

INNOVATION
CENTRE
DENMARK



ACCESS TO TECH TALENT IN INDIA

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ABBREVIATIONS

CAGR	Compounded Annual Growth Rate
GCC	Global Capability Centre
IT/ITeS	Information Technology / Information Technology enabled Services
CAGR	Compounded Annual Growth Rate
DPDP	Digital Personal Data Protection Act
GDPR	General Data Protection Regulation
IDA	Danish Society of Engineers
IIT	Indian Institute of Technology
NIT	National Institute of Technology
AIIMS	All India Institute of Medical Sciences
IIM	Indian Institute of Management
NIRF	National Institutional Ranking Framework
NIELIT	National Institute of Electronics and Information Technology
TCS iON	Tata Consultancy Services Intelligent Operations Network
TIHs	Technology Innovation Hubs
NCR	National Capital Region
COCO	Company Owned Company Operated
COPO	Company Owned Partner Operated
ICMR	Indian Council for Medical Research
NASSCOM	National Association of Software and Service Companies
SPARC	Scheme for Promotion of Academic and Research Collaboration
GIAN	Global Initiative of Academic Networks
VAJRA	Visiting Advanced Joint Research
MeitY	Ministry of Electronics and IT
DBT	Department of Biotechnology
DST	Department of Science and Technology
MCA	Ministry of Corporate Affairs

FOREWORD BY THE AMBASSADOR

Denmark and India share an ambitious vision for a green, digital, and sustainable future. The partnership between our two nations has deepened significantly in recent years, built on shared values of trust, innovation, and inclusivity. As we celebrate the milestones achieved under the Green Strategic Partnership, it is also evident that digitalisation will be the next great enabler of this relationship, unlocking new pathways for growth, resilience, and global impact.

It is my privilege as Danish Ambassador to India to introduce this insightful report produced by Innovation Centre Denmark.



Denmark is among the world's most digitalised economies, but its continued success depends on maintaining the talent and capabilities required to drive innovation. India, meanwhile, is home to one of the world's largest and most dynamic pools of digital professionals, researchers, and entrepreneurs. This complementarity offers extraordinary opportunities for collaboration, not only to address Denmark's growing digital skills gap, but also to co-create solutions that advance global priorities in sustainability, energy transition, and artificial intelligence.

This report offers a timely and data-driven perspective on how Denmark can engage with India's digital ecosystem through research, innovation, and talent partnerships. It highlights how bilateral mechanisms, such as joint research calls, academic exchange, and industrial collaboration, are already enabling meaningful engagement between our universities, companies, and research institutions. More importantly, it points to how these collaborations can evolve into long-term talent and innovation pipelines that strengthen both economies.

I hope this report will inspire policymakers, researchers, and industry leaders to explore the full potential of Indo-Danish collaboration in the digital age.

A handwritten signature in black ink, appearing to read "Rasmus Abildgaard Kristensen".

RASMUS ABILDGAARD KRISTENSEN
Ambassador of Denmark to India
December 2025

EXECUTIVE SUMMARY

Denmark's competitiveness depends heavily on digital talent. Nonetheless, many companies struggle to attract and retain IT-specialists due to a limited domestic pipeline, demographic pressures, and intense global competition. Without action, the shortage of skilled professionals could double by 2030, slowing innovation and growth.

In contrast, India has emerged as a global powerhouse of digital talent and innovation. With over five million students in engineering and computer science and a fast-growing workforce skilled in AI, data science, and advanced computing, India combines the scale and expertise needed to support Denmark's digital transition. Global Capability Centres (GCCs), strong academic institutions and an expanding R&D ecosystem make it a critical partner in building future-ready digital capacity.

This report maps the intersection between Denmark's growing digital skills gap and India's evolving digital workforce and research landscape. It identifies tangible opportunities for Denmark to strengthen its innovation and talent base.

Beyond mapping the scale and capabilities of India's digital workforce, the report also aims to highlight how existing Indo-Danish research and innovation frameworks can serve as pathways to attract and engage India's digital talent. In doing so, they strengthen both countries' research ecosystems while directly supporting Denmark's need for specialised digital competencies.

India's digital ecosystem is no longer defined by scale alone, but by maturity, innovation, and institutional collaboration. The Indo-Danish relationship has moved from early-stage cooperation to co-creation, supported by strong policy alignment through the Green Strategic Partnership and expanding bilateral R&D platforms. Danish entities that approach India strategically, balancing innovation, governance, and culture, stand to gain long-term resilience and competitiveness.

By linking Denmark with India's vast talent base and entrepreneurial dynamism, the two countries can together address Denmark's skills bottleneck while advancing global solutions in green and digital transition.





CHAPTER 1: **DENMARK'S DIGITAL WORKFORCE CHALLENGES**

For years, Denmark has consistently positioned itself as a digital frontrunner in Europe, underpinned by a strong policy framework and a long tradition of national digital strategies. The current Digital Strategy 2030 is closely aligned with the EU's Digital Decade, reflecting Denmark's ambition to be among Europe's leading digital economies.

However, Denmark is confronted with a multifaceted digital talent crisis that threatens its digital competitiveness and innovation capacity. While the country benefits from strong digital infrastructure and a high quality of life, Danish companies struggle to employ and retain IT specialists. Without access to these advanced skills, the consequences could be severe: economic growth may

slow, Danish competitiveness could be weakened, and innovation across the business sector risks being stifled. This shortage stems from several interconnected factors including a limited domestic pipeline of IT and engineering graduates, fierce global competition for tech professionals, and challenges in retaining international talent.

Companies increasingly compete on a global scale, where digital professionals can choose employers and countries offering the best conditions, such as career development, flexibility, and work-life balance, putting additional pressure on Denmark to reform recruitment practices and expand its pool of highly skilled tech professionals (Digital Hub Denmark, 2025).

STATISTICS AND TRENDS

The Danish IT Industry Association (IT-Branchen, 2024) highlights the shortage of IT competencies as the primary barrier to business growth in Denmark. According to the Danish Society of Engineers (IDA), Denmark is projected to face a shortage of approximately 20,400 engineers and science (STEM) graduates by 2040 if current trends continue (IDA, 2025a).

A 2025 mapping by Digital Hub Denmark and HBS Economics presents persistent challenges in sustaining a steady inflow of highly qualified professionals from abroad (Digital Hub Denmark, 2025).

As per the European Commission's 2025 Digital Decade country report, IT specialists comprised 5.8 per cent of total employment in Denmark, slightly above the EU average of 5.0 per cent. However, this figure represents a decline from 5.9 per cent in 2023, indicating a stagnation or potential reversal in growth. The Danish national target is to increase this share to 7.7 per cent by 2030, as compared to the EU's broader goal of 10 per cent. (European Commission, 2025).

Meanwhile, the demand for IT professionals continues to outpace supply. The European Commission projects that labour demand in Denmark's IT sector could reach 400,000 by 2030, nearly double the size of the current workforce, underscoring the urgency of closing the digital skills gap (Eurostat, n.d.).

According to Statistics Denmark (2024), Danish companies are increasingly facing difficulties in recruiting employees with the appropriate skills for IT development and operations. In 2024, 8 per cent of all companies reported having unfilled IT vacancies. The challenge is especially significant within the IT industry, where 33 per cent of companies experienced shortages of IT specialists. According to a 2024 European Commission report, software and applications developers and analysts were the most sought-after roles, comprising nearly half (47.5 per cent) of all online job postings for IT specialists in 2024 (European Commission, 2025).

CHALLENGES

1. Relevant Education

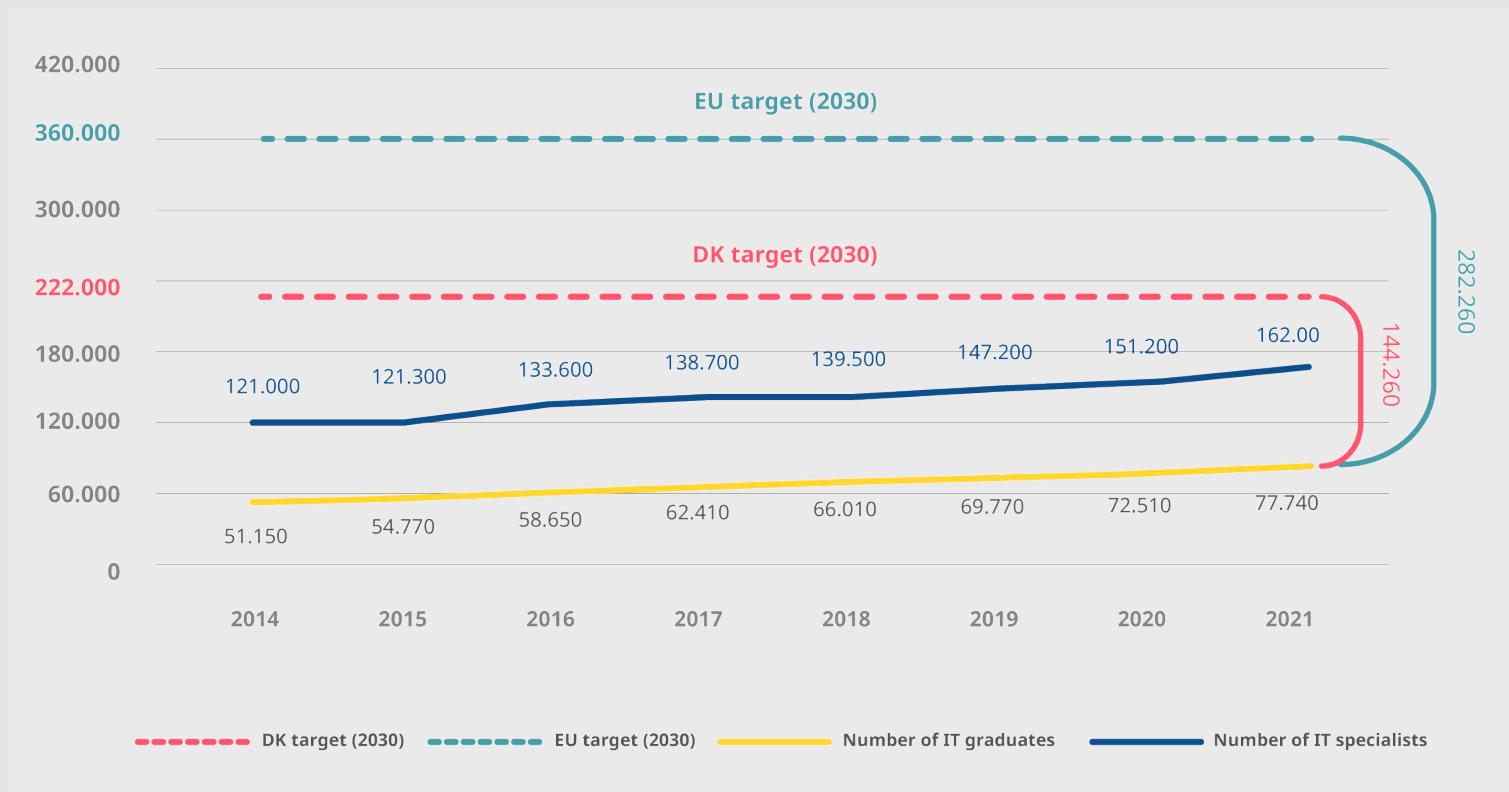
A critical bottleneck contributing to Denmark's shortage of digital talent is the country's IT education pipeline. Despite being one of the most digitalised societies in Europe, Denmark is struggling to produce enough formally educated IT professionals to meet growing labour market demands.

Denmark ranks number 20 in the EU in terms of the educational level of Information Technology (IT) specialists and lags behind in the number of IT professionals with long higher education IT degrees (ATV, 2024).

In parallel with Denmark's digital transformation, enrolment in STEM programmes has grown, reaching around 68,000 students in 2024, roughly 27 per cent of those in higher education. However, this growth has slowed in recent years, and projections from IDA also indicate a growing imbalance between the supply of STEM graduates and the future needs of the labour market (IDA, 2025b; Statistics Denmark, n.d.).

According to the think tank, the Danish Academy of Technical Sciences (in Danish Akademiet for de Tekniske Videnskaber or ATV), the number of IT graduates entering the labour market was 77,740 in 2021. Figure 1.1 shows a shortage of approx. 144,260 and 282,260 compared to the Danish government's target and the EU's target for IT specialists in the labour market. This is a much larger gap than what the EU's and the government's own estimates indicate for IT specialists in the labour market.

Fig. 1.1: Development in the number of IT specialists and IT graduates from 2014 to 2022. Data is only available for IT specialists until 2021 compared with Denmark's and the EU's 2030 targets.



Source: ATP 2024 based on data from Statistics Denmark and Eurostat.

2. A Demographic Disadvantage

The demand for skilled labour is further complicated by Denmark's demographic trajectory. The country is experiencing a steady aging of its population, with fewer young people entering the workforce and a growing share of citizens reaching retirement age. At the same time, the unemployment rate remains low, at 2.9 per cent as of August 2025, limiting the availability of domestic labour (Statistics Denmark, 2025).

This demographic imbalance is not only a workforce issue, it also challenges the sustainability of Denmark's welfare model and its ability to maintain public services and competitiveness. According to the DK2030 report from the Ministry of Finance, Denmark will face a growing fiscal pressure as the ratio of working-age citizens to retirees continues to decline. This structural shift will reduce the labour supply while simultaneously increasing public expenditure. Without a broader, more diverse workforce, particularly in digitally intensive sectors, Denmark risks a slowdown in both economic growth and public sector innovation (Finansministeriet, 2023).

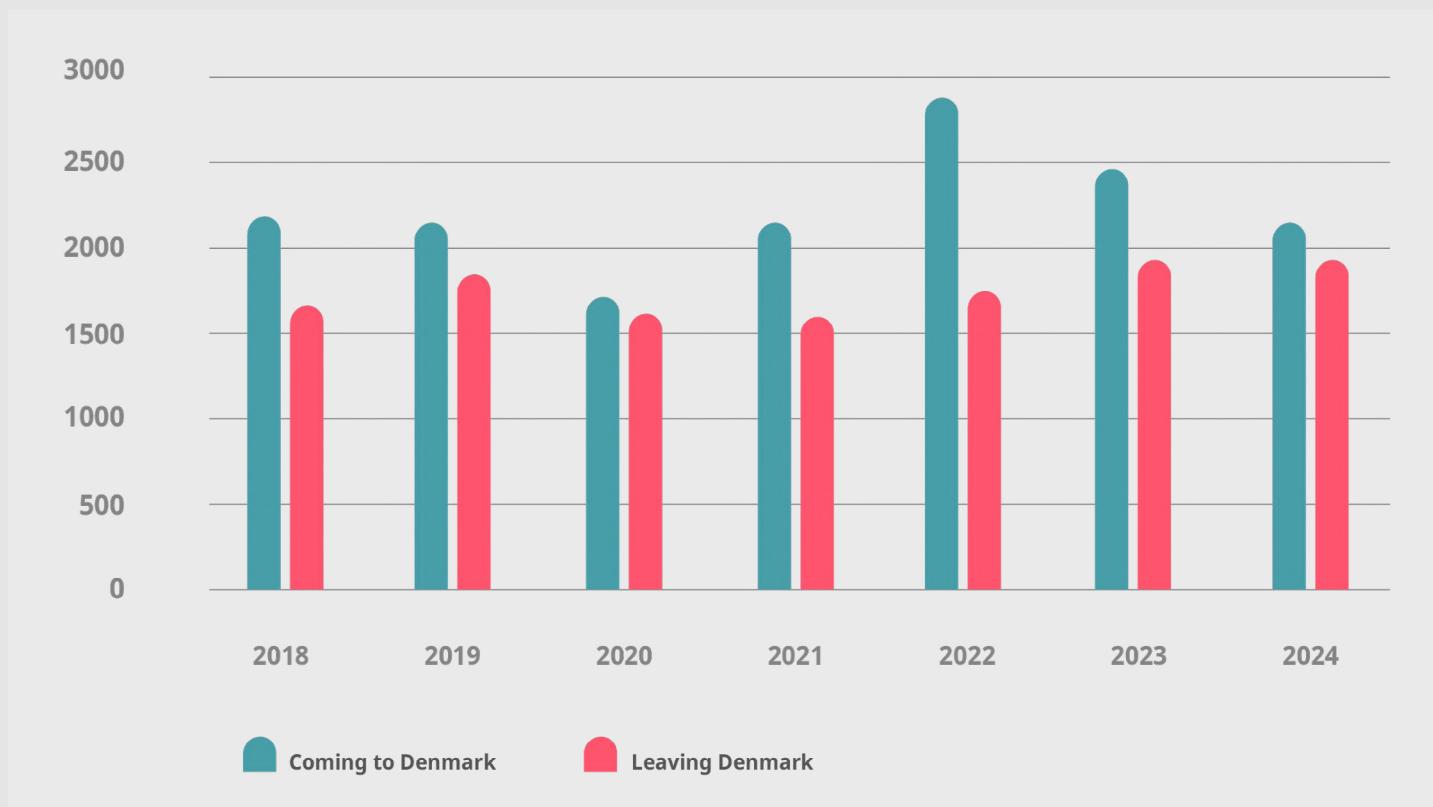
3. Retention of International Talent

Denmark struggles to retain international digital professionals, with a significant number leaving the country within a year of arrival (Lillelund, E. 2021; Digital Hub, 2023). For many this is due to their partners struggling to find employment, which strongly impacts long-term retention. Additionally, a lack of social and cultural integration, such as language barriers and limited inclusion in workplace and social life, makes it harder for them to settle, prompting early departure.

The intense competition for digital professionals in Denmark has led to increased recruitment costs and challenges in attracting top talent. This environment makes it difficult for smaller companies to compete with larger firms offering higher salaries and more resources (Rodriguez, 2023). Denmark's opt-out from certain EU policies, such as the Blue Card scheme, limits its ability to attract highly skilled non-EU digital professionals. This regulatory stance restricts the country's access to a broader talent pool necessary for driving digital innovation (The Copenhagen Post, 2024).

In 2024, Denmark experienced a net inflow of just over 100 digital professionals, the lowest level in a decade outside of the COVID-19 pandemic. Although more than 2,000 digital talents arrived in the country, nearly 1,900 left, continuing a rising outflow trend observed since 2021. Notably, 79 per cent of incoming digital specialists are foreign nationals, while an increasing number of Danish professionals are departing. This dynamic resulted in a net gain of 340 foreign digital talents, offset by a net loss of 230 Danish professionals (Digital Hub Denmark, 2025).

Fig.1.2: Movement of Digital Talent to and from Denmark (Digital Hub, 2025)





CHAPTER 2: INDIA'S DIGITAL TALENT POOL

Digital talent sits at the heart of India's economic transformation. What began as a back-office outsourcing model has evolved into a hub for research, product development, and digital innovation. Today, India is not only supporting global businesses but also helping them stay competitive in areas such as AI, data science, cloud computing, and cybersecurity. With millions of engineers

and IT professionals entering the workforce each year, India has established itself as a critical node in the global digital landscape. India is no longer simply a provider of technical manpower but a strategic centre for innovation and digital excellence, where global companies design, test, and scale new solutions for worldwide markets.

THE SCALE OF INDIA'S DIGITAL WORKFORCE

India is home to over 1.4 billion people, making it the world's most populous country with a diverse mix of languages, religions, and cultures. In contrast to Denmark, the population is relatively young, with a median age of around 28 years, offering a large and dynamic workforce. Rapid urbanization and a growing middle class are driving social and economic transformation across the country, and digitalisation plays a pivotal role in knitting the diverse country together.

India's IT sector is evolving fast and is one of the largest in the world. During the Indian Financial Year (FY) 2024–25, it employed an estimated 5.8 million professionals (NASSCOM, 2025), a figure that underscores the country's role as a backbone of global digital operations.

This growth is being accelerated by shifts in global corporate spending. In 2023, around 70 per cent of enterprises worldwide allocated more than one-fifth of their technology budgets to digital services (NASSCOM, 2024). As a result, the demand for competencies in AI, machine learning (ML), cloud computing, big data analytics, cybersecurity, and intelligent automation has risen sharply. India has been quick to respond; adoption of these technologies has surged within both multinational operations and domestic firms, positioning the country as a hub for next-generation digital skills (NASSCOM-Zinnov, 2024).

University Pipeline and Graduate Output

India's higher education system underpins this workforce scale, with 1,338 universities and 52,081 colleges¹ (Press Information Bureau, 2025). More than 5 million students are enrolled in various engineering (Bachelor of Technology [B. Tech.], Bachelor of Engineering [BE], Master of Technology [M. Tech.], and Master of Engineering [ME]) and computer science (Bachelor of Computer Applications [BCA] and Master of Computer Applications [MCA]) courses in 2023-24. (All India Survey of Higher Education). Graduation details can be seen in Table 1.

Although the quality of education varies greatly, employability after graduation has improved: the share of job-ready graduates has increased from 34 per cent a decade ago to over 51 per cent in 2024, aided by industry-academia partnerships, co-designed curricula, and skilling programmes led by corporates and edTech providers (The Hindu, 2024).

Table 1: Graduation details for engineering and technology courses in 2021-22

Number of graduates from undergraduate courses	7.8 million
Number of graduates from IT and engineering undergraduate courses	1.1 million
Number of graduates from postgraduate courses	1.8 million
Number of graduates from IT and engineering postgraduate courses	145,000

Source: All India Survey of Higher Education (2024)

¹ In India, colleges are higher education institutions affiliated with universities that offer undergraduate and some postgraduate degrees. Unlike universities, which can award degrees independently, most colleges follow the curriculum, examination system, and degree certification of their parent university.

CLASSIFICATION OF INDIA'S EDUCATIONAL SYSTEM

India's educational system includes federal (54), state (466), private (495), and deemed (124) universities (high-performing institutions that have been granted university status by India's Ministry of Education or MoE), along with 158 institutions of national importance such as the Indian Institute of Technology (IITs), National Institute of Technology (NITs), and All India Institute of Medical Sciences (AIIMS) (University Grants Commission, 2025). This diverse mix reflects India's federal model and strong public-private participation in higher education.

While India does not have an official government-defined level system, the terms Tier 1, Tier 2, and Tier 3 are widely used across academia, industry, and policy circles. These categories serve as a practical way to distinguish institutions based on their quality, reputation, infrastructure, student intake, and industry linkages. Though informal, the classification is useful when assessing the strength of talent pipelines, the maturity of research ecosystems, and the potential for collaboration.

- TIER 1: IITs, Indian Institute of Management (IIMs), Indian Institute of Science (IISc), and top law/medical schools - globally ranked, highly selective, and well-funded; ideal for advanced research, dual degrees, and global talent development.
- TIER 2: NITs, newer IITs/IIMs, and leading private universities (e.g., Birla Institute of Technology and Science or BITS Pilani, Ashoka University) - strong education and research with regional influence; suited for scalable collaborations, student mobility, and innovation partnerships.
- TIER 3: Thousands of affiliated colleges and emerging private universities - widen access to education; best for developmental collaborations in faculty training, digital skilling, and curriculum reform.

Skills and Emerging Specialisations

India's digital workforce spans a wide spectrum of capabilities. Traditional strengths in software engineering and IT services remain dominant, but newer areas are growing rapidly. Penetration in AI/ML and data science increased from 65 per cent in FY 2018-19 to 86 per cent in FY 2023-24, while adoption of cybersecurity jumped from 55 per cent to 88 per cent in the same period. Cloud computing is now embedded across most organisations, and blockchain has grown from a 5 per cent penetration rate in FY 2018-19 to 56 per cent by FY 2023-24 (NASSCOM-Zinnov, 2024).

With national initiatives such as the IndiaAI, FutureSkills programmes and rising private-sector investment in deep tech, India is positioning its workforce to meet global demand in frontier technologies. By 2026, demand for AI professionals in the country alone is expected to reach one million (Ministry of Electronics & IT, 2025).

LEVERAGING INDIA'S DIGITAL ECOSYSTEM

India's Tech Hubs: Strategic Gateways for Talent and Innovation

India's leading cities, Bengaluru, Hyderabad, Pune, Chennai, and New Delhi's National Capital Region (NCR), have developed into mature technology ecosystems. These hubs combine a high concentration of engineering talent, strong startup activity, deep access to venture capital, and close links between academia and industry. Federal and state governments further support these ecosystems with targeted policies and infrastructure development.

Beyond the metro cities (also called Tier 1 cities), a new wave of 26 emerging Tier-2 and Tier-3² cities such as Coimbatore, Ahmedabad, Trivandrum, Vadodara, and Indore are attracting global firms (NASSCOM-Zinnov, 2024; EY, 2023). These cities offer significantly lower operating costs, lower attrition rates, and supportive state-level incentives. For example, Karnataka's GCC Policy and Tamil Nadu's Global Capability Hub Scheme actively promote local investment. Many of these cities also offer domain specialisations, such as Pune in automotive technologies and Chennai in logistics, while their proximity to universities strengthens the talent pipeline.

India has made substantial investments in building a robust innovation ecosystem. More than 25 Technology Innovation Hubs (TIHs) have been set up in strategic areas such as AI, robotics, sensors, and data analytics. These hubs promote indigenous technology development, startup incubation, and advanced skilling programmes aligned with national and global industry needs (Department of Science & Technology, 2025). Integration with flagship missions such as Make in India and Atmanirbhar Bharat (self-reliant India) further reinforces this effort. Collectively, these initiatives are positioning India as a global destination for deep-tech talent and innovation-driven manufacturing.

A key driver of this evolution is the rapid expansion of Global Capability Centres (GCCs) in India. These are subsidiary or offshore units set up by a multinational company to deliver high-value services such as engineering, R&D, digital innovation, or IT operations for its global business.

India's GCC Landscape: Scale, Maturity, and Evolution

India now hosts more than 1,800 GCCs, employing around 1.9 million professionals. Originally focused on back-office support, GCCs have evolved into strategic hubs that drive product development, technology leadership, and innovation for their parent organisations. They manage high-value functions such as R&D, full-stack product engineering, and advanced fields like blockchain and the Internet of Things (IoT) (NASSCOM-Zinnov, 2024).

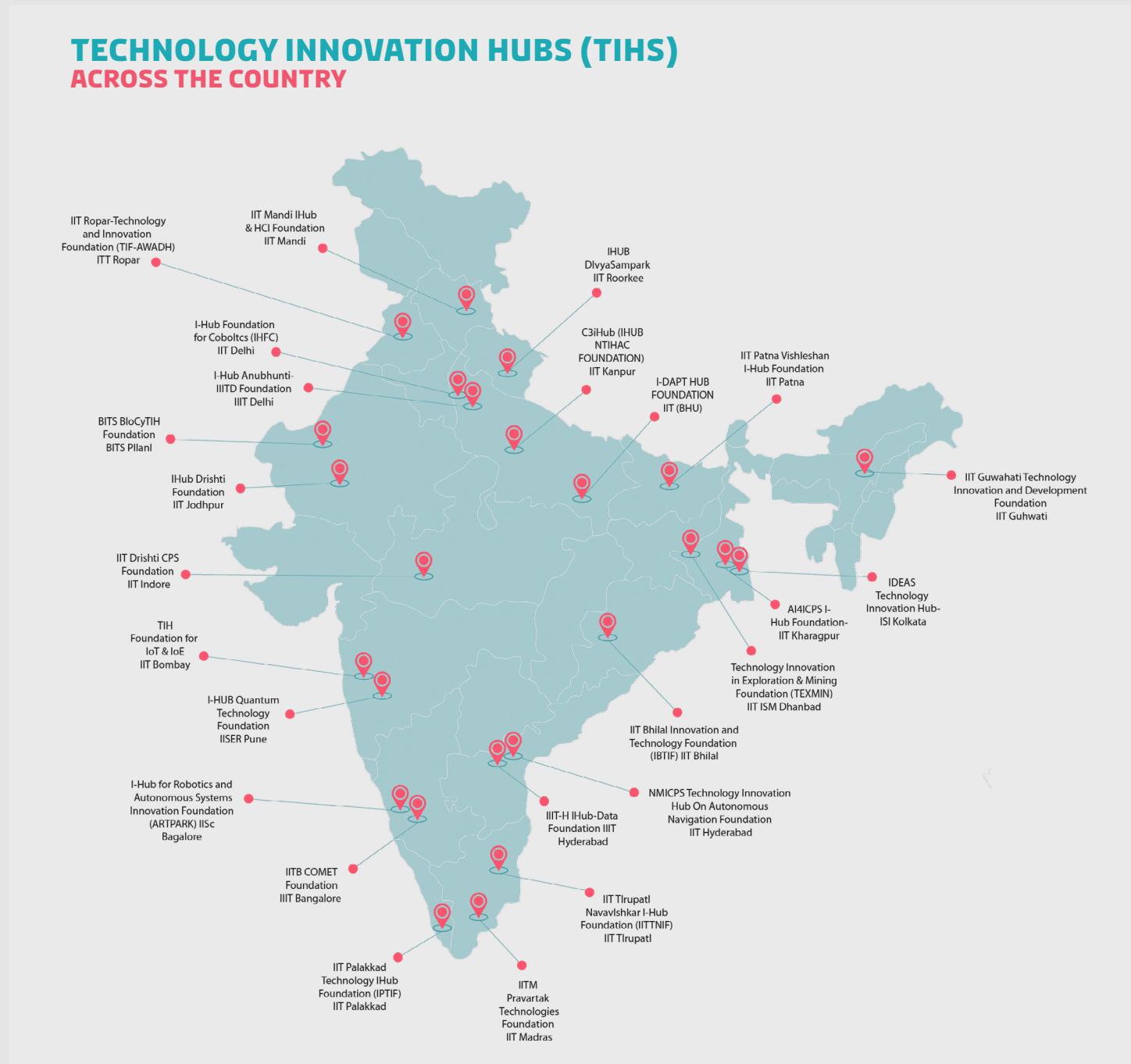
This figure is projected to reach 2.8 million by 2030, with their contribution to India's economy expected to rise from DKK 452 billion (USD 64.6 billion) to over DKK 700 billion (USD 100 billion) by the end of the decade (NASSCOM-Zinnov, 2024; EY, 2023).

Indian centres are no longer "execution arms" but rather own end-to-end products, Intellectual Property (IP), and innovation mandates, which were previously managed in headquarters or outsourced vendors. As Harish Pillai, Managing Director, James Douglas Global observed, "Many foreign firms now use their GCCs to insource high-value work from existing suppliers, especially design, product roadmap, and ownership, while development and maintenance remain external." This change is also evident in hiring practices, with many GCCs adopting hybrid models that blend in-house strategy teams with recruitment process outsourcing (RPO) partners for scalability and flexibility.

Notable Danish companies such as Maersk, Danfoss, and Novo Nordisk have established GCCs in India, using them as hubs for advanced digital solutions, engineering design, and global IT services that support their worldwide operations.

² Much like the educational system, India uses an unofficial tier-based system to classify cities into Tier-1, Tier-2, and Tier-3 categories based on their size, infrastructure, talent availability, cost structures, and business ecosystem maturity.

Fig. 2.1: Technology innovation hubs in India



Source: National Mission on Interdisciplinary Cyber-Physical Systems Quarterly Bulletin April 2025

Engagement Models and Operational Pathways

Non-Indian enterprises can consider entering India through three principal models:

- Captive (GCC) – full ownership and IP control, suitable for R&D-intensive firms such as Novo Nordisk or Maersk, which operate sophisticated centres in Bengaluru focusing on digital health and AI-enabled logistics
- Managed (GCC Partners) – a company-owned but partner-operated structure using service providers like ANSR Global or The Scalers for faster scaling with local governance support.
- Vendor or Hybrid Models – appropriate for short-term or transactional projects, often serving as a precursor to deeper engagement.

At the same time, experts caution against common misconceptions. As GCC adviser Vishal Chopra notes, "Talent isn't cheap in India, it's cost-competitive," underscoring the importance of building a strong Employer Value Proposition (EVP) to attract top talent. Firms must also plan around India's longer notice periods, often up to 90 days, which can affect onboarding timelines. For Danish businesses, these insights highlight the need for realistic planning and investment in leadership and partnerships when setting up or scaling operations in India.

The EG Group, a mid-sized Danish software firm, illustrates how cultural integration and joint leadership can convert an Indian delivery centre into a strategic innovation hub. EG's Indian GCC in the city of Mangalore grew from fewer than 20 staff in 2019 to about 850 today; its team evolved from executing back-office tasks to driving full product development, underlining the potential of building "one company, two locations".

Policy Landscape

Several Indian states have launched targeted schemes to attract and retain GCCs. Karnataka offers rental and skilling incentives, investment subsidies, infrastructure support, and R&D funding to expand GCCs in Bengaluru and surrounding regions (India Briefing, 2024a). Tamil Nadu focuses on infrastructure development in Tier-2 and Tier-3 cities, while Gujarat's Gujarat International Finance Tec-City (GIFT City) promotes R&D and fintech innovation (India Briefing, 2024b). Despite these policies, GCCs face persistent challenges. Regulatory complexity, including corporate laws, labour regulations, data privacy, and tax compliance, can slow operations (Inductus GCC, 2024). Talent retention is difficult, with attrition rates of 20-30 per cent in tech hubs, requiring strong upskilling and employer value propositions. Cultural misalignment between Indian teams and foreign headquarters can hinder decision-making, and infrastructure gaps, particularly in emerging regions, further complicate delivery.



CHAPTER 3: **STRATEGIES FOR JOINT R&D AND TALENT COLLABORATION**

As global innovation becomes increasingly networked, cross-border collaboration in research and development (R&D) is emerging as a decisive driver of competitiveness.

India invests between 0.6 to 0.7 per cent of its GDP in R&D, but has one of the largest pools of researchers and engineers globally (Mohan V., 2024). India has launched several national missions to bolster research and development across diverse scientific and technological domains. Table 2 shows an overview of selected tech related national missions currently active in India.

Table 2: Overview of selected R&D National Missions

MISSION	YEAR OF LAUNCH / RAMP-UP	CORE FOCUS AREAS	RELEVANCE TO DIGITAL/DEEP-TECH /SPACE
IndiaAI Mission	2024	AI compute infrastructure, foundational models, datasets, responsible AI, startup ecosystem	Flagship deep-tech mission; foundational for AI-driven innovation; major opportunity for cross-border R&D and digital talent alignment
National Quantum Mission (NQM)	2023	Quantum computing, quantum communication networks, quantum sensors, materials	Strong overlap with Danish photonics/quantum strengths; India building national quantum hubs enabling international collaboration
India Semiconductor Mission (ISM)	2022/23 rollout	Chip fabrication, design clusters, semiconductor supply-chain, sensors	Hardware backbone for AI/IoT/ robotics; strategic relevance for supply-chain diversification and R&D partnerships
National Supercomputing Mission (NSM)	2015 (major scale-up 2023–25)	Indigenous HPC systems, national compute grid, exascale research	Enables AI training, climate modelling, space mission simulation; entry point for Danish research collaboration
Gaganyaan / Indian Human Spaceflight Programme	2018 (ramp-up 2024–25)	Human-rated spacecraft, digital avionics, autonomous navigation, simulation, robotics	Central to India's space digitalisation; opportunity for space tech cooperation, including EO, sensors, and mission data systems

Although India scores high in very specific scientific areas, Indian universities do not rank in the top 100 of the most well-known global ranking scales like QS or the Shanghai index. This is largely due to a fragmented university structure, with a high number of specialised universities and no full comprehensive universities. Nonetheless, India has systematically invested in academic exchange programmes that link its universities to global research ecosystems. Key initiatives such as the [Global Initiative of Academic Networks \(GIAN\)](#), the Scheme for Promotion of Academic and Research Collaboration (SPARC), and the [Visiting Advanced Joint Research \(VAJRA\)](#) Faculty Scheme fund inbound and outbound mobility of researchers and students between India's top 100 National Institutional Ranking Framework (NIRF) institutions and globally ranked universities (Department of Science & Technology, 2025). These mechanisms could enable Danish universities to embed short-term research residencies, co-supervise doctoral projects, and co-develop curriculum modules on sustainability, digitalisation, and life sciences.

Meanwhile, European instruments complement these efforts. Under Erasmus+ and Marie Skłodowska-Curie Actions (MSCA), Indian doctoral and post-doctoral researchers can spend up to two years in Denmark, bringing cutting-edge expertise in AI, biotechnology, and materials engineering (European Commission, n.d.). Danish higher-education institutions already engage with Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) through joint research projects and faculty exchange programmes. Expanding these channels to include Tier-2 Indian universities, where industry linkages are rapidly growing, would diversify Denmark's talent pipeline and promote equitable access to research opportunities.

JOINT R&D AND BILATERAL FUNDING MECHANISMS

Denmark and India entered into the current bilateral agreement on science, technology and innovation in 2018. India's Department of Science and Technology (DST) and Department of Biotechnology (DBT) have established co-funding arrangements with Innovation Fund Denmark (IFD), enabling joint research calls that foster long-term partnerships between Danish and Indian institutions (Innovation Fund Denmark, n.d.). These mechanisms do not only fund applied research but also provide Danish organizations access to India's pool of engineers, data scientists, and software developers who play a key role in translating research into scalable digital solutions.

Digital matchmaking platforms such as [Manthan](#), launched by India's Office of the Principal Scientific Adviser, further bridge academia, start-ups, and industry around national missions in clean energy, digital health, and sustainable mobility. Together, these initiatives create structured pathways for Danish research institutions and companies to engage with India's growing digital workforce and innovation ecosystem.

RELEVANT FUNDING MECHANISMS BETWEEN DENMARK AND INDIA:

- **Bilateral Calls:** Co-funded research & innovation calls. Denmark and India have had four bilateral research calls since 2018, with approximate 50/50 funding from each country. All projects include participation from both academia and industry and start at TRL5.
- **Multilateral Calls:** EU Horizon. India participates actively in EU's Horizon Europe programme, through co-funded calls. Currently, over 88 joint projects have involved Indian partners under Horizon 2020 and Horizon Europe.
- **Nordic Council of Ministers** more specifically Nordic Innovation and Nordforsk supports innovation and outreach activities between India and the Nordics.
- **Private foundations** for example the Novo Nordisk Foundation (NNF) has a strategic focus on India, and has invested heavily in joint R&D.

INDUSTRY ENGAGEMENT WITH INDIA'S DIGITAL TALENT ECOSYSTEM

Beyond academic partnerships and government-led funding schemes, Danish companies can work directly with India's established networks of technology enterprises, innovation hubs, and skilling platforms to translate R&D into practical innovation.

India's digital industries are strongly oriented towards partnership-led innovation. Global and Indian companies alike invest in employer-led skilling, working closely with education providers and start-ups to build advanced digital capabilities (NASSCOM, 2024). Platforms such as NASSCOM FutureSkills Prime, TCS iON, Scaler, and Masai School deliver modular training aligned with industry needs.

A recent example is the collaboration between Denmark's Energy and Climate Academy, Aprendio, and the Indian Institute of Technology Madras (IIT Madras), which offers post-graduate courses to engineers in India's leading technical university. The initiative delivers Continuing Professional Development certification in key fields including wind energy, hydrogen, district heating, and carbon capture, utilisation and storage. Danish experts from industry, academia, and public authorities such as the Danish Energy Agency contribute as lecturers, combining Danish know-how with India's growing talent base in green energy technologies (Energy Cluster Denmark, 2025).

A number of large Danish companies are leveraging India's technology base to extend their global R&D capacity. For instance, Novo Nordisk's Global Business Services in Bengaluru has expanded from operational support to analytics-driven healthcare innovation, demonstrating how long-term trust and capability development can yield strategic R&D outcomes. Meanwhile, shipping giant Maersk's Bengaluru Technology Centre exemplifies how global innovation can be engineered from India.

MAERSK'S BENGALURU TECHNOLOGY CENTRE: DRIVING GLOBAL LOGISTICS INNOVATION FROM INDIA

Maersk, Denmark's global leader in shipping and logistics, has made India central to its digital transformation journey through its Technology Centre in Bangalore. Established as part of a wider network of tech hubs across India, the centre employs over 2,900 technology professionals across Bangalore, Pune, Mumbai, and Chennai. The Bangalore hub serves as the company's global innovation engine, developing platforms, algorithms, and customer experiences that power supply chains in more than 130 countries (Maersk, 2025).

Its teams work on software engineering, architecture, data science, AI, and cybersecurity, and have already secured over ten patents in AI-driven logistics. Among its flagship innovations is Star Connect, an AI-powered energy-efficiency platform that uses edge computing to process over 2.5 billion IoT data points in real time, enabling dynamic route optimisation, fuel forecasting, and emissions monitoring for Maersk's fleet. The logistics company has been able to integrate locally developed technologies into its global operations; from real-time visibility systems and smart warehousing to customer automation, demonstrating how leveraging India's digital talent and strategic R&D ecosystem can directly enhance global competitiveness.



CHAPTER 4: COMPLIANCE, REGULATORY AND CULTURAL CONSIDERATIONS

Indian professionals bring strong technical skills and English fluency, but cultural nuances can shape workplace dynamics when collaborating with European leadership. Key differences include hierarchical tendencies in Indian teams versus egalitarian Scandinavian structures, a stronger focus on consensus over individual accountability, flexible timelines versus structured planning, and indirect communication styles versus direct feedback preferences.

These differences can create misunderstandings in

decision-making, project scoping, and performance discussions, where a polite “yes” may not indicate full understanding. Advisers suggest that measures like establishing structured onboarding for managers, written summaries, regular check-ins, conducting cross-cultural training for both Indian and European teams, and creating hybrid leadership teams could help bridge these gaps (The Culture Factor, n.d.; Meyer, 2014). Firms that invest in cultural alignment generally see better integration and long-term trust.

HOW EG TURNED CULTURAL DIFFERENCES INTO COLLABORATIVE STRENGTH:

When Danish tech firm EG expanded its operations to Mangalore, its goal was not to chase low costs but rather to invest in long-term capability. At the outset, collaboration between Indian and Danish teams did not come effortlessly. Early on, there were clear gaps in communication styles, decision-making, and feedback culture. Instead of imposing one way of working, EG chose a different path: mutual understanding.

To bridge the gap, EG invested in cross-cultural training, leadership exchanges, and 'culture buddy' programmes pairing colleagues across geographies. New hires were onboarded into EG's global mindset from day one, with learning modules that included cultural context and practical awareness of diverse communication and feedback styles.

"We had open conversations about how each team worked. Danish colleagues spent more time in India, and Indian team members visited Denmark. That in-person time helped break down barriers. We didn't try to erase the differences; we leaned into them," recalls Anand Fernandes, CEO of EG India. "The turning point was when we stopped talking about 'them' and 'us' and started solving problems together."

Today, EG India has grown into an 850-member innovation hub, and EG's largest offshore engineering centre driving R&D and product development for the global company. Teams operate under a shared operating model that ensures alignment, but what really drives success, Fernandes emphasises, is trust. "Each side brings its own strengths, and together we've built something better than either could have done alone."

EG's story illustrates a simple truth: cross-cultural collaboration is not a challenge to fix but rather, a relationship to build, grounded in patience, curiosity, and respect.

There is a need for structured onboarding of Danish managers into Indian contexts and vice versa. Firms that deploy cultural bridge roles (e.g. India-based Danish expats or local leaders with Europe exposure) have shown better integration outcomes. Embedding these bridge roles into hiring and leadership transitions can create long-term alignment and reduce friction.

While English is the primary working language in India, nuances in communication can lead to misunderstandings. Some of the common issues are discussed below.

- Yes culture: Agreement may not always indicate understanding or commitment. Danish managers may need to probe gently to confirm alignment.
- Time perception: Differing views on punctuality and urgency can impact project coordination. Danish teams typically follow rigid timelines, while Indian teams might adjust dynamically.
- High-context vs low-context Communication: Indian communication often relies on context and implied meaning, whereas Scandinavian norms are more direct and literal.

Training programmes on intercultural communication, regular sync meetings, and clear documentation standards help mitigate these risks. To navigate these cultural and communication challenges, Danish and other European firms are advised to:

- conduct regular cross-cultural training for both Indian and European teams
- establish hybrid leadership teams with representation from both geographies
- encourage feedback loops and safe spaces for clarification
- use collaborative tools that bridge asynchronous communication (e.g. Slack and Confluence); and embed long-term Danish managers in Indian operations to foster trust and alignment

INTELLECTUAL PROPERTY RIGHTS (IPR)

India's IPR framework, largely harmonised with international standards such as the Agreement on Trade-Related aspects of Intellectual Property Rights (TRIPS Agreement), offers protection for patents, trademarks, copyrights, and industrial designs. Registration with the Indian Patent Office is crucial for securing enforceable rights (Office of the Controller General of Patents, Designs & Trade Marks, n.d.).

Employment contracts and vendor agreements should include comprehensive IP assignment and confidentiality clauses to safeguard proprietary technologies and trade secrets (Mondaq, 2025).

Cross-border technology transfer agreements, including licensing and royalty arrangements, must adhere to Indian contract law and foreign exchange regulations. Moreover, withholding tax obligations may apply to payments for IP-related transactions across borders (Income Tax India, n.d.). It is also pertinent to note that patent applications filed by Indian residents must be filed in India at least 6 weeks before filing in foreign jurisdictions. Alternatively, a foreign filing license must be obtained from the Indian Patent Office prior to filing in the foreign jurisdiction. This stipulation in the Indian Patent Act, Section 39, ensures that inventions relating to atomic energy or defence purposes are adequately monitored by Indian authorities.

DATA PROTECTION

The Digital Personal Data Protection Act, 2023 (DPDP) marks a pivotal shift in India's approach to data governance, moving towards a consent-based and accountability-driven model. The Act introduces key principles of informed consent, purpose limitation, and data minimisation, while granting individuals the right to access, correct, and erase their personal data. Cross-border data transfers are permitted but subject to government oversight and specified safeguards to ensure responsible handling of sensitive information (Mondaq, 2025).

However, the implementation of the DPDP remains a work in progress. Critics point to limited clarity on enforcement mechanisms and the scope of government exemptions, which may weaken protection standards compared with international benchmarks such as the EU's General Data Protection Regulation (GDPR). Moreover, the forthcoming Data Protection Board of India, responsible for enforcement, has yet to demonstrate institutional independence and operational readiness—raising concerns about consistency and transparency in adjudicating violations (Ministry of Electronics and Information Technology, n.d.).

CORPORATE STRUCTURING AND REGULATORY APPROVALS

While India offers a conducive environment for foreign investments, firms must navigate a multi-layered statutory framework governing corporate formation, taxation, employment laws, data protection, IPR, and ongoing compliance obligations.

Non-Indian entities can select from several legal structures, each carrying distinct regulatory and operational implications:

- **Wholly Owned Subsidiary (WOS):** The most common route for GCC establishment, governed by the Companies Act, 2013, this model provides full operational control, limited liability, and flexibility in business decisions.
- **Branch Office (BO):** Suitable mainly for import-export or liaison functions, a branch office requires prior approval from the federal Reserve Bank of India (RBI) and is subject to restrictions on undertaking commercial activities beyond its approved scope.
- **Liaison Office (LO):** Intended for non-commercial roles such as coordination, communication, and information sharing. Liaison offices are prohibited from earning income in India.
- **Limited Liability Partnership (LLP):** Offers operational flexibility and shared ownership, though Foreign Direct Investment (FDI) in certain sectors remains subject to specific restrictions.
- **The Build-Operate-Transfer (BOT) approach:** a third-party service provider sets up and manages the GCC on behalf of the parent company before transferring ownership after a defined period. BOT models reduce initial capital expenditure but can raise concerns around IP protection, governance, and cultural integration.

FOREIGN INVESTMENT AND REGULATORY OVERSIGHT

India's liberalised FDI policy allows up to 100 per cent foreign ownership under the automatic route in most sectors relevant to GCCs, including IT, R&D, and business process management. Nonetheless, sectoral caps and investment rules can change periodically. Continuous regulatory monitoring is therefore necessary to maintain compliance and mitigate legal or reputational risks.

INCORPORATION AND COMPLIANCE PROCEDURES

The incorporation process involves several statutory steps:

- Registering the company name with the Ministry of Corporate Affairs (MCA).
- Securing a Director Identification Number (DIN) and Digital Signature Certificate (DSC).
- Preparing the Memorandum and Articles of Association.
- Filing incorporation documents with the Registrar of Companies (ROC).

Once incorporated, companies must also obtain a Permanent Account Number (PAN), Tax Deduction and Collection Account Number (TAN), and Goods and Services Tax (GST) registration to operate within India's taxation and commercial systems.

TAXATION, FINANCIAL, AND EMPLOYMENT COMPLIANCE

Indian subsidiaries of non-Indian firms are subject to the corporate income tax regime, with standard rates of around 22 per cent, in addition to applicable surcharges and cess. Entities engaged in manufacturing or operating under specific incentive schemes may qualify for concessional rates.

To ensure fiscal transparency, transfer pricing regulations mandate that all related-party transactions follow the arm's length principle, thereby reducing the risk of base erosion and profit shifting (Income Tax India, n.d.).

Frequent regulatory updates and variable interpretation across jurisdictions can pose challenges, particularly for small and medium-sized enterprises unfamiliar with Indian compliance culture. Transfer-pricing regulations, though aligned with global standards, require detailed documentation and periodic audits to meet the arm's length principle, adding to the reporting burden for multinationals (Income Tax India, n.d.).

Companies registered in Special Economic Zones (SEZs) or International Financial Services Centres (IFSCs) benefit from tax incentives and simplified customs procedures. However, access to these schemes can be uneven across states, and approval processes may be lengthy. State-level incentives, such as land rebates or electricity duty exemptions, offer potential cost advantages but are often contingent on local policy cycles and may lack long-term predictability (Department for Promotion of Industry and Internal Trade, 2023; Dutt, 2025).

LABOUR LAWS IN INDIA

India's employment laws are among the most comprehensive in Asia, reflecting strong worker-protection traditions. Regulations cover minimum wages, timely salary disbursal, social-security contributions through the Employees' Provident Fund (EPF) and Employees' State Insurance (ESI), as well as gratuity, maternity benefits, and occupational safety standards (IndusLaw, 2025). The legal requirement to establish Internal Complaints Committees (ICCs) under the Prevention of Sexual Harassment (POSH) Act, 2013, underscores India's growing emphasis on equitable and safe workplaces (Department of Expenditure, n.d.).

Nonetheless, labour law complexity continues to be a significant barrier for non-Indian firms entering the country. Although India has initiated reforms, implementation remains uneven across states. Companies often encounter inconsistencies in enforcement, especially regarding social-security registration and compliance audits. Moreover, rigidities in employment termination and contract renewals can deter firms from scaling operations quickly (Department for Promotion of Industry and Internal Trade, 2023).

When hiring non-Indian nationals, companies must also navigate visa and work permit regimes that involve multiple authorities and evolving documentation standards. The lack of centralised processing or mutual recognition arrangements with EU states can delay onboarding for skilled professionals, an issue of particular relevance to Danish enterprises engaging in cross-border research or innovation partnerships.



CHAPTER 5: STRATEGIC REFLECTIONS FOR DANISH STAKEHOLDERS

Danish organisations can unlock new growth and innovation by engaging with India across three interconnected pathways: **innovation and R&D, capability building, and sustainable governance**. First, innovation and R&D partnerships offer a platform to combine Denmark's strengths in sustainability, life sciences, and digital engineering with India's depth

in applied research and technology. Danish firms can participate in Indo-Danish joint calls and collaborate with India's 25 Technology Innovation Hubs to co-develop frontier technologies, and use platforms such as Manthan for structured industry-academia matchmaking and access to co-funding opportunities.

STIBO SYSTEMS INDIA: FROM OUTSOURCING TO A TALENT-DRIVEN STRATEGIC HUB IN INDIA

Danish software company STIBO Systems commenced its India operations in 2005 by outsourcing low-risk production tasks to a local partner. Recognising the potential of Bangalore's talent pool, the company gradually expanded to include 24x7 support, R&D, Cloud Operations, and Professional Services. In 2020, STIBO Systems established its own entity, STIBO Systems India, consolidating global business functions locally and growing its team to around 131 full-time employees. This evolution transformed India from a peripheral outsourcing location into a strategic extension of the company, contributing to innovation, global delivery, and operational efficiency.

A central factor in this success has been STIBO's proactive talent acquisition and employer branding strategy. The company maintains campus partnerships across Tier 1, 2, and 3 institutions in Bangalore, leverages internships as pipelines for full-time roles, and has hosted pan-India hackathons attracting participants from over 140 institutions, including IITs and NITs. The 2024 edition generated nearly 30,000 online views that translated into 2,000-3,000 registrations.

"It is a low-cost, high-visibility exercise," the STIBO team explained. "We aim to make our annual hackathon a prestigious event on Bangalore's tech calendar." Beyond talent scouting, these hackathons serve as powerful branding tools, spreading awareness about STIBO Systems and the field of master data management across elite institutions and emerging talent pools. The multiplier effect is evident; participation from certain IITs surged in later editions, fuelled by word-of-mouth from previous finalists.

This multi-tiered approach allows the company to tailor its talent pipeline, offering short-term internships, graduate programmes, hackathons, and the STIBO Accelerator initiative to nurture early-career professionals. By combining structured skill-building with cultural adaptability, STIBO Systems demonstrates how Danish enterprises can leverage India's deep digital talent base while maintaining a unified global ethos.

Talent and capability development initiatives can address Denmark's digital-talent shortage while creating mutually recognised training standards. By leveraging national skilling programmes such as NASSCOM FutureSkills Prime and IndiaAI FutureSkills, Danish organisations can build certified digital-skill pipelines aligned with EU standards. Short-term internship and apprenticeship models, similar to those implemented by Stibo Systems, can provide early access to trained graduates and ensure practical industry exposure.

Global capability and operations models present opportunities to **build scalable yet culturally integrated teams that mirror Danish work values**. Companies can adopt a staged Global Capability Centre strategy, starting with Company-Owned Partner-Operated or Build-Operate-Transfer models to test operations before establishing wholly owned subsidiaries. City clusters can be selected by specialisation: Bangalore for software and healthtech, Hyderabad for AI and cloud computing, Pune and Chennai for automotive and logistics, and Coimbatore or Vadodara for cost-efficient digital operations. Danish enterprises can also partner with Indian startups and incubators such as IIT Hyderabad T-Hub and IIIT Bengaluru Innovation Centre for rapid prototyping and proof-of-concept pilots, shifting the relationship from outsourcing to co-innovation.

Finally, **culture, governance, and sustainability** are critical to long-term success. Danish firms should establish cross-cultural bridge roles; Indian managers with Nordic experience or Danish expatriates embedded within Indian teams, and make intercultural onboarding mandatory for both leadership and staff. Ensuring compliance parity is equally essential: appointing a Data Protection Officer, aligning operations with India's Digital Personal Data Protection Act (2023) and the EU's GDPR, and embedding Danish ESG and sustainability principles into all operations will reinforce trust, transparency, and long-term resilience.

To translate these insights into actionable thinking, we propose a Framework for Strategic Reflection, which is a set of probing questions designed for Danish organisations to evaluate their approach to accessing talent in India. The framework can be used to assess priorities, capabilities, and risk appetite:

A. Strategic intent

- What is the primary objective of engaging with Indian talent - cost efficiency, innovation, speed to market, or market proximity?
- Which parts of the value chain (R&D, product design, digital engineering, or operations) could be most strengthened by Indian talent?

B. Talent segmentation

- Which skills and functions (AI, engineering, design, or back-office) are most critical to the future competitiveness?
- Are we clear on whether to target Tier-1 cities (Bengaluru and Hyderabad) or emerging Tier-2 hubs (Pune and Coimbatore)?
- What is our approach to building vs buying talent (internal skilling programmes, external hiring, or academic partnerships)?

C. Operating model choices

- Should we build a wholly-owned GCC, engage in joint ventures, or leverage specialised Indian partners?
- How will we integrate with Indian universities and startups for innovation pipelines?

D. Governance and culture

- Do we have cross-cultural leadership capacity to bridge Danish and Indian work styles?
- How will we ensure governance, IP protection, and alignment with EU regulatory standards?

E. Sustainability and inclusion

- Are we embedding sustainability goals (green energy and responsible AI) in our India engagement?
- How do we ensure diversity, equity, and inclusion in our India operations?

F. Long-term resilience

- What risks (political, regulatory, attrition, or skill obsolescence) are we monitoring?
- Do we have a 5-10-year roadmap for evolving our India footprint as digital and green technologies mature?

For Danish enterprises, the task is not why India, but rather how to engage with India; which models, partners, and safeguards will translate this potential into measurable value?

THE ROLE OF ICDK BANGALORE IN AIDING DANISH ENTITIES ACCESS INDIA'S TALENT PIPELINE

The Innovation Centre Denmark (ICDK) in Bengaluru acts as a strategic bridge for Danish stakeholders seeking to engage with India's innovation landscape. ICDK Bangalore helps interested Danish entities by providing access to:

- **Strategic Partnerships & Platforms:** Connect with government agencies, universities, research institutions, incubators, accelerators, investors, and companies to support business and innovation collaborations.
- **Market Exploration:** Understand the viability of your product, service, or idea in India, and adapt offerings for local and emerging markets.
- **Delegations & Immersion Programs:** Facilitate learning and partnerships through curated meetings and exchange programs with Indian counterparts.
- **Internationalisation & Scaling Consulting:** Support for Danish firms entering the Indian market or seeking funding, leveraging deep knowledge of Indian business, research, and innovation culture.
- **Knowledge Transfer:** Promote collaboration between Danish and Indian R&D centres and universities to transform scientific research into commercial, scalable solutions.

CONCLUSION

Denmark's digital transformation depends increasingly on access to qualified technology professionals and R&D capabilities. The domestic supply of digital talent remains limited, creating a structural bottleneck for both innovation and productivity. India offers a complementary opportunity through its scale, technical depth, and established digital infrastructure. However, collaboration should be approached as a means of co-developing technologies and competencies, not as a strategy for cost reduction or outsourcing routine tasks.

For Danish companies, several collaboration models can be applied. Global Capability Centres allow for long-term competence building and ownership of intellectual property, while joint R&D projects, pilot co-development agreements, and startup partnerships provide flexibility for smaller enterprises. Strategic sourcing of specialised digital teams can supplement internal expertise in data science, AI, and software engineering. Common to all models is the need for clear governance, transparent IP frameworks, and shared performance metrics.

Structured frameworks that enable mobility of researchers and professionals, mutual recognition of skills, and support for industry-academia linkages are essential. Bilateral research calls, innovation programmes, and talent visa schemes can provide a predictable structure for collaboration and ensure alignment with Denmark's strategic priorities in green and digital transitions.

Collaboration with India's digital ecosystem requires investment in intercultural leadership, consistent quality assurance, and protection of sensitive data and intellectual property. Time zone differences, regulatory complexity, and uneven academic standards across Indian institutions can present operational challenges. Successful partnerships therefore depend on careful partner selection, incremental scaling, and continued alignment with regulatory standards.

BIBLIOGRAPHY

All India Survey of Higher Education. (n.d.). All India Survey of Higher Education 2022-23. Ministry of Education, Government of India.

- ASQ. (n.d.). Learn About Quality. Retrieved from Six Sigma: <https://asq.org/qualityresources/six-sigma>
- Businesswire India. (2025, July 03). Startup Policy Forum Launches #100DesiDeepTechs to Shape India's DeepTech Future; Partners DPIIT, MEITY Startup Hub and IIT-Madras. Retrieved from <https://www.businesswireindia.com/startup-policy-forum-launches-100desideeptechs-to-shape-india%20%99s-deeptech-future-partners-dpiit-meity-startup-hub-and-iit-madras--95551.html>
- ATV – Akademiet for de Tekniske Videnskaber. (2024, August). IT-uddannenes betydning på arbejdsmarkedet i Danmark [PDF]. Retrieved from https://atv.dk/files/media/document/IT_uddannenes%20betydning%20i%20Danmark%20rapport_august%202024_opdateret_18_nov_final.pdf
- Department for Promotion of Industry and Internal Trade. (2023, April 26). Foreign Direct Investment. Retrieved from <https://dpiit.gov.in/foreign-direct-investment/foreign-direct-investment-policy>
- Department of Expenditure. (n.d.). Retrieved from https://doe.gov.in/files/inline-documents/DoE_Prevention_sexual_harassment.pdf
- Department of Science & Technology. (2025). National Mission on Interdisciplinary Cyber-Physical Systems Quarterly Bulletin April 2025. Department of Science & Technology.
- Digital Hub Denmark. (2025, September). Exit Interviews: Why do international tech professionals leave Denmark?. Retrieved from [Exit Interviews - Why do international tech professionals leave Denmark?.pdf - Google Drive](https://www.digitalhubdenmark.dk/post/Exit%20Interviews%20-%20Why%20do%20international%20tech%20professionals%20leave%20Denmark%20.pdf)
- Digital Hub Denmark. (2025, January). Annual Report 2024: A milestone year for Digital Hub Denmark. Retrieved from <https://www.digitalhubdenmark.dk/post/annual-report-2024>
- Digital Hub Denmark. (2024a, September). Denmark faces significant decline in ability to attract and retain digital talent. Retrieved from <https://www.digitalhubdenmark.dk/post/denmark-faces-significant-decline-in-ability-to-attract-and-retain-digital-talent>
- Digital Hub Denmark. (2024b, September). Mapping the digital talent pool in Denmark. Retrieved from [Mapping the digital talent pool in Denmark 2024.pdf - Google Drive](https://www.digitalhubdenmark.dk/post/Mapping%20the%20digital%20talent%20pool%20in%20Denmark%202024.pdf)
- Dutt, A. (2025, April 10). Step-by-Step Guide to Setting Up a Global Capability Center (GCC) in India. Retrieved from <https://www.linkedin.com/pulse/step-by-step-guide-setting-up-global-capability-center-aniket-dutt-k5inf/>
- Energy Cluster Denmark. (2025, September 2). Engineers from India's leading university

receive post graduate courses from the Danish energy sector [Press release]. Via Ritzau. <https://via.ritzau.dk/pressemeddeelse/14555781/engineers-from-indias-leading-university-receive-post-graduate-courses-from-the-danish-energy-sector?publisherId=13562485&lang=da>

- European Commission. (2025, June). Digital decade 2025: Country report Denmark. Shaping Europe's digital future. Retrieved from <https://digital-strategy.ec.europa.eu/en/library/digital-decade-2025-country-reports>
- European Commission. (2024). Denmark: National Digital Decade Strategic Roadmap. Digital Skills and Jobs Platform. Retrieved from: <https://digital-skills-jobs.europa.eu/en/actions/national-initiatives/national-strategies/denmark-national-digital-decade-strategic-roadmap>
- European Commission. (n.d.). Denmark 2024 Digital Decade Country Report. Retrieved from <https://digital-strategy.ec.europa.eu/en/factpages/denmark-2024-digital-decade-country-report>
- European Commission. (n.d.). Marie Skłodowska-Curie Actions. Retrieved from Supporting excellence in research and innovation: <https://marie-sklodowska-curie-actions.ec.europa.eu>
- Eurostat. (n.d.). Labour market statistics – Structure of earnings survey (metadata). European Commission. https://ec.europa.eu/eurostat/cache/metadata/en/isoc_skslf_esms.htm
- EY. (2023). Future of GCCs in India - a vision 2030 report.
- Finansministeriet. (2023, November). DK2030: Danmark rustet til fremtiden. Retrieved from https://fm.dk/media/qgnn51oi/dk2030-danmark-rustet-til-fremtiden_web-a.pdf
- Folketinget. (2025, February 26). Redegørelse om Danmarks digitale udvikling (Redegørelse nr. R 8, Folketinget 2024-25). Retrieved from https://www.ft.dk/ripdf/samling/20241/redegoerelse/R8/20241_R8.pdf
- Horizon Europe. (n.d.). Retrieved from https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en
- IDA. (2025a, May 13). Manglen på STEM-uddannede stiger til nye højder frem mod 2040 [The shortage of STEM graduates will rise to new heights towards 2040]. <https://ida.dk/om-ida/nyt-fra-ida/manglen-paa-stem-uddannede-stiger-til-nye-hoejder-frem-mod-2040>
- IDA. (2025b, April). Prognose for ubalance på arbejdsmarkedet for STEM-uddannede 2025-2040 (med vedtaget dimensionering: endelig version). <https://ida.dk/media/9067/prognose-for-mangel-paa-stem-uddannede-paa-arbejdsmarkedet-2025-2040-med-vedtaget-dimensionering-endelig-version-april-2025.pdf>
- IDA. (2021, June). Mismatch på arbejdsmarkedet for it-uddannede i 2030. Retrieved from ida.dk/media/8590/mismatch-paa-arbejdsmarkedet-for-it-uddannede-i-2030-udgivet-juni-2021.pdf
- Income Tax India. (n.d.). Transfer Pricing. Retrieved from <https://incometaxindia.gov.in/Pages/international-taxation/transfer-pricing.aspx>

- India Briefing. (2024, October 11). Karnataka Global Capability Center Policy 2024-2029: Key Features. Retrieved from <https://www.india-briefing.com/news/karnataka-global-capability-center-policy-2024-2029-key-features-35441.html/>
- India Today. (2024, December 6). India records 102% increase in medical colleges, 130% rise in MBBS seats. Retrieved from India Today: <https://bestcolleges.indiatoday.in/news-detail/india-records-102-increase-in-medical-colleges-130-rise-in-mbbs-seats>
- Inductus GCC. (2024, September 09). Legal & Regulatory Compliance to Set Up a GCC in India. Retrieved from <https://inductusgcc.com/legal-regulatory-compliance-to-set-up-a-gcc-in-india/>
- Innovation Fund Denmark. (n.d.). Retrieved from <https://innovationsfonden.dk/en>
- IRIS Group & HBS Economics. (2021, June). Mismatch på arbejdsmarkedet for it-uddannede i 2030 (for Danske Gymnasier og IDA). IDA. Retrieved from: <https://ida.dk/media/8590/mismatch-paa-arbejdsmarkedet-for-it-uddannede-i-2030-udgivet-juni-2021.pdf>
- IT-Branchen. (2024, March 20). Her er branchens største vækstbarrierer for 2024. Retrieved from: IT-Branchen. <https://itb.dk/nyheder/her-er-branchens-stoerste-vaekstbarrierer-for-2024>
- Klinke, Lasse Ørum (2016, June.). Danmark vil mangle 19.000 it-specialister i 2030. Version2. Retrieved from <https://www.version2.dk/artikel/rapport-danmark-vil-mangle-19000-it-specialister-i-2030>
- Lillelund, E. (2021, November 27). Denmark struggles to retain international graduates: "Fancy phrases like 'international outlook' aren't going to cut it". TechSavvy. Retrieved from: <https://techsavvy.media/denmark-struggles-to-retain-international-graduates-fancy-phrases-like-international-outlook-arent-going-to-cut-it/>
- Maersk. (2025, September 10). Maersk showcases innovations and technologies that are shaping the future of logistics at 'Code Cargo 2025'. Retrieved from <https://www.maersk.com/news/articles/2025/09/10/future-of-logistics-at-code-cargo-2025>
- Meyer, E. (2014). The culture map: Breaking through the invisible boundaries of global business. PublicAffairs.
- Ministry of Commerce & Industry. (2025, February 1). India's Startup Revolution. Retrieved from <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2098452>
- Ministry of Commerce & Industry. (2025, January 15). Nine Years of Startup India. Retrieved from <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2093125>
- Ministry of Electronics & IT. (2025, March 6). India's AI Revolution: A Road Map to Vikisit Bharath. Retrieved from <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2108810>
- Ministry of Electronics and Information Technology. (n.d.). Retrieved from <https://www.meity.gov.in/data-protection-framework>
- Ministry of Foreign Affairs of Denmark. (n.d.). Retrieved from <https://indien.um.dk/en>

- Ministry of Power. (2025, May 02). India and Denmark signs renewed Memorandum of Understanding (MoU) today. Retrieved from <https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=2126235>
- Mohan, V. (2024, November 29). India improves its R&D expenditure but lags behind many countries including China, USA and Israel. The Times of India. <https://timesofindia.indiatimes.com/india/india-improves-its-rd-expenditure-but-lags-behind-many-countries-including-china-usa-and-israel/articleshow/115813953.cms>
- Mondaq. (2025, February 25). Establishing And Operating Global Capability Centres In India: Legal Frameworks And Strategic Insights. Retrieved from <https://www.mondaq.com/india/corporate-and-company-law/1585920/establishing-and-operating-global-capability-centres-in-india-legal-frameworks-and-strategic-insights>
- NASSCOM. (2024). Digital Enterprise Maturity 5.0: Digital Readiness in the Era of AI. NASSCOM.
- NASSCOM. (2025). Technology Sector in India: Strategic Review - 2025. NASSCOM.
- NASSCOM Zinnov. (2024). India GCC Landscape Report The 5-year Journey. NASSCOM Zinnov.
- Office of the Controller General of Patents, Designs & Trade Marks. (n.d.). Retrieved from <https://ipindia.gov.in/>
- Rodriguez, P. (2023, August 2). The challenges of hiring developers in Denmark. The Scalers. <https://thescalers.com/the-challenges-of-hiring-developers-in-denmark/>
- Statistics Denmark. (2025, September.). Unemployment ["Arbejdsløse"]. Retrieved from <https://www.dst.dk/en/Statistik/emner/arbejde-og-indkomst/beskaeftigelse-og-arbejdsloshed/arbejdsløse>
- Statistics Denmark. (2024). Digitalisation. Statistics Denmark. Retrieved from <https://www.dst.dk/en/Statistik/temaer/digitalisering>
- Statistics Denmark. (n.d.). Digitalisation. Retrieved from <https://www.dst.dk/en/Statistik/temaer/digitalisering>
- The Copenhagen Post. (2024, May 29). Denmark's outdated policies block international talent and slow down economic growth. <https://cphpost.dk/2024-05-29/life-in-denmark/opinion/outdated-policies-block-international-talent-and-slow-down-economic-growth/>
- The Culture Factor. (n.d.). Country Comparison Tool. Retrieved from <https://www.theculturefactor.com/country-comparison-tool>
- The Hindu. (2024, July 22). Economic Survey 2023-24: Only 51% graduates employable. Retrieved from The Hindu: <https://www.thehindu.com/business/budget/economic-survey-2023-24-only-51-percent-indian-graduated-employable-survey-says/article68432324.ece>
- University Grants Commission. (2025, September 15). Retrieved from <https://www.ugc.gov.in/>