

# Betting on the Future – The Bangladesh IT-ITeS Industry is Poised for Growth

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### Introduction

Over the past five years, the offshore global IT-ITeS market has grown steadily with an 8.6% CAGR to reach US\$175-180 billion in 2017. Although India and the Philippines have been the most prominent delivery destinations, several next-wave locations have emerged with niche pocket of strengths and unique propositions in terms of cost structures, talent markets, and diverse risk profiles.

Bangladesh, in particular, has seen significant interest from IT-ITeS players in the recent years. The domestic IT-ITeS industry in Bangladesh is currently valued at US\$0.9-1.1 billion and is expected to grow five-fold to reach US\$4.6-4.8 billion by 2025. The industry is witnessing an increase in activity from regional and domestic players alike, with service offerings ranging from transactional IT-Application Development and Maintenance (ADM) and IT-helpdesk, to niche services such as big data analytics, Internet of Things (IoT), 3D imaging, and virtual reality / augmented reality (VR/AR). Leading players such as Wipro, IBM, TCS, NTT Data, and WPP are already leveraging the location through delivery center set-ups and joint ventures with local companies.

The ability to operate at significantly lower costs (20-30% lower than India and the Philippines) is one the key value propositions for Bangladesh's IT-ITeS industry. In addition to lower costs, Bangladesh offers a large entry-level workforce, augmented with a blooming technology services freelancing community. Government authorities have demonstrated strong support to promote the IT-ITeS industry in the country by providing attractive incentives for export-oriented units and focused investments to increase the availability and quality of both physical and ICT infrastructure.

Drawing insights from Everest Group's existing research and combining it with recent interactions with market players, this study focuses on evaluating the current IT-ITeS delivery landscape in Bangladesh, and discusses the on-ground experiences of companies operating in the country. This study also offers perspectives on key enablers and considerations for the IT-ITeS industry in Bangladesh and key roles the location can play in delivery portfolios of global companies.

In compiling this report, we have leveraged the following sources of information:

- Interviews with service providers and enterprises
- Interviews with key stakeholders in the government and enabling bodies including Leveraging ICT (LICT), Bangladesh Computer Council (BCC), Bangladesh High Tech Park Authority (BHTPA), and Bangladesh Investment Development Authority (BIDA), key recruiters, and real estate companies
- Proprietary databases of Global In-house Centers (GICs), service provider delivery centers, outsourcing transactions, operating costs, and talent pool

### Current State of Play in Bangladesh's IT-ITeS Industry

The IT-ITeS industry in Bangladesh, though significantly smaller than offshoring giants such as India and the Philippines, has demonstrated one of the highest growth rates globally indicating a huge untapped potential and increasing interest by investors. The domestic industry is expected to generate revenue of US\$0.9-1.1 billion in 2017 and grow nearly fivefold to reach US\$4.6-4.8 billion by 2025 (see Exhibit 1). This is remarkably higher than the overall growth forecast for either an established peer location such as India (10-13% CAGR for 2017-2020) or an emerging peer location such as Vietnam (12-15% CAGR for 2017-2020).

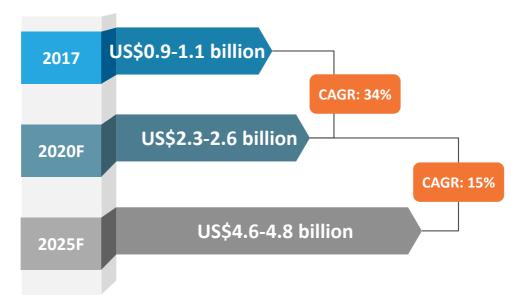
### **EXHIBIT 1**

Bangladesh IT services-ITeS industry domestic market size

Source: BCG. Everest Group (2017)

### Bangladesh IT services-ITeS industry domestic market size

2017-2025F; US\$ billion

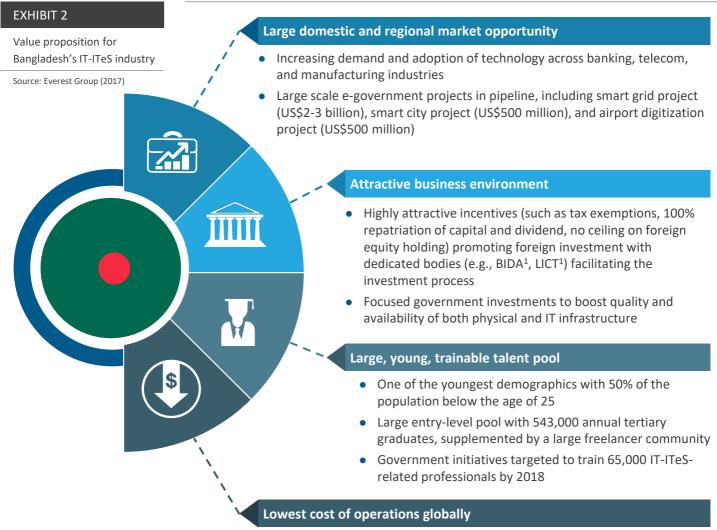


While most of the industry is focused on supporting in-country services, significant number of IT/ ITeS players support global and regional markets. Key source geographies supported are the United States, United Kingdom, UK, Canada, Australia, and the African continent. Further, companies are increasingly developing a strong presence in the Middle Eastern economies, driven by cultural and lingual affinity, and a considerable Non-Resident Bangladesh citizen base which currently resides as expats in these countries.

Bangladesh has already drawn attention from several large and mid-sized service providers, including — Wipro and IBM (present with local subsidiaries serving the domestic market); NTT Data and WPP (present via joint ventures with BJIT and GraphicPeople respectively); and TCS (servicing a large-scale government project). Key industries served by these players include banking, telecom, and manufacturing. The growth of the domestic industry and high focus on "Digital Bangladesh" has spurred sharp progress in the functional and technical knowledge of the resources, especially in next-generation technology skills. Consequently, several product-based companies (such as DataSoft, Reve Systems, and Southtech) have established large teams and emerged as key suppliers for the local and regional industry.

The IT-ITeS industry is majorly focused on IT products and services, with relatively lower emphasis on ITeS / BPO services. Players primarily support traditional IT services such as application development and maintenance, IT helpdesk, and web development; however, there are an increasing number of offerings for next-generation digital services such as big data analytics, Internet of Things (IoT), 3D imaging, and Robotics Process Automation (RPA). Within ITeS services, non-voice services (such as graphic designing, industry-specific BPOs for telecom and financial services, and risk & compliance BPOs) are more prominent for global delivery as compared to voice-based services which are only provided for domestic market.

### **Bangladesh Value Proposition**



- Lowest operating costs among the top 250 IT-ITeS delivery locations.
   Offers 20-30% savings over India and the Philippines
- Cost proposition further enhanced by lucrative government incentives, including 100% exemption on corporate tax and up to 10% cash back on export revenue
- BIDA Bangladesh Investment Development Authority; LICT Leveraging ICT for growth, employment, and governance

### What to Expect in Bangladesh?

### **Burgeoning domestic and regional market opportunity**

"Our company has high interest in Bangladesh after our recent contract successes and are excited by the opportunity to make it a key focus area in future." – General Manager, Strategy and Business Development, Leading global IT service provider

A high domestic demand for IT-ITeS services also strengthens the proposition for global service providers to establish delivery centers in Bangladesh. The domestic market demand is dominated by the public sector given high focus on "Digital Bangladesh" (see Exhibit 3). The government plans to make aggressive investments in large-scale technology projects such as smart grid project, digital connectivity project, smart city project, airport digitization project, and multiple other projects with a combined value of nearly US\$6 billion. These projects are majorly funded by international agencies such as World Bank, Asian Development Bank, and UNDP, and offer a large opportunity for global service providers. Several IT-ITeS providers such as Wipro, IBM, TCS, and Augmedix have already set up delivery centers to tap this opportunity.

"We are actively seeking expansion opportunities into Bangladesh: Readymade garment manufacturing, banking, and public sectors are potential opportunities to explore." – Head of Government & Regulatory Affairs, Leading global IT service provider

Within the private sector, demand is driven by the banking, telecom, and manufacturing industries. The industry demand is equally strong for traditional solutions (such as ERP systems) as well as digital solutions, such as mobile payment systems or big data and analytics, to drive process optimization in the telecom sector.

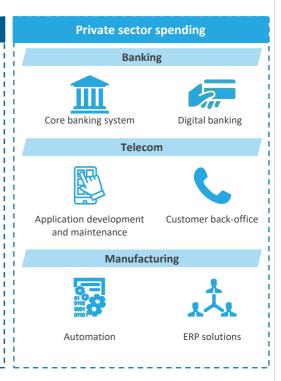
In addition to the domestic market, several players support services for the regional market, including Bhutan, Myanmar, and Nepal. These services mainly comprise software solutions for banking (e.g., traditional ERP, microfinance, and Islamic banking solutions) and insurance clients.

### **EXHIBIT 3**

Key opportunities across public and private sector

Source: Government of Bangladesh, Everest Group (2017)

# Public sector spending Smart grid (US\$2-3 billion) Digital connectivity (US\$550 million) National IT backbone Airport digitization (US\$360 million) (US\$360 million) National data center Machine readable State Banks (US\$190 million) passport (US\$180 million) (US\$150 million)



"The strengthening IT

population makes Bangladesh a strategic

- Founder & CEO,

**Augmedix** 

infrastructure and young

option for future growth"

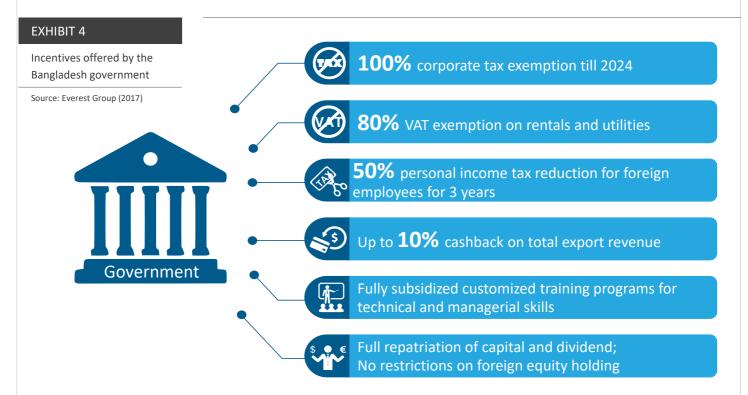
### Attractive business environment with pragmatic government support

Bangladesh's pro-investment government has made significant progress in putting an enabling ecosystem for the IT-ITeS industry. Key initiatives include:

- Setting up of 25 high-tech parks and software technology parks across the country
- Increase in power generation capacity to 15,000 MW (400% growth over seven years)
- Operational tier-3 datacenter and ongoing construction of a tier-4 national datacenter
- Addition of 1,300 GBPS Internet bandwidth through submarine cable SEA-ME-WE-5 and 12 ITC connections adding nearly 400 Gbps
- Plans to launch metro rail system in Dhaka to tackle high congestion levels

"Nearly 100 professionals were sent abroad for nine-month long IoT training, and the entire program was sponsored by government" – COO, DataSoft Systems

Moreover, the government offers a plethora of incentives to facilitate industry growth and make Bangladesh the destination of choice for IT-ITeS services in Asia. These include a mix of both tax- and training-related incentives (See Exhibit 4). Leading domestic companies have leveraged these incentives to train their local resources on next-generation themes such as Internet of Things (IoT). Multiple initiatives have also been undertaken over the last three years to enable enterprise competitiveness, funding access, enabling innovation, and industry promotion. Such initiatives are expected to further increase in the coming years



# Large, young, and trainable talent pool supplemented with a blooming freelancer community

"You can find hundreds of graduates in a fraction of money only in Bangladesh." – Director, Bangladesh's leading IT exporting company

With more than half the population below the age of 25 years, one of the youngest populations globally, Bangladesh has a high number of students graduating from its universities every year. Total university enrollment has nearly doubled in the last decade, surpassing 1.6 million in 2016. This is driven by government's firm focus on development of the ICT industry and increasing establishment of private universities.

With 38 public and 92 private universities, Bangladesh churned out 543,000 tertiary graduates¹ in 2016-17. Of the total pool, nearly 16,000 have IT-related degrees, and 126,000 have business-related degrees. At a city-level, Dhaka has the highest concentration of talent with 63,000-67,000 tertiary graduates annually, which is higher than several competing global services destinations (see Exhibit 5). Dhaka's local talent pool is further amplified with the migration of talent from other parts of the country.

### **EXHIBIT 5**

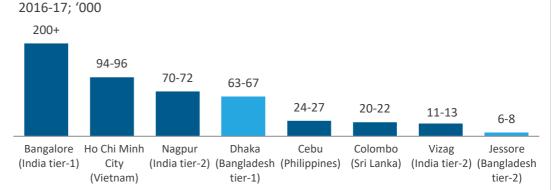
Entry-level talent pool comparison with peer locations

Source: Everest Group (2017)

"The biggest strength in Bangladesh is the young dynamic workforce. They can be trained easily and fit the sector needs." – Chief Executive Officer, Bangladesh IT exporting company

"We invest nearly
BDT40,000-50,000 per
student as part of our
training programs for the
corporates, and invite
trainers from reputed
institutes such as Indian
Institute of Management,
Ahmedabad and Indian
Institute of Technology,
Delhi" – Project Head,
Bangladesh Computer
Council

### Annual tertiary graduates across all education streams



Bangladesh also offers a thriving community of freelancers primarily supporting U.S. and UK clients. The Oxford Internet Institute ranks Bangladesh as the world's second largest supplier of online freelancer talent. Existing companies leverage this experienced pool for sourcing talent, as well as meeting seasonal demand for requirements such as software development and testing, web development, document editing, and creative and multimedia support.

Another differentiating factor is the low competitive intensity in Bangladesh, which has led to significantly lower attrition rates as compared to peer competing locations. Leading domestic players experience 10-12% annual attrition for IT services and 15-18% attrition for BP services.

Furthermore, the government is putting in place multiple initiatives to enhance the quality of IT-ITeS talent and train nearly 65,000 people till 2018. Key ongoing initiatives include the following:

- Top-up IT training program covering 10,000 IT and science graduates for IT-specific training
- ITeS foundation skills program targeting 20,000 non-science graduates for ITeS-training
- Mid-level management training program plans to build 1,500 future leaders for the IT-ITeS industry by training existing mid-level managers
- Industry association skills training program covering 23,000 and 6,000 youths for extensive IT and ITeS training programs, respectively, with specialist tracks
- In addition, there are skill enhancement training programs (targeting 3,500 youths) run by LICT and BHTPA
- 1 Tertiary graduates includes undergraduate degrees only; excludes postgraduates, vocational graduates and diploma/certificate holders

# Lowest cost of operations for service delivery globally, with 16-20% savings over Bangalore

"Employee readiness to work and unmatchable costs are the ultimate drivers for the Bangladesh market. We have been able to achieve 25% lower costs than India." — Director, Bangladesh's leading ITeS company The global offshore services industry has long focused on maximization of cost savings and continually increased leverage of locations providing the next-wave of savings. Amongst the top 250 IT-ITeS delivery locations, Bangladesh is the lowest-cost destination offering significant savings over any of its counterparts. Everest Group's analysis of total operating cost (including salaries, benefits, facilities, telecom, technology, and operating overheads) indicates that Dhaka (Bangladesh) is 16-20% less expensive than Bangalore (India) and is nearly 30% lower than Cebu (Philippines) for IT services (see Exhibit 6). The cost proposition is as attractive for ITeS / non-voice business processes, with 18-22% savings over Bangalore (India). Difference in operating costs is primarily attributed to lower compensation costs and cost of living. With the completion of multiple high-tech parks and increased office space, office rentals in Bangladesh are expected to further reduce by up to 40% in the next two years, adding to the cost competitiveness of the location.

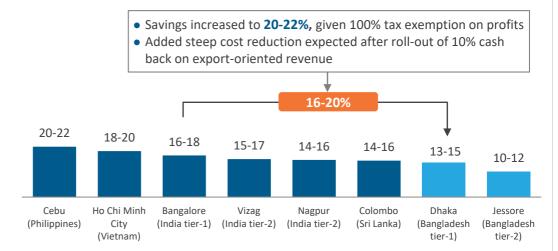
### **EXHIBIT 6**

Operating cost comparison with peer locations

Source: Everest Group (2017)

### Annual operating cost per FTE for IT services<sup>1,2</sup>

2017; US\$ '000



Bangladesh's cost proposition is further strengthened with the impact of attractive government incentives, including 100% corporate tax exemption (till 2024) and 80% VAT exemption on utilities (such as office rent and electricity). In addition, the government plans to offer up to 10% cash back on the total export revenue to attract investment from global companies in the IT-ITeS sector.

While 90% of the global IT-ITeS delivery operations are currently concentrated in Dhaka, tier-2 cities such as Jessore, Rajshahi, and Kaliakoir also have well-developed local economies and provide access to sizable talent pools. Players considering tier-2 locations in Bangladesh will benefit from an early mover advantage and an additional 20-25% lower costs than Dhaka, however; infrastructure-related risks (such as uninterrupted power and internet connectivity) will be relatively higher.

- Blended, market-average operating costs for steady-state global services operations and excludes impact of incentives and capital expenses related to set-up, transition, and expat costs
- 2 IT represents application development and maintenance

### **Success Stories**

"With Reve Systems as our proven technology partner, we can now offer next-level customized support to our semi-wholesale clients. In fact, we expect our new customer sign-ups to increase up to 40% next year." — Leading global telecom service provider

### Overview:

Reve Systems, a Bangladeshi software solutions company, created a bespoke internet telephony mobile app for a leading global telecom service provider

### Impact:

- The unique seamless app helped client reduce bandwidth utilization for voice calls (from 32 kbps to 13.5 kbps) with pronounced cost savings of 20% relative to its previous offshore vendor
- With the launch of new app, the client witnessed 20% improvement in customer retention, nearly 30% increase in new customer sign-ups and a notable upsurge in CSAT
- Further, collaborative support from the Bangladeshi team helped client shorten its reaction time from 12 months to two months for large scale product changes
- The team's agility also enabled the client to enter new business segments both in terms of new geographies, resulting in five-fold additional business opportunities, and new customer segments (from retail to the semi-wholesale segment)

What sticks in my mind is ServicEngine's eagerness to do a great job and to please the client. I don't think you see that in the industry across the globe today. I've been around the BPO space for 15 years and there's a seamlessness that occurs with ServicEngine - from sales to account management to operations to service." -VP, Marketing, Leading **US-based risk and** compliance BPO

### Overview:

ServicEngineBPO (SEBPO), a US-Bangladesh joint venture firm, provides ongoing support to a US-based conglomerate firm in streamlining customer background verification process. The firm has been named to the IAOP's "The Global Outsourcing 100" consistently since 2014

### Impact:

- The client has been leveraging the Bangladesh team since 2008, after testing with multiple underperforming solutions provided by previous global vendors. SEBPO team has been consistently outperforming the predefined SLAs and delivering more than 99% risk and compliance accuracy
- Further, the team has been offering substantial flexibility in scaling of the workforce to tackle unpredictability of the client's work. This has resulted in expansion of the client dedicated team at SEBPO by 45% in two years

"We indeed feel privileged that our client continues to trust us with its largest global activation projects." – Managing Director, GraphicPeople

### Overview:

GraphicPeople, a Denmark-Bangladesh joint venture firm, has been providing support to a US-based technology giant for production of its business catalogues since the past 10 years

### Impact:

- The Bangladesh team acts as the client's centralized EMEA operations hub, operating in multiple shifts to provide 24/7 coverage. They produce 336 units of 24-page client's business catalogues in 14 languages for 12 countries every month
- In addition to reaping significant cost savings and improved centralized quality control, the client has been able to achieve 30-33% reduction in time-to-market along with 25% increase in productivity

"Our product has brought a revolutionary change to day-to-day operations of microfinance sector. Our expert team conducts a deep-dive demand-supply analysis to localize the product for different countries, and ensuring compliance with local credit authorities at the same time." — COO, DataSoft Systems

### Overview:

DataSoft Systems, a Bangladesh-based CMMI level 5 software firm, has been assisting about 100 clients across seven countries in Southeast Asia and Africa with its predictive analytics-based microfinance management solution

### Impact:

- The locally-developed solution's multi-layer security checking has enabled clients to identify potential defaulters with more than 80% accuracy, which is significantly higher relative to others available solutions in the market
- Further, post implementing the solution, clients have been able to achieve up to 70% reduction in operational costs along with 50% increase in HR management efficiency

"Southtech stands out in its professionalism and experience and has became the offshore vendor of choice. They provide us much better service at a much lower cost." – Director, Leading US-based pharmaceutical

### Overview:

SouthTech, a Bangladeshi CMMI level 5 player, assisted a leading US-based pharmaceutical firm to identify duplicate and dishonest volunteers for clinical drug trials

### Impact:

- The Bangladeshi company developed a robust transparent solution, first of its kind, which could authenticate previously unverifiable trial eligibility within five minutes. This helped client break-even and reap profits in a convincingly lower time-frame of 12 months and save multi-million dollars
- As compared to the client's previous offshore vendor, Southtech offered significantly higher cost savings with better Standard Operating Procedures (SOPs) and Project Management Practices (PMPs)

### Some Challenges Will Need to be Considered

"While we were initially apprehensive about the location, our operations have never been affected in the past five years. No downtime at all!" – U.S.-based client of a Bangladesh service provider

"Even if a new company wants to set-up a 500-FTE center supporting Artificial Intelligence technology, the government will sponsor the entire training program." – LICT Project Head, Bangladesh Computer Council

"You can easily scale up to 200-400 FTEs at the base level in Bangladesh, however, finding 1,000 'right' FTEs for your organization might be challenging." – Director, Bangladesh IT-ITeS Player

## Limited availability of world-class IT-ITeS Infrastructure. Situation expected to improve in two to three years after completion of high-tech park projects

Access to well-developed infrastructure facilities and uninterrupted power supply remains one of the key concerns for Bangladesh. Although the situation has improved significantly in the last five years, companies usually set up in-house back-ups for electricity and create multiple redundancy arrangements for Internet connectivity. Infrastructure issues are likely to further reduce, given ongoing government efforts and plans to develop high-tech parks. Currently, Bangladesh has one operational high-tech park in Dhaka, and two parks are nearing completion in Jessore and Kaliakoir, and 20 more facilities are planned across the country. These facilities are expected to offer cost-effective uninterrupted supply of power and Internet, and government support for sourcing talent. Most of the upcoming high-tech parks are expected to be operational by 2019-2020, also resolving the temporary shortage of Grade-A office space.

# Talent needs to be trained given scalability concerns, government offering up to 100% reimbursement for training programs

As the IT-ITeS sector in Bangladesh is growing rapidly, there is a shortage of ready-trained talent. Most of the companies plateau around 300-400 FTE scale and leverage the freelancer pool to handle overflow volumes. To build this pool internally, companies usually invest in training programs, especially for next-generation digital skills. The government is actively supporting companies in training initiatives and incentives for full reimbursement of training programs (both customized as well as standard programs) are readily available. Further, nascent market conditions are likely to be challenging in terms of availability of middle-level management, experienced resources, and presence of ancillary services (e.g.,

recruiters and training providers); companies may need to relocate managerial staff from

other offshore locations such as India to Bangladesh during initial years of operation.

### Intellectual Property (IP) and data privacy issues

The legal and regulatory environment in Bangladesh is currently less favorable for IT-ITeS market as compared with that in offshoring giants such as India and the Philippines. Bangladesh is at rank 129 out of 138 countries on WEF's IP protection index. While the country is well-protected by virtue of the Information & Communication Technology Act 2006, potential exists to tighten the IP protection regime. This is likely to get resolved through upcoming legislation, which has become increasingly important in light of the "Digital Bangladesh" initiatives.

# Moving Forward, Bangladesh has the Potential to Play Multiple Roles in the Service Delivery Portfolios of Global Companies

Companies evaluating Bangladesh as a service delivery location can leverage its large domestic market potential, lower cost of operations, and large talent pool in many ways:

### **EXHIBIT 7**

Roles that Bangladesh can play

Source: Everest Group (2017)

### **Hub for regional and domestic market delivery**

- The domestic market is poised for remarkable growth, given aggressive IT spending by government and private sector further pushing the case for Bangladesh as a mid-sized hub
- By virtue of offering a skilled IT workforce, Bangladesh is likely to solidify its position as a hub for service delivery to Asian companies in a nearshore construct



# Low-cost spoke complementing existing India/Philippines service portfolio

- With 16-20% cost savings over offshoring giants such as India and the Philippines, Bangladesh presents a great opportunity for companies with an existing delivery hub in Asian locations to set up a spoke
- The spoke, in addition to complementing skills and processes, may also be used to mitigate business continuity risks

Key roles that
Bangladesh can play in
service delivery
portfolios of global
companies



### CoE for microfinance, Islamic banking, and graphic design

- Bangladesh, the birthplace of the global microcredit movement, is ideal to play the distinctive role of a Center of Excellence (CoE) for microfinance and Islamic banking operations globally
- Several instances of existing players successfully hosting centralized microfinance and graphic designing operations



- Bangladesh offers an attractive opportunity for large global providers and enterprises to partner with domestic specialists for niche service offerings, especially those related to emerging technologies such as IoT, big data analytics, and Virtual Reality / Augmented Reality
- Multiple instances of leading global companies such as WPP and NTT Data collaborating with local specialists to avail this opportunity

### Conclusion

Bangladesh offers a compelling blend of quality talent at low costs with a risk profile much lower than commonly perceived. The proposition is further accentuated with pragmatic government support to boost foreign investments. Bangladesh has positioned itself as a strong contender for companies appraising locations for the next wave of cost arbitrage. There are certain challenges regarding infrastructure, talent scalability, and data protection; however, the government and industry have adopted bold measures to assuage their impact and create a harmonious ecosystem for the growth of the IT-ITeS sector. It is important for companies considering Bangladesh to understand the nature of risks that exist, and how they compare with other peer emerging locations, in order to make an informed decision based on the ability to manage or mitigate such risks.

### **About Everest Group**

Everest Group is a consulting and research firm focused on strategic IT, business services, and sourcing. We are trusted advisors to senior executives of leading enterprises, providers, and investors. Our firm helps clients improve operational and financial performance through a hands-on process that supports them in making well-informed decisions that deliver high-impact results and achieve sustained value. Our insight and guidance empowers clients to improve organizational efficiency, effectiveness, agility, and responsiveness. What sets Everest Group apart is the integration of deep sourcing knowledge, problem-solving skills and original research. Details and in-depth content are available at www.everestgrp.com.

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