UP's Digitech Transformation

⊢ PUTTING INNOVATION FIRST ⊣

Uttar Pradesh government has been at the forefront, embracing digital transformation and relentlessly pushing PM Narendra Modi's vision of 'Digital India' across the state

> A Digital India is an empowered India, boosting 'Ease of Living' and transparency. We have made huge strides in a decade, thanks to effective usage of technology.
>
> **Narendra Modi,**
> Prime Minister

Uttar Pradesh is one of the largest states in India with GDP of more than USD 256 billion and has the largest consumer base in the country with around 25 crore people. The IT and Electronics sector has been contributing immensely to the state's economy. The presence of leading companies such as Microsoft, TCS, PayTM, HCL, Wipro, Haier Electronics, ST Microelectronics, Samsung, LG Electronics, NXP, Cadence, Mentor Graphics, Qualcomm, Nvidia, etc is a testament to the UP's growing appeal in the segment.

This appeal has also much to do with the long-standing vision of PM Narendra Modi and the effective

KEY INITIATIVES IN AI BY UP GOVERNMENT

UP is harnessing AI tools like:

- **Mine Mitra** to boost legal mining through advanced technology, including AI for vehicle and mineral identification, processed on the cloud via IoT
- **Chakbandi AI ERP** integrates various technologies like drones, GNSS, GIS for data creation and mapping
- AI-powered **optical character reader** to automatically extract meter readings, units, and serial numbers from meter photos
- **Jarvis**, AI-powered audio-video analytics software, helps in prison monitoring and supervising jail inmates
- A dedicated **Climate Resilience Observatory** established at IIIT (Indian Institute of Information Technology) Lucknow, to analyse data for disaster forecasting and provide an early warning system

Leveraging e-Governance to power 1 trillion-dollar vision

PICS: DIPR, UTTAR PRADESH GOVT

governance of CM Yogi Adityanath—enabling a digital space for the state that encompasses all key sectors, stakeholders, departments and state residents. With the intention of introducing 'ease of doing business', transparency and efficiency, the UP government has launched several initiatives that are making 'ease of living' and 'ease of doing business' second nature to UP.

The UP government has been at the forefront when it comes to embracing digital transformation and relentlessly pushing the PM's vision of a 'Digital India'. The state government has relied on e-Governance as it fosters a broader change in the relationship between the government and its stakeholders. Moreover, it reduces the cost of government operations and improves transparency along with accountability. People, process, technology, and resources have been the hallmark of e-Governance practices by the UP government.

Embarking on a journey to achieve a 1 trillion-dollar economy within the next 5 years, UP government has identified IT and ITeS as a core sector to propel the state's economy. As a result, accelerated adoption of digital technologies has been encouraged by the state government across various departments and industries.

A PROGRESSIVE DIGITAL STATE

UP has made significant progress in embracing digitalisation in multiple domains of governance. In the past, the state government has undertaken various key initiatives, such as:

- Land and property records and property transfer
- Public services delivery digitised, thus contributing significantly to ease of living for people
- UP Police set up one of the largest emergency crime response digital portals—UP112
- CM helpline
- Ayush Kavach
- Chikitsa Setu
- e-Sathi
- e-Tendering–UP ranked 1st in India in e-Tendering system
- e-Office–188 implemented including directorates/ HoD offices, PSU/ non-government organisations, DM and commissioner offices, police department etc.
- e-District

> UP has a lot of potential in various fields and the government is using digital technology to bring about economic reforms.
>
> **Yogi Adityanath**
> Chief Minister

The state's other digital initiatives, including the single window portals Nivesh Sarathi, Nivesh Mitra, OIMS, e-FIR and PM GatiShakti NMP etc, have significantly transformed the industrial landscape and citizen-centric services in UP. As a result of its steady approach towards good governance and using technology to promulgate a more conducive environment, since 2017 onwards as part of 'Ease of Doing Business' journey, UP has implemented more than 1,400 business reforms.

These are proving to be the ultimate engine for economic growth. Uttar Pradesh has now 'Achievers State' ranking in the Business Reform Action Plan of states by DPIIT, Government of India.

Digital UP Conclave 2024:
Focus on governance & growth through technological innovation

The Digital Uttar Pradesh Conclave 2024 was organised by The Economic Times in association with the IT & Electronics department, Government of Uttar Pradesh, on June 28, 2024, in Lucknow. This flagship event has served as a critical platform for discussing the state's digital transformation in governance.

The conclave brought together multiple key stakeholders including government officials, industry leaders, academia, and technology experts to explore the potential of digital initiatives in improving public service delivery and governance.

The topics of discussion included digital infrastructure, e-Governance, cybersecurity, and the role of technology in improving citizen services. The conclave focused on the importance of public-private collaborations in driving innovation and improving the efficiency of government operations.

TOI PHOTO

UP's IT revolution

IT and electronics sector would have a major share in Uttar Pradesh's journey towards becoming a 1 trillion-dollar economy

Today for a country to be recognised as powerful and a pioneer, it needs to leverage IT and electronics innovation with its economy, based on data. UP government is focusing on latest trends, innovations and strategies in IT-ITeS, electronics manufacturing, e-Governance and AI alchemy sectors to fuel its economy.

The state is already making attempts to create an ecosystem to develop IT hubs. Semiconductors, which are found in almost every instrument of day-to-day life, are the spine of any economy. UP is also focusing on semiconductor manufacturing on its soil with Rs 40,000 crore investment.

During GBC 4.0 in February 2024, the Department of IT & Electronics has grounded 53 MoUs, investment worth Rs 90,779 crore, with a potential employment of 75,385, under the Electronics Manufacturing, IT/ ITeS and Data Center policies.

UP LEADING THE WAY

Establishment of manufacturing hubs
Uttar Pradesh has positioned itself as a leading hub of electronics manufacturing in India, essential for the infrastructure backbone of e-Governance and technology transformation. The state government has facilitated the development of Electronics Manufacturing Clusters (EMCs), Electronics Manufacturing Zones, industrial clusters, and Special Economic Zones (SEZs) to support this growth.

Mobile phone production
With 55% of all mobile phones manufactured in India coming from Uttar Pradesh, the state plays a pivotal role in ensuring access to affordable and high-quality devices, a key enabler for digital governance and citizen engagement.

Diversification of electronics products
Beyond mobile phones, Uttar Pradesh's electronics manufacturing sector is diversifying into consumer electronics, LED lighting, electronic components, and IT hardware. This diversification supports a broader range of digital services and enhances the technological infrastructure necessary for e-Governance.

Electronics Manufacturing Clusters (EMCs)
The government's promotion of EMCs facilitates the growth of the electronics industry, providing the necessary infrastructure for companies to thrive. This infrastructure is crucial for developing and deploying advanced e-Governance technologies.

Uttar Pradesh Semiconductor Policy 2024
Launched in January 2024, this policy has successfully attracted leading global players to establish semiconductor manufacturing units in the state. Semiconductors are foundational to developing the hardware necessary for e-Governance and technology transformation.

Anchor companies and reputed component suppliers
Leading companies such as Vivo, Oppo, Samsung, Lava, Haier, and LG, along with component suppliers like Holitech, Transsion, Jahwa, Sunwoda, and Samkwang, have established their units in Uttar Pradesh. Their presence contributes to the technological advancements and innovations driving e-Governance.

Rising digi-revolution in UP

In line with the stated objective of chasing and realising the digital goal, which forms a key component for the CM's vision for the state, in a time-bound manner, the state government has also roped in private startups and the youth. Budding entrepreneurs are stepping up and building startups to realise CM Yogi's dream of taking the internet to every village. They have been instrumental in initiatives like expanding 5G WiFi network to promote the digital revolution in rural and backward areas of the state.

As a result of finding easy access to high-speed internet, even villagers are reaping the fruits of the state's digital transformation. Through the development of open public WiFi network through Artificial Intelligence (AI), common man in the remote sections of the state is now able to take advantage of the internet.

Microdata having been fed in the network through advanced AI has enabled access to NCERT syllabus from class 1 to 12. By virtue of this, children are deriving the benefits of e-education. People are also able to avail the facility of Jan Suvidha Kendra from their mobile phones.

Village Integrated Command and Control Centre is being utilised for this and training on AI networks, e-education, teleconsultation

Innovative products developed by UP-based startups

- e-trike (electric tricycles)
- Re-ignitable and throttleable cryogenic engines and reusable rocket
- Voice marker-based AI powered mental health and wellness solutions
- Advanced robotic dog

services, CCTV, e-Governance services and e-commerce are being imparted through such centres. Along with this, e-library, and tele-education with a two-way communication system for teleconsultation and phone-based application for education, have also been developed.

Towards proficiency: NIPUN

The 'NIPUN Bharat Digital Initiative', led by the UP government, aims to digitally empower educators in schools across UP under the purview of UP's basic education department

PIC: DIPR, UTTAR PRADESH GOVT

NIPUN Bharat Digital initiative seeks to provide educators with tablets as part of a comprehensive 'Learning Resource Package'.

A dedicated portal 'NIPUN Bharat Digital Initiative Unified Portal', and a mobile app have been developed. This portal and mobile app serve as a central hub, facilitating communication and data management for all stakeholders, streamlining essential functions, including management of educator data, distribution of tablets, scheduling of device allocation, event

inspections, and numerous other critical processes.

Its seamless integration, ensuring that all information submitted by users is readily accessible to the pertinent authorities within different departments and institutions, is what sets this portal apart. This streamlined strategy enhances transparency and efficiency, allowing all relevant parties to access real-time updates on various processes at their convenience.

Moreover, the portal features an automated notification system that sends timely email and SMS notifications to all concerned users at pivotal stages. This feature guarantees that everyone involved is well-informed and can proactively participate.

Empowering farmers, aiding agritech startups

The state is aspiring to replicate the success of Global Investors Summit 2023 in the agricultural sector through **'Krishi Bharat'**

PIC: DIPR, UTTAR PRADESH GOVT

In a substantial move, CM Yogi Adityanath-led government has announced plans to host a global farmers' summit named 'Krishi Bharat' in November 2024, in collaboration with the Confederation of Indian Industry (CII).

This four-day mega event, to be held in Lucknow, will witness the participation of delegations comprising farmers and agricultural experts from countries such as the US, Germany, Brazil, Italy, Poland, France, Spain, Indonesia, and Kenya. The scale of the summit is expected to match that of the UP Global Investors Summit held in February 2023, which garnered over 19,000 investment proposals worth Rs 40 lakh crore from both domestic and multinational companies.

Despite being a leading agricultural producer, Uttar Pradesh is looking forward to improving per hectare yield and sub-optimal food

processing, resulting in increased farm incomes and exchange of new technologies.

AGRITECH POLICY TO SEED A NEW ERA IN UP

The UP government has approved a new Agritech Policy, under which platforms will be developed to share data from digital crop surveys and digitisation will reduce farming costs and enhance productivity. About Rs 21 crore expenditure is expected in five years under the policy, which will also include promoting agritech startups. Under the policy, state farmers will be provided with the latest technological advancements, weather reports, technical advice, etc. With the first phase of the digital crop survey complete, a database is already in place. Incentives will be provided to agritech startups and companies, offering them opportunities for agritech testing.

The digital impact

One of the major reforms done by the Uttar Pradesh Government was the implementation of one of India's largest digital single window portal 'Nivesh Mitra'. Nivesh Mitra is an end-to-end online platform to provide NOCs/ clearances/licenses required for setting up and running a business in Uttar Pradesh. Total 42 departments are involved offering 487 number of online services.

Likewise, UPGIS 2023 was aimed to attract investment intents. The government signed MoUs with the investors intending to invest in the industrial landscape of UP. For easing out the process of MoU signing and to give proper handholding support to investors, an online Investor Relationship Management Portal was developed. The portal not only facilitates the digital signing of MoUs but also enables their monitoring. 'Nivesh Sarathi' is a one-stop solution for investors to have seamless response on their queries, redressing grievances, filing investment intents, seeking facilitation and monitoring of their investment projects. Nivesh Sarathi is poised to change the entire way of investor engagement in Uttar Pradesh.

THE CIRCUIT OF PROGRESS

- North India's first hyper-scale Data Centre Yotta D1 was inaugurated in Greater Noida
- The first data center building, Yotta D1, has a 5,000-server rack capacity. In addition, it features 28.8 MW IT Power and will provide 48 hours of IT power backup
- Companies like Yotta of the Hiranandani Group, STT, Adani, Sify Technologies, NTT Global and Webwerks have marked UP as a favourable destination for data centres
- Gautam Buddha Nagar to become one of India's biggest data centre hubs
- The state has 5 operational STPI parks located in Noida, Meerut, Lucknow, Kanpur and Prayagraj
- 4 upcoming STPI parks in Agra, Varanasi, Bareilly and Gorakhpur
- State government funded Li-ion (post cells) CoE established at Noida's C-DAC Centre in association with Ministry of Electronics and Information Technology, GoI
- AI City proposed in 40 acres of land near Lucknow Airport
- Kanpur being planned to be developed as a drones and robotics manufacturing hotspot, leveraging the presence of premiere institutes like IIT Kanpur
- Uttar Pradesh holds 6th position in software exports in the country with total software export from STPI registered IT/ITeS units for FY 22-23 standing at Rs 40,000 crore
- Presence of major key players in IT sector in UP—PayTm, TCS, HCL, Microsoft, MAQ, Adobe, Wipro, Infosys, etc

CONSUMER CONNECT INITIATIVE