Driving a Digital Bangladesh Through High-tech Manufacturing

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IDC Market Note

MARKET NOTE

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EXECUTIVE SNAPSHOT

FIGURE 1

Executive Snapshot: Driving a Digital Bangladesh Through High-Tech Manufacturing

This Market Note presents IDC Manufacturing Insights' viewpoints on considering Bangladesh as the emerging high-tech manufacturing hub. These insights are based on our conversations with key Bangladesh government officials, high-tech industry sector (composed of mobile and laptop manufacturers), and advisory bodies that are expected to aid the growth of the high-tech manufacturing industry.

Key Takeaways

- The Bangladesh government has introduced the "Vision 2021," with the intention of achieving the status of a middle-income economy by 2021 while driving the digital economy road map through focused policy and investment guidelines around the high-tech manufacturing sector.
- Bangladesh has been one of the fastest growing nations in Asia with an annual gross domestic product (GDP) of US$249.7 billion in 2017 at a growth rate of 7.3%.
- The opportunity for mobile phones and laptops in Bangladesh is substantial, and based on estimates from the Bangladesh Mobile Phone Importers Association, about 34 million phones were imported in 2017, which amounted to US$1.18 billion. The laptop market is estimated to be at US$300 million.
- The availability of workforce at a competitive wage structure, domestic market demand, and a favorable policy structure are some of the factors that make Bangladesh an attractive market for high-tech manufacturing. Success stories of manufacturing organizations, such as Walton and Samsung, provide evidence of the support provided by the Bangladesh government in driving the growth of the high-tech industry.
- The government has sponsored several projects around infrastructure upgradations and trainings that can help expedite the efforts required by organizations to set up and scale their respective manufacturing operations.

Source: IDC, 2018

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IDC'S POINT OF VIEW

Situation Overview

Bangladesh has been one of the fastest growing nations in the Asian subcontinent. Based on the World Bank's estimates, the country's gross domestic product (GDP) was US$249 billion with an annual growth rate of 7.3% in 2017. In terms of the absolute GDP split, services accounted for 56.5%, whereas manufacturing accounted for 29.3% in 2017. However, the rising per capita and increasing disposable incomes have resulted in changing consumption patterns around the usage of devices such as laptops and high-end smartphones. Feeding off these new private consumption patterns and with an intention to achieve the status of a middle-income economy by 2021, the Bangladesh government launched "Vision 2021." One of the core objectives of this initiative is to make Bangladesh a destination for global manufacturing and services. From an operational point of view, the government has been looking at ways to encourage the high-tech sector (specifically around mobile phones and laptops) to produce locally either by assembling semi-knocked-down (SKD) or completely knocked down (CKD) goods. Further, the government has initiated a series of policy changes that allows organizations to set up production bases in Bangladesh, with an intention to cater to the domestic and regional demand of neighboring countries, such as Bhutan, India, Myanmar, and Nepal.

Driving the High-Tech Manufacturing Sector: The Opportunity

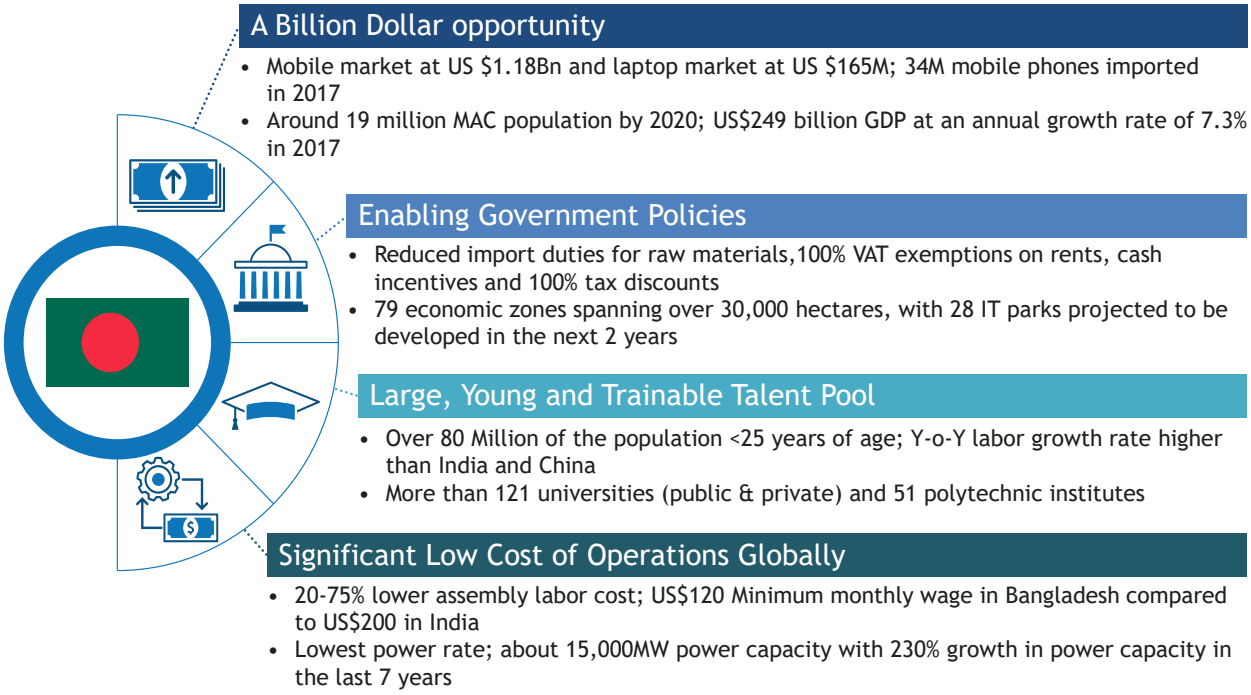
Bangladesh is a relatively young economy. With over 50% of the population younger than 25 years of age, Bangladesh has the advantage of an adequate labor pool that can help drive local high-tech manufacturing efforts. This also drives the growth of smartphones, with an addressable market of over 8 million, accounting for 23% of the overall mobile phone volume. The growing middle class and affluent (MAC) households presents a strong domestic demand and a market for premium goods.

- **Academia and skilled workforce**. With around 121 universities (public and private) and 51 polytechnic institutes, Bangladesh has a robust foundation for developing the future workforce, especially in the field of electrical, electronics, and mechatronics.
- **Incentives and tax holidays**. To support Vision 2021, the government has introduced incentives exclusively for the high-tech industry players, including reduced import duties for raw materials, as shown in Figure 2.

- **Special economic zones for high-tech manufacturers**. To cater to the investment needs of the high-tech industry players, the Bangladesh government has formed a dedicated body called the Bangladesh Hi-Tech Parks Authority (BHTPA). With a view to provide a secure and reliable infrastructure, the Bangladesh Economic Zones Authority (BEZA) has approved several economic zones. Dedicated zones based on specific requests (on equity basis) by governments such as that of India, Japan, People's Republic of China, and Singapore are also under development. Investors are provided with a host of benefits, such as income tax (IT) exemption for 10 years, dividend tax exemption, and duty exemption on exports.

FIGURE 2

Bangladesh High-Tech Manufacturing — Favorable Factors



Source: Bangladesh Investment Development Authority and IDC, 2018

The public–private partnerships (PPP) with infrastructure developers, along with training support offered by the BHTPA, could help high-tech manufacturers set up operations in a smooth and cost-effective manner while ensuring adherence to international standards for facility management.

Existing Player Portfolios and Capabilities

According to a recent World Bank report, Bangladesh has made great strides in attracting foreign direct investments (FDIs), substantiated by the fact that over US$11 billion was invested in the country in 2017. With a view to increase FDI further and improve the overall business environment, the government has rolled out several policies through its regulatory bodies, such as the BEZA, Bangladesh Investment Development Authority (BIDA), the BHTPA, and the ICT Division of the Department of the Ministry of Posts, Telecommunications, and IT. Also, the development of a one-stop investment service portal, which is expected to be launched in the near future, will aid in increasing bureaucratic transparency. Multiple local and international players are operating in Bangladesh. Significant among them are Symphony, Samsung, Huawei Technologies, Transsion Holdings, and Walton. According to IDC's Mobile Phone Tracker 1H18, they combine to hold about 53.2% of the smartphone market share.

Case Study: Global Mobile Phone Brands Assembling in Bangladesh

Through the Fair Group, its channel partner, Samsung has obtained a high-tech manufacturing license and established a 58,000 sq ft assembling factory in Narsingdi. Transsion Holdings, which has been able to aggressively capture around 15% of the market in a year, has set up its plant in Gazipur and has plans of initially catering to the domestic market before looking to export its devices within the next two years. Huawei Technologies, the largest telecommunications equipment manufacturer in the world, has been investing in providing high-quality ICT infrastructure and network enhancement services in the country. Recently, it demonstrated 5G technology in Bangladesh and is planning to set up a laptop assembling factory. Xiaomi has also announced its plans of setting up a mobile manufacturing plant in Bangladesh within the next two years.

Case Study: Walton — Leading the Domestic Manufacturing Efforts

Walton is one of the largest family owned businesses in Bangladesh. Its product portfolio spans refrigerators, air-conditioners, televisions, industrial applications, and precision components, among others. Walton set up its facility in Kaliakair in 1977 and since then has diversified into high-tech products, such as mobiles and laptops. The 50,000 sq ft facility received a provisional license in 2017 to assemble mobile phones locally. Walton has accounted for 9.1% of the overall mobile phone market and around 12.3% of the smartphone market in CY 1Q18. The unavailability of quality component suppliers within the manufacturing ecosystem in Bangladesh poses significant challenges for Walton and led to Walton investing in machinery and processes for producing components, such as fasteners and shrink wraps. Walton also inaugurated its laptop manufacturing facility in early 2018 and has inked a deal to export 500 "Made in Bangladesh" Walton laptops to Nigeria, with plans to expand to countries such as Bhutan, Nepal, and Timor-Leste.

Case Study: Aamra Companies — Creating a Digital Solution

Aamra Companies was founded in 1985, with distribution and maintenance of equipment for the textiles and apparel industry as its primary business. Since then, the conglomerate has diversified into IT and now has partnerships with global tech companies, such as Microsoft, Oracle, Cisco, Tata Communications, Bharti Airtel, Telekom Malaysia, and so forth. The Smart Solutions Division at Aamra Companies started in 2016, with the intention of providing digital solutions to enhance the lifestyle of its customers. It has successfully launched the WE phone. Toward the end of 2017, Aamra Companies has invested in a 61,000 sq ft factory for assembling phones with 6 assembly lines, 4 of which are equipped with 4G calibration. It is also planning to operationalize its 22-assembly line unit in Kaliakar high-tech park by 2019. In terms of long term strategy, Aamra Companies want to remain focused on SKD rather than a CKD based assembly model and does not wish to compete with pureplay manufacturers. Aamra Companies is currently looking at exporting its phones to countries such as Qatar and Singapore through other facilities planned to be set up in South/Central America and China.

Case Study: DataSoft Systems Bangladesh — Emerging Technologies in Developing Forefront Solutions

DataSoft Systems Bangladesh, a local firm working out of Bangabandhu Sheikh Mujib Hi-Tech Park in Bangladesh, has developed an internet of things (IoT) device to solve the water supply crisis in Mecca, Saudi Arabia. The device sends out automated notifications for refilling when the level falls below 10% of the holding volume. DataSoft Systems Bangladesh has also invested substantially in reskilling its young workforce by partnering with Columbia University, thus strengthening the emerging technology ecosystem, which would play a crucial role in the overall high-tech manufacturing value chain.

Factors to Consider for the High-Tech Manufacturing Community

Although the aforementioned sections aimed to highlight the advantages of manufacturing in Bangladesh, there are certain gaps that the government and the advisory bodies are working on:

- **Policy execution and incentive package transparency for the high-tech sector**. To bring increased transparency around policies, the government has been making proactive efforts through industry outreach programs and events that can showcase the larger intent. The Leveraging ICT (LICT) project has been launched by the government in 2013. It continues to bridge the gap between the industry and policymakers, aiming to develop a vibrant ecosystem.
- **High capex**. Setting up a new mobile manufacturing unit would require considerable investments; capital availability and financial assistance are additional challenges that the industry has been facing. Continuous measures have been taken by the government to assuage these challenges. Land, a major component of the capital expenditure, is provided by the government at a subsidized price, whereas the machinery can be imported tax-free. To assuage the liquidity issues, the government has been working closely with financial institutions to reduce commercial interest rates while simplifying the processes involved in disbursements.

- **Skill set availability and technological challenges**. The other major concern, specific to CKD-based manufacturing, is the cost of hiring and retaining experienced engineers and technicians. There is a need for engineers and technicians who are adept at driving activities, such as PCB design and chipset manufacturing. The government has created multiple highly subsidized training programs through instituted bodies, such as LICT. There has been a conscious effort to increase the number of institutes to impart relevant skills and training.
- **Industry ecosystem**. Currently, there are limited options for supporting the ancillary businesses to manufacturing. For instance, the Walton example of producing metal enclosures, fasteners, and shrink wraps by itself is a testament of the limited ecosystem. However, the local ecosystem is expected to improve as the number of factories grow (it has gone up from zero to four in the last year), making it more viable for ancillary businesses to commence operation.
- **Long-term strategy and intellectual property rights**. The government and many of the existing players in the high-tech manufacturing community are keen to move from SKD to CKD manufacturing. The government realizes the increased importance of intellectual property rights (IPRs) as the country moves up the value chain and has been collaborating with other developed nations to bring best practices to improve IPR protection in the country. The ICT division has been actively working toward implementing regulations to protect IPRs, which, in the long run, would be critical to the growth of end-to-end high-tech manufacturing value chains.

Additionally, the government is monitoring the business landscape and engaging with industry players and stakeholders to implement policies that would increase investors' confidence in the long run.

Summary

The opportunity for mobile phones in Bangladesh is substantial, and companies, such as Walton, Symphony, Aamra Companies, Samsung, and Transsion Holdings, have already set up, or are close to setting up, assembly facilities. Furthermore, the recent policies around high-tech manufacturing was instrumental in realizing FDIs of over US$11 billion in 2017. From an operations point of view, the government is aware of the challenges that are required to make Bangladesh a global brand and has been making substantial investments across the complete value chain to develop a next-generation ecosystem. In the long run, the combination of the factors mentioned earlier would aid in making Bangladesh a world-class high-tech manufacturing hub while ensuring it remains an attractive destination for future investments.

LEARN MORE

Related Research

- *Tech Buyer Presentation: Trends in the Philippine High-Tech Manufacturing Sector* (IDC #AP42832217, July 2017)
- *Trends in the Malaysian High-Tech Manufacturing Sector* (IDC Manufacturing Insights #AP42407017, April 2017)

Synopsis

This Market Note presents IDC Manufacturing Insights' viewpoints on considering Bangladesh as an emerging high-tech manufacturing hub based on our conversations with industry players, advisory bodies and government officials.

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