ACCELERATE PH

FUTURE-READY

ROADMAP 2022

The Philippine IT-BPM Sector

Executive Summary
GLOBAL IT-BPM SECTOR ASSESSMENT

The complex business and technology landscape, as well as fast-evolving regulatory requirements, is driving enterprises to engage partners that can tap into innovative tools and technologies to deliver business process efficiencies on a global scale at competitive prices. The Information Technology and Business Process Management (IT-BPM) sourcing sector continues to take the lead in transforming businesses by leveraging IT-enabled solutions to adapt to an increasingly demanding market.

Over the past 30 years, the global IT-BPM sourcing sector has grown from offering low-end, unstructured single-focus services to a multi-billion dollar market, providing multiple services and capabilities to clients from all over the world. The sector has shifted from being a cost-cutting platform for clients to a comprehensive strategic business model offering sophisticated services promising to deliver value, drive innovation, reduce risk, and gain a competitive advantage.

Today, almost one-sixth of the global IT-BPM sector is outsourced, with the sector expanding by more than five times in the past decade. In 2015, the sector generated US$166 billion in revenue globally and is forecast to increase to US$250 billion by 2022. Of the global IT-BPM sourcing market for 2015, IT Services global sourcing accounted for nearly 60%, while 40% came from BPM global sourcing services.

Exhibit 1: Global IT-BPM Market Assessment

From a stakeholder perspective, suppliers or service providers are undergoing significant transformation from being a single-service provider to developing expertise in multiple services and capabilities across diverse verticals. Among the larger service providers primarily, it is often difficult to distinguish the particular services each company offers since most are involved in voice, non-voice, and ITO services. IT-BPM operators are also shifting from a static business model towards a more agile, non-linear business model incorporating outcome-based pricing. In addition to offering vertical-specific solutions
and providing domain expertise, operators are integrating new technologies such as social, mobility, analytics, and cloud (SMAC) architecture and robotics process automation to continually add value to their customers.

Countries are increasingly eyeing a larger slice of the lucrative IT-BPM sourcing sector taking into consideration potential for investment inflow and employment opportunities. We categorize the destinations into three groups: Leaders, Alternatives, and Emerging or Developing players.

**Exhibit 2: Competitive Positioning of IT-BPM Centers**

India and the Philippines are global leaders in the IT-BPM sector and remain at the forefront of voice and non-voice BPM as well as IT services. China and Mexico can be classified as alternative participants that are maturing in terms of capabilities and service offerings. Emerging players encompass six IT-BPM destinations: Chile, Brazil, and Poland, which are seen as strong regional participants, while the remaining three are Southeast Asian countries Malaysia, Thailand, and Indonesia. Similar to the alternative participants, countries in the emerging segment currently have varying levels of capabilities and offerings.

The Banking, Financial Services, and Insurance (BFSI), High-Tech and Telecoms, Manufacturing, and Healthcare make up the four main verticals that largely leverage IT-BPM services. These sectors continue to evolve rapidly in terms of regulatory environment, capital requirements, and process optimization, further driving the rapid adoption of IT-BPM, as illustrated in the following exhibit.
### Exhibit 3: Vertical Demand

<table>
<thead>
<tr>
<th>Situation</th>
<th>Impact</th>
</tr>
</thead>
</table>
| **BFSI** | • Regulatory changes and norms such as Basel III, Solvency II, the SOX Act, and the US Patriot Act increase regulatory compliance cost.  
• Growing number of digital customers. |
| **Hi-Tech/Telecoms** | • High capital investment is a concern for telecom providers that strive to optimize Capital Expenditures (CAPEX) and reduce operating expenses (OPEX).  
• Growth in mobile communications led to a drop in public-switched telephones and voice revenue volumes.  
• Over-the-top (OTT) participants such as video and audio and services such as Netflix and Spotify gaining popularity. |
| **Manufacturing** | • The need to leverage external specialized talents to optimize manufacturing business processes.  
• Efficient resource management across geographies.  
• The need to strengthen core capabilities. |
| **Healthcare** | • Regulatory reform and changes in the healthcare system worldwide.  
• Hiring and training IT talent not the core business of healthcare service providers.  
• Free up internal resources for core business purposes. |
| **Outsourcing of both transactional finance and accounting (F&A) processes and non-transactional financial functions.**  
**Increased application of automation due to rapid advances in technology.**  
**Outsourcing activities shifting from transactional processes to network operations, content bundling and solutions.**  
**Value-added services such as content and next-generation communication services.**  
**Digital platform and environment with high levels of security and privacy protection.**  
**Manufacturing analytics and performance management.**  
**Manufacturing planning and control support.**  
**Systematic and quality management system, which reduces supply management overhead and travel expenses.**  
**Electronic medical records (EMR) digitizing patient medical records.**  
**Software-oriented architecture improving the performance of applications.**  
**Laboratory information management systems automating the process of receiving, processing, and storing data from laboratory instruments.** |

Source: Frost & Sullivan analysis
As shown above, demand for IT services is expected to remain prevalent across all verticals while sub-segments indicate a heightening KPO demand.

The Philippines has considerable potential to fuel its growth even further in the next six years and beyond. There are multiple paths to growth, each having its advantages and disadvantages. Top locations such as India are clearly moving from a cost plus labor arbitrage model focusing on generating higher revenue and profitability per employee. This necessitates a shift in strategy, moving towards accelerated adoption of technology platforms, and an increased focus on vertical specialization. The other growth path, which is taken by China and other emerging countries, concentrates on ramping up volumes in order to increase global market share and gain credibility as quality suppliers of IT-BPM outsourcing services.
THE PHILIPPINE IT-BPM SECTOR REVIEW

The selection of a viable IT-BPM destination can be a daunting decision for service providers that are planning to either enter a new country or expand their business within a particular area. A careful study on location viability is vital as this could affect the service providers’ long-term competitiveness and sustainability. As highlighted in the following chart, the selection of an IT-BPM location hinges on three core areas – regulation, cost, and labor.

**Exhibit 5: Selection Parameters for IT-BPM Locations**

<table>
<thead>
<tr>
<th>Selection of IT-BPM Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several factors considered when companies select a potential IT-BPM location</td>
</tr>
</tbody>
</table>

**Regulation (Business Environment)**
- The level of a government’s business regulation has an impact on the competitiveness of potential IT-BPM locations.
- Major IT-BPM locations are trying to attract foreign investment by streamlining tax payment procedures and reducing minimum capital requirements.

**Costs (Financial Attractiveness)**
- In terms of cost arbitrage, general compensation costs are a main consideration when selecting an IT-BPM location.
- In addition to the level of employee compensation costs, infrastructure costs such as office rental costs are an important differential among countries.

**Labor (Talent Pool and Salaries)**
- The availability and depth of professional and technical talent are prime factors when determining the IT-BPM location.
- The attractiveness of any location from an IT-BPM perspective is closely correlated to the quality and quantity of the available workforce.

Source: AT Kearney, Frost & Sullivan analysis

The Philippines is a top tier destination for IT-BPM services and is considered a market leader. In the past 10 years, the sector has achieved significant growth in global market share. Today, it is the number one destination for voice-related services, and rapidly growing its capability to offer non-voice BPM and IT services to an increasingly broader set of clients worldwide.

In reviewing the current state of the Philippines as an IT-BPM destination across five major dimensions – cost, service diversification, talent pool, vertical specialization, and affinity to buyer geographies – it is apparent that progress has been considerable, especially in the past six years.
The Philippines started, nearly two decades ago, as an alternative IT-BPM destination to India, offering low-cost services. It has since evolved, and is currently able to offer high-quality services at competitive price points. As the Philippines moves up in its service delivery capabilities, newer, emerging countries such as Vietnam are increasingly taking its place as a low-cost hub.
Exhibit 7: SEA Countries in Tholons 2016 Ranking

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Country</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Philippines</td>
<td>Manila (NCR)</td>
</tr>
<tr>
<td>7</td>
<td>Philippines</td>
<td>Cebu City</td>
</tr>
<tr>
<td>17</td>
<td>Malaysia</td>
<td>Kuala Lumpur</td>
</tr>
<tr>
<td>18</td>
<td>Vietnam</td>
<td>Ho Chi Minh City</td>
</tr>
<tr>
<td>19</td>
<td>Vietnam</td>
<td>Hanoi</td>
</tr>
<tr>
<td>28</td>
<td>Singapore</td>
<td>Singapore</td>
</tr>
<tr>
<td>55</td>
<td>Indonesia</td>
<td>Jakarta</td>
</tr>
<tr>
<td>66</td>
<td>Philippines</td>
<td>Davao City</td>
</tr>
<tr>
<td>69</td>
<td>Malaysia</td>
<td>Penang</td>
</tr>
<tr>
<td>81</td>
<td>Philippines</td>
<td>Santa Rosa, Laguna</td>
</tr>
<tr>
<td>85</td>
<td>Philippines</td>
<td>Bacolod City</td>
</tr>
<tr>
<td>86</td>
<td>Thailand</td>
<td>Bangkok</td>
</tr>
<tr>
<td>90</td>
<td>Philippines</td>
<td>Iloilo City</td>
</tr>
<tr>
<td>93</td>
<td>Philippines</td>
<td>Dumaguete</td>
</tr>
<tr>
<td>94</td>
<td>Philippines</td>
<td>Baguio City</td>
</tr>
<tr>
<td>97</td>
<td>Philippines</td>
<td>Metro Clark</td>
</tr>
</tbody>
</table>

Source: Tholons, Frost & Sullivan analysis

Excluding India and China, the Philippines is the most prominent destination in Tholons’ Top 100 list where a total of nine cities were shortlisted in the global top 100 IT-BPM destinations. Overall, the Southeast Asian outsourcing sector continues to mature and develop as a “brand”, with 16 cities currently among the Top 100 outsourcing destinations. The Tholons report cites that expanding domestic markets continue to draw large service providers to the region, resulting in the upward movement of key Southeast Asian service delivery locations.

In terms of service diversification, the Philippines remains as the top destination of choice for voice-based services while expanding its horizontal BPM services in areas such as finance and accounting, as well as vertical-focused solutions such as healthcare information services. The country also has a strong affinity to the North American market and is consistently preferred by major buyers due to its cultural and historical links, English proficiency skills, and friendly and hospitable manpower.

The Tholons Top 100 Outsourcing Destinations Ranking is an annual proprietry study to evaluate the overall performance of IT-BPM destinations at the city level. In the past three to five years, Southeast Asia has seen a rebound on the back of an improving macroeconomic environment and expanding domestic market. Combined with strong government support, the region has grown to become an IT-BPM destination. Led by the Philippines, other countries in Southeast Asia, namely Malaysia, Vietnam, Singapore, Indonesia, and Thailand are currently the most promising destinations for IT-BPM services. To justify outsourcing, a strong IT-BPM center would require access to a well-educated workforce,
communication proficiency (especially in English) and competitive wage levels. Inherently, the Philippines has a competitive advantage in all three aspects.

Exhibit 8: Estimated Median Pay (per annum) of Key Countries (2015)

A comparison of two common profiles in IT services and BPO sectors are shown by country. We compare team leader roles (IT & Customer Service) globally in US Dollars.

The Philippines has a wage advantage compared to most emerging IT-BPM centers (with the exception of India) and has a reasonably high rate of tertiary enrolment providing access to an educated workforce at affordable prices. In addition, the country has an advantage in English proficiency over other IT-BPM destinations. The Philippines is currently the third largest English-speaking country in the world with over 70% of the population able to converse in English. Global studies have clearly identified the Philippine workforce as a leader in English proficiency.

Source: Payscale.com, Frost & Sullivan analysis
By leveraging these inherent advantages, the Philippine IT-BPM sector has grown rapidly over the last roadmap period (2010 – 2016), increasing revenue at a CAGR of ~17% (from US$ 8.9 billion in 2010 to an estimated US$ 22.9 billion in 2016).
Exhibit 10: Performance of the Philippine IT-BPM sector in previous Roadmap period (2010 – 2016)\(^1\)

**Revenues Growing at a CAGR of \(~17.1\)%**

<table>
<thead>
<tr>
<th>Year</th>
<th>Billions (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>8.9</td>
</tr>
<tr>
<td>2016e</td>
<td>22.9</td>
</tr>
</tbody>
</table>

**Adding \(>100,000\) jobs per annum (on average)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousands (FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>527</td>
</tr>
<tr>
<td>2016e</td>
<td>1,115</td>
</tr>
</tbody>
</table>

In terms of manpower, the sector has added an average of \(>100,000\) jobs every year, growing at a CAGR of 13.8\%, from 527,000 FTEs in 2010 to an estimated 1,150,000 FTEs in 2016.

---

\(^1\) Range in 2016 accounts for the projection margin of error \((\pm 3.5\%)\)
THE PHILIPPINE IT-BPM SECTOR OUTLOOK

Revenues generated by the Philippine IT-BPM sector are expected to be US$ 22.9 billion in 2016, mainly comprising outsourced services in contact center and BPO (US$ 12.8 billion), IT services (US$ 3 billion), Health Information Management Services (US$ 2.4 billion), and Global In-house Centers or GICs (US$ 4.7 billion). Animation and Game Development is the smallest segment, with US$ 56.2 million in contribution.

Exhibit 11: Current and Projected Revenue of the Philippine IT-BPM Sector

We project the overall market to grow at a compound annual growth rate (CAGR) of 9.2% from 2016 to 2022 reaching US$ 38.9 billion by 2022.
While the projected revenue growth rate for this roadmap period is considerably lower than past CAGR of 17% between 2010 and 2016, the Philippines is still projected to outperform the global IT-BPM sector with revenue growth at 5.6% (from 2016 to 2022) and as a result will increase its share of the global IT-BPM outsourcing sector from 12.7% in 2016 to 15.5% by 2022. The relatively slower growth is also seen as a sign of a maturing sector and the anticipated impact of technology.

Most of the Philippine IT-BPM sector’s growth will be driven by high-value services as the country moves up the value chain in the next six years. Some of these high-value services include:

**Contact Center and BPO subsector**
- Engineering Services Outsourcing (ESO)
- Data Analytics
- Performance Management
- Legal Process Outsourcing (LPO)

**Information Technology Services subsector**
- Application Development Management (ADM)
- System Integration
- Automation Enablement
- IoT-enablement languages (e.g. Python programming)

**Health Information Management subsector**
- Preventive Health
- Remote Healthcare Management
- Provider Services

**Animation and Game Development subsector**
- 3D animation
- Augmented & Virtual Reality (AR/VR)
- Gamification

**Global In-house Center subsector**
- Industry specific services for Telecom, Healthcare, Insurance and Pharmaceutical

In terms of employment, the total manpower employed by the sector is projected to increase from an expected 1.15 million Full-Time Equivalents (FTEs) in 2016 to an estimated 1.8 million FTEs by 2022, equivalent to a CAGR of 7.8%.
Exhibit 12: Current and Projected Headcount of the Philippine IT-BPM Sector

Source: Frost & Sullivan analysis

Notes:
- Animation and game development growing at 13.3% CAGR (from 4,300 FTEs in 2016 to 9,100 FTEs in 2022)
- E denotes estimated
- P denotes projected

The relatively slower growth in manpower, largely attributed to more technology-enabled high-value jobs, vis-à-vis revenues (7.8% vs. 9.2%) indicates an increase in revenue per FTE - a sign of moving up the value chain.
IMPACT OF TECHNOLOGY

Over the next decade, technology developments will transform industries, enabling them to become digitized, more connected, and smarter businesses. The healthcare sector, for instance, is rapidly expanding its focus from post-incident care to more preventive care thanks to technologies such as wearable sensors, data analytics, and cloud-enabled remote monitoring. New technologies related to energy harvesting, co-generation, smart grids and smart meters are likewise redefining the energy industry. Similar technology-led transformations are being experienced across all industries.

These technology-led industry transformations present both direct and indirect impacts to the IT-BPM sector. For example, driverless cars require large amounts of computing and analytical power at the back-end to ensure incident-free operations; or advances in drone technology applications into retail supply chains could result in greater decentralization of e-commerce, delivery management, and analytics providing greater avenues for outsourcing.

In addition, technological changes could influence the way IT-BPM services are delivered. Robotics, automation, and cloud computing, among other technologies, are expected to directly impact the IT-BPM sector. In the financial services industry, for example, blockchain is an emerging technology that is expected to become a key differentiator among service providers in the near future.

While there is a gamut of technologies that will, in one way or the other, shape the opportunity and delivery landscape for the IT-BPM sector, we see the convergence of the following four major digital trends significantly impact the sector.

- **Big Data and Analytics (BDA):** BDA refers to a data discovery process using techniques and tools i.e. mining useful information or insights from huge sets of data (both structured and unstructured) enabled through exponential increases in both computing power and storage capacity.
- **Internet-of-Things (IoT):** IoT refers to everyday devices connected to the Internet through sensors and computing power to monitor and manage actions, offering users greater influence over their environment.
- **Automation and Artificial Intelligence:** Combining technologies such as Robotics Process Automation (RPA), Artificial Intelligence (AI), and machine learning.
- **Cloud Computing:** Delivering IT services hosted over the Internet to transform compute resources into a utility.

The impact of these technological trends will result in two opposing forces acting upon the growth potential and services mix for the IT-BPM sector in the coming years. These forces are a) Augmented growth driven by opportunities from new technology-enabled services that can be offered by the IT-BPM sector; and b) Dampened growth due to the service automation and streamlining of some services.
**Exhibit 13: Opposing Forces of Technology on IT-BPM**

**Potential dampening of roles due to automation**
- For low skilled roles, this would usually mean job replacement through automations
- For more complex job categories, implications are more on reskilling than on replacement

**Augmented growth of the functions / services supported by IT-BPM**
- Outsourcing market (end-use demand) continues to grow
- In many cases, technology accelerates this growth
- Many new (advanced) services will be offered by the IT-BPM sector

With the combination of these two forces and despite an adverse impact on low-skilled jobs, it is projected that in the short to medium term, there is a potential upside for ~654k net new jobs to be created (between 2016 and 2022) in the IT-BPM sector (from a baseline of 1.15 million jobs in 2016).

**Exhibit 14: Projected Change in Skills Mix in the Philippine IT-BPM Sector**

<table>
<thead>
<tr>
<th>JOB TYPE</th>
<th>DAMPENING</th>
<th>GROWTH</th>
<th>TOTAL IMPACT (2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low skilled tasks</td>
<td>Cumulative*</td>
<td>29%</td>
<td>482k (2022)</td>
</tr>
<tr>
<td></td>
<td><strong>CAGR</strong></td>
<td>4%</td>
<td>525k (2022)</td>
</tr>
<tr>
<td>Mid-skilled tasks</td>
<td></td>
<td>7%</td>
<td>840k (2022)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12%</td>
<td>452k (2022)</td>
</tr>
<tr>
<td>High skilled tasks</td>
<td></td>
<td>1%</td>
<td>478k (2022)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19%</td>
<td>169k (2016)</td>
</tr>
</tbody>
</table>

With 73% of the workforce being mid-high skilled,

Source: Frost & Sullivan analysis, IBPAP & member companies data
As indicated above, technological changes may dampen growth in some of the low-end services (such as transcription and Type I voice services), thereby potentially reducing manpower requirement from 525k FTEs in 2016 to around 482k FTEs by 2022.

However, as new technology enables the sector to move up the value chain, the reduction in low-skill jobs in the sector will be more than compensated by significant employment opportunities in the mid- and high-skilled services. Mid-skilled jobs are projected to grow from 452k FTEs in 2016 to 840k FTEs by 2022 while high-skill services have the potential to grow at an even faster rate, from 169k FTEs in 2016 to 478k FTEs by 2022.

As illustrated in the following exhibit, to transition to a higher value-added service mix, the sector will require significant changes and infusion of talent across the skill spectrum.

**Exhibit 15: Illustrative Human Capital Transition Driven by Technology**

![Exhibit 15: Illustrative Human Capital Transition Driven by Technology](image)

---

3 Type I refers to simple call types which are typically just information retrieval or user guidance such as enquiries on account balances, payment due dates for credit cards and the like.
The following changes are critical for the human capital skill spectrum of the Philippine IT-BPM sector to move towards a higher value-added scenario:

- Specialized high-skilled entrants (e.g., PhD, MS, Industry laterals) coming in directly at the high end of the skills pyramid
- Existing workforce upskilled from mid to high skill
- Mid-career entrants (e.g., laterals, managers) and specialized graduates coming in to bolster mid-level skills requirement
- Existing manpower engaged in low-skill tasks to be reskilled to perform relatively high-value jobs
- Widening reach to new talents to explore careers in the IT-BPM sector

For more sustained development in the IT-BPM sector beyond 2022, it is essential to strengthen the focus on the foundational capabilities in Science, Technology, Engineering and Mathematics (STEM).
HUMAN CAPITAL

The number of people employed in the IT-BPM sector is estimated\(^4\) to be 1.15 million Full-Time Equivalents (FTEs) in 2016, accounting for 2.9% of Philippine employment. By 2022, total FTEs in the IT-BPM sector is expected to reach 1.8 million or around 4.1% of the country’s total employment.

Exhibit 16: Contribution of IT-BPM Sector to Total Employed Workforce in the Philippines\(^5\)

In addition, based on Philippine labor demand projections for 2016 to 2022, 14% (roughly one out of seven jobs\(^6\)) of the country’s employment requirements will be fulfilled by the IT-BPM sector.

The impressive growth of the IT-BPM sector in the Philippines between 2010 and the end of 2016 is estimated to have generated nearly 620k new jobs. The sector is projected to create an additional ~654k jobs between the end of 2016 and the end of 2022.

---

\(^4\) Based on inputs from industry players and ratified by the IT-BPM sector association, IBPAP

\(^5\) For the overall employment projection data until 2015, data from the Philippine Statistics Authority’s Annual Labor and Employment Estimates for the years 2010 to 2015 were used. Considering the average labor force participation (64.1%) between 2010 and 2015 and IMF projected employment rates (reaching 94.4% in 2022), projections were made for the period 2016-2022.

\(^6\) This is only direct jobs (excluding indirect and induced effects)
In the early years of the Philippine IT-BPM sector, the National Capital Region (NCR) attracted nearly all investments. These days, however, IT-BPM companies are significantly increasing their workforce throughout the country, with an estimated quarter of a million jobs created in locations outside NCR as of end of 2015 (based on feedback from ICT Councils in Centers of Excellence and Next Wave Cities™ and available Philippine Economic Zone Authority (PEZA)-accredited building capacity data).
Exhibit 18: Projected Distribution of IT-BPM Jobs throughout the Philippines

The contribution of provincial locations is expected to grow to 28% by 2022, creating an estimated additional 244k FTEs. Jobs outside the NCR are expected to grow by an average of 11% annually from 2016 to 2022 compared to the 6.9% projected job growth for NCR in the same period.

In the first few years (2016-2019), it is expected that bulk of potential jobs in locations outside the NCR will be entry-level positions offered by contact centers. In addition, voice-related work done under the banner of HIM will also be increasingly sourced from cities such as Iloilo, Bacolod, and Davao. Parallel to this is the anticipated gradual “outsourcing” of shared services jobs from the NCR to other locations throughout the Philippines. This “intra-migration” will entail less complex processes (voice and administrative), but will gradually expand to functions such as finance and accounting, and payroll management.

The growth of the IT-BPM sector heavily depends on the extent to which labor demand and supply can be synchronized in coming years.
The “supply” emanating from the academic institutions is just the “beginning-of-the-funnel” i.e., the universe of potential talent that may or may not be a) interested and b) found suitable for an IT-BPM career. It is important to determine with precision, what percentage of the “supply” would be suitable to work for the IT-BPM sector and what percentage of the “supply” has applied for a job in the sector. Unfortunately, there is no comprehensive sector-wide data reflecting these variables by type of service and educational background of the applicant.

- The only quantitative estimate available for “interest” is a 2015 IBPAP survey among students enrolled at universities that were part of the SMP program, which indicates that 56.5% of respondents would consider working for an IT-BPM company.7 However, this finding is likely to have a selection bias as most people answering this survey would at least have some interest in knowing about the SMP program and in considering the IT-BPM sector as a career option. IBPAP members actively involved in human capital initiatives and Industry players engaged in workshops and meetings indicate that the interest level is closer to one-third (33%) or at most, half (50%).

- A survey conducted among IT-BPM companies as part of research for this roadmap indicates that a median of 15% of applying candidates are found suitable for recruitment8. Another source - an industry profile released by the Philippine Statistics Authority (PSA) in July 2016 - indicates the average yield ratio9 for the sector to be 23%.10 Neither source provides the required granularity of data by educational background and the subsector applied to by the applicant.

- Also to be noted is that while the full impact of transition to the K-12 Program on supply remains unclear at this point (i.e. increases or decreases in high school drop-out rates, college enrolments, and college drop-out rates), there is likely to be a significant temporary dip in the supply of college graduates for at least two years.

Industry players engaged in workshops and meetings have consistently maintained that this attenuation of talent through the selection funnel is a clear, present, and critical issue. Qualitatively, we understand the effect of these factors renders the pass-through from the beginning to end of the funnel to be between 5% and 8%. What is evident is that, despite there being seemingly sufficient available supply at the “beginning-of-the-funnel” from educational institutions, only a small proportion of that supply makes its way to the “end-of-the-funnel” and into the IT-BPM sector. This phenomenon is outlined in the succeeding exhibit.

7 IBPAP, Service Management Program Survey, April 2015. The SMP marketing and talent development teams conducted the surveys in 2014 during the SMP roadshows in five universities (Cavite State University, Carlos Hilado Memorial State College, Laguna State Polytechnic University, West Visayas State University, and Negros Oriental State University) where a total of 819 college students, across year levels, participated. These are the universities where the SMP program is already implemented.

8 The responses varied based on the nature of the company’s operation; 45% of the respondents were range-bound between 10 and 20%.

9 A recruitment yield ratio reflects the percentage of job candidates at the beginning of a step in the recruitment/selection process who move on to the next step in that process (hiring-offering posting).

There has historically been a gap between suitable supply flowing through the education funnel and the jobs needed by the sector. While the sector fills a significant portion of this unmet demand through lateral hires or career shifters (i.e., experienced manpower moving from other industries, including Overseas Filipinos Workers), a portion of the demand has had to be fulfilled by sub-optimal talent. This situation will increasingly be untenable given the pivot towards higher skills necessitated by the anticipated impact of technology.

For sustainable growth, the IT-BPM sector should address this gap through interventions that aim to a) increase the number of people interested in a career in the sector through awareness creation and career marketing initiatives; and b) influence the qualification rate through targeted programs such as SMP (the Service Management Program curriculum that IBPAP designed and CHED approved) and other interventions in collaboration with the academe.

It is also possible that lateral entrants into the industry will see an upward trend in the next few years releasing some of the pressure off the fresh talent supply. This too will require specific interventions to attract such career shifters and in providing bridging training to better prepare them for a career in the IT-BPM sector.

Finally, in order to enable a more quantitative assessment of the supply and demand gap, further detailed studies need to be conducted to gauge the exact quantum and nature (i.e., across education levels and IT-BPM sector) of the talent shortfall and the underlying variables.
HIGH-IMPACT PROGRAMS (HIPs)

Discussions in the preceding sections underscored the need for key interventions to support the continued growth of the Philippine IT-BPM sector. These interventions are classified along the following six themes:

1. **Human Capital**: Interventions to expand, upgrade and attract the supply of fresh graduates and career shifters, as well as retain and develop the existing workforce

2. **Inclusive Growth**: Interventions to create more diversified, nationwide growth of the IT-BPM sector and the improved capabilities of Local Government Units (LGUs) to attract and sustain IT-BPM sector investments

3. **Country Competitiveness**: Interventions to enhance international competitive positioning of the Philippine IT-BPM sector

4. **Government Support**: Interventions to strengthen government-industry collaboration

5. **SMEs and Startups**: Interventions to create a vibrant SME and start-up ecosystem contributing to the IT-BPM sector

6. **Impact of Technology**: Interventions to enable increased adoption of technology with a view to drive productivity and competitiveness of the sector and to ensure the development of a future-ready workforce

A set of 21 High-impact Programs (HIPs) has been developed to address issues and opportunities across these six themes.

**HUMAN CAPITAL**

Availability of the right talent in terms of quantity and quality is a critical input in any production function. This is particularly true for the IT-BPM sector where service output largely hinges on the quality of its human capital and where ‘Human Capital Availability’ is considered as the most critical differentiator for location choice among potential investors.

The primary case for change is an urgent need to attract a higher proportion of the country’s educated workforce in joining the IT-BPM sector and also to create a training and skill acquisition environment that increases their industry readiness. In addition to interventions in training and skill development, there is also a need for stronger industry-academe linkages to support a more foundationally-sound talent pipeline. One key area that requires intervention is increasing English proficiency (spoken, written, verbal, emotive and other facets), which is a core competency and considered as the bedrock for a career in the IT-BPM services sector. These interventions will rely on the continued support of academic institutions as well as agencies such as Technical Skills Development Authority (TESDA), Department of Education (DepEd), and the Commission on Higher Education (CHED) through their continued close engagement with the industry (represented by IBPAP and partner associations).
Identified interventions on Human Capital are designed to a) attract and upgrade fresh graduates and b) retain and upgrade existing workforce and career shifters. The five HIPs under Human Capital are:

- Build an industry-led IT-BPM talent attraction ecosystem; career progression path, skill mapping, and advocacy
- Create more high quality and effective skill development avenues through evaluation, accreditation, and ranking
- Enhance Service Management Program (SMP to SMP+) targeting specific subsectors and mid/high-end skill development
- Create sustainable long-term funding mechanism for human capital development activities, tapping on to more sources
- Embark on a nationwide effort to enhance English proficiency across early stage education, near hire, and existing workforce

The HIPs are discussed in further detail in *Accelerate PH Future-Ready Roadmap 2022* full publication.

**INCLUSIVE GROWTH**

The growth in the number of IT-BPM companies establishing delivery centers outside the NCR will go hand in hand with the rising number of job opportunities for young Filipinos in the country. The opportunity for fresh graduates to earn relatively higher income (IT-BPM sector starting salaries for entry-level jobs outside the NCR could be two times the minimum wage) upon graduation will likely act as a catalyst encouraging more high schoolers to pursue a college degree.

Expansion of the IT-BPM sector to centers outside of NCR would spur Inclusive Growth benefiting the economy as a whole. The three HIPs to stimulate greater Inclusive Growth are:

- Enhance Next Wave Cities™ Program (NWC to NWC+) to provide more real-time and comprehensive information that reflect various key business enabling factors
- Improve capacity for ICT Councils to facilitate growth of the IT-BPM sector
- Review and update the National Disaster Risk Reduction and Management Plan (NDRRMP) with specific focus on IT-BPM

The HIPs are discussed in further detail in *Accelerate PH Future-Ready Roadmap 2022* full publication.
COUNTRY COMPETITIVENESS
To sustain its leadership position in the sector, the Philippines needs to position itself as presenting unique competitive advantages to potential IT-BPM operators. This differentiated brand and positioning could center on existing, inherent strengths of the Philippine workforce i.e., being 'creative', 'emotive', and 'service-oriented'.

In addition to customer experience attributes, the Philippines, in keeping with its years of experience in this sector, should strengthen its position and perception on being at the cutting-edge of technology adoption relevant to the sector.

Finally, there is a need for curated messaging to cater to different types of investors. For example, the pitch to operators with existing presence in the Philippines (i.e. goal is to motivate them to bring in more business) will require a different approach compared with the messaging to potential fresh investors, such as companies which are not in the Philippines but present in nearby regions. Understanding specific investor needs and ‘hot buttons’ is a critical exercise in order to develop an effective promotional campaign.

The two HIPs addressing these aspects are:
• Develop a five-year campaign strategy to promote the Philippines globally as a destination of choice for IT-BPM services
• Form a government–industry joint council to represent the sector at the highest level of national and economic development and in maintaining a welcoming ecosystem for all foreign Investors

The HIPs are discussed in further detail in Accelerate PH Future-Ready Roadmap 2022 full publication.
GOVERNMENT SUPPORT

The Philippines continues to make considerable progress in the areas of ease of doing business and country competitiveness. In the World Bank’s Ease of Doing Business index, the Philippines’ improved from rank 134 in 2010 to rank 103 in 2015. In the World Economic Forum’s Global Competitiveness Index, the Philippines moved from the 85th spot in 2010 to 47th spot in 2015. Both indicators highlight an improving business climate (between 2010 and 2016) that is contributing to a steady increase in net foreign direct investments.

Both fiscal and non-fiscal incentives play a role in attracting and retaining investments in the country. Governments provide tax incentives to steer investments towards priority sectors or regions and to influence the nature of these investments (e.g., more capital intensive). In every investment incentive policy, the government ensures that potential benefits are balanced against costs. In this context, and given the significant economic contribution of the IT-BPM sector to the Philippine economy, it is important that government support through investment incentives continues in order to sustain the sector’s growth.

The four HIPs addressing these aspects are:

- Advocate for continued government support through an economic and policy framework that is conducive to trade with, and investment by, all existing and prospective partners from all geographies
- Advocate for more evidence-based evaluation of incentives (fiscal and non-fiscal)
- Advocate for modernization of policy and regulation like flexible working arrangements that reflect global trends in IT-BPM
- Improve IT-BPM sector information (comprehensive, up-to-date) that enable evidence-based policy setting

The HIPs are discussed in further detail in Accelerate PH Future-Ready Roadmap 2022 full publication.

12 http://www.doingbusiness.org/data/exploreeconomies/philippines/
SME AND STARTUP ECOSYSTEM
Small and Medium Enterprises (SMEs) play an important role in every economy, as they often constitute the majority of the enterprises and generate most of the country’s employment. In 2014, SMEs accounted for 99.6% of all enterprises and contributed 62.8% of the jobs created in the Philippines.\(^\text{13}\)

Policymakers often think of small business as the employment engine of the economy. And when it comes to job-creating power, it is the small new businesses that are generating most of today’s jobs. In the American economy, for instance, new and young companies are the primary source not only of job creation but also of economic dynamism as they inject competition and spur innovation.

In the Philippines, the SME and startup ecosystem offers a great potential to become a breeding ground for new and innovative businesses. The development of SMEs is important in driving the growth of new and emerging sectors and in diversifying service offerings.

The three HIPs addressing these aspects are:

- Encourage & incentivize the setting up of incubation centers for IT-BPM SME and startups
- Advocate the introduction of programs focused on entrepreneurship in the Philippine educational system
- Establish a “DIGITAL FILIPINO” portal providing SME and startups, operating in the IT-BPM sector, access to resources and information

The HIPs are discussed in further detail in Accelerate PH Future-Ready Roadmap 2022 full publication.

\(^{13}\) http://www.dti.gov.ph/dti/index.php/resources/sme-resources/sme-statistics
IMPACT OF TECHNOLOGY

As in most industries, technology evolution will drive IT-BPM industry and workforce transformation. While the responsibility of ensuring that its workforce is able to transition rests on the industry players, collective implementation of the identified interventions will a) attract broader stakeholder support, b) provide direction and context to small and mid-sized firms as part of the ecosystem and most importantly c) attract higher value-add services as the country positions itself as a technology-enabled hub.

In order to move the Philippine IT-BPM sector up the value chain, the following changes in human capital are critical:

- Attract specialized high-skilled entrants (e.g., PhD, MS, Industry laterals) to the mid and high end of the skills pyramid
- Upskill existing workforce from low to mid; and mid to high skill
- Attract mid-career entrants (e.g., laterals, managers) and specialized graduates to bolster mid and high level skills requirement
- Retool existing manpower engaged in low-skill tasks to perform relatively high-value jobs

For more sustained development in the IT-BPM sector beyond 2022, it is essential to strengthen the focus on core capabilities in Science, Technology, Engineering and Mathematics (STEM).

The four HIPs addressing these aspects are:

- Actively advocate for a strategic Science, Technology, Engineering and Mathematics (STEM) policy framework
- Establish a High Entry Placement Program (HEPP) targeted at graduates to directly take on value-added work (mid and high skill roles)
- Establish Higher Education Technology Consortiums (HETCs) to enable the creation of high-skilled specialists
- Establish a program to upskill existing manpower in specialized competency areas

The HIPs are discussed in further detail in *Accelerate PH Future-Ready Roadmap 2022* full publication.
IMPLEMENTATION CONSIDERATIONS
Successful implementation of the identified High-Impact Programs will require dedicated executive capacity as well as project management and monitoring and evaluation (M&E) capabilities. It is thus suggested to strengthen specific parts of the executive capacity with the associations.

ESTABLISH A DEDICATED PROGRAM MANAGEMENT OFFICE (PMO) UNDER IBPAP
The PMO will play a crucial role in facilitating, coordinating, and driving the implementation of the IT-BPM roadmap. The PMO will ensure that projects are on track (vis-à-vis budgetary and performance obligations) and that lines of communication are open across all stakeholders (implementation partners, donors/funding agency, implementation team, and beneficiaries). In addition, the PMO will foster strong working relationships within the project team, facilitate relationship management and ensure that duties and responsibilities are clearly communicated:

• Ensuring timely delivery of all contractual obligations
• Interim, mid-term and project completion reporting
• Budget control and contract administration
• Quality control
• Research and editorial assistance
• Project change implementation
• Logistical support
• All internal and external communication related to the HIPs

The PMO is envisioned to be the common team providing implementation planning and M&E support to IBPAP and its partner associations.
ENHANCE ABILITY TO DELIVER HIGH QUALITY RESEARCH

One of the common themes running across many of the HIPs is the need to provide planned, structured and timely research to IT-BPM operators. With the sector’s increasing planning and policy-support needs e.g., analyzing trends, identifying growth areas, and understanding challenges in the IT-BPM sector, it is imperative to strengthen IBPAP’s research capacity.

Specifically, the research team should be able to effectively:

• Publish market research and market insights on the IT-BPM sector periodically
• Collaborate and engage third party researchers including research universities (e.g., University of the Philippines, Ateneo de Manila University, De La Salle University, University of Asia and the Pacific, University of Santo Tomas, etc.) to develop independent research reports on the market opportunities, trends, and insights of the IT-BPM sector
• Initiate research on key issues faced by the IT-BPM sector aimed at increasing understanding on issues faced by the sector– for e.g., attrition rates, near hire good practices, new offerings in the IT-BPM sector, workforce issues, housing, health, training needs and the like
• Collaborate with government stakeholders such as National Economic Development Authority, Philippine Statistics Authority, Bangko Sentral ng Pilipinas, Department of Labor and Employment, Department of Trade and Industry, Department of Information and Communications Technology and others to enable the availability of consistent sector-wide information

STRENGTHEN EXECUTIVE CAPACITY ACROSS KEY DOMAINS CONSIDERED IMPORTANT TO THE SECTOR

Based on the High-Impact Programs, the most important functions of the IT-BPM industry association will be in the areas of a) human capital development, b) policy advocacy, lobbying and public relations, and c) marketing and industry development support. Many of the HIPs necessitate collaboration and partnership with an extended ecosystem of participants including government stakeholders, academe, industry partners, and others.

Executive capacity and capability in these functional areas should be significantly enhanced to ensure the successful implementation of the HIPs.
ENABLE COHESIVE WORKING ACROSS SUBSECTORS AND COLLECTIVE STAKEHOLDER ENGAGEMENT

The implementation of HIPs will only be successful through synergistic efforts and collective stakeholder management. It is thus essential to strengthen cooperation and coordination among all associations (IBPAP and partner subsector associations) with a view to promoting complementary and coherent programs. As part of greater collaboration, areas which require enhanced complementarity and synergy could possibly be taken up collectively while routine tasks that are often duplicated (such as accounting, human resource management and the like) could be organized as a shared service. An association structure that enables cohesive working relationships across subsectors as well as collective stakeholder engagement is further discussed in the Accelerate PH Future-Ready Roadmap 2022 full publication.