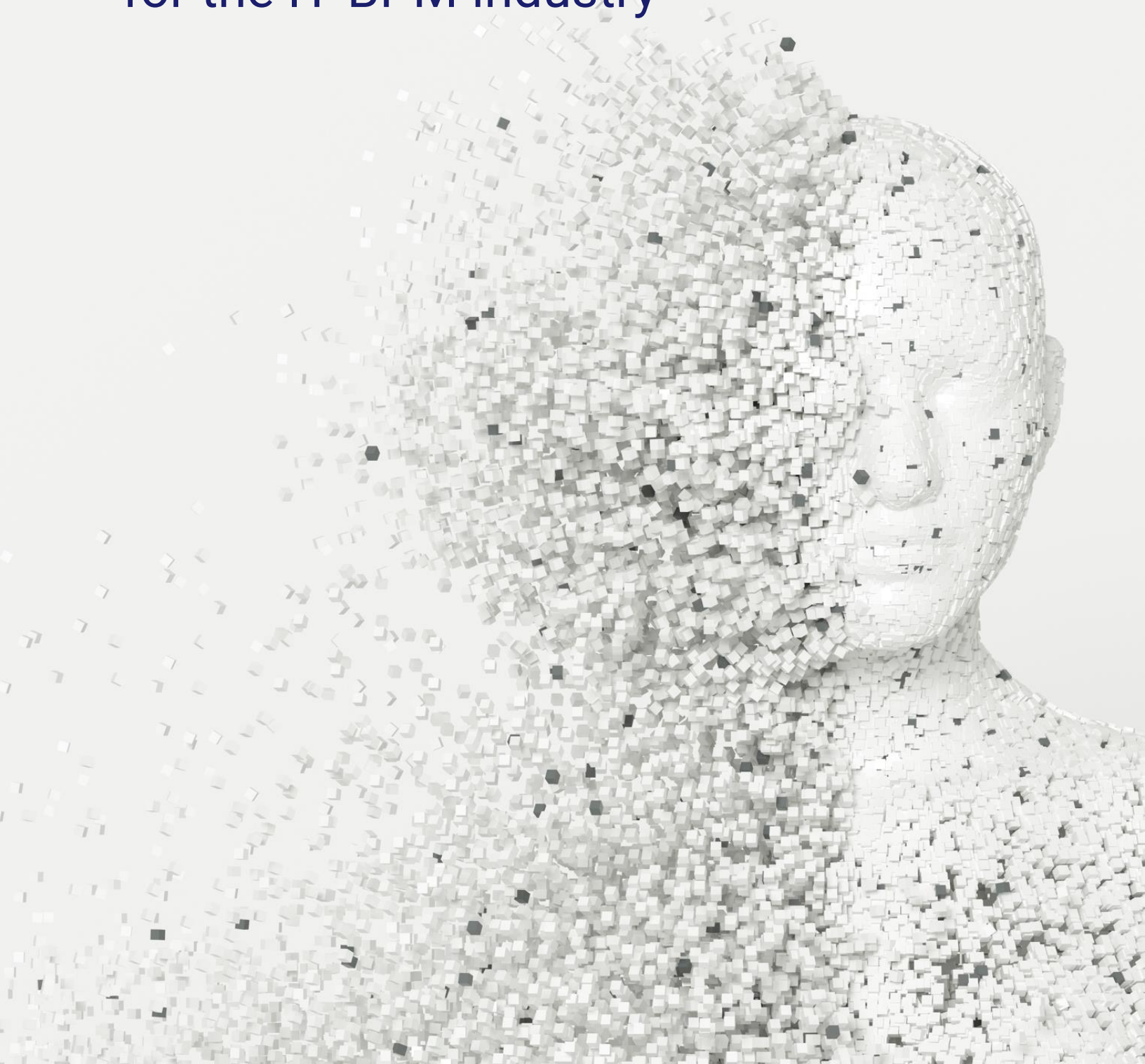


Navigating the Generative AI Wave: Implications for the IT-BPM industry



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Executive summary

Though its origins date back to the 1960s, generative AI was propelled into the spotlight with the public release of ChatGPT in late November 2022 and its adoption by 5 million users in only 5 days. The significant advances evidenced by that release triggered a surge of interest, acceptance, and further evolution across industries, including the IT-BPM industry.

Since that time, organizations across industries have been keenly exploring generative AI's potential, as reflected in the substantial financial investments and partnerships happening virtually daily. From language translation to healthcare diagnoses, generative AI is reshaping processes, enhancing customer experiences, and optimizing efficiency. While it will certainly touch all industries in some way, the technology will have varying impact across industries and functions, with the software, e-commerce, e-learning, and electronics and hi-tech industries among those that will be most impacted.

However, despite its promising prospects, generative AI faces many challenges, primarily centered around data privacy, bias, and high computational costs. Ethical considerations, regulatory compliance, and environmental impact further complicate its widespread adoption. Estimates indicate that global implementation is still three to five years away.

Even in the face of these challenges, generative AI holds the potential to revolutionize the IT-BPM industry. While concerns about job displacement and human replacement are clouding the view, as was the case with technologies such as ERP and cloud, the prevailing belief is that generative AI will have a net-positive impact on the workforce. While low-skilled transaction roles may diminish, newer roles requiring expertise in data science, AI, and ethical practices will emerge, signaling a shift in the industry's skill set demand. To navigate this transformative wave, businesses and individuals must focus on change management, upskilling, and reskilling.

The Philippines' IT-BPM industry is positioned as a frontrunner to embrace generative AI disruptions. With a mature global services delivery market, a supportive business environment, and a favorable demographic structure, the Philippines is poised to harness the opportunities presented by generative AI. Industry associations' initiatives and government support for upskilling and reskilling are contributing to workforce readiness for the next phase of the IT-BPM industry's growth.

In this report, we explore the growing acceptance of generative AI, potential use cases, possible challenges to its widespread adoption, and possible impacts on the IT-BPM workforce. We argue that fears related to the potential impact of this technology are unfounded and highlights the key actions required to harness the opportunities it presents. We also discuss how the Philippines' IT-BPM industry is well positioned to embrace generative AI disruptions, given its maturity, supportive business environment, and favorable demographics.






















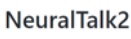
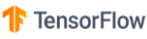


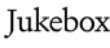
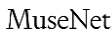



















The current buzz around generative AI

With the release of ChatGPT for public use in late November 2022 and its wide acceptance among the public, generative AI has created significant buzz in the IT-BPM industry. Generative AI is not a new technology, having been around for over six decades. The first recorded use case of generative AI dates to the 1960s, when ELIZA, the first chatbot, was launched. Today, mature AI models, faster computation capabilities, and high-quality training data are redefining the generative AI technology, creating new use cases almost every day. Further, generative AI is no longer limited to text-based outputs; there are multiple AI tools that help produce music, designs, art and other creative data, among many other capabilities, as exhibit 1 depicts.

EXHIBIT 1

Variety of generative AI tools currently available

Source: Everest Group (2024)

 Image generation	 OpenAI DALL-E 2	 Jasper Art	 MidJourney	 runway	 Stable Diffusion
 Video generation	 Fliki	 Kaiber	 lumen5	 PICTORY	 synthesia
 Code generation	 cogram	 GitHub Copilot	 tabnine	 OpenAI Codex	
 Image captioning	 Microsoft Azure Cognitive Services	 clarifai	 ClipClap	 NeuralTalk2	 TensorFlow
 Audio generation	 Aiva	 Jukebox	 MuseNet	 Riffusion	 VOCALOID
 Text generation	 ChatGPT	 copy.ai	 Jasper	 Simplified	 Writesonic
 Synthetic data	 gretel	 hazy	 MDCLONE	 MOSTLY AI	 SYNTHESIZED
 3D assets	 DreamFusion	 GET3D	 MDM: Human Motion Diffusion Model	 Point-E	

Significant technology development and widespread acceptance have sparked enterprises' interest across industries in the possible use cases of this technology. In the first quarter of 2023, over US\$ 1.7 billion was raised across 46 VC deals in AI, and a further US\$ 10.6 billion worth of deals were announced across the Banking, Financial Services, and Insurance (BFSI), manufacturing, Retail and Consumer Packaged Goods (CPG), and health and life sciences industries. Some early use cases have already hit the market. Microsoft now provides a new and innovative search experience that integrates ChatGPT with Bing and Microsoft 365. Google launched Bard – its own chatbot – along with other generative AI-based tools, such as AI-powered Google Workspace and Vertex AI, which help with ideas for building generative AI applications.

Evolving generative AI use cases across industries

From language translation to image processing to supply chain optimization, enterprises across industries are already adopting generative Artificial Intelligence (AI) not only to provide a better customer experience, but also to enhance productivity and efficiency. In Everest Group's 2024 Key Issues Survey with about 200 enterprises, GBS and providers, 58% of enterprises say that they are exploring use cases to test feasibility or conducting pilot projects on generative AI, while another 27% have already started to implement generative AI across processes. In line with this, multiple providers are also exploring generative AI use cases to enhance their service delivery. Airbnb is making its platforms user-friendly for customers across the globe by translating listings to the local language of the user in real time. Siemens recently introduced an AI-integrated X-ray system that sets the capture area precisely and accurately produces the exact number of copies needed to reduce patients' exposure to X-rays. Large-scale retailers such as Amazon and Walmart employ AI to help with demand forecasting. In the second half of 2023, there has been growing evidence of enterprises partnering with technology firms to integrate this transformational technology into their businesses, as described in Exhibit 2.

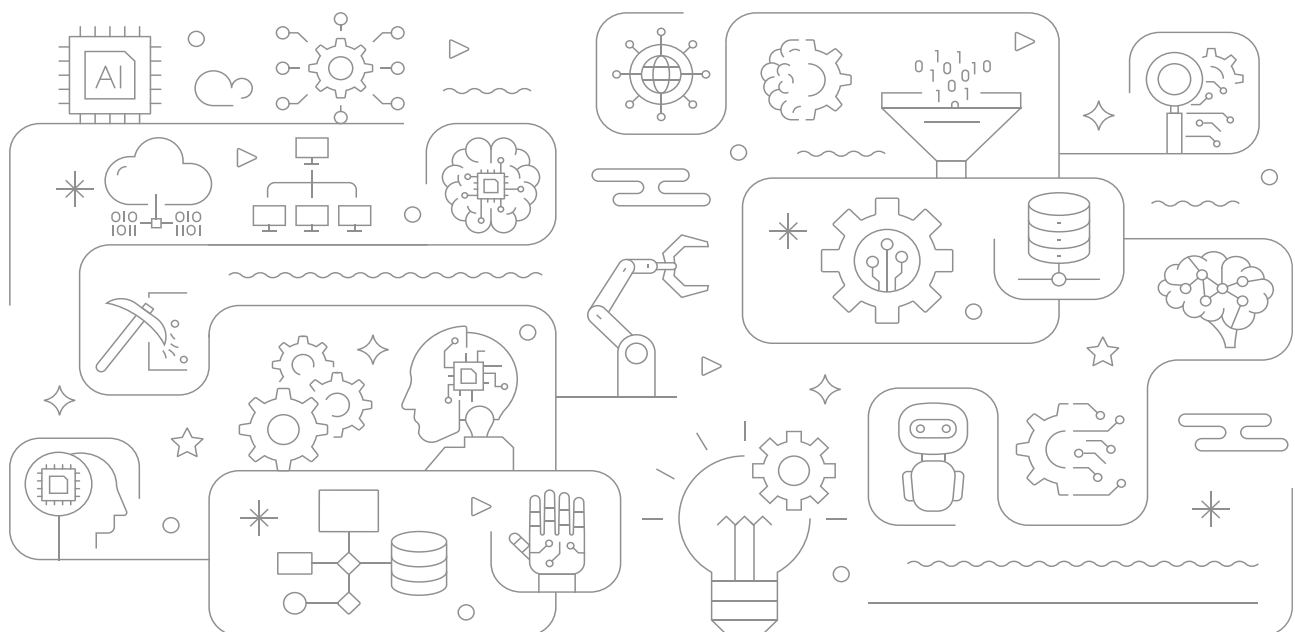









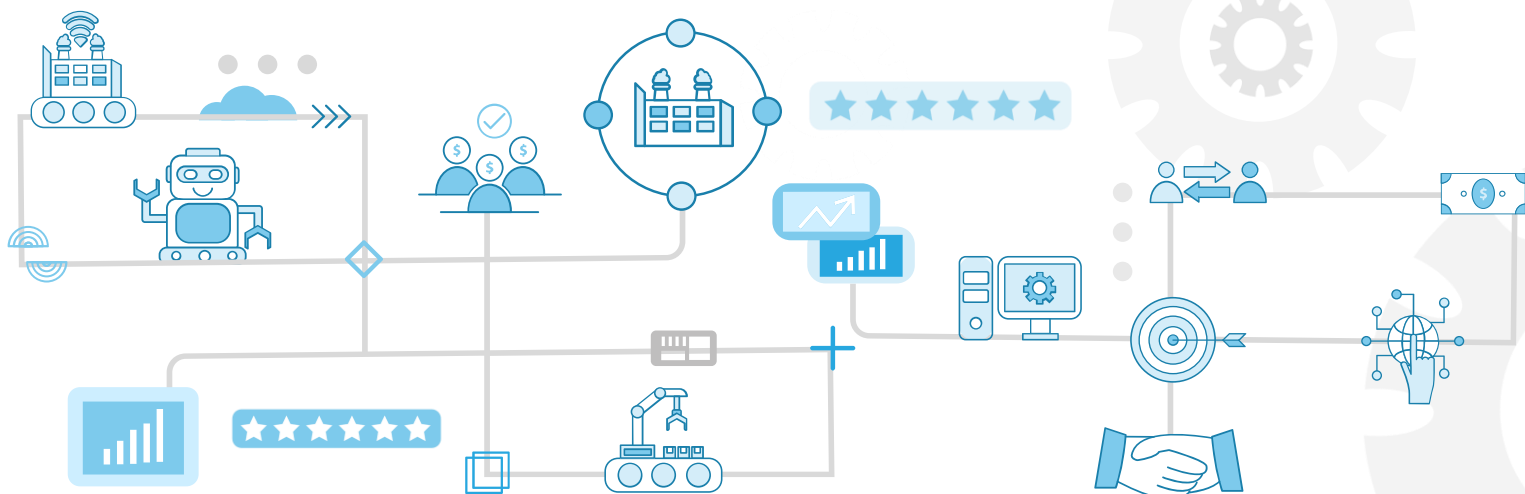
EXHIBIT 2

Partnerships between leading global firms and AI-focused firms on generative AI projects

Source: Everest Group (2024)

ILLUSTRATIVE

Industry	Potential use cases	Enterprises	Gen AI partner
Banking, Financial Services, and Insurance (BFSI) 	Loan/service applications, real-time customer analysis, fraud detection, risk management, financial report generation (balance sheet, cash flow statements, etc.)	Morgan Stanley ONE ZERO DIGITAL BANK	AI21labs OpenAI
Healthcare and Life Sciences (HLS) 	Drug discovery, clinical trials, medical simulation, personalized treatment, chatbot-based patient care	Insilico Medicine MAYO CLINIC	Chemistry42 Vertex.ai
Retail and Consumer Packaged Goods (RCPG) 	Self-service, billing, catalog generation, workflow automation, conversational commerce, product search, personalized recommendations	Levi's macy's	IBM Watson LALALAND
Telecom 	Networking tasks, contracting management, partner onboarding, scam detection, chatbots and virtual assistants	China Telecom verizon	OpenAI 天翼云
Manufacturing 	Product development and design, quality control, SCM, vendor support	AUTODESK ptc creo	OpenAI
Electronics, hi-tech, and technology 	Chip design, algorithm development, procedural content generation, player behavior analysis, UI design and code reviews	Adobe SYNOPSYS	Sensei
Media, entertainment, gaming 	2D/3D content creation, text/image/video/music generation, dynamic and personalized game storyline generation, NPC generation, testing, adaptive difficulty regulation	Disney unity	Disney Disney RESEARCH STUDIOS



It is evident that generative AI has the potential to meaningfully impact several industries.

- Banking, Financial Services, and Insurance (BFSI):** Generative AI can help BFSI professionals by readily providing information on tax laws and accounting standards to expedite auditing and comply with financial regulations. AI can also be employed to improve the performance of Machine Learning (ML)-based fraud detection models, as well as train ML models used for KYC processes.
- Healthcare and Life Sciences (HLS):** Generative AI can be the first point-of-contact for a patient by either recommending basic medical action or connecting the user with a doctor as required, thus removing the consultation bottleneck. The technology can also analyze clinical trial results as well as design and render prosthetics from simple sketches and data.
- Retail and CPG:** Generative AI can generate insights around market trends, challenges and customer preferences for retail and CPG companies. This information can be used in forecasting demands, managing inventory, and building trade promotions.
- Technology:** The technology industry has multiple use cases for AI, which are playing a pivotal role in improving efficiency across processes. Tech organizations can use generative AI to summarize elaborate product program codes in text format, as well as code creation and debugging, which is otherwise time-consuming and susceptible to human error.

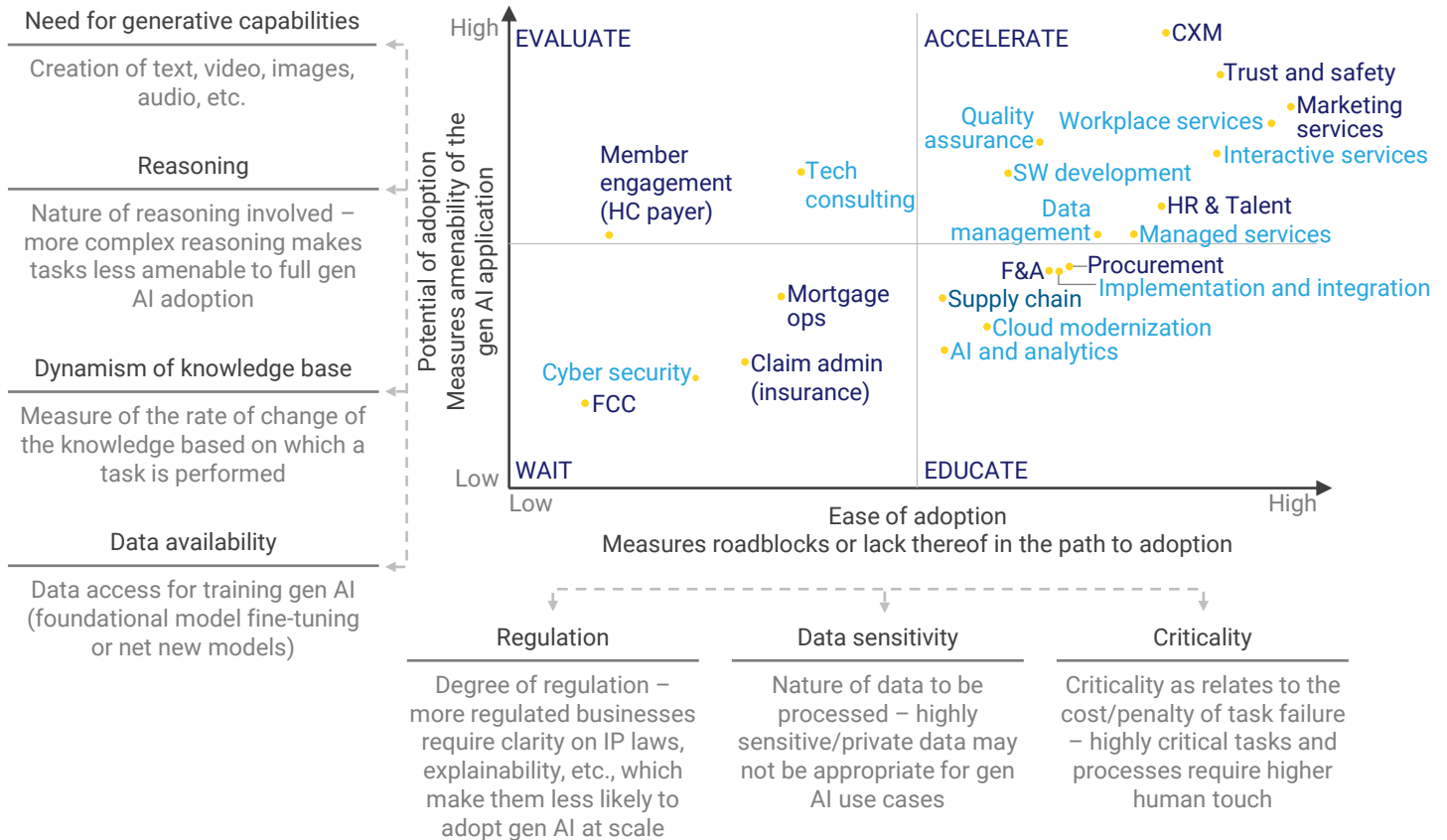
While generative AI will enable innovative transformation in a large total addressable market, it will not have the same impact across all industries.

There are two critical parameters to assess how IT-BPM functions could be impacted by generative AI: the potential of adoption and the ease of adoption. Potential of adoption measures how easy it is to train the generative AI application to serve a particular function's needs. It is determined by the need for automation, data availability, complexity of reasoning behind the AI model, and dynamism of data. Ease of adoption looks at regulations, data sensitivity, and criticality of use. Depending on the extent of potential and ease of adoption, IT-BPM functions and processes can be classified into four broad categories as depicted in Exhibit 3.

EXHIBIT 3

Categorization of IT-BPM functions and processes based on their potential and ease of adoption of generative AI

Source: Everest Group (2024)



The software, e-commerce, e-learning and electronics and hi-tech industries are some examples where we expect the impact to be highest, with estimates indicating more than half of the workforce potentially being exposed to generative AI. On the other hand, industries such as manufacturing and energy and utilities are less likely to be impacted. Among functions, we expect transactional processes such as customer service, billing and invoicing, and workplace services to be heavily impacted, while judgment-intensive processes such as strategy building, consulting, and cyber security to be minimally impacted by generative AI.

Challenges to generative AI adoption

While generative AI appears to be a promising source of industry revolution, the path to widespread transformation might be three to five years away given the challenges and risks that organizations must carefully navigate.

Data and consistency-related challenges

Given the high volume of data required to efficiently run generative AI models, data and consistency-related risks are the primary challenge to widespread adoption of generative AI:

- **Data privacy and security:** Generative AI systems require vast amounts of data to train effectively, but possession and storage of such data raise three major concerns: confidentiality – using confidential data for model training; data leakages – exposure of private information; and plagiarism – using copywritten data produced by large language models. The costs of a data breach can run into millions, or even billions, making data privacy and security the biggest challenge for generative AI. These challenges not only pose high risks of financial loss but may also have significant legal and reputational implications, threatening a business' very existence.
- **Bias and fairness:** Generative AI models are trained on large data sets, which themselves can be flawed or biased. For example, commercial facial recognition systems employed reported higher error rates when assigning a gender to darker-skinned individuals than it did for lighter-skinned people. In another example some recruiting tools trained on historical resumes were found to be biased against women, as they ranked male candidates higher for technical roles.
- **Deepfakes:** A significant concern with generative AI is the trustworthiness/reliability of its results. There are many examples of how this technology can be used to produce incorrect information in various media, which can lead to fraud and misinformation, which can have widespread social and legal implications.

Cost-related challenges

Integrating AI within the business can be very costly:

- **High computational cost:** Generative AI systems require vast amounts of data and other resources to train effectively. Accessing, possessing, and storing this data can be very expensive. OpenAI spends about US\$700,000 each day to keep ChatGPT running, including all the computing, hardware, and software components needed.
- **Regulatory expenses:** To date, more than 10 countries have taken steps to regulate the adoption of AI in the market. Meeting these regulatory requirements often requires investments in data management, audits, and compliance measures, which adds to the overall cost of using generative AI.
- **Training and maintenance costs:** Training AI models requires abundant resources across software and hardware, which are expensive. The Graphics Processing Units (GPUs) used for training AI models are also expensive. And on top of the high setup costs, they need to be updated and maintained continually as new data is generated, adding ongoing costs.

ESG-related challenges

In addition to the consistency and cost challenges, are ESG-related challenges. For example, deepfakes can worsen social unrest and polarization given the potential for false information generation and propagation. AI adoption requires the implementation of a governance structure that enforces ethical use of AI. Further, generative AI's computational power requires significant energy use, significantly impacting the environment.

Companies seeking to adopt generative AI need to address these challenges to ensure efficient and responsible AI deployment. Careful planning and phased implementation can help by allowing time for stakeholders to assess each issue and make carefully considered decisions before proceeding.

Impact of the AI wave on the IT-BPM workforce

Impact of the AI wave on the IT-BPM workforce

There is no doubt that generative AI holds the potential to redefine the IT-BPM industry, with an estimated impact that is higher than technologies such as RPA and automation, given wider acceptance and enthusiasm among consumers and business leaders. This potential, though, has created widespread frenzied concern that generative AI may replace humans with technology, leading to large-scale job losses. And the fact is, we are already seeing generative AI automating repetitive and preliminary tasks such as data processing, potentially eliminating some low-skill transactional roles.

Potential impact on IT-BPM workforce

It is imperative to understand that – while it is true that generative AI does have the potential to reduce human effort and improve efficiency – it cannot fully replace humans due to its lack of understanding of context and nuances. While the technology can produce plausible-sounding results, they may not be factually correct or precise, posing significant risks when applied to industries such as BFSI or healthcare and life sciences. Additionally, at its very core, generative AI generates results based on analysis of patterns and does not have the ability to generate novel ideas or engage in deep learning and evaluation, making it an aid for humans, and not a replacement.




Further, given the multiple challenges involved, slower than expected adoption, and a significant shift in the skill set required to make the market amenable to AI adoption, significant impact is still years away. In Everest Group's Key Issues 2024 survey, more than 50% enterprises say they believe gen AI is likely to have limited or no impact to their contact center agent headcount over the next 12 months.

By the time there is visible impact from this transformational technology, its adoption will create several new job roles that will either directly or indirectly result in net-positive impact on the job landscape, as indicated by our 3E framework, which assesses the impact of transformational technology, as seen in Exhibit 4.

EXHIBIT 4

Everest Group’s 3E framework to assess market impact of transformational technologies

Source: Everest Group (2024)

 Eliminate	 Evolve	 Establish
ERP		
<ul style="list-style-type: none"> • Point solutions • Manual processes • Siloed operations 	<ul style="list-style-type: none"> • Custom applications • Audit and compliance • Reporting 	<ul style="list-style-type: none"> • Industry/LoB-specific functionalities • Integration
Cloud		
<ul style="list-style-type: none"> • Reduced on-premises data center footprints 	<ul style="list-style-type: none"> • Security • Competitive landscape 	<ul style="list-style-type: none"> • New consumption models • Modern legacy • Cloud migration as-a-service
Generative AI		
<ul style="list-style-type: none"> • Language services? • Coding? 	<ul style="list-style-type: none"> • AI enablement services • Creative services 	<ul style="list-style-type: none"> • Will gen AI ease modernization?

Much like the earlier transformative impacts of Enterprise Resource Planning (ERP) and cloud, generative AI promises to revolutionize industries and processes. ERP, for example, eliminated the inefficiencies of point solutions and manual operations, evolving into custom applications and sophisticated reporting mechanisms. This transition birthed industry-specific functionalities that reshaped the nature of some work. Similarly, the cloud eliminated the burdens of on-premises data centers, creating the opportunity to enhance security measures and driving the evolution of the security and competitive landscape, ushering in the era of cloud migration as-a-service.

Generative AI is set to have at least the same impact. It holds the potential to eliminate repetitive tasks such as language services and coding, making room for strategic roles that harness AI’s potential. It will evolve roles, enabling professionals to amplify their impact through AI-powered creative services. Roles that require data science proficiency, AI, and machine learning will be essential for the widespread adoption of generative AI systems. Further, experts who can ensure ethical practices and compliance with regulations (internal and external) will be in high demand.

Much like other transformational technologies, generative AI will beget promising changes that thrive on the interplay between technology and human expertise. In a nutshell, this technological evolution is likely to impact the IT-BPM workforce in two key ways. While routine and repetitive tasks will be automated and low-skill jobs may be lost, it will free the workforce to focus on more judgment-intensive activities, enhancing efficiency and productivity. As the industry looks for experts who can fine-tune, train, develop, and maintain generative AI models, while also ensuring alignment with business objectives, next-generation roles such as prompt engineers, generative AI trainers, and tuning engineers, will gain prominence in the industry. Exhibit 5 presents an illustrative list of generative AI job titles that are already gaining prominence in the industry.

EXHIBIT 5

Illustrative list of generative AI job titles gaining prominence

Source: Everest Group (2024)

Analysis based on 200+ generative AI job openings on LinkedIn

High frequency

Upcoming

Occasional posts

Role Category						
Data for gen AI	Data collector	Chatbot content writer	Annotation analyst			
Development	Generative AI software architect	Generative AI software engineer	Data scientist	Generative AI platform engineer	Security and privacy architect	AI alignment engineer
Integration	Knowledge engineer	Generative AI implementation consultant				
Enhancement	Prompt engineer	Generative AI trainer	Prompt tuning engineer	AI moderator		
Business-specific	AI product owner	Generative AI ambassador	AI ethicist	Responsible AI officer		

Preparing to embrace the impact

With a better understanding of generative AI’s evolution and potential use cases, it appears that this advanced technology is unlikely to displace humans but will surely transform existing skill sets, fundamentally reshaping the way businesses operate. To stay relevant in these dynamic times, the workforce and organizations must understand and integrate evolving industry needs, concurrently focusing on skill set enhancement and effective change management.

- Talent upskilling and reskilling:** Newer roles such as prompt engineer, AI auditor, and AI ethics manager have already started to gain traction. At an individual level, workers need to upskill/reskill themselves in areas such as data analytics, machine learning, and AI to enable them to fill these newer roles. At the same time, organizations need to prioritize the upskilling and reskilling of their employees, enabling them to seamlessly transition into these newer roles to fully harness the potential of generative AI technologies. Training in newer skill sets and potential shortcomings of this new technology will be imperative for successful adoption on a wider scale.
- Change management:** The primary requirement for optimizing the impact on the IT-BPM workforce will be to allay fears associated with job losses and present a positive outlook related to this change, through education and change management initiatives.

The Philippine IT-BPM industry: ready for generative AI disruptions

Generative AI's potential disruption to the IT-BPM industry cannot be underestimated. Delivery geographies across the globe will need to ensure that their workforces understand the change in service delivery and upskills/reskills themselves to meet the industry's evolving needs. All stakeholders – organizations, industry associations, and the government – have key roles to play in this new phase of the industry.

The Philippine IT-BPM industry has the right mix of capabilities and industry support to harness these evolving opportunities:

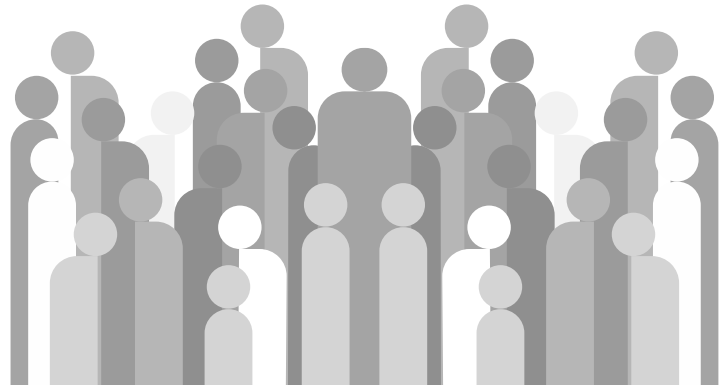
- **Mature market for global services delivery:** The Philippines is one of the leading locations for IT-BPM service delivery of, with 18% of the global IT-BPM headcount. In a year marred by macroeconomic concerns, rising prices and pressures to manage cost and price margins, preliminary data from the Philippines' IT-BPM industry indicates robust growth. The workforce has expanded by 8.7%, reaching a total of 1.70 million FTEs, surpassing the global growth rate of 7.1%. In terms of revenue, the Philippines has achieved an 8.8% growth rate, outperforming the global average of 7.7%, resulting in estimated revenues of US\$35.4 billion.
With relatively higher service delivery maturity, skilled talent, and cost-savings potential, it is already the destination of choice for global services delivery for enterprises worldwide. With the right interventions in skill enhancement and change management, the Philippines stands to be the front-runner in driving IT-BPM service delivery adoption and evolution of generative AI technologies.
- **Supportive business and operating environment:** The IT-BPM industry benefits from a robust ecosystem fostered by government support, industry associations, and academia, all dedicated to ensuring its readiness for the future. Multiple initiatives are regularly launched to ensure skilling of the incoming workforce and upskilling/reskilling of the current workforce to meet the sector's evolving demands. The IT Business Process Association of Philippines (IBPAP) is at the forefront of these efforts, proactively preparing Filipino talent for higher-value roles in an AI-driven economy. IBPAP has initiated upskilling and reskilling programs through partnerships with Cirrolytix, LinkedIn, Lumify Work Ph, StackTrek, and the Analytics and AI Association of the Philippines (AAP). Furthermore, the IBPAP has established an AI Advisory Council, composed of industry leaders, technologists, and individuals from global research firms, to gain a deeper understanding of fast-changing AI technologies and their potential impact on the Philippine IT-BPM industry.
- **Favorable demographic structure:** Unlike the leading source geographies and the majority of the competing locations for IT-BPM service delivery, the Philippines boasts a much younger population, as shown in Exhibit 6. This demographic advantage translates into an easier learning curve for the younger population when it comes to acquiring new skill sets, in contrast to locations with relatively older demographics. Consequently, the current and incoming workforce in the Philippines can more easily acquire the in-demand skill sets required to adopt generative AI technology.

EXHIBIT 6

Age demographics in key IT-BPM services source and delivery geographies

Source: Everest Group (2024)

Population, by age group
Proportion of total population; 2021



	USA	UK	Germany	France
80+	4%	5%	7%	6%
70-79	7%	9%	9%	9%
60-69	12%	11%	13%	12%
50-59	13%	14%	16%	13%
40-49	12%	12%	12%	13%
30-39	14%	13%	13%	12%
20-29	13%	13%	11%	11%
10-19	13%	12%	9%	12%
0-9	12%	12%	9%	11%

	Philippines	Costa Rica	India	France
80-89	1%	2%	1%	4%
70-79	2%	5%	3%	8%
60-69	5%	9%	6%	14%
50-59	8%	12%	9%	12%
40-49	11%	13%	12%	15%
30-39	14%	16%	16%	16%
20-29	17%	16%	18%	11%
10-19	19%	14%	18%	10%
0-9	21%	13%	17%	10%

The Philippines has one of the youngest populations across all competing locations

Conclusion

Generative AI is the juggernaut that has captured the attention – and excitement – of businesses and consumers alike. This breakthrough technology finds application across industries, functions, and regions, well beyond earlier technologies that primarily streamline routine and repetitive tasks to potentially company-changing benefits. Nonetheless, there are significant risks and complexities that could impede widespread AI adoption and need to be addressed with careful consideration. Furthermore, some industries are better positioned than others to take full advantage of AI integration. As a result, significantly observable adoption is not likely within the next three years.

Despite these challenges, generative AI has the potential to unlock significant new opportunities for the IT-BPM industry as new and innovative use cases continue to emerge. While the potential for automating rudimentary data handling tasks has raised concerns about job displacement, the benefits will outweigh the concerns and new job roles are likely to replace many of the displaced roles. As with prior transformational technologies, generative AI is likely to create a net-positive disruption by generating several high-skilled judgement-intensive jobs.

To fully embrace the potential changes within the IT-BPM industry, it is imperative to implement change management initiatives and reskill/upskill the workforce so it can harness emerging opportunities presented by generative AI.

The Philippines' IT-BPM sector is uniquely and well positioned to take advantage of the opportunities presented by widespread generative AI adoption. The country is already a destination of choice for IT-BPM service delivery, boasting robust growth even during the recent global economic slowdown. Further, it benefits from one of the world's youngest populations among source geographies and competing locations, making it relatively easier to train workers on the skills needed to capitalize on the generative AI wave. Moreover, the industry receives strong support from government, industry associations, and academia to ensure that the industry and its workforce remain future-ready. Multiple initiatives aimed at upskilling and reskilling the current workforce and preparing the incoming workforce are already in progress. The Philippines has the right mix of capabilities and support to ride the generative AI wave and take the IT-BPM industry to greater heights.

