

Digital textile printing showing growth in domestic apparel market

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Lower lead time, eco-friendly and design flexibility are the major factors driving the growth of digital textiles printing globally.

The Digital Textiles Printing (DTP) commercialized in the early 2000s has revolutionized the textiles printing process in current time. DTP can be defined as any inkjet-based printing designs onto fabrics with the help of a digital-based image. Since its introduction, this technology has witnessed tremendous popularity among textiles printers across the world. It currently represents more than 1.5% of the overall printed textiles market which is expected to be more than 5% by 2020. Worldwide market rising to US\$ 1.88 billion in 2018, more than double its value in 2013.

The applications of DTP technology is segmented into four major categories, namely textiles & clothing, home textiles, soft signage, and others. Soft Signage application is the oldest and largest end-use application of the DTP technology.

The major factor that is driving the growth of DTP is significantly lower time to market as compared to traditional printing methods, eco-friendly process, higher design flexibility, reduced

inventory obsolesces. Traditional textiles printing process takes around 6-8 weeks as against 3-10 days taken by DTP. Therefore, DTP helps textiles printers to eliminate the unnecessary steps and reduce the time in order to stay competitive in the fast-changing fashion cycles, which have also reduced the average run lengths across all the regions.

Furthermore, DTP is also more environmentally friendly process consuming less power and water and leaving minimal industrial waste and CO₂ emissions as compared to the traditional printing process, which makes it an ideal choice for the replacement of the traditional printing process taking into consideration its environmental impacts.

The digital textile industry continued to grow globally through 2017, with machinery sales helping to push the market to around 1.9 billion sq. m of digitally printed fabric globally. China, Italy, India, Turkey and the US continue to dominate, with steady growth rates in some of these large markets. The output volume of digitally printed fabric in these five countries is 47% of the global volume.

The environmental regulations in China, together with high orders in Turkey, had an impact on digital printing

in both those markets. Developing markets such as Pakistan, Bangladesh, Indonesia, which are still small compared to the major markets, became the focus for many OEMs and showed high growth rates, that have helped to compensate for the stability of mature markets.

With digital printing reaching 1.9 billion sqm, its share in total printing industry becomes 5.5% globally. At a regional level, Asia and Europe remain the two largest global regions; the industry continues to grow both inside and outside of these two regions in smaller markets.

From an output point of view, the 2017 data showed that Asia and Europe saw roughly 37% and 38% market shares respectively. Although the output volume of these two regions is very similar, the unit installations are quite different. The number of printers operating in Asia is almost twice as many as in Europe, because of the underdeveloped nature of the markets in this region. However, in particular, China has started to invest in high-end machinery, which will show its impact on volume in the coming years.

The higher growth rates in markets such as Pakistan, Bangladesh, Vietnam, Sri Lanka and other South & Eastern

Asian countries had a significant impact on the region's growth in 2017. Especially Pakistan has been the fastest-growing market, with a 40% increase in the output volume compared to last year.

Some of the commission printing orders of fast fashion brands were moved to East Asian countries because of the high labour cost of China. However, China is still very powerful in the region, having the best quality printing and garment factories. The environmental protection policy of the Chinese government became a driver of new installations, which led to a rise in annual output capacity of 21%. South Korea is another market in the region, which had a difficult year because the export orders moved to China and other Asian countries. Most of the high-speed, super-wide printer installations were seen in the US, China, India and some European countries in 2017.

Digital textile printing in Pakistan

The market for digital textile printing in Pakistan is increasing as it offers better and high definition textile print design possibilities, lower water, effluent,

Table 1: Import of Textile Printing Machinery			
Value: Rs. 000			
Machinery	2017-18	2016-17	2015-16
Ink Jet Printers	423,792	410,516	513,938
Laser Jet Printers	1,114,121	1,005,414	668,106
Flat Bed Printers	5,975	7,593	7,246
Print / Design Machinery	14,340	38,505	3,980
Dot Matrix Printing	286,727	128,578	144,669
Total	1,844,955	1,590,606	1,337,939

Source: Pakistan Bureau of Statistics.

emissions and energy use with an economical production of "short to medium run" prints to the market. The shorter delivery times brings increased savings to retailers and brands as digital printing industry is based on proximity sourcing and just-in-time printing and sourcing strategies. The textile printing has become a concept rather than just an embellishment on an outfit contributing to the style and shape of the garment.

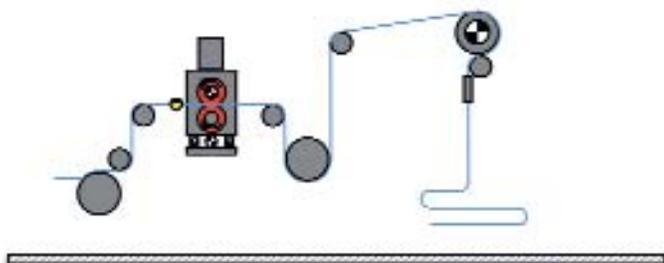
The technological advancements in Pakistan textile printing made the two aspects associated with textile printing -

the design and the printing, more and more interdependent. Today's textile printing technology facilitates precise and exact placing of prints on a garment, thus enabling the manufacturers to decrease or increase the size of the print, modify the background tones, produce optical illusions, print advanced graphics, and offer the best translation of every single design. In the textile industry, the majority of textile printing is done in traditional analogue method but there is a growing interest in digital printing on textiles.



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There are more than 100 digital printing machines installed for the high-end domestic fashion apparel market in Pakistan. If all the smaller sublimation machines and smaller printing facilities are taken into account, the total installed capacity is more than 300 machines in 2017. This ever-growing sector demands new and faster machines. Many conventional textile printers have partially converted their print runs into digital format in order to cater to the domestic retail market. The domestic retail market for women's apparel Pakistan, has a fast-growing apparel sector that accounts for 19% of its exports and firms are competitive with global exporters in terms of prices. It also remains highly concentrated in cotton products.

In this context, the domestic fashion and apparel market has experienced rapid growth, driven by a rise in household incomes and growth in the young population. Import of major types printing machinery in Pakistan increased from Rs 1,338 million in 2015-16 to Rs 1,845 million shown in 2017-18 in Table 1 and country-wise import of inkjet printers are given in Table 2.

Several major textile manufacturers to launch their own fabric and apparel brands in the local market, many of them add digital printing machines to meet the demand for new designs and quality apparel. Fashion designers and factory owners are collaborating with each other to produce designer fabric (lawns). In most cases, the brands hire top fashion designers to design their range of lawn.

Table 2: Country - Wise Import of Ink Jet Printers
Quantity: 000 Number
Value: Rs. 000

Description	2017 - 18		2016 - 17	
	Quantity	Value	Quantity	Value
China	57	182,941	30	136,231
Germany	5	19,498	1	5,496
Indonesia	5	20,291	9	32,836
Philippines	207	99,922	36	173,473
USA	11	38,366	12	34,754
Thailand	6	23,875	1	586
UAE	2	6,388	1	24
All Others	179	32,511	6	27,116
Total	114	423,792	96	410,516

Source: Pakistan Bureau of Statistics.

Lawn fabric is in huge demand in the domestic market and abroad.

Several brands like Gul Ahmed, Khaadi, Nishat, Bareeze, etc. and designers have already opened their outlets in the Middle East, the UK and the US to cater to the demand of affluent Pakistanis and other South Asians, particularly Indians.

In other cases, designers get their stocks produced by mills and sell in the market under their own brands. In certain cases, both the mill owners and designers partner to share profits. Apart from the above-mentioned factors, the entry of qualified, young fashion designers in the market has also helped transform the lawn market and contributed substantially to its growth and expansion by catering to the demand of brand and quality conscious urban middle-class consumers.

The retailers in Pakistan are increasingly aware of the shorter production lead times, proximity sourcing and quick stock replenishment strategies in the local fashion market which will lead to more applications in digitally printed fabrics. Therefore, the digitally produced fabrics have allowed exclusivity of designs and production of smaller lots for higher value addition. The fashion garment industry has emerged as one of the important small-scale industries in Pakistan. Its products have large demand both at home and abroad. The local requirements of fashion garments are almost fully met by this industry. With a population of 201 million people, it is no wonder that the domestic retail market is proving to be the salvation for many textile printers and processors who were producing for the export market in the past. ♦

