

- use of face masks during COVID-19: A review and potential solutions. Environmental Challenges (3). DOI: 100039.
- 90 SABIC. (2022) Closed loop recycling pilot project for single-use facemasks. Available from: https://www.sabic.com/en/lmages/FRAUNHOFER-SABIC-AND-PROCTER-GAMBLE-JOIN-FORCES-IN-CLOSED-LOOP%20RECYCLING-PILOT-PROJECT-FOR-SINGLE-USE-FACEMASKS_tcm1010-35061.pdf.
- ⁹¹ SABIC. (2022) Closed loop recycling pilot project for single-use facemasks. Available from: https://www.sabic.com/en/lmages/FRAUNHOFER-SABIC-AND-PROCTER-GAMBLE-JOIN-FORCES-IN-CLOSED-LOOP%20RECYCLING-PILOT-PROJECT-FOR-SINGLE-USE-FACEMASKS_tcm1010-35061.pdf.
- ⁹² The World Bank. (2019) How much do our wardrobes cost to the environment? Available at: https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente
- ⁹³ World Economic Forum. (2020) These facts show how unsustainable the fashion industry is. Available: https://www.weforum.org/agenda/2020/01/fashion-industry-carbon-unsustainable-environment-pollution/
- ⁹⁴ Common Objective. (2018) Apparel production: fibre to fabric to fashion. Available at: https://www.commonobjective.co/ article/apparel-production-fibre-to-fashion.
- ⁹⁵ Amed, I., Berg, A., Balchandani, A., et al. (2021) The state of fashion 2021. McKinsey & Company. Available at: https://www.mckinsey.com/industries/retail/our-insights/state-of-fashion.
- 96 Staista.com. (2023) Available: https://www.statista.com/statistics/1094146/global-retail-technology-financing/
- ⁹⁷ Amed, I., Berg, A., Balchandani, A., et al. (2019) The State of Fashion 2019. McKinsey & Company. Available at: https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insights/the%20state%20of%20fashion%202019%20a%20year%20of%20awakening/the-state-of-fashion-2019-final.pdf
- 98 Amed, I., Berg, A., Brantberg, L., et al. (2017) The state of fashion 2017. McKinsey & Company Available: https://cdn.businessoffashion.com/reports/The_state_of_fashion_2017.pdf
- ⁹⁹ Naeem, M., Ozue, W. (2021) Understanding the social consumer fashion brand engagement journey: insights about reputed fashion brands. Journal of Brand Management 28(5): 510–525. doi: 10.1057/s41262-021-00239-5
- ¹⁰⁰ CBInsights. (2021) The future of fashion: from design to merchandising, how tech is rapidly reshaping the industry. Available at: https://www.cbinsights.com/research/fashion-tech-future-trends/.
- ¹⁰¹ Omairh, M.B. (2022) The Future of Malls in Saudi Arabia Post-Pandemic: How Can Shopping Centers Can Encourage People To Return. Available: https://www.linkedin.com/pulse/future-malls-saudi-arabia-post-pandemic-/
- ¹⁰² Hirschfeld, A. (2020) Augmented Reality Is Going Change How You Update Your Wardrobe. Observer. Available: https://observer.com/2020/02/augmented-reality-retailers-asos-gap-smart-mirrors-mobile-apps/
- ¹⁰³ The Insight Partners. (2021) US\$17.86Bn Virtual Reality and Augmented Reality in retail market (by 2028) growth forecast at 24.8% CAGR during 2021 to 2028, COVID impact and global analysis. Available at: https://www.globenewswire.com/news-release/2021/09/15/2297757/0/en/17-86Bn-Virtual-Reality-and-Augmented-Reality-in-Retail-Market-by-2028-Growth-Forecast-at-24-8-CAGR-During-2021-to-2028-COVID-Impact-and-Global-Analysis-by-TheInsightPartners-com.html
- ¹⁰⁴ Amed, I., Berg, A., Balchandani, A., et al. (2019) The state of fashion 2019. McKinsey & Company. Available at: https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insights/the%20state%20of%20fashion%202019%20a%20year%20of%20awakening/the-state-of-fashion-2019-final.pdf
- ¹⁰⁵ Hagel, J., Brown, J.S., Kulasooriya, D., Giffi, C. (2015) The future of manufacturing: Making things in a changing world.

 Deloitte Insights. Available: https://www2.deloitte.com/us/en/insights/industry/manufacturing/future-of-manufacturing-industry.html
- ¹⁰⁶ Hagel, J., Brown, J.S., Kulasooriya, D., Giffi, C. (2015) The future of manufacturing: Making things in a changing world.
 Deloitte Insights. Available: https://www2.deloitte.com/us/en/insights/industry/manufacturing/future-of-manufacturing-industry.html
- ¹⁰⁷ Research and Markets. (2021) Micro fulfillment market for grocery and general merchandise by technologies (autoStore, shuttle based), by warehouse size, by geography forecast to 2026. Available at: <a href="https://www.researchandmarkets.com/reports/5232422/micro-fulfillment-market-for-grocery-and-general?utm_source=Cl&utm_medium=PressRelease&utm_code=dgc5kf&utm_campaign=1487655+-+Global+Micro+Fulfillment+Industry+2020-2026+-+Huge+Investments+in+Start-ups+During+the+COVID-19+Pandemic+&utm_exec=joca220prd.
- ¹⁰⁸ CBInsights. (2021) The future of fashion: from design to merchandising, how tech is rapidly reshaping the industry. Available at: https://www.cbinsights.com/research/fashion-tech-future-trends/
- ¹⁰⁹ CBInsights. (2021) The future of fashion: from design to merchandising, how tech is rapidly reshaping the industry. Available at: https://www.cbinsights.com/research/fashion-tech-future-trends/



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