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INDUSTRY OUTLOOK

UNLEASHING INDIA'S DIGITAL POTENTIAL: IT INDUSTRY OUTLOOK 2023

14 August 2023

Introduction

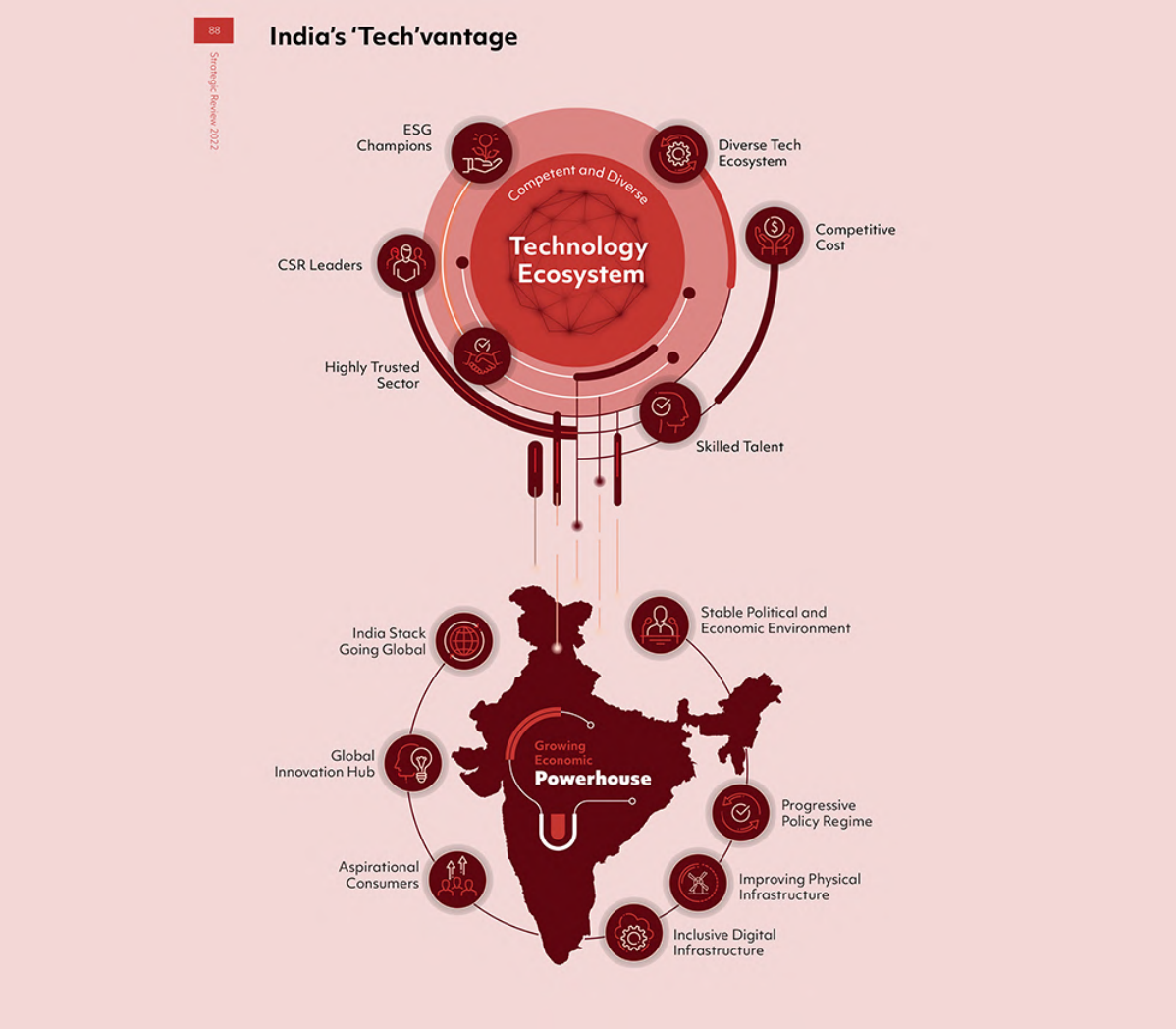
India is acknowledged as a prominent international centre for IT services and has emerged as the third-largest startup ecosystem globally with a remarkable count of over 100 unicorns. Till FY 2016-17, approximately one unicorn was being added every year. Over the past four years (since FY 2017-18), this number has been increasing at a rapid pace, with a whopping 66 per cent Year-on-Year (YoY) growth in the number of additional unicorns being added every year. As of 31st May 2023, India is home to 108 unicorns with a total valuation of USD 340.80 billion. Out of the total number of unicorns, 44 unicorns with a total valuation of $ 93.00 billion were born in 2021 and 21 unicorns with a total valuation of USD 27 billion were born in 2022. [1]

The advent of cutting-edge technologies such as 5G, Internet of Things (IoT), Advanced Data Analytics, Artificial Intelligence (AI), Cloud Computing, Augmented and Virtual Reality (AR/VR), 3D printing, robotics, and blockchain, among others, is set to revolutionize the trajectory of technological advancement. To foster innovation in these domains, multiple Centres of Excellence have been established by the government. Further, endeavours are underway to empower Indian IT professionals with world-class skills in these transformative technologies through the implementation of the Future Skills Programme. [2]

The Indian IT industry stands as a rapidly expanding domain within the Indian economy. In the year 2022, this industry (IT-BPM) made a significant contribution of 7.4 per cent to India's Gross Domestic Product (GDP) while providing employment to an impressive workforce of over 5 million individuals. Projections indicate that the sector is poised to experience robust growth, with a compound annual growth rate (CAGR) estimated between 11 per cent and 14 per cent over the upcoming five years. This trajectory is expected to propel the industry to a substantial value of USD 350 billion by the year 2026. [3]

The recovery in FY 2022 and FY 2023 after the disruptions inflicted by pandemic, has maintained the growth momentum by witnessing sustained revenue growth while prioritizing the reinforcement of industry fundamentals and the cultivation of trust and competencies. Against the backdrop of a volatile global economic landscape and the looming prospect of a recession, the demand for technology adoption and digital acceleration remains robust. Consequently, technology remains a pivotal strategic priority, serving as a vital driver of business innovation and transformation while simultaneously enhancing operational efficiencies and cost optimization.

Figure 1: Technology Ecosystem in India



Source: NASSCOM

According to a recent report from NASSCOM, India's technology industry is poised to achieve remarkable growth in FY23. The industry's revenue, encompassing hardware, is estimated to surpass USD 245 billion, representing an impressive year-on-year growth of 8.4 per cent. This substantial increase amounts to an additional USD 19 billion compared to the previous year.

In terms of exports, the report highlights that they are expected to reach USD 194 billion, with growth rates of 9.4 per cent in reported currency terms and 11.4 per cent in constant currency terms. Simultaneously, the domestic technology sector is projected to reach $51 billion, demonstrating a year-on-year growth of 4.9 per cent. Further, in rupee terms, domestic tech revenues are anticipated to achieve a notable 13 per cent year-on-year growth, propelled by continued investments from enterprises and the government. It is noteworthy that the industry remains a significant employment creator, with the addition of nearly 300,000 employees, bringing the total employee base to approximately 5.4 million. This robust 5.7 per cent year-on-year growth reinforces India's position as a leading hub for digital talent on a global scale, further solidifying its status as the 'Digital Talent Nation'.

India is home to approximately 35,000 technology firms, with a significant 53 percent share in the country's service exports. In the estimated financial year of 2023, the tech industry is anticipated to generate revenue of approximately USD 245 billion, out of which digital revenues will account for an impressive 32 to 34 per cent. Notably, India also witnessed substantial foreign direct investment (FDI) in the IT sector, with USD 14.6 billion flowing in during the same year. This remarkable sum represents an impressive 26 percent of the total FDI inflows received by the country. [4]

Box 1: ***Key insights of the IT Industry of India in 2023***

- The IT industry in India is the second largest in the world, after the United States.
- India is home to over 4 million IT professionals.
- The IT industry in India expected to contribute 10% to India's GDP by 2025.
- The IT industry in India is a major source of foreign exchange earnings for India.
- Computer Software industry experienced robust growth of 22.4% and 19.2% in 2021-22 and 2022-23 respectively, but slower growth is anticipated in 2023-24.
- Investment commitment for Data Centre construction in 2022-23 exceeded ₹924 billion, more than double the investment in 2021-22 (₹434 billion).
- Uttar Pradesh plans to establish new software technology parks in Agra, Bareilly, Gorakhpur, and Varanasi with a total construction cost of ₹800 million.
- IT sector hiring declined by 31% YoY in June 2023 across various types of IT companies.
- New investment proposals by the computer software industry amounted to ₹800 million in the quarter ending June 2023.
- ITES industry reported a strong 12% growth in sales revenues in the financial year 2022-23.
- IT services companies expected to report weak June 2023 quarter results due to a soft discretionary spending environment, project pullbacks in financial services and telecom, project ramp downs, and lower conversion of total contract value to annual contract value.

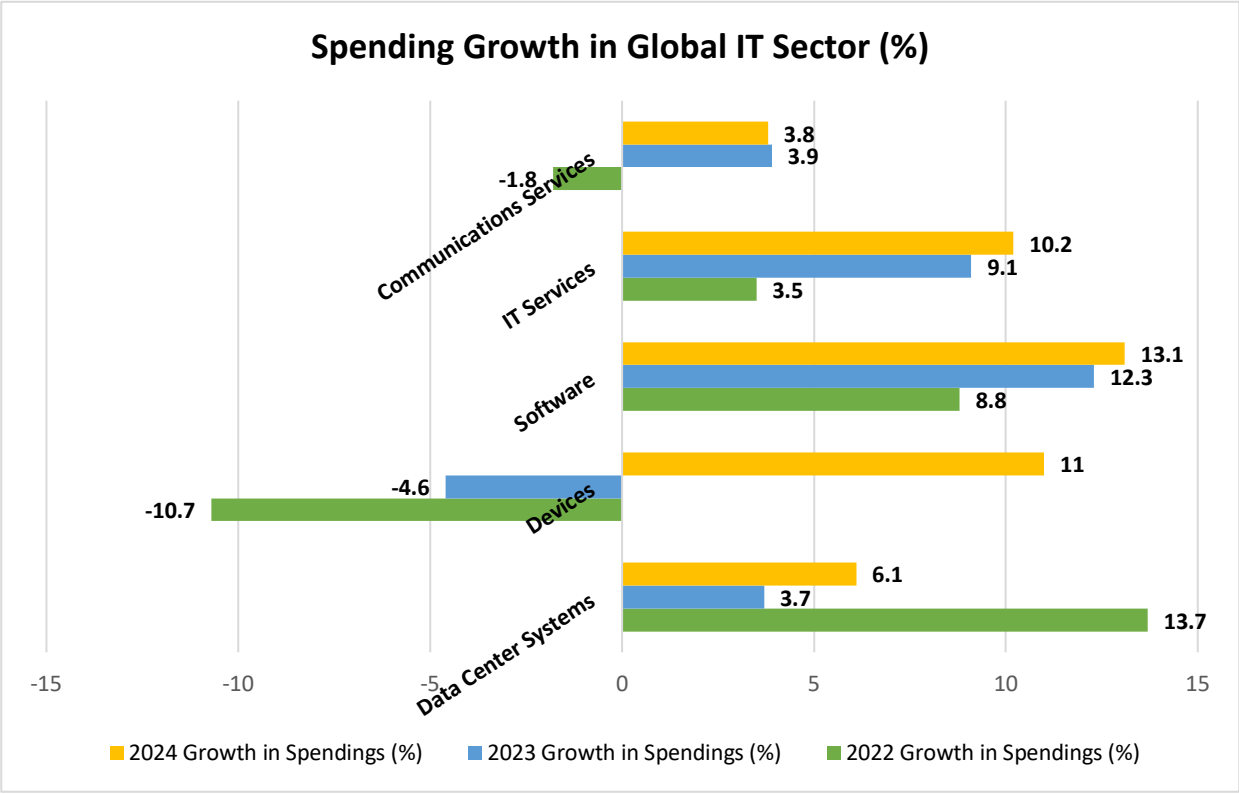
Global Scenario for IT Sector

According to a report by Global News Wire, the worldwide information technology market expanded from USD 8,179.48 billion in 2022 to USD 8,852.41 billion in 2023, representing a compound annual growth rate (CAGR) of 8.2 percent. The global IT industry had been making progress in recovering from the disruptions caused by the COVID-19 pandemic. However, the ongoing conflict between Russia and Ukraine has hindered this recovery momentum, placing many markets worldwide at the verge of recession. Nonetheless, taking into account these short-term consequences, it is anticipated that the global IT industry will reach a value of USD 11,995.97 billion by 2027, with a CAGR of 7.9 percent. In 2022, the Asia-Pacific region held the distinction of being the largest market for information technology (IT), with North America following closely behind as the second largest region in the IT market. [5]

As Gartner has forecasted that amid all the global macroeconomic headwinds, the IT spending worldwide is likely to grow at 5.5 per cent in 2023 to a total USD 4.6 trillion from the 2022 levels.

Despite the several macroeconomic headwinds across the globe, digital transformation remained strong and resilient. Globally, the software segment is one of the strongest segments expected to grow double-digit in the current year followed IT Services and Communication services (see Chart 1).

Chart 1: Where the Global IT Spending goes to*?



*2024 Forecasted. *Source: Gartner (April 2023)*

In 2022, Data Centre Systems experienced a substantial growth in spending at 13.7 per cent, followed by an expected slight decline to 3.7 per cent in 2023 and a subsequent increase to 6.1 per cent in 2024. But devices encountered a decline in spending by -10.7 per cent in 2022, which is expected to improve to -4.6 per cent in 2023 and then witness a significant rise of 11 per cent in 2024. Software spending

exhibited positive growth with rates of 8.8 per cent in 2022, 12.3 per cent in 2023, and 13.1 per cent in 2024. IT Services displayed a growth rate of 3.5 per cent in 2022, which is anticipated to accelerate to 9.1 per cent in 2023 and further rise to 10.2 per cent in 2024. Communications Services experienced a decline in spending by -1.8 per cent in 2022, but it is predicted to recover with growth rates of 3.9 per cent in 2023 and 3.8 per cent in 2024. Overall IT spending had a modest growth rate of 0.5 per cent in 2022, which is projected to improve to 5.5 per cent in 2023 and further rise to 8.6 per cent in 2024. [6]

Classification of IT Sector in India

The Indian Information Technology industry can be divided into the following main categories: IT Services, Engineering Services, ITES-BPO Services, and e-Business. [7]

IT Services can be further classified into Information Services (IS) outsourcing, support and installation of packaged software, systems integration, processing services, support and installation of hardware, and IT training and education.

Engineering Services encompass Industrial Design, Mechanical Design, Electronic System Design (including Chip/Board and Embedded Software Design), Design Validation Testing, Industrialization, and Prototyping.

ITES-BPO Services refer to services that utilize telecom networks or the Internet. Examples of such services include Remote Maintenance, Back Office Operations, Data Processing, Call Centres, and Business Process Outsourcing.

The IT sector is not only viewed as a significant market but also as a potential production base by international companies. As a result, India is widely recognized as a pioneer in software development and a preferred destination for IT-enabled services.

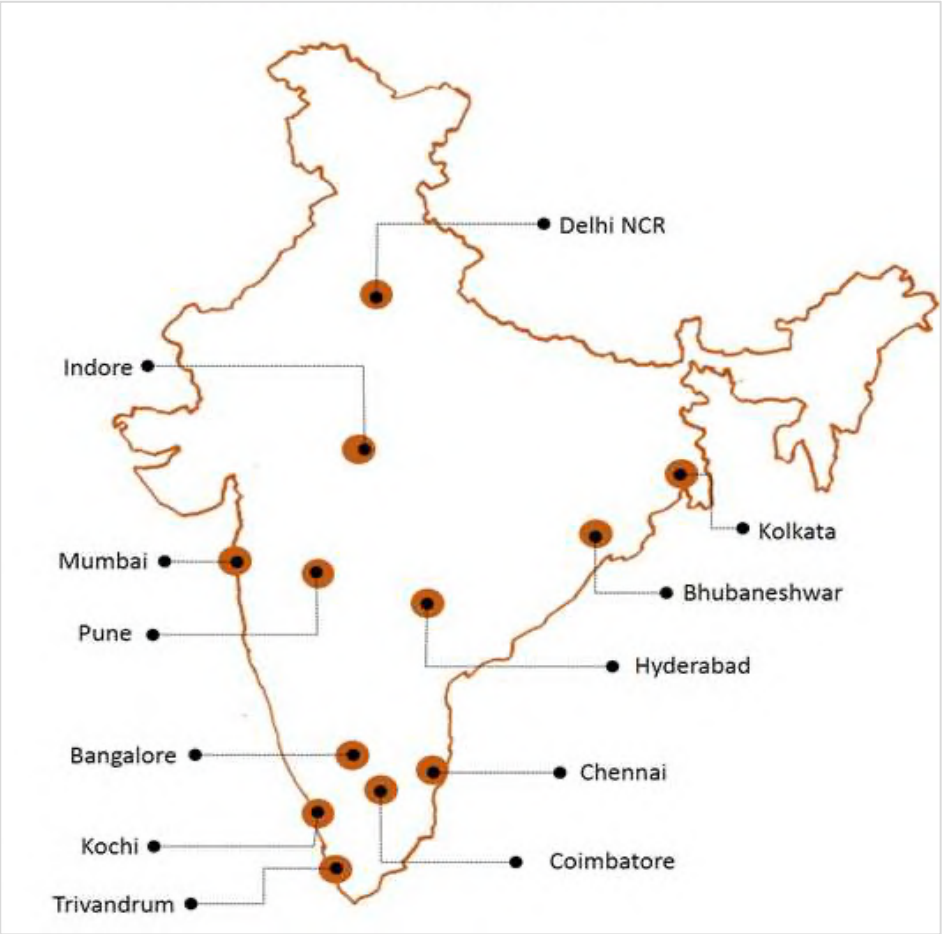
Cluster of IT Hub cities in India

India is home to several major IT hub cities that have played a significant role in the country's rapid technological advancement. These cities have emerged as centres for innovation, technology development, and IT-enabled services, attracting both domestic and international companies.

Among the IT hub cities in India, Bengaluru tops the list. Popularly known as the "Silicon Valley of India", Bengaluru continues to be the undisputed leader of the IT growth story in India. It houses the headquarters of numerous global tech giants and hosts a vast number of software development centres, research institutions, and startups. The city's robust infrastructure, skilled workforce, and supportive ecosystem have contributed to its prominence in the IT industry.

Among others, Hyderabad, Pune, Chennai, Delhi-NCR, and Mumbai are just a few examples of the major IT hub cities in India where IT sector is significantly growing and contributing to the overall development of the Indian IT industry (see Figure 2).

Figure 2: Cluster of IT Hubs in India



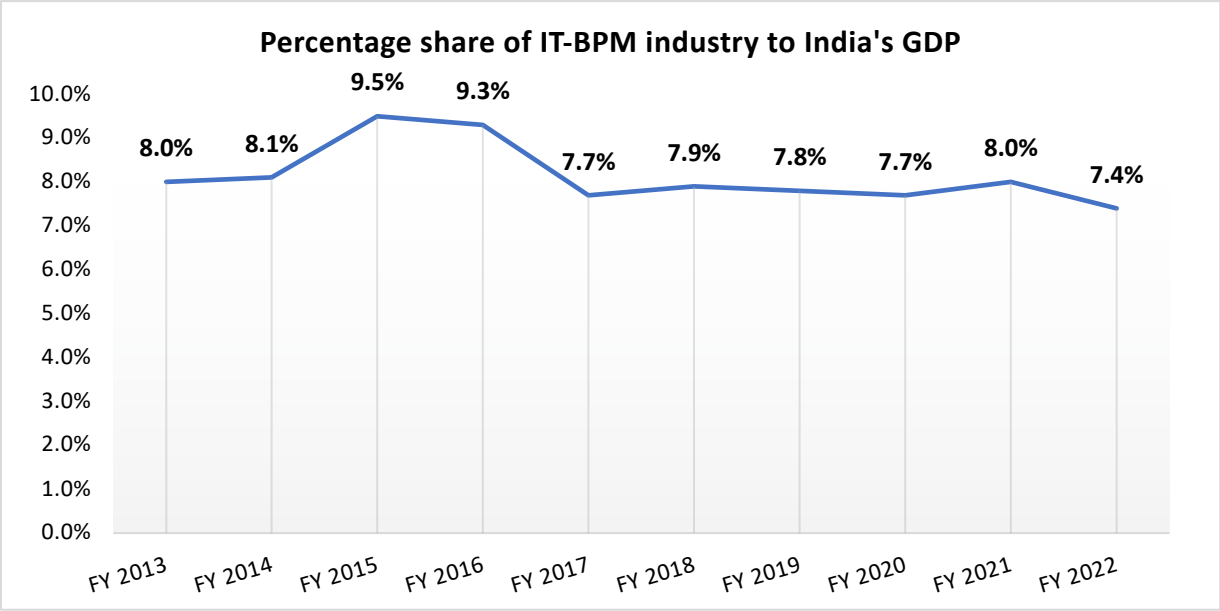
Source: Google web

Significant impact of the IT-BPM industry on India's GDP over the past decade

India holds a prominent position as a major offshoring hub for various IT companies globally, making its business process management market highly significant. The information technology/business process management (IT-BPM) sector made a substantial contribution of approximately 7.4 percent to the country's GDP in the fiscal year 2022. BPM can be regarded as a discipline rather than a mere process, encompassing techniques to enhance, analyse, automate, and optimize business processes. [8]

The share of IT-BPM industry to national GDP from FY 2013 to FY 2015, there was a gradual increase rising from 8.0 per cent to 9.5 per cent indicates a positive-growth trajectory and an expanding presence of the IT sector in the Indian economy (see Chart2).

Chart 2: Share of IT-BPM Industry to India's GDP in the last 10 years (per cent)



Source: Statista

However, in FY 2016 and FY 2017, there was a temporary setback for the IT-BPM industry, the share was dropping to 9.3 per cent and 7.7 cent respectively.

In FY 2018 and FY 2019, the share remained relatively stable, with minor fluctuations at 7.9 per cent and 7.8 per cent respectively. In FY 2020 and FY 2021, the share of the IT industry experienced a marginal decline, reaching 7.7 per cent in both years. This decline in the contribution of IT-BPM industry can be attributed to a deceleration in advanced economies and weak global cues arising from the slowdown in the US and European nations, thereby negatively impacting the industry's growth during this period.

The most significant change occurred in FY 2022, where the share of IT-BPM industry to national GDP dropped to 7.4 per cent, marking a significant decrease compared to the previous years.

In the last 10 years, the contribution of IT-BPM industry reflects a mix of growth, and stability. It highlights the importance of monitoring and analysing the factors that influence these fluctuations to understand the dynamics of the industry and its impact on the economy.

Export and Import Scenario

Over the past one decade, the export of software from India has experienced significant growth. Starting at USD 65,867 million in 2012-13, software exports steadily increased each year, reaching USD 146,775 million in 2022-23. This growth trend indicates a strong and thriving software industry in the country (see Table 1).

Table 1: Export and Import of Software from India in last 10 years.

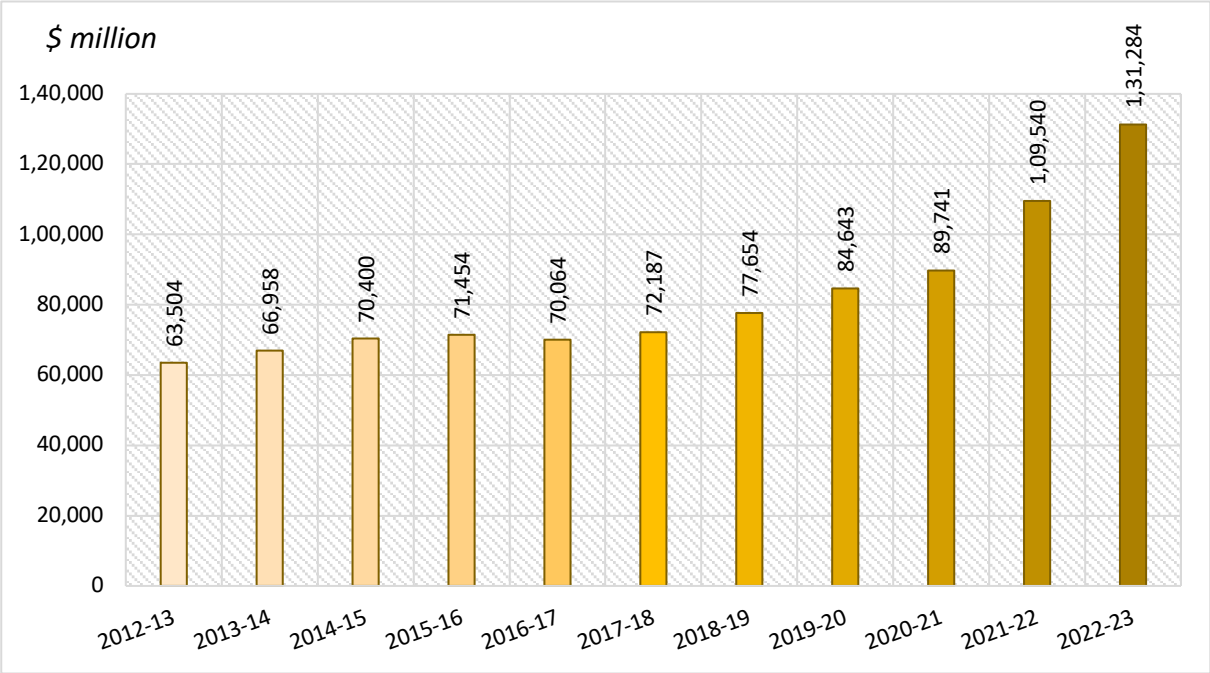
Export of Software (in USD million)		
Year	Export	Import
2012-13	65,867	2,363
2013-14	69,439	2,481
2014-15	73,108	2,708
2015-16	74,153	2,699
2016-17	73,651	3,587
2017-18	77,326	5,139
2018-19	83,466	5,812
2019-20	93,102	8,459
2020-21	99,997	10,257
2021-22	122,093	12,554
2022-23	146,775	15,491

Source: CMIE

The consistent growth in software exports over the past one decade reveals that there is a strong demand for India's software products globally. This reflects that India has a pivotal role in the global market for software products driving country's reputation for delivering high-quality software solutions and services.

In net export terms, India has consistently maintained a strong position in software exports. This indicates India's competitiveness in the global market. With a net export value of USD 63,504 million in 2012-13, India's net exports steadily increased over the years, reaching an impressive USD 131,284 million in 2022-23 (see Chart 3).

Chart 3: Net Export of Software by India

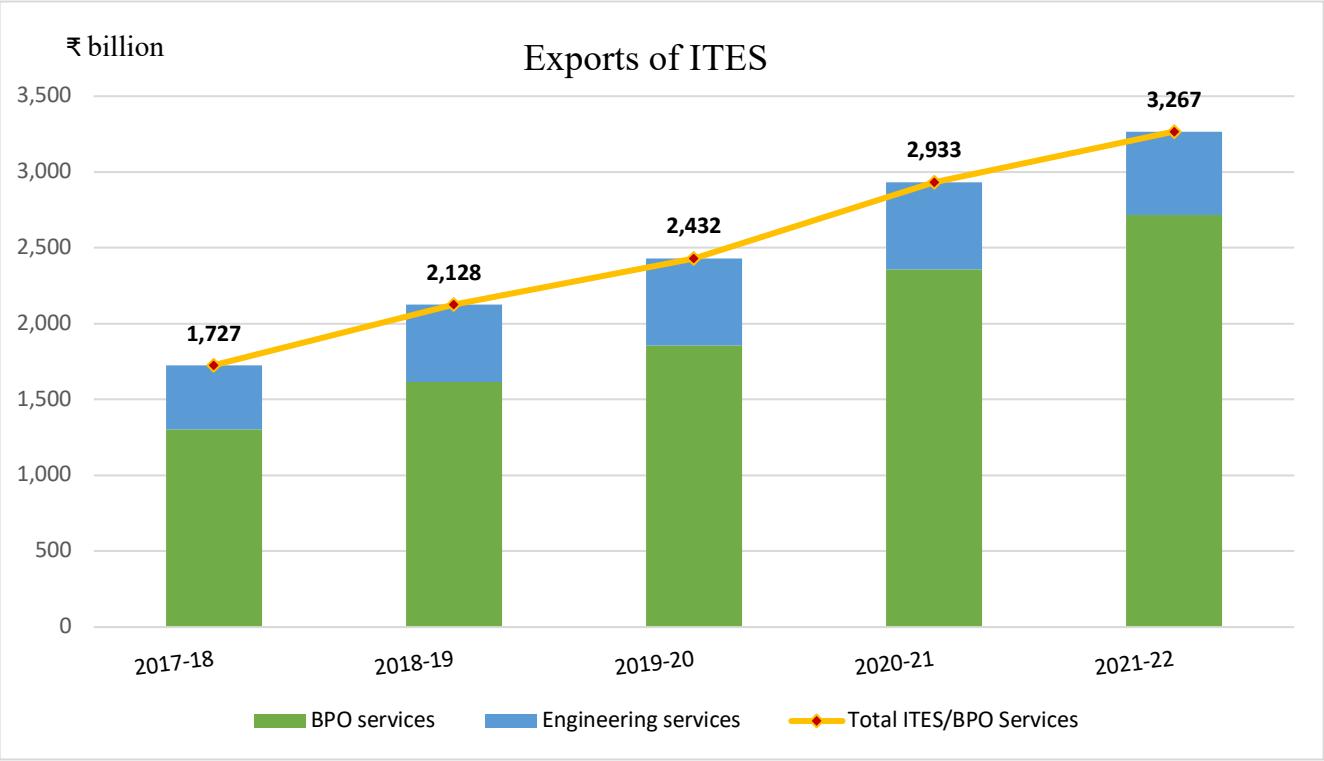


Source: CMIE, Infomerics Economic Research

The upward trajectory in net exports of Software from India signifies its growing influence in meeting global software demands.

When it comes to the export of IT-enabled services (ITES) from India, the industry has maintained their robust growth. In this segment, the BPO services is largely contributing to the industry's export followed by the Engineering Services (see Chart 4).

Chart 4: Exports of IT Enabled Services (ITES): Reported by 20 Largest Companies (in ₹ billion)

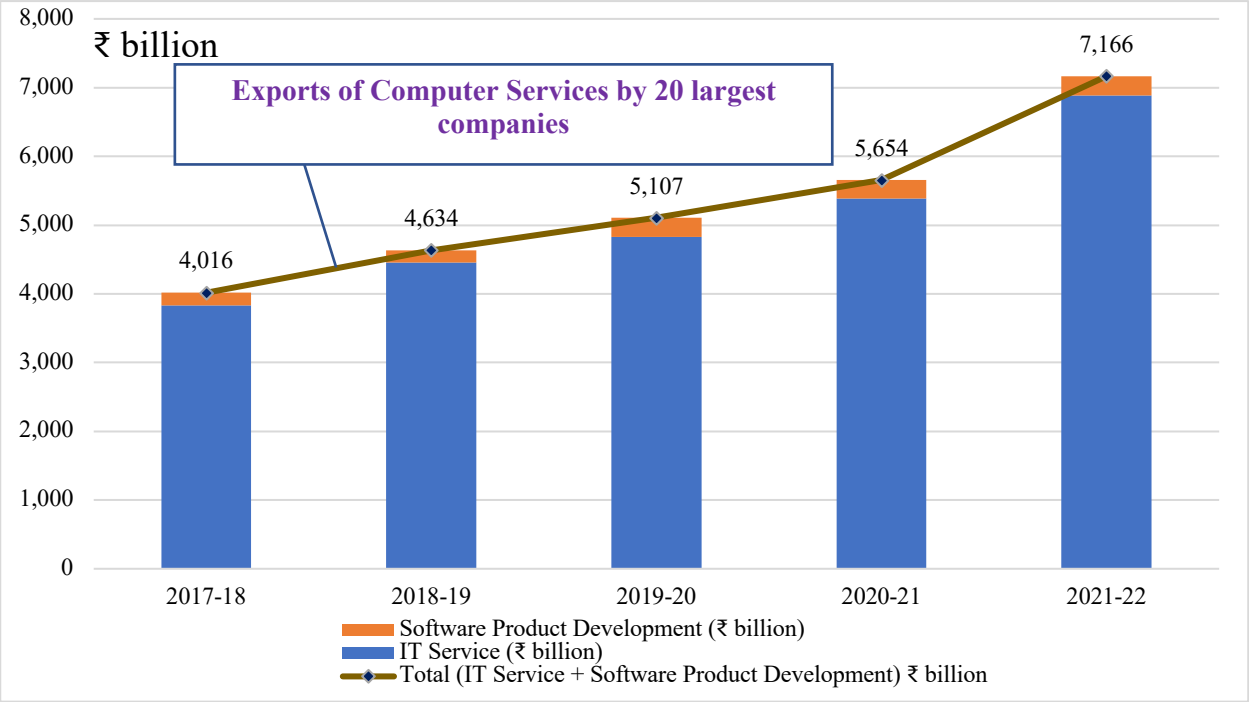


Source: CMIE, Infomerics Economics Research

The export of ITES/BPO services in total in India has displayed a consistent upward trajectory over the past five years. As reported by the 20 largest companies in ITES domain, the export data above explains the robustness of ITES sector. Starting at the value of ₹1,727 billion in 2017-18, the exports witnessed a notable increase to ₹2,128 billion in 2018-19, followed by a further surge to ₹2,432 billion in 2019-20. Despite the challenges posed by the global pandemic in 2020-21, the sector demonstrated resilience and recorded a significant growth to ₹2,933 billion. The momentum continued in the subsequent year, with exports reaching an impressive ₹3,267 billion in 2021-22. These consistent year-on-year advancements not only underscore the robustness of the ITES/BPO sector but also highlight its crucial role in India's economic growth and global competitiveness.

In Computer Service segment, IT Service export dominates the contribution (see Chart 5).

Chart 5: Exports of Computer Services reported by 20 largest companies (in ₹ billion)

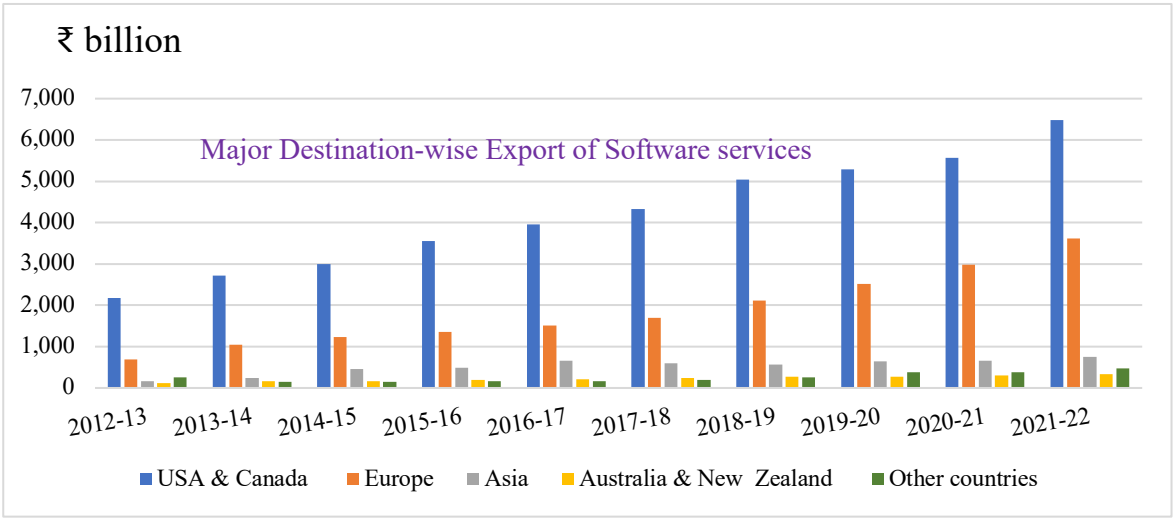


Source: CMIE, Infomerics Economics Research

The data shows that the export value of IT services and software product development in India has been growing steadily over the past four years. In 2017-18, the total export value was ₹4,016 billion. This increased to ₹4,634 billion in 2018-19, ₹5,107 billion in 2019-20, ₹5,654 billion in 2020-21 and ₹7,166 billion in 2021-22. This represents an overall growth of 78 per cent over the five-year period.

The demand for India's software services is very high in the USA, Canada and other European countries. The USA & Canada remains a leading destination for India software services export followed by the Europe, Asia, and Australia and New Zealand (see Chart 6).

Chart 6: Major Destination-wise Exports of Software Services by India

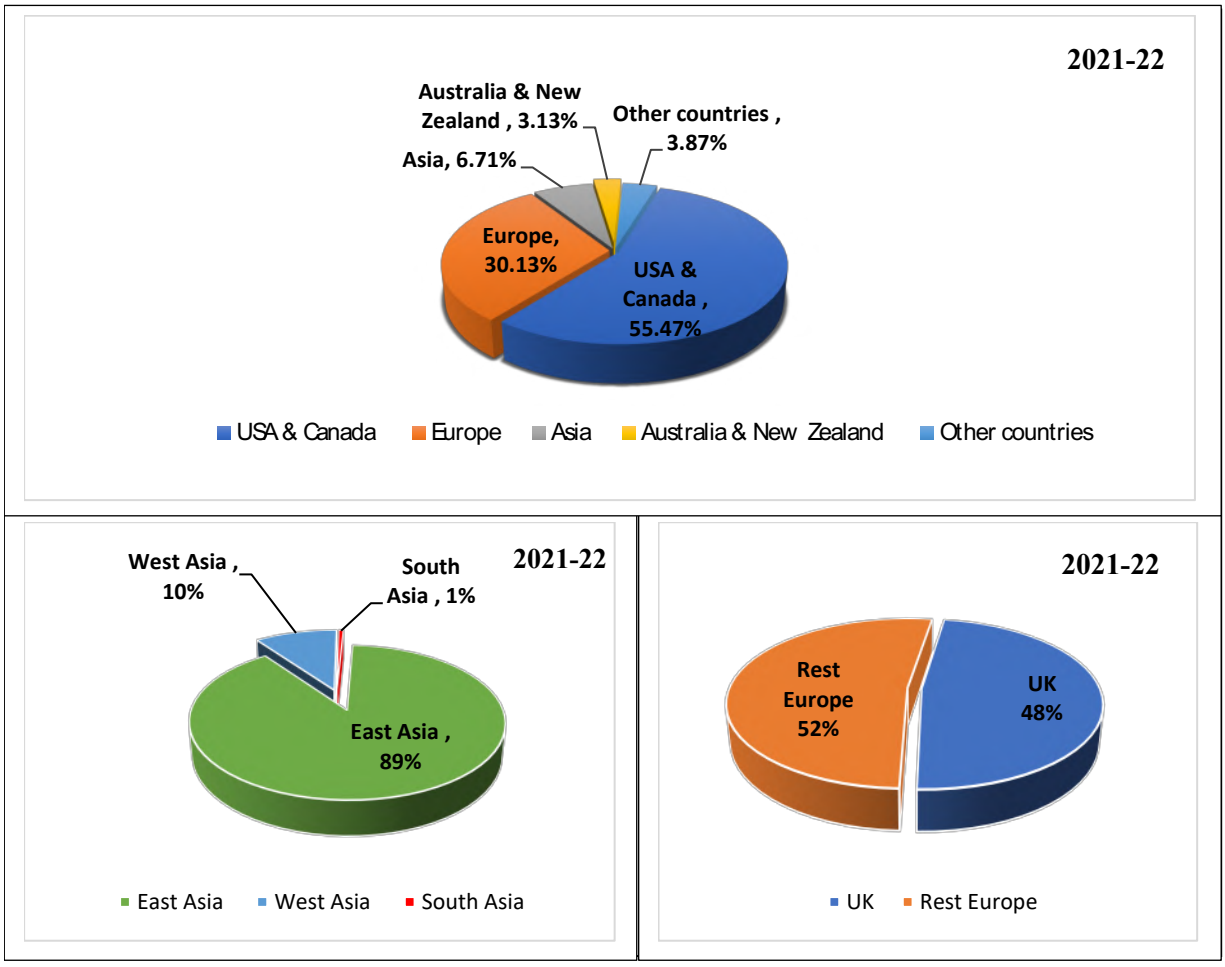


Source: CMIE, Infomerics Economics Research

From 2012-13 to 2021-22, there was a consistent growth in exports across all regions. Notably, the USA & Canada have consistently remained the largest destination, with exports increasing from ₹2,182 billion in 2012-13 to ₹6,476 billion in 2021-22. Europe also showed significant growth, rising from ₹690 billion in 2012-13 to ₹3,618 billion in 2021-22. Asia experienced steady growth as well, increasing from ₹163 billion in 2012-13 to ₹759 billion in 2021-22. Export in Australia & New Zealand also displayed an upward trend. This can be concluded that there is strong demand for India's software services in the global market.

The USA & Canada consistently remain the largest market for India software services, accounting for a significant portion of India's exports, starting at 63 per cent of the total software services export basket in 2013-14 and gradually declining to 55 per cent in 2021-22. Europe has shown a steady increase in its share, rising from 20 per cent in 2013-14 to 30 per cent in 2021-22 (see Box 2).

Box 2: Destination-wise share of India's export of Software Services in 2021-22



Source: CMIE, Infomerics Economic Research

Asia has maintained a relatively stable share of around 7-10 per cent throughout the years. Australia & New Zealand have remained consistent at 3 per cent throughout the period.

In the year 2021-22, the above data explain the share of India's exports of software services across major destinations in the world. The largest share of exports, accounting for 55.47 per cent, was directed towards the United States and Canada. Europe followed with a significant share of 30.13 per cent, while Asia received 6.71 per cent of the exports. Australia and New Zealand represented the smallest portion with 3.13 per cent of the total exports. This data suggests that the United States and Canada remain the dominant recipients of exported software services, with Europe also playing a substantial role in the market. Meanwhile, Asia and Australia & New Zealand received relatively smaller shares in comparison.

Investment

India is the third largest and fastest-growing hub for technology startups. In the year 2022, over 1300 startups were set up, and out of these, 23 achieved unicorn status, making India the second-highest source of unicorn additions in the same year. [9]

The IT industry is expected to grow at a healthy pace, driven by the increasing adoption of technology by businesses around the world, and favourable government policies. The global presence of India's IT products and services in the last few decades has made India an attractive investment destination for technology firms.

The IT industry has experienced a significant increase in the cost of new projects announced over the years, with the highest cost of ₹1,081,974 million recorded in 2022-23, indicating a trend of growing investments and a strong focus on innovation and expansion within the industry (see Table 2).

Table 2: Investment Trends in Information Technology Industry

Year	During the year				At the end of the year			
	New projects announced		Projects completed		Projects under implementation		Projects outstanding	
	Cost	Count	Cost	Count	Cost	Count	Cost	Count
	₹ million	Numbers	₹ million	Numbers	₹ million	Numbers	₹ million	Numbers
2012-13	204,499	32	27,030	14	1,558,366	177	2,436,787	286
2013-14	280,200	9	18,522	9	1,427,525	155	2,621,967	262
2014-15	100,609	36	24,161	12	1,315,033	127	2,557,561	248
2015-16	171,899	43	65,782	13	1,252,552	120	2,465,215	235
2016-17	192,818	48	29,046	18	1,406,498	134	2,033,925	241
2017-18	58,856	32	42,086	16	1,241,127	144	1,943,155	247
2018-19	319,214	49	19,245	20	1,305,001	160	2,147,019	259
2019-20	408,786	49	89,350	18	1,606,531	160	2,230,612	272
2020-21	500,192	50	8,598	13	1,638,824	152	2,637,837	288
2021-22	490,130	37	37,240	9	1,451,412	135	2,836,553	275
2022-23	1,081,974	43	117,947	21	1,500,018	115	3,507,000	262

Source: CMIE

Investment in the computer software industry is expected to robust in the coming years. During the year 2020 to 2023, the software industry's hiring spree has significantly increased. Now, the employees are returning to workspaces from the earlier mode of work from home. This has increased the demand for office spaces and hence more investments are required in the industry. New investment proposals by the computer software industry amounted to ₹800 million in the quarter ended June 2023 which is quite lower than the same quarter of the preceding year when the new investment proposals worth ₹21,184.6 million were announced. [10]

As per the CMIE's capex monitoring machinery, the domestic and international firms have committed to invest over ₹924 billion for the construction of data centres in 2022-23 alone. Investment proposals for data centres in the said year are more than double of that reported in the financial year 2021-22, when projects worth ₹434 billion were announced. In what seems to be a long-term story, a plethora of

factors, such as, rising cloud adoption, the roll out of 5G, increased data consumption, supportive government policies among others are driving investments in the data centre industry. [11]

Institutional Initiatives

India is recognised as a global hub for IT services and has emerged as the world's 3rd largest start-up ecosystem, having 100 + unicorns. Emerging technologies like 5G, Internet of Things, Advance Data Analytics, Artificial Intelligence, Cloud computing, Augmented and Virtual Reality, 3D printing, robotics and blockchain etc. will redefine the future of technology led transformation. Several Centres of Excellence have been setup to promote innovation in these areas. Efforts are also on to enable Indian IT professional attain world class skills in these technologies through a Future Skills Programme. [12]

In the Union Budget 2023-24, the allocation for IT and telecom sector stood at ₹97,579.05 crore (US$ 11.77 billion). In the same budget, the Union Minister for Finance announced the plans to establish 100 5G labs aimed at facilitating the development of applications utilizing 5G services across diverse socioeconomic sectors. These labs will be situated in educational institutions and will encompass a wide range of use cases, including but not limited to education, agriculture, health, power, urban management, mining, logistics, resource management, tourism, sports, security, and e-governance. The Government has committed to funding 80 per cent of the CAPEX (Capital Expenditure) for the Lab Setup and covering 100 per cent of the OPEX (Operational Expenditure) for the next four years. The respective institutions will be responsible for contributing the remaining 20 per cent of the CAPEX. [13]

In September 2022, the new Telecommunications Bill 2022 was published for public consultation by the Ministry of Communications as a move toward creating a new telecom framework in India. The new Telecommunications Bill 2022 holds great promise for the IT sector in India. It aims to boost growth and efficiency in the industry through various provisions. The bill will simplify the licensing process, encouraging more businesses to enter the market and fostering healthy competition, resulting in better services and lower prices for consumers. Additionally, the bill addresses spectrum allocation, ensuring more efficient use and improved network performance. Enhanced data security measures will safeguard businesses from cyber threats and data breaches. The bill has the potential to drive investment, job creation, and economic growth, while also promoting innovation in the telecom sector, such as the adoption of 5G technology and the development of new services like over-the-top (OTT) offerings. This legislative push can significantly benefit both the IT sector and the Indian economy over the medium-term. [14]

The STP Scheme (Software Technology Parks Scheme) is a 100 per cent export-oriented scheme for the development and export of computer software, including export of professional services using communication links or physical media. In June 2023, there were 63 STPI centres across India, with a total of over 15,000 registered units. The STP Scheme has been a major success in promoting the growth of the IT industry in India. In the financial year 2022-23, the software exports from STPI units amounted to ₹6.28 trillion, which is approximately 50 per cent of the national software exports. The STP Scheme is expected to continue to play a major role in the growth of the IT industry in India in the years to come. The government is committed to further expanding the scheme and making it more accessible to businesses. In the coming years, the STP Scheme is expected to help India become a global leader in the IT industry. [15]

Industry Risks and Challenges

Information Technology industry in India faces several significant risks that could hamper its growth and stability. One of the primary concerns is the growing cybersecurity threat landscape. As the IT sector becomes increasingly interconnected and reliant on digital technologies, it becomes more vulnerable to cyberattacks, data breaches, and ransomware incidents. Sophisticated cyber threats targeting businesses, critical infrastructure, and sensitive data pose a significant risk to the industry's reputation, customer trust, and financial health.

Also, geopolitical uncertainties, trade tensions, and regulatory changes in global markets could affect outsourcing trends, leading to potential disruptions in the IT industry's traditional revenue streams. Rapid technological advancements could also create challenges in terms of skill obsolescence and upskilling demands, making it crucial for the industry to continually invest in a future-ready workforce. Furthermore, any unexpected economic downturn or global crises may impact IT spending, leading to delayed or reduced technology investments from clients. In navigating these risks, industry stakeholders need to proactively strengthen their cybersecurity measures, diversify their markets, and prioritize workforce development to ensure sustained growth and resilience amidst an evolving landscape. [16]

Beleaguered with macroeconomic uncertainty across the USA and EU countries, the global technology companies are confronting heightened global challenges, including geopolitical tensions, supply chain volatility, raw material shortages, semiconductor supply concerns, and new regulations. Similarly, the Indian IT industry is expected to face some challenges in 2023, such as, rising inflation, interest rates, and the ongoing war in Ukraine.

Higher interest rates are slowing deal flow, leading to extended hold periods and updated investment within the IT industry. Over 150 deals were announced in Q1 CY23 compared with 270+ in Q1 CY22 and 220+ in Q1 CY21. [17]

Indian startups in the Generative AI domain encounter significant challenges. These include a lack of patient (long-term) capital for essential and resource-intensive foundational model development. Also, there are high costs associated with compute resources, and a shortage of domestic hardware OEMs or hyperscalers in the pipeline. Concerns related to data privacy, security, and copyright infringement also prevail, compounded by the absence of consensus on global regulations and usage standards. There is a limited supply of skilled personnel in the new generation of AI, making it difficult to upskill a large workforce quickly within the next 6-12 months. Besides, net-zero goals have been disrupted, necessitating a rebalancing of growth in light of existing and emerging ESG compliances.

Technology Clusters in tier 1 cities in India have historically done well. While there are IT talents in all parts of India, they are forced to move to tier 1 cities. As a result, big cities are saddled with infrastructure issues. Government must come-up with a special budget for booming IT infrastructure in tier 2, or Tier 3 cities as well to take-off the load from big cities. Measures to address the skills gap in the IT industry and support for training and upskilling of workers must be accorded a high priority. Tax incentives may be provided for companies that invest in research and development for salubrious growth of the industry. This year's budget may also include measures to address concerns around data privacy and security, as well as efforts to increase the adoption of digital technologies in various sectors. [18]

The Way Forward

During this critical phase of economic slowdown, one major concern is the falling market capitalizations of IT firms. To address this issue effectively, there is an urgent need to focus on expanding margins and increasing revenues. Achieving these goals requires firms to enhance their work processes' efficiency, adjust their workforce, and rely more on automation. Moreover, modernizing legacy architectures and considering strategic mergers and acquisitions (M&A) can also contribute to growth.

The IT industry must also develop resilient systems to mitigate the cyclic nature of global headwinds and potential risks. Exploring new avenues of innovation and opportunities in sectors, such as, real estate, manufacturing, and retail can generate additional revenue streams.

In addition to these challenges, technology firms are being significantly impacted by the changing climate and its societal effects. Governments and stakeholders worldwide are concurrently urging companies to improve transparency regarding their environmental impact and tax contributions. Consequently, businesses are expected to modify their management software to comply with upcoming regulations. This would enable them to gain real-time insights and grant authorities access to pertinent data.

India's software services industry continues to show consistent growth in exports, demonstrating its competitiveness and potential for further development and innovation. However, the year 2023 is challenging for the Indian IT industry because of rising inflation, interest rates, and the ongoing conflict in Ukraine. Despite these hurdles, the industry is expected to maintain a healthy growth trajectory, driven by strong global client demand.

In 2023, the IT industry's key areas of expansion will revolve around digital transformation, cloud computing, cybersecurity, and artificial intelligence. These technologies have gained increasing significance for businesses of all scales, and the Indian IT sector is well-equipped to assist clients in adopting and leveraging these cutting-edge solutions.

The domestic market presents promising opportunities for the IT industry's continuous growth. The Indian government's substantial investments in IT infrastructure are opening up new avenues for IT companies in the country.

While summing up, it can be concluded that the outlook for India's IT industry in 2023 remains positive, despite the challenges it may encounter. With its strong foothold and strategic positioning, the industry is poised to grow at a fast clip with a renewed thrust on digital transformation, cloud computing, cybersecurity, and artificial intelligence.

ENDNOTES

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