



LightCastle
Partners

BANGLADESH HI-TECH INDUSTRIES

Vision 2030



Executive Summary

Bangladesh's hi-tech industry is gaming forward on the back of following growth **drivers**:

- **Strong Economy Vitals for Tech Products and Services**: Majority of the population of Bangladesh are young and tech-adaptable where **62%+** are **under 35** years. The **Middle class is growing at 10% per annum** to reach **34 million by 2025**. Of the total population, **98%** have mobile phone connection, **more than 62% are on internet**, accounting for **102 million+** individuals with **94 million** mobile internet penetration.
Alongside steady economic growth, the investment to GDP ratio of Bangladesh has grown to **32% (US\$ 96Bn)** in FY 2018-19 from **26% (US\$ 26Bn)** in 2009-10. However, the country's FDI stood at a mere **3% in CY 2019**.
- **Local and Global Initiatives**: Technological infrastructure and network enhancement services, national laptop assembly and mobile manufacturing factories from global giants like Samsung, Huawei and Xiaomi have propelled the growth of the industry in Bangladesh. Notable initiatives from local pioneers Walton, Aamra and Datasoft include smartphone manufacturing and assembly, development of world class IOT devices.
- **Tech Startups attracting FDI**: The Bangladesh Entrepreneurship Ecosystem is at an inflection point with an excess of US\$ 200 million in international investments from big-name corporate investors and venture capitals, investing in industries like FinTech, Logistics, and Mobility over the last four years.
- **Government Initiatives building capacities and fostering Investments**: More than 70,000 professionals from entry, mid and top management levels trained over the last year. Multiple dedicated spaces ranging from 50,000 sq ft. to 62,000 sq ft. allocated for Incubation and Training programs in software parks and universities. In addition, exemptions on Tax, Import Duty and Vat are attracting investments from developers and IT & ITeS firms.
- **Large workforce and price attractiveness are major drivers of growth**: Currently the country's employment stands at 77mn with over 5mn in the apparel sector. While labor wages have risen in China, Bangladesh still capitalizes on lower wage rates. Moreover, Bangladesh has the cheapest industrial electricity tariff among peers

Low productivity and efficiency posing **setbacks** for growth:

- With only **2-4%** of existing factories being able to improve productivity, services, and compliance, the mid level management is still dependent on foreign talent. Currently, labor productivity level in Bangladesh is 77% of China and 15% lower than India

Building global brand perception and strategic partnerships will lead the **way in the Future**:

- Strategic partnerships across platforms can play vital role in gaining international coverage. "Building a brand perception around "Digital Bangladesh" can act as country's brand to gain local and global Hi-Tech demand.

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Overview

Macro Economy, Investment and Sectors





Economic indicators of the past decade suggest growth for the country

164Mn

Population
2019

27.9

Median Age
2019

U\$1,855

GDP Per Capita
2019

U\$299Bn

GDP
FY 2018-19

~6.5%

GDP Growth Rate
Average (2010-19)

U\$3.61Bn

FDI
Average (2010-19)

U\$41Bn

Total Exports
FY 2018-19

U\$34Bn

RMG Exports
FY 2018-19

U\$800Mn

ICT Exports
FY 2018-19

161Mn

Mobile Subscribers
May 2020

102Mn

Internet Users
May 2020

94Mn

Mobile Internet Users
May 2020

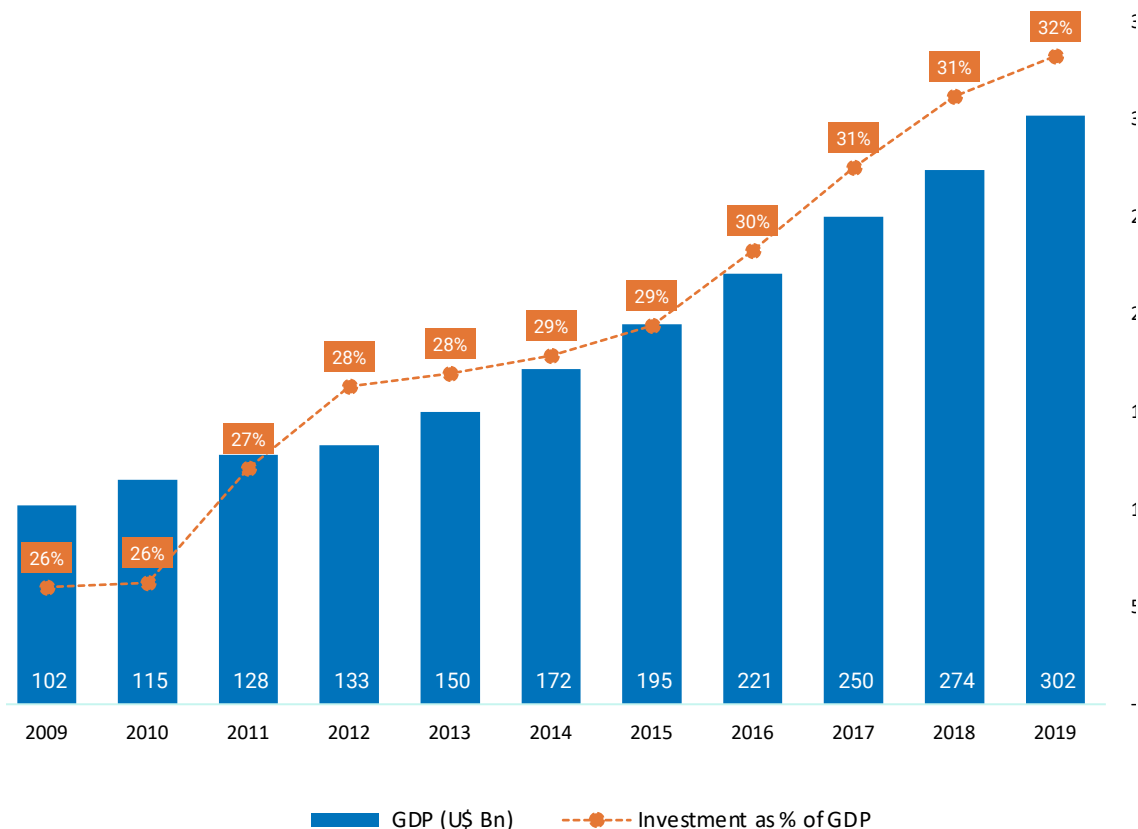
- Bangladesh, the **39th largest economy** and one of the fastest growing countries, showed an impressive annual GDP growth rate of **~6.5%** over the last decade.
- GDP per capita has been growing at rates over **5%** since 2015 peaking at **U\$ 1,855** (as of 2019), which is almost equal to China in 2005.
- The economy is on track in graduating from the **LDC status in 2024** and has made impressive strides in human development. PwC, a global consultancy, also predicts Bangladesh to become the **28th largest economy** in the world by 2030.
- It dominates the **global RMG market in 3rd position**, right after China and Vietnam, earning **U\$ 34Bn** (83% of total export earnings) as of 2019. It's ICT sector is booming, exporting **U\$ 800Mn** worth of service across the globe.
- The country has a population of 164 Mn and has reached 37% urbanization. Connectivity has reached its peak, with **98%** mobile phone connection (**161Mn**) and **62%** internet penetration (**102Mn**) and **57%** mobile internet penetration (**94Mn**).



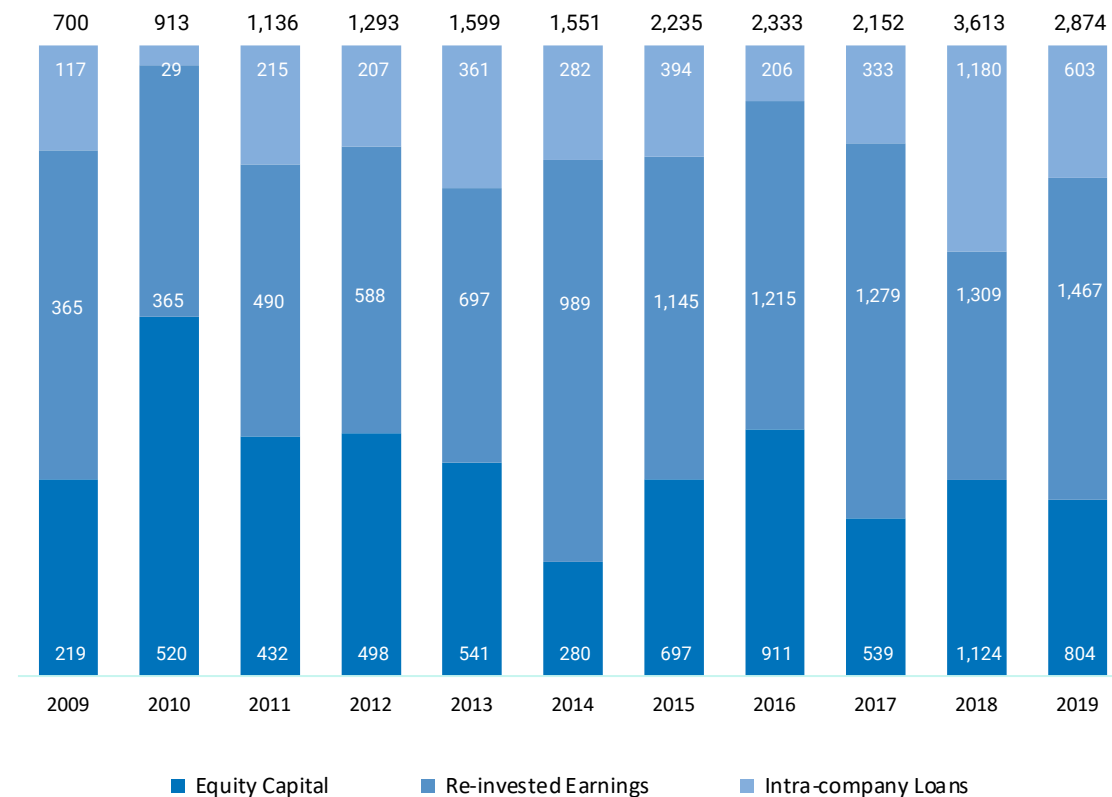
Investment in the country has grown ~4X over the last decade

Alongside steady economic growth, the investment to GDP ratio of Bangladesh has grown to **32% (U\$ 96Bn)** in FY 2018-19 from **26% (U\$ 26Bn)** in 2009-10.

Investment as % of nominal Annual GDP of Bangladesh



FDI Breakdown by Component (U\$ Mn)



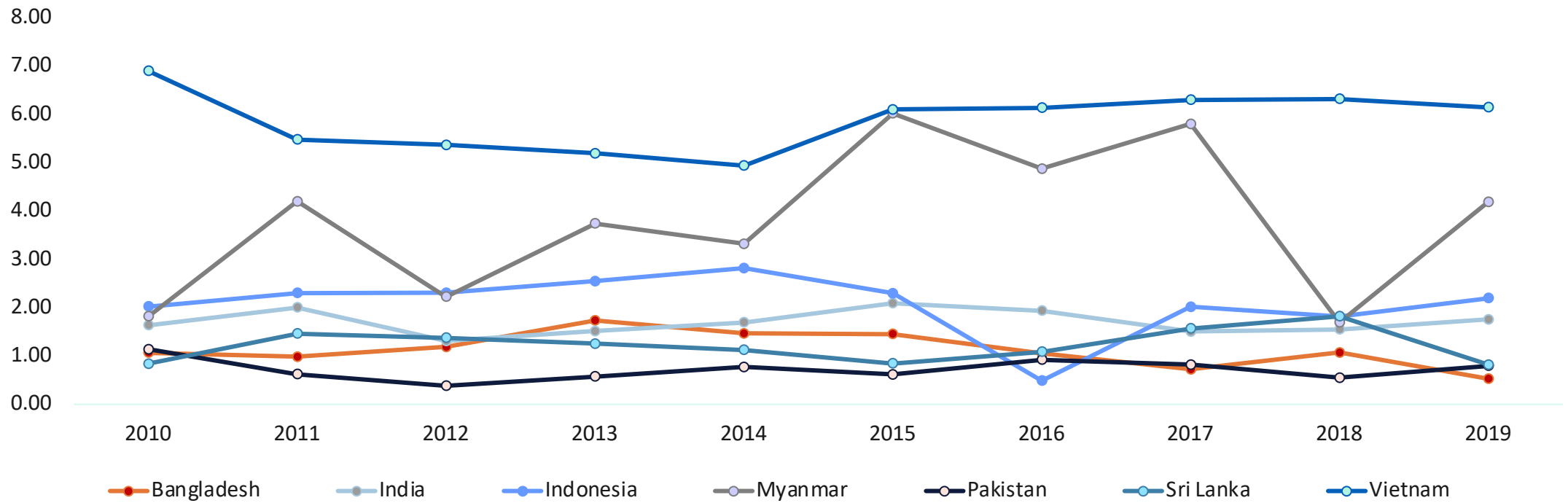
Foreign Direct Investment

Comparison with regional peers



Despite the excellent progress, the country's Foreign Direct Investment (FDI) in CY 2019 stood at a mere **3%** (U\$ **2.87Bn**) of the country's total investment. With policymakers devising policies to attract FDIs, investments are expected to increase in the new decade

Comparison with Regional Peers: FDI as % of GDP



Source: UNCTAD World Investment Report, World Bank Data

Promising sectors for the new decade

findings from the ecosystem



Promising Sectors Derived from Business Confidence Index Study

Fiscal Year 2016 - 17	Fiscal Year 2017 - 18	Fiscal Year 2019 - 20
Power & Energy	▲ ICT & ITES	▲ Pharmaceuticals
ICT & ITES	▲ Agro-Processing	● Agro-Processing
RMG	▲ Pharmaceuticals	▼ ICT & ITES
Pharmaceuticals	▼ Power & Energy	▲ Logistics
Leather Goods (Footwear)	● Leather Goods (Footwear)	▲ Digital Financial Services

- LightCastle Partners annually conducts '**LightCastle Business Confidence Index**' – a study for gauging the business sentiments of private sector leaders across myriad sectors, having a notable contribution to the country's economy.
- This year's study was conducted based on in-depth interviews with **59 business leaders** from March 2020 to April 2020.

 Increased
  Unchanged
  Decreased

Promising sectors for the new decade

Based on sentiments of 59 CXO members



Confidence*	Industry	Rationale
32%	Pharmaceuticals	<ul style="list-style-type: none">Increased health consciousness among the mass and ageing population is expected to drive demand in the future.Bangladeshi pharmaceutical products already meet local demand and are now gaining traction globally
32%	Agriculture and Agro-processing	<ul style="list-style-type: none">Changes in demographics, lifestyle habits and increased urbanization have driven a sea change in how people consume food, burgeoning the demand for convenient, processed and ready-to-eat foods.
25%	ICT & ITES	<ul style="list-style-type: none">Outsourcing can gain traction locally with increased adoption of IT and technology-based solutions, further catalysed by the advent of coronavirus, and the subsequent trend towards digitization of essential services and physical channels/platforms.
12%	Logistics	<ul style="list-style-type: none">With increasing demand for better logistic support, the need for an integrated ecosystem may finally be met, expanding the scope for the sector in the future.
10%	Digital Financial Services	<ul style="list-style-type: none">Although Digital Financial Services are becoming increasingly popular opportunities for financial inclusion and greater scope of development for the industry remain for Bangladesh.

**Percentage of industry experts having confidence in the sectors' future developments*

Sectoral Outline

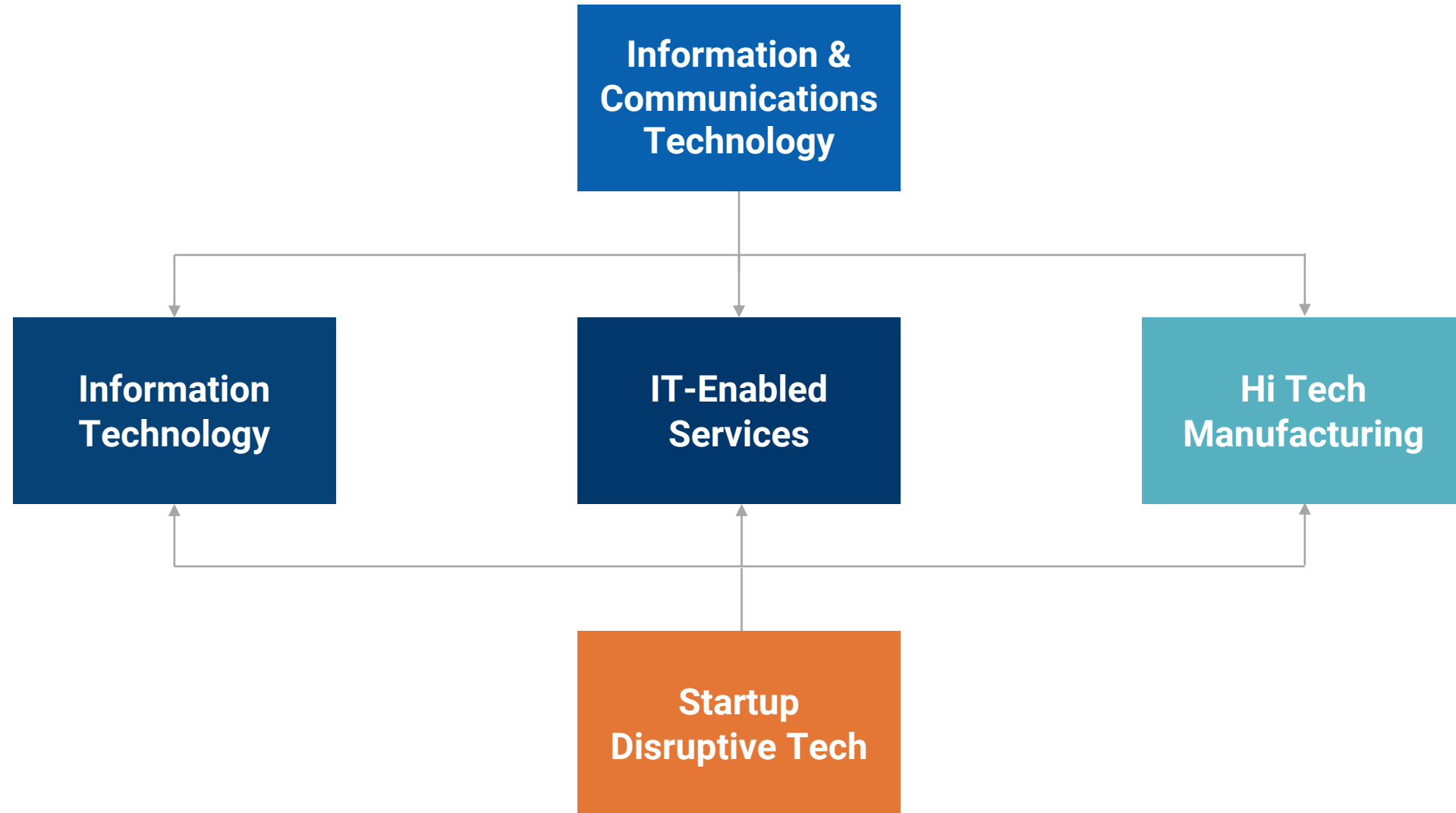
Hi-Tech Industry



Hi-Tech Manufacturing, IT and ITeS Segments










comprise the broader ICT sector – with Startups rapidly disrupting the space



Local Companies Spearheading Hi-Tech Growth

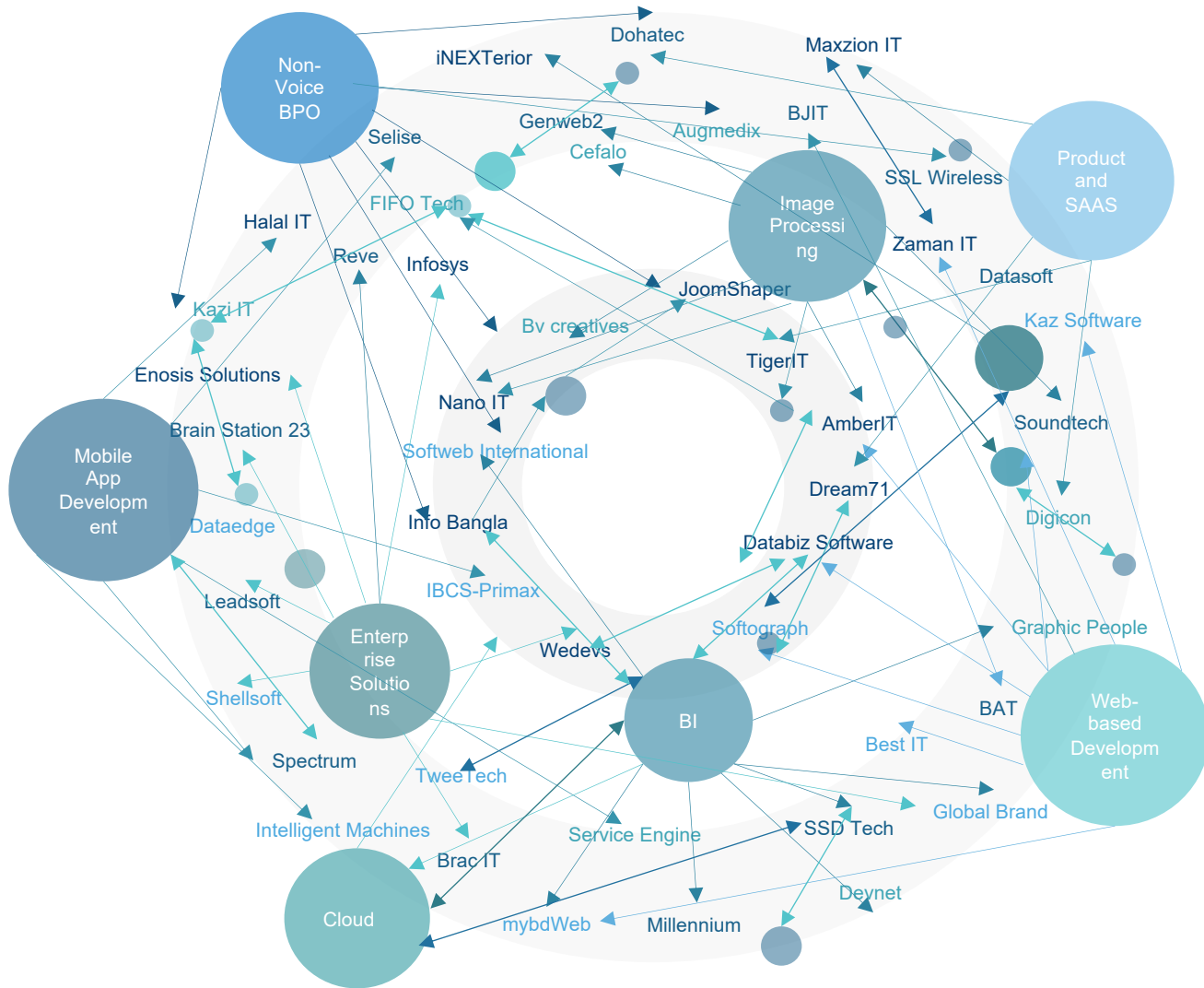
Global manufacturers joined the fray



Origin	Companies	Notable Activities
Global Companies		<ul style="list-style-type: none"> Operating its 58,000 sq. ft. assembling factory
		<ul style="list-style-type: none"> Operating its own plant with 15% market share
		<ul style="list-style-type: none"> Providing technological infrastructure and network enhancement services Planning to set up laptop assembling factory
		<ul style="list-style-type: none"> Planning to set up mobile manufacturing plant
Local Companies		<ul style="list-style-type: none"> Produces & assembles in its 50,000 sq. ft. facility BDT 1 Bn IPO for business expansion & debt servicing
		<ul style="list-style-type: none"> Produces and assembles phones in 61,000 sq. ft. facility Partnered with Microsoft, Oracle, Cisco, Tata, Bharti Airtel & Telekom Malaysia
		<ul style="list-style-type: none"> Developed IoT device to solve water supply crisis in Saudi Arabia

Bangladesh IT-ITES Market

Coming of age



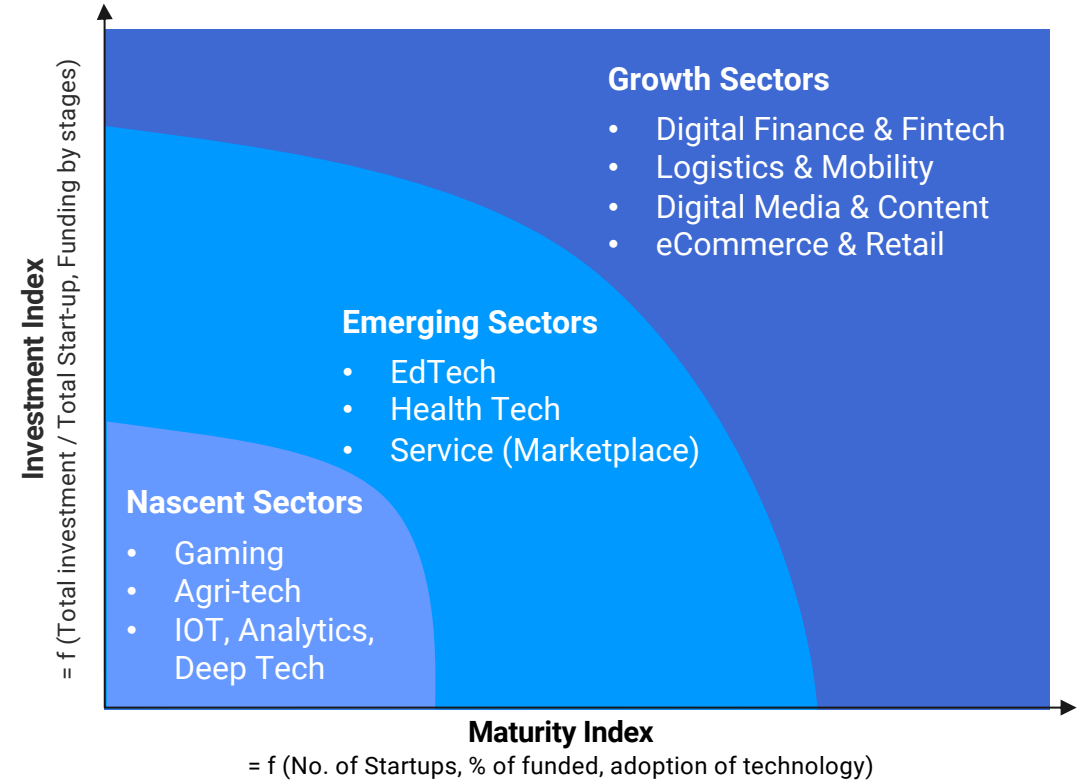
- The government **targets an astounding USD 5 billion** and promises to create employment for around **200,000 people** by 2021.
- The IT and ITES industry of Bangladesh has grown by **40% annually since 2010**.
- The sector, comprising of around **1,200 companies**, has been declared as a **thrust sector by the Government** to meet its goal of being a digital economy by 2021 and a knowledge-based economy by 2041.
- The sector's prospect is being driven by a **young workforce** interested in freelancing and IT, **lower cost for human resources**, **government incentives** including IT-based training and increasing **establishment of IT Parks**.
- The industry enjoys numerous incentives such as **exemption of income tax, value added tax (VAT) and customs duty and 10% cash incentive for exporters**.

Bangladeshi Startups

Rapidly picking up new disruptive technology



Startup Sector Maturity vs Investment



Growth Sectors: Sectors with large funded startup base with the highest adoption of deep-tech coupled with local & global investor attraction

Emerging Sectors: Sectors with medium funded startup base with relatively low-to-high adoption of technology and medium investor interest

Nascent Sectors: Sectors with small startup base with relatively low investor activity

Startup Funding Landscape

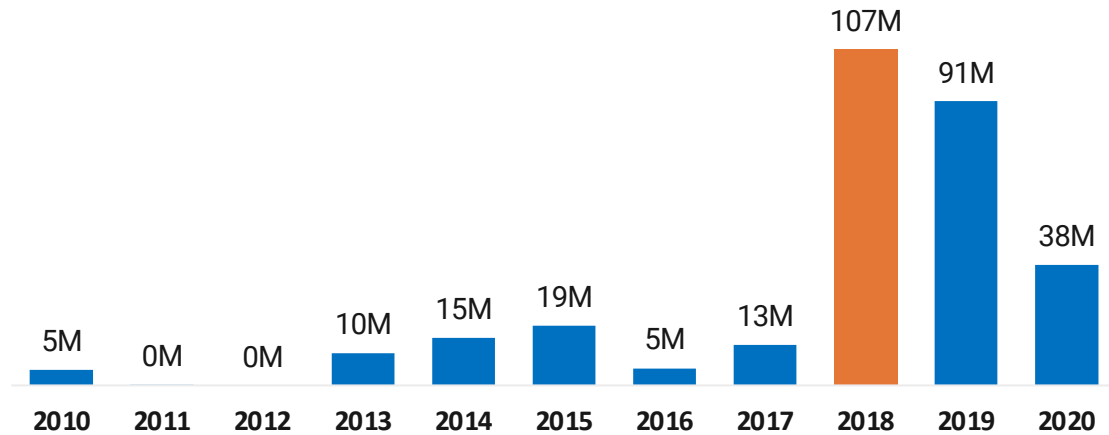
Staying ahead of regional peers



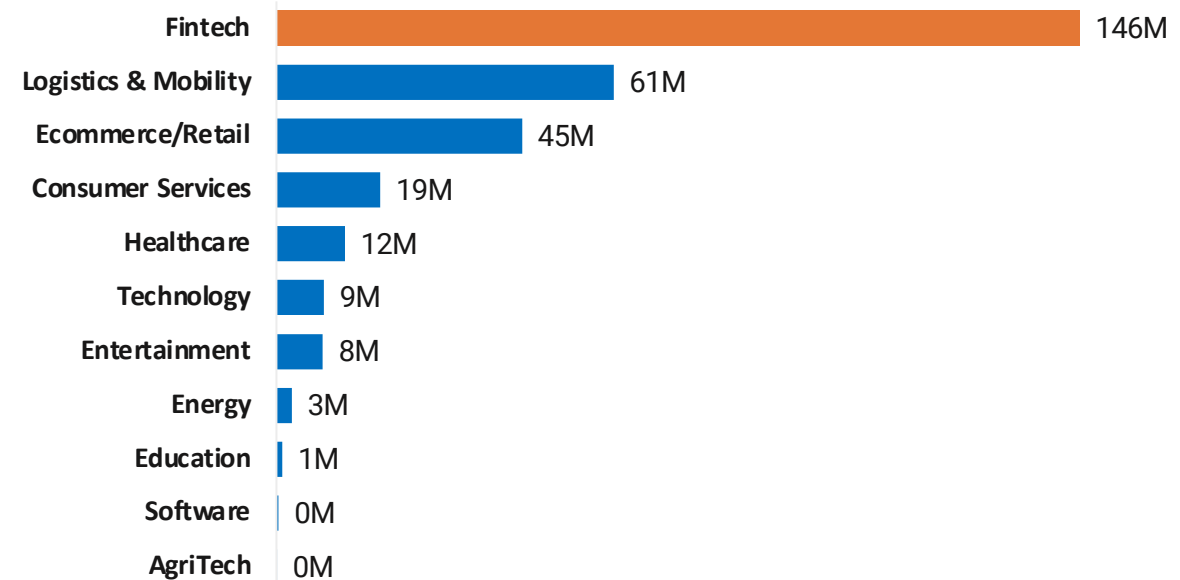
Funded Companies 77	Number of Funding Deals 139	Funding Deals Disclosed 74
Total Funding (USD) 287Mn	Global Funding (USD) 270Mn	Local Funding (USD) 17Mn

Startup funding in Bangladesh is at an inflection point with an excess of **US\$ 200 million** in international investments from big-name corporate investors and venture capitals, investing in industries like **FinTech, Logistics, and Mobility** over the last four years.

Startup Funding Raised (USD Mn)



Investment Breakdown by Sector (USD Mn)



Challenges

Limiting the growth of the sector



Major Hurdles for Growth

Lack of skilled manpower and underdeveloped infrastructure



Country

Talent availability & quality

Infrastructure



Bangladesh



0.3 Mn p.a. with few certifications



WEF Infra Rank: 120



India



6.5 Mn p.a. with IT/ITeS certifications



WEF Infra Rank: 51



Philippines



0.5 Mn p.a. suited to ITeS



WEF Infra Rank: 112



Vietnam



0.3 Mn p.a. to grow the IT sectors



WEF Infra Rank: 85



Sri Lanka



0.03 Mn p.a. with strong certification focus



WEF Infra Rank: 55



P.A: Per Annum | WEF: World Economic Forum

Lack of skilled workers for High Value Products

On 2-4% of existing Factories are able to improve productivity, services and compliance

Lack of skilled middle managers

Middle management is still dependent on foreign talent

Low Labor Productivity

Productivity level in Bangladesh is 77% of China and 15 pp lower than India

Low Labor Productivity

IT/ITeS are yet to pick up high end services



Hindrances in Attracting Foreign Direct Investment

Short-term and Long-term Challenges

<u>Challenges</u>	<u>Type</u>	<u>Details</u>
Short-term Challenges	Regulatory Uncertainty	Bangladesh often fails to keep the promises displaying a lack of coordination owing to bureaucratic tangles that discourage investors.
	Absence of Adequate Policies	The lack of a dedicated comprehensive FDI policy has been an Achilles' heel for Bangladesh. Moreover, the scope of signing free trade agreements (FTAs) is available that remains unutilized.
	Restriction in Profit Repatriation	Bangladesh Bank often creates hurdles in profit repatriation, one of the preconditions of FDI, which is obstructing FDI inflow. This means foreign investors face difficulties to take back their money or dividends.
	High Taxation and VAT Policies	Coping with the competition, the corporate tax rate and VAT policies need to be revised to inject the nation with high FDI inflow.
Long-term Challenges	Lower Rank in Ease of Doing Business Index	The level of convenience of doing business in a host country plays a crucial role in making investment decisions. Bangladesh struggles to gain investors' confidence as it severely lacks in the Ease of Doing Business index by the World Bank
	Underdeveloped Capital Market	Bangladesh's underdeveloped capital market highly contributes to the investment decision of foreign companies as it negatively influences investors' confidence.



Regional Market Competition is getting intense in recent times



Vietnam

- Investment from Samsung, Microsoft, Intel, LG in **chip** and **smartphone manufacturing** and **R&D**
- **14,000** businesses spanning hardware, software, and digital content



India

- Potential to attract **USD 21 bn** investments in the next **5 years**
- **Electronics, aerospace & medical devices** have witnessed the entry of global companies



Sri Lanka

- Launched its modern national **hi-tech training facility** backed by **South Korea** in 2019 investing **USD 26 mn**



Maldives

- Received **USD 11 mn** from ADB to bring in a single electronic platform to improve the speed and efficiency of cross-border control procedures employing the latest in high-tech systems



Malaysia

- By **2025**, it will be able to achieve improved labor productivity, increase manufacturing's contribution GDP, enhance innovation capacity and create more high-skilled jobs through its **Industry4WRD**

Opportunities

What differentiates Bangladesh?

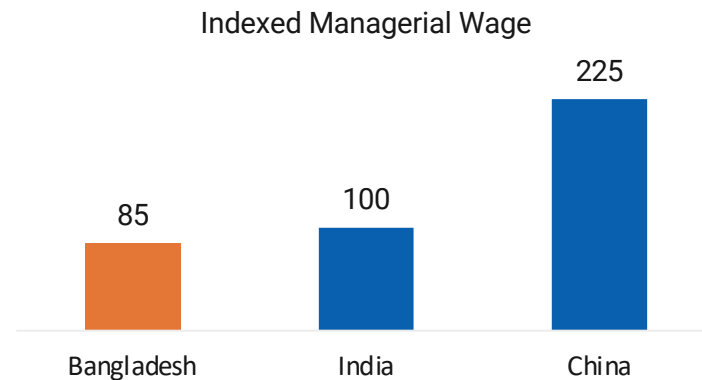
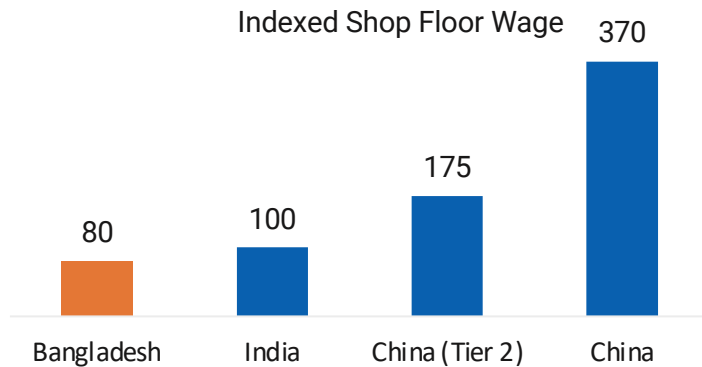


Drivers for Sectoral Growth



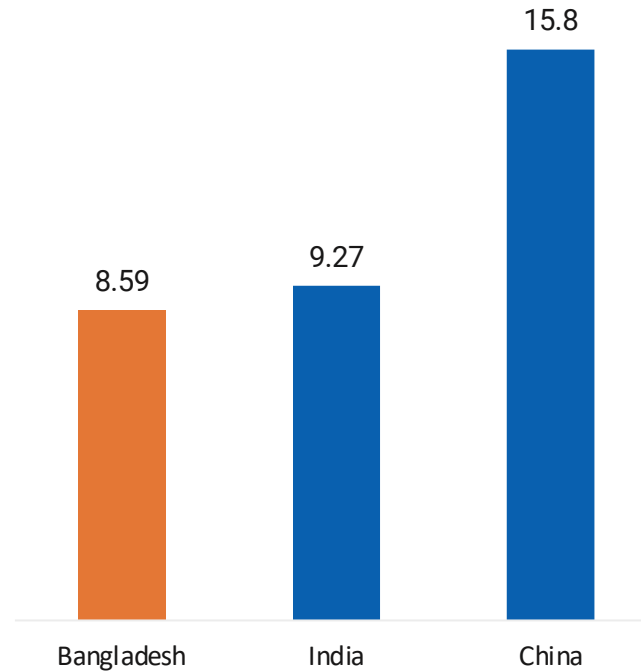
Higher labor supply and cheaper power tariff than peer countries

Low-skilled labor available at 20-70% lower wages



Cheapest industrial electricity tariff among peers

Avg. Industrial Electricity Tariff (¢ / kWh)



Industry growth factors emanating from high labor supply

Large Labor Pool

- Labor force: **77 Mn**
- Employment in apparel sector: **5 Mn**

Price Attractiveness

- Lower wages compared to competitors
- Wages in China have risen

High quality for low & lower-mid apparel

Bangladeshi factories are well-known for supplying good quality and large order sizes

Doing Business Index



Govt. has taken an initiative to become double digit by 2025

Ranking in 2020



The World Bank Group's Doing Business 2020 study ranked Bangladesh **168th** in the global ease of doing business rankings this year from 176th in the previous year.

The government of Bangladesh has undertaken a number of initiatives to improve the ranking :

- **Setting up a new business became less expensive** with the **reduction of registration and name clearance fees** and removal of the **certifying fee for digital certificates**.
- In Dhaka, obtaining an **electrical connection** was made more **efficient** as the city invested in **digitization and human capital**. At the same time, the country reduced the amount of the security deposit required for a new connection.
- **Access to credit information was improved** thanks to expanded coverage by the credit information bureau. This reform delivered Bangladesh's most significant improvement.
- Bangladesh Investment Authority (BIDA) has introduced an **One Stop Service Center** to assist foreign investors.

Infrastructure development in Hi-Tech Parks need to keep up for attracting investments



36

Firms allocated spaces in **Sheikh Hasina Software Tech Park**

62,000
Sq. ft.

Incubator & training centre built in Bangabandhu Sheikh Mujib Hi-Tech Park

15

Firms operating currently in **Janata Tower Software Tech Park**

50

Startups allocated **spaces** and **co-spaces** in Janata Tower Software Tech Park

60,000
Sq. ft.

Laptop assembling factory built in Bangabandhu Hi-Tech City

62,000
Sq. ft.

Incubator & training centre being built in KUET Incubator & Training Centre

2

IoT firms currently operating in Bangabandhu Hi-Tech City

50,000
Sq. ft.

Incubation house being built in CUET Business & Incubator Centre



Skill development initiatives

need to continue fostering investments in Hi-Tech Parks

65,000

Professionals trained in the past year

25

CXO professionals trained in **Hong Kong University**

6,000

Trained under **Support to Development** project

65

Further **CXO** professionals trained by Hong Kong University trainees

1,000+

Trained under the **Mid Level Training Program**

36,000
Sq. ft.

Training house being built in CUET Business & Incubator Centre

4,000+

Young professionals trained under the **Skill Enhancement Program**

17,500

To be trained in Sheikh Kamal Training & Incubation Centre



New Incentive Packages

for Hi-Tech Park investors is competitive than earlier

10
Year

Tax holiday followed by 2-year **tax exemption** for developers

100%

VAT exemption for procurement provider

3
Year

Tax holiday followed by **7-year tax exemption** for IT & ITeS firms

80%

VAT exemption for electricity distributor

3
Year

Tax exemption (50%) for foreign employees

0%

Import Duty for capital machinery

10
Year

Tax exemption (50%) to dividend, capital gain & royalty & technical fees

100%

Ownership opportunity for foreign investors

Destination Bangladesh: How we can attract investments





Increase Focus Towards Creating Global Brand Perception

Alongside capturing local hi-tech demand



**Creating global
brand perception**

Leverage **Growing smartphone and laptop demand**.

Capitalize on **Government incentives and tax subsidy** for value addition in country

Target Investors and Stakeholders including global brands and consumer technologies like Dell, Lenovo, Samsung, Amazon, PayTM and many more.



**Capturing local
Hi-Tech Consumer
Demand**

Strategic partnerships across platforms can play vital role in gaining international coverage

Create advocates from globally acclaimed **Bangladeshis / influential NRBs** to reach out to prospective investors and create positive association

“Digital Bangladesh” can act as country’s brand instead of “Beautiful Bangladesh”

Goal for Bangladesh: Capture Higher Value Addition

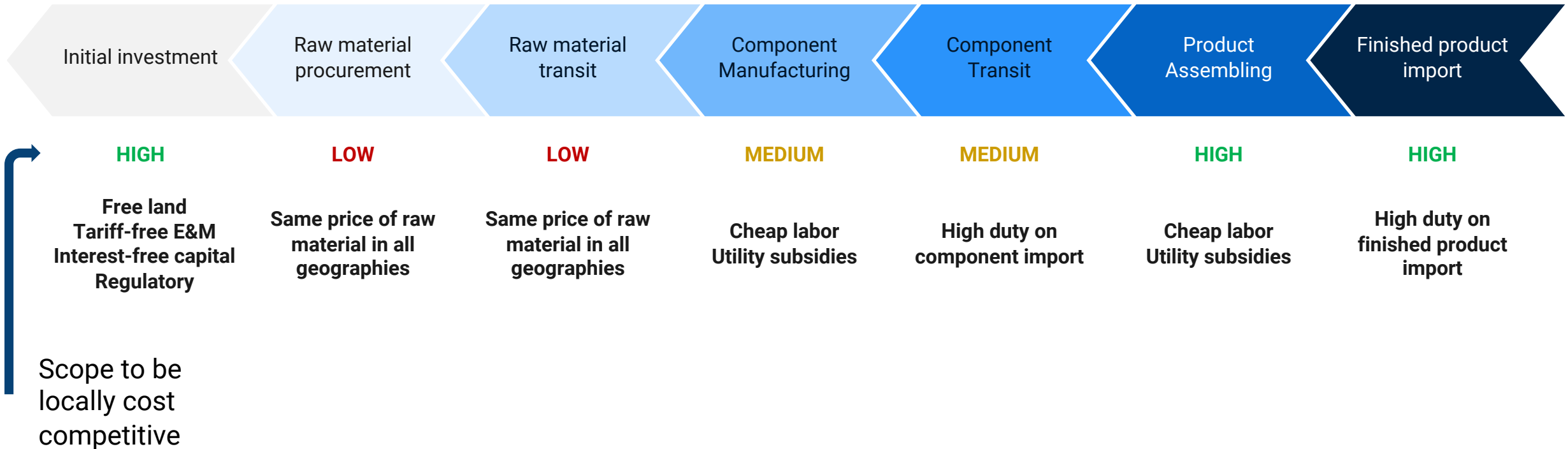


By gradually move towards the left of the manufacturing supply chain

Limited opportunity for localization in the short-term

- **Low duties** on import of components
- Paucity of **skilled workforce** for value-added manufacturing

More **value addition** towards the left



Key Takeaways



Key Takeaway



Takeaway	Details	Impact on Growth
Entrance of Global Payers	<ul style="list-style-type: none"> Following the success of local firms such as Walton Hi-Tech Industries, Aamra Companies, Datasoft Systems, global companies such as Huawei Technologies, Samsung, Transsion Holdings, Xiaomi Technologies have either joined the fray or planning to. 	●
Local hi-tech consumer demand	<ul style="list-style-type: none"> Lack of skilled manpower and underdeveloped infrastructure are major barriers to scale up hi-tech manufacturing in the country. Focus should increase towards capturing local hi-tech consumer demand, moving towards the left of the manufacturing supply chain to capture higher value addition and creating global brand perception. 	●
Consistent Skill & Infrastructural Development	<ul style="list-style-type: none"> Current skill and infrastructural development initiatives from public and private enterprises and hi-tech parks, tax incentives from the NBR need to keep up for attracting foreign investments. 	●
Lucrative hi-tech local market	<ul style="list-style-type: none"> Lucrative hi-tech local market of USD 2.3 billion growing at a CAGR of 24%, high labor supply, cheap power tariff, Government commitment, stable economic growth rate of 6-7% per annum in the last decade – reflect a positive landscape for foreign investors. 	●
Competition	<ul style="list-style-type: none"> Competition in the regional market is getting intense in recent times – with countries such as Vietnam, India, Sri Lanka, Maldives, Malaysia attracting multi-million dollar foreign investment deals for hi-tech projects. 	●
Improve Doing Business Index	<ul style="list-style-type: none"> Improvement in the Doing Business Index will be crucial for Bangladesh to attract foreign investments – as it currently scores below major competitors such as Vietnam, Philippines, India, Sri Lanka in 7 out of 10 factors. 	●
Barriers	<ul style="list-style-type: none"> Lack of skilled manpower and underdeveloped infrastructure are major barriers to scale up hi-tech manufacturing in the country. 	●

● Growth Driver ● Hurdle



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