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Uttar Pradesh Core of India's IT & Electronics Revolution

By Elets News Network 06-January-2025

Take a moment and listen

In the 21st century, India is not just meeting global technological demands; it is leading innovation on a global scale. As the Hon'ble Prime Minister, Shri Narendra Modi, aptly articulated at the recent SEMICON India 2024: "In the 21st-century Bharat, the chips are never down! Today's Bharat assures the world— when the chips are down, you can bet on India!" This powerful statement embodies India's vision to emerge as a global IT and electronics powerhouse.

Shri Ashwini Vaishnaw, Union Minister for Electronics & Information Technology, stated in a recent social post that India's electronics exports ranked among the top three by the end of the first quarter of the Financial Year 2024-25, showcasing the country's significant potential in electronics production. To capitalise on this momentum and harness the potential of the manpower in advancing the sector, the country has set an ambitious target of achieving $500 billion in electronics production by 2030, building on a current market base of over $150 billion.

Recognising the pivotal role of semiconductors in powering modern technology—from smartphones to electric vehicles—the Indian Government has prioritised semiconductor manufacturing. Under Minister Vaishnaw's leadership, the Ministry of Electronics and Information Technology (MeitY) launched the ₹76,000 crore India Semiconductor Mission. This transformative initiative seeks to position India as a global semiconductor manufacturing hub, offering up to 50% financial support from both central and state governments. To date, projects totalling approximately ₹1.5 trillion have been approved, with many more in the pipeline.

India's IT sector is a driving force behind the nation's digital transformation and economic growth. In 2023, the IT services market expanded by 6.1%, reaching $14.5 billion. The India Brand Equity Foundation (IBEF) projects that the industry will grow to $350 billion by 2026, contributing 10% to the national GDP. Reflecting the sector's strategic importance, the Union Budget for 2024- 25 has allocated ₹1,16,342 crore ($13.98 billion) to IT and telecommunications, emphasising advancements in cybersecurity, AI, blockchain, and hyper-scale computing.

With some of the lowest data costs globally, the country has achieved widespread digital accessibility, facilitating transformative progress in banking, governance, and education. This digital infrastructure has fueled a projected IT spending growth of 11.1% in 2024, reaching $138.6 billion. Software exports, a cornerstone of economic strength, generated $199 billion in revenue for FY24, driven by innovations in IT services and advanced technology solutions.

The IT industry also serves as a major employment generator, creating 290,000 new jobs in FY23 and expanding the workforce to 5.4 million, as reported by Invest India. Additionally, the country has become a vibrant hub for tech startups, producing 23 unicorns in 2022 and reskilling over 280,000 employees in digital technologies. With $109.49 billion in foreign direct investment since 2000, the nation has established itself as a leading destination for global capability centres (GCCs), having attracted $10 billion in data centre investments since 2020.

Uttar Pradesh Emerging as India's Next It and Electronics Hub

Uttar Pradesh, as the largest exporter of consumer electronics in India, accounts for 40 per cent of the country's mobile handset production and 55 per cent of mobile components production. Also, the state is a significant player in India's IT sector, ranking sixth nationally in software exports, highlighting its growing prominence in the IT industry. Hon'ble Chief Minister, Shri Yogi Adityanath also highlighted the immense leap made by the state at SEMICON 2024 stating, "Today Uttar Pradesh has been established as a big data centre hub. Uttar Pradesh Semiconductor Policy 2024 is being implemented to create a conducive environment for semiconductors in the state. Many attractive provisions have been made in this policy, including relaxation in capital subsidy, interest subvention, land value, stamp and electricity charges."

The state's proximity to the National Capital Region (NCR) and a robust industrial base, which includes 15 industrial areas and 12 specialised parks, make Uttar Pradesh highly attractive to IT and electronics enterprises. Hence, UP hosts several IT parks and Special Economic Zones (SEZs) in cities like Noida, Greater Noida, and Lucknow, attracting major IT firms such as TCS, Wipro, and HCL Technologies.

The state has introduced several dynamic policies to support the IT and Electronics industries, which include:

1. **Startup Policy 2020:** Uttar Pradesh ranks as India's fourth-largest startup ecosystem, with over 14,000 startups recognised under the Startup India Program and nearly 2,000 under the StartInUP Program, driven by the Uttar Pradesh Startup Policy 2020 and its 2022 amendments. Aiming to foster innovation, generate 150,000 jobs, and boost economic growth, the policy offers seed funding, patent subsidies, marketing grants, and interest-free loans for startups in Tier 2 and 3 cities. With more than 60 incubators already established and plans for 100 by 2025, the state also focuses on inclusivity, supporting rural entrepreneurship and emerging sectors like AI and biotechnology.

2. **Electronics Manufacturing Policy 2020:** The Uttar Pradesh Electronics Manufacturing Policy (UPEMP) 2020 has significantly advanced the state's economic and employment prospects, aiming to position Uttar Pradesh as a leading electronics manufacturing hub. With targets of ₹40,000 crore in investments and 400,000 job opportunities, the policy has attracted 42 companies that have made investments exceeding INR 6,500 crore in the state. Prominent names among these investors include Haier, Vivo, Smakwang, LG, Samsung, Dixon, Addverb, Oppo, and Havells. As of 2023, the electronics sector played a vital role in the state's USD 300 billion GSDP, contributing 22% to exports. Incentives under the policy include subsidies on capital, land, and electricity, alongside skill development programs, which have made the state attractive for domestic and international investors, aligning with India's Atmanirbhar Bharat initiative and promoting sustainable growth.

3. **Data Center Policy 2021:** The Uttar Pradesh Data Center Policy 2021 amended in 2022 offer extensive financial and non-financial incentives, such as interest subsidies, land and electricity subsidies, and exemptions from building norms, to make the state an attractive hub for both domestic and global investors. Noida's strategic role as a central IT hub is emphasised, alongside goals of developing 900 MW data centre capacity, securing INR 30,000 crores in investment, and establishing multiple state-of-the-art data centre parks. By fostering innovation and creating job opportunities, the policy aims to transform Uttar Pradesh into a leading force in India's digital economy, addressing rising data consumption and strengthening infrastructure.

4. **Semiconductor Policy 2024:** The Semiconductor Policy 2024 from Uttar Pradesh is a strategic initiative aimed at positioning the state as a global leader in semiconductor manufacturing and innovation. The policy focuses on developing world-class infrastructure, such as fabrication units and R&D centres, and offers substantial fiscal incentives, including a 50% capital subsidy and a 100% exemption on electricity duty for 10 years. It promotes skill development by collaborating with educational institutions and funding training programs. Moreover, public-private partnerships and collaborations with international semiconductor leaders are emphasised to drive innovation. As an outcome of the same, Noida is poised to become a semiconductor hub with a total investment of ₹32,146 crore, following the Uttar Pradesh government's approval of proposals from Tarq Semiconductor (₹28,440 crore) and Varna Sundari Investments (HCL Group) (₹3,706 crore), says government data.

5. **GCC Policy 2024:** The Uttar Pradesh Global Capability Centres (GCC) Policy 2024 marks a transformative initiative aiming to position Uttar Pradesh as a major hub for GCCs in India. The policy, in response to India's projected GCC market growth to $110 billion by 2030, focuses on developing high-value service hubs for multinational corporations. It offers comprehensive incentives, including capital subsidies of up to ₹25 crore, payroll subsidies, and interest reimbursements, to attract investment. The state has invested ₹5.31 lakh crore over the past five years in infrastructure like the Ganga Expressway and Jewar Airport, creating a strong industrial base. The policy aims to generate over 500,000 jobs by attracting over 1,000 GCCs, leveraging Uttar Pradesh's large and skilled workforce. Additionally, it emphasises sustainable practices and regulatory ease, fostering a conducive environment for innovation and technological advancement.

6. **IT and ITeS Policy 2022:** The Uttar Pradesh IT and ITeS Policy 2022 aims to transform the state into a leading global hub for information technology by developing world-class infrastructure, fostering innovation, and enhancing skill development. The policy offers various incentives, including capital subsidies, operating expense reimbursements, and tax exemptions, to attract investments and promote employment in the IT sector. Since its implementation, the policy has significantly boosted the state's IT landscape. Notably, North India's first hyper-scale data centre, Yotta D1, was inaugurated in Greater Noida, marking Uttar Pradesh as a favourable destination for data centres. Additionally, data centres with a capacity of 636 MW are currently under development in the state, underscoring the policy's effectiveness in attracting substantial investments and enhancing the IT infrastructure.

Expansion of the IT Sector in Uttar Pradesh

Uttar Pradesh is on an ambitious journey to establish itself as a premier destination for IT and IT-enabled Services (ITeS) in India. The state has rolled out a series of strategic initiatives designed to expand these sectors, positioning Uttar Pradesh as a technology powerhouse:

- **Industry Status for IT and ITeS Sectors**

A significant milestone was achieved in October 2024 when the Uttar Pradesh government granted 'industry' status to the IT and ITeS sectors. This strategic reclassification has opened up numerous opportunities for technology companies. One of the key benefits is the ability for IT firms to purchase land at industrial rates, which are considerably lower than commercial rates. Additionally, companies in these sectors now qualify for industrial power tariffs, leading to substantial reductions in operational costs. These incentives are expected to make Uttar Pradesh a more attractive investment destination, driving both domestic and international companies to establish a presence in the state.

- **Strategic Investments and Development Plans**

In a major push to bolster the IT landscape, the state has committed to investing approximately $4 billion (₹33,500 crore) over the next five years, according to Invest Uttar Pradesh. This investment is set to drive the development of global technology hubs and emphasises the adoption of cutting-edge technologies, such as AI, machine learning, drones, and robotics. These advancements align with global tech trends, ensuring that Uttar Pradesh stays competitive on an international scale.

To strategically distribute growth and resources, the government has identified five key cities — Noida, Lucknow, Kanpur, Varanasi, and Prayagraj— for targeted development. Noida, already recognised as a thriving IT hub due to its proximity to Delhi and robust infrastructure, is expected to experience accelerated growth. Meanwhile, cities like Lucknow and Kanpur, known for their educational institutions and growing talent pool, are set to evolve into innovation centres. Varanasi and Prayagraj, with their cultural and economic significance, will also see significant technological advancements, bridging the gap between tradition and modernity.

- **AI City in Lucknow**

Keeping pace with time, Uttar Pradesh government is developing India's first AI City in Lucknow. A 40-acre site near Lucknow's airport, adjacent to the Lucknow-Kanpur highway, has been designated for this project. The AI City will encompass a comprehensive ecosystem, including AI startups, data centres, data analytics facilities, AI-based training centres, and data forensics units. This initiative is part of Uttar Pradesh's broader strategy to transform cities like Lucknow, Kanpur, Gautam Buddha Nagar (Noida), Varanasi, and Prayagraj into AI and IT hubs, thereby propelling the state towards a trillion-dollar economy. The state government has partnered with institutions such as the Indian Institute of Technology-Kanpur, the Indian Institute of Management-Lucknow, and Dr. A.P.J. Abdul Kalam Technical University to support these knowledgebased initiatives. Additionally, the AI City is designed to be self-sufficient, featuring residential and commercial spaces, educational institutions, and healthcare facilities, all integrated within a "walk-to-work" model to promote sustainable urban living.

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Uttar Pradesh's Electronics Sector on the rise

Uttar Pradesh has emerged as a significant hub in India's electronics sector, driven by strategic initiatives and robust infrastructure development:

- **Infrastructure Development**

The state has developed two Greenfield Electronics Manufacturing Clusters at Sector 24, Yamuna Expressway, and Ecotech VI & VII in Greater Noida. These clusters host major companies like Samsung, Oppo, and Vivo, contributing to 40% of India's mobile manufacturing market, asserted Invest UP.

- **Semiconductor Industry Focus**

Uttar Pradesh is making significant strides in the semiconductor industry, with robust incentives and infrastructure development to establish itself as a global manufacturing hub. The state offers various exemptions, including a 100% waiver on stamp duty, registration fees, and electricity duty for ten years, as well as facilitating dual power grid networks for FAB units and offering a 50% exemption on transmission and wheeling charges for 25 years.

The state's infrastructure development includes setting up the first semiconductor park near Noida International Airport, with 225 acres allocated in Greater Noida for semiconductor manufacturing. These initiatives align with the India Semiconductor Mission, attracting major global companies like AMD, Applied Materials, and Micron Technology, reinforcing Uttar Pradesh's commitment to becoming a leading semiconductor hub.

The state also boasts of a highly skilled workforce, nurtured by premier institutions like IIT Kanpur, IIT BHU, IIIT Prayagraj, and IIM Lucknow, which provide a steady stream of talent for the electronics sector.

- **Achievements in the Electronics Sector**

Uttar Pradesh has emerged as a powerhouse in India's electronics sector, establishing itself as the largest exporter of consumer electronics and a major hub for smartphone manufacturing. The state contributes 45% of India's smartphone production and 55% of mobile component manufacturing, thanks to significant investments from global electronics giants like Samsung, OPPO, and VIVO in Greater Noida. These facilities collectively drive 40% of the nation's mobile manufacturing market. The state's infrastructure is bolstered by two Electronics Manufacturing Clusters (EMCs) at Yamuna Expressway and Ecotech in Greater Noida, creating a conducive ecosystem for growth.

The state has come a long way in the IT and Electronics game, from being an industrial state to gaining the identity of a hub for tech and manufacturing. The credit goes to the robust policies, initiatives and forward-looking approach of the state government for becoming a trillion-dollar economy.