GOVERNMENT OF KERALA

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EMPOWERING THE FUTURE

KERALA

INFORMATION TECHNOLOGY POLICY 2026

HARNESSING THE GROWTH TRENDS IN TECHNOLOGY

ELECTRONICS & INFORMATION TECHNOLOGY DEPARTMENT

Kerala IT
EMPOWERING THE FUTURE

KERALA STARTUP MISSION

THIRUVANANTHAPURAM TECHNOPARK HARMONY@WORK

INFOPARK

kozhikode india cyberpark creating opportunities

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SPACE

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1 Chapter I: Introduction

1.1 Background

Kerala, the Indian state with the highest Human Development Index, is one of the forerunners in the development of the Electronics and IT industry in the Country. The State had established the country's largest and the first IT space- Technopark- way back in 1990. The creation of Infopark and Cyberpark along with KSITIL has given a further fillip to the promotion of IT skills and employment opportunities. In order to develop an inclusive IT ecosystem, the state had initiated several e-Governance initiatives under KSITM & C-DIT, many of which later became national models for citizen-centric delivery of government services. Kerala was the first state to develop a policy for the development of startups under the initiative of KSUM and as a result, has been consistently ranked as a TOP Performer in startup development amongst states of India. The Free and Open-Source Software (FOSS) philosophy adopted by Kerala and promoted under the leadership of the various knowledge societies/communities including IT School program (now Kerala Infrastructure and Technology for Education (KITE), and later by International Centre for Free and Open Software (ICFOSS) has resulted in the development of a vibrant FOSS community and widespread adoption of open-source software in critical applications. In the IT talent development space also, the State has made significant strides by establishing specialized Institutions like IIITMK, Kerala Digital University, ICT Academy of Kerala etc. The recent launch of the KFON project will give a huge boost to IT development in the state. The Kerala Space Park project adds a new dimension to the IT space of Kerala. Since the introduction of the first IT policy way back in 1998, through various policy measures, Kerala could develop a comprehensive ecosystem for the inclusive use of Information Technology.

While Kerala could harness the power of IT for the overall well-being of society, the State could not capitalise much, economically on the booming IT and Electronics industry in the country. With the State contributing only a small portion to the IT and Electronics industry output today, there is a need to reinvent the sector considering the opportunities that are emerging in these sectors, such as the Space Tech sectors. There is a need for Kerala to push the boundaries further by adopting "digital" means in all walks of life effectively, to gain a leadership role in the emerging world of digital revolution. This necessitates the development of a new policy framework considering the radical changes that have taken place in the sector both nationally and globally. The IT policy 2026 is proposed in this context to give a quantum leap to Kerala in the next 5 years.

1.1.1 Focus of IT Policy 2026: Harnessing the growth trends in Technology

Information Technology continues to be a sunrise sector for India. Contributing almost 10% of GDP, the sector is witnessing a CAGR of 8% employing around 5 Mn people. The Indian Information technology and business process management (IT-BPM) sector is the world leader with around 55% of global share and Indian companies have established more than 1000 global delivery centres in 80+ countries. It is expected that the growth in the IT sector will continue further as the world is rapidly undergoing a digital transformation driven by the exponential growth in innovative technologies in the post pandemic world. Several studies have indicated

that the Indian IT sector is expected to double its output to USD 500 Bn by 2030 from the current level of USD 245 Bn (2022-23), making it one of the fastest growing sectors amidst the general recessionary trends in the economy. A similar trend is visible in the hardware side of digital industry also. India is estimated to have a market of around USD 500Bn in electronics by 2026, from the current level of USD 134 Bn. The imports which account for around 50% of the current market are also expected to reduce to 30% by that time due to the aggressive policy push by the government of India on electronics manufacturing for increasing self-reliance. The electronics industry currently contributes to 3.3% of GDP and is growing at a CAGR of 14%, making it a key growth driver for the economy. Even though Kerala was an early mover in the electronics industry with the establishment of the benchmark public sector undertaking M/s Keltron in the late 70's, which crafted a unique de-centralized model of development, the state could not keep in pace with the fast development in the sector during 1990's and 2000's. With the presence of national agencies like ISRO, CDAC, Cochin Shipyard, Brahmos etc. and with the emergence of demand in sectors like space, electric mobility etc., there is a huge potential for development of the electronics industry from the state in the near future.

At the same time, the IT, Electronics and Space sectors are also undergoing substantial changes all around the world. With the emergence of the fourth industrial revolution characterized by the convergence of the digital, physical and biological world, the world is witnessing a digital revolution driven by a host of new technologies like Artificial Intelligence, Data Analytics, Blockchains, Cloud Computing, Quantum computing, Genomics etc. The key aspect of emergence of these digital technologies is their ubiquitous nature and the pervasive impact they have on multiple sectors of society. These technologies, if used properly can make radical positive transformation in the society addressing several problems currently hampering human development. These technologies can play a vital role in attaining sustainable development goals and as a state having the highest human development index, Kerala could be the forerunner in the adoption of digital technologies for societal good.

Kerala is one of the regions with the highest biodiversity in the world. The same geological factors that made Kerala one of the best tourist spots globally have also helped to create diverse flora and fauna resulting in unique genetic data that will be very valuable for new industries like synthetic biology and bio-manufacturing. When IT is applied to the science of biotechnology, it results in certain specialized tools, technologies, and systems that came to be known as Bio-IT. With genetic data driving not only drug development but also precision medicine, and improvements in agriculture, livestock environment management, etc., the field of Bio-IT has expanded rapidly. The convergence of AI, Genomics, Nanotechnology, and Robotics is driving the next Industrial revolution, and fast development of powerful integrated IT solutions.

All the above factors may be highly beneficial for Kerala in its next stage of development and growth. The objective of the IT Policy 2026 will be two-fold. On the one hand, the State has to harness the burgeoning opportunities in IT, Electronics and Space sectors both in terms of production and employment while on the other hand, the State should adopt the technologies in various sectors of the economy to bring in a more equitable inclusive growth. This will hasten the State's stride towards evolving as a true knowledge society, which UNESCO (2005) defines

as an equitable and democratic society where knowledge shall be used for human well-being. For the implementation, apart from agencies within the Electronics and IT Department, other government agencies would be consulted / engaged in accordance with the respective department norms of engagement (agencies such as KITE, KELTRON, IKM, eHealth etc.

1.1.2 Vision

To transform Kerala into a leading global knowledge economy and innovation hub, leveraging its exemplary human development indices, pioneering digital infrastructure, inclusive talent and startup ecosystem, and emerging high-tech sectors.

1.1.3 Mission

a) Infrastructure Excellence: Achieve universal, high-speed connectivity with initiatives like KFON and statewide 5G adoption, develop decentralized urban-rural IT hubs to democratize access, and create world-class infrastructure.
b) Innovation & Entrepreneurial Leadership: Foster a vibrant ecosystem for deep-tech startups and IP-driven enterprises through dedicated incubation centres, risk capital support, sector-specific accelerators, and collaboration with academia and industry.
c) Human Capital Development: Build future-ready digital talent at scale via ICT Academy, Digital University Kerala, and promotion of FOSS for inclusive, equitable skill development; ensure workforce diversity, gender equity, and continuous re-skilling aligned with emerging technologies.
d) Citizen-Centric e-Governance: Implement unified digital platforms for seamless service delivery, optimize government processes using cloud and microservices architecture, enforce robust data governance, cybersecurity, and privacy measures fostering transparency and efficiency.
e) Sustainable Digital Transformation: Promote ethical and responsible adoption of emerging and transformative technologies to drive inclusive social impact aligned with SDGs.
f) Investment & Business Enablement: Facilitate ease of doing business with streamlined single-window clearances, targeted fiscal incentives, marketing support for domestic and global outreach, and attractiveness for GCCs and private investors capitalizing on Kerala's unique talent, cost, and ecosystem advantages.

2 Chapter II: Policy Framework

2.1 IT Policy 2026- Directions for growth

The primary purpose of the new IT Policy for Kerala is to prepare a blueprint for the State to develop, improve and enhance the well-being of its people through adoption and deployment of appropriate digital technologies. But this forward progress cannot be sustained without the foundations in modernizing and developing all productive sectors of the Kerala economy. This forms the agenda for the next decade of growth. The impressive performance of the State with respect to human development indices needs to be leveraged for the economic growth of the region by moving up in the value chain. The use of technologies for improving governance and delivery of services to citizens will also be a key consideration. Keeping this in mind, the new IT Policy 2026 of the state is divided into two, focusing on **economic development and social development** respectively. This is captured in Figure 1. As shown in the figure below, economic growth can be specific while social growth can be targeted at the attainment of sustainable development goals through digital transformation by leveraging on technology. To achieve the same, there is a need to enhance the infrastructure- both physical and human-, create ecosystems for fostering innovation, entrepreneurship and startups and improve governance by adopting smart governance principles. To strengthen these enablers, there is a need to have specific policy interventions and investments in infrastructure by the government. Additionally, to foster innovation, to support entrepreneurship and to facilitate digital transformation for social good, fiscal incentives may have to be designed, from time to time. All these form elements of the new IT Policy 2026.

Fig 1: Conceptual Model for IT Policy 2026

2.2 IT Policy 2026- The anticipated outcomes

The overall outcome of the Digital Strategy proposed in the new IT Policy 2026 is to transform Kerala into an inclusive knowledge society. To achieve this, the State has to develop both in social and economic dimensions. As discussed in Chapter 1, Kerala could not gain much from the information technology industry growth in the country and the state's share of the industry is abysmally low when compared to its immediate neighbors. One of the key targets for the next

decade is to address this. The trend towards decentralized development in IT as against growth concentrating in centralized parks can be a major advantage for the State which has an urban continuum throughout the State with good civil facilities. Keeping this in mind, it is proposed that Kerala should target garnering 10% of the IT market share of the Country in the next 6 years. The IT sector is estimated to reach around USD 500 Bn by 2030, which translates to around USD 50Bn for the state and this will be achieved by promoting both services and I.P based businesses, of which 50% will be from I.P business. This is more than 10 times the growth from the current level of around USD 4Bn. The global Space economy is predicted to grow from the current USD 500 Bn to USD 1 Tn by 2040 and the government of India has set a modest target of attaining 10% share i.e., USD 100Bn. Kerala being the cradle of the Indian space program and hosting three major centres of ISRO and the only space technology institute (IIST), the government targets to reach 10,000 Cr by 2030. Similar growth may be targeted for the electronics industry also.

One of the stated goals of the current government is to transform Kerala into a Knowledge Economy in the next 5 years. To make Kerala a true knowledge society, the ambitious target for economic growth of IT, Electronics and Space industry has to be supplemented by focusing on the power of digital technologies in overall societal growth also. This involves the adoption of digital technologies for rapid transformation of several basic sectors that affect human development. The attainment of various Sustainable Development Goals (SDGs) by leveraging technology could be a good way forward in this direction. Technology could be used to minimize wastage, enhance the reach and facilitate several inclusive models of growth. Designing specific schemes towards this, form the other aspect of the outcome expected from the new IT Policy 2026 for the State.

2.3 The enablers

The new IT Policy 2026 for Kerala should build on its existing strengths. Some of the elements which form the base of next stage of growth of the IT sector in the state are given below:

2.3.1 Infrastructure

The infrastructure forms a key element of the development of any industry. There are four key infrastructure elements which support the next stage of growth in the state:

2.3.1.1 IT Parks and Workspaces:

Kerala was the first State to create a concentrated workspace for IT units in the Country with the establishment of Technopark, Thiruvananthapuram in 1990. The Infopark in Kochi, Cyberpark in Kozhikode and satellite facilities in Kollam, Chertala and Koratty also were made subsequently for supporting the growth of IT industries. In the next stage of growth, more spaces will be developed as Sustainable IT corridors extending comfortable experience to the technical workforce with the active participation of the private sector to develop this infrastructure further. Specialized infrastructure for the support of early-stage companies is proving to be a key enabler for the growth of startup companies. The private sector will be encouraged to establish private IT parks and the current incentives for IT parks will be extended to these Private IT Parks through

affiliation, and they will be entitled to the benefits at the existing rates. The government will examine possibilities of bringing amendments to the Land laws, if required, to facilitate the setting up of the IT parks in the State.

2.3.1.2 Communication Infrastructure:

Kerala was one of the first states in India to create a Wide Area Network (KSWAN) connecting all government offices to enable e-Governance activities and free Wi-Fi facilities in public places for use by the general public. Also, Kerala is among the few states where more than 99% of the populated area is covered with High Speed 4G/5G data connectivity, resulting in a teledensity of about 122, next only to Delhi. The State later pursued innovative initiatives such as statewide high-speed giga fiber infrastructure, Kerala Fiber Optic Network (K-Fon Project) which envisions providing high-quality bandwidth connectivity to over 30,000 government offices and commercial connections to households. The scheme will provide subsidized / free internet connectivity to about 2 million households in the near future realising the State's declared policy of making the Internet a basic right for every Citizen. KFON platform shall be utilized to provide plethora of infotainment and other social sector services like education, health, agriculture, entrepreneurial support and so on. KFON will form a key enabler in the next stage of growth of IT in the State by ensuring competition amongst various ISPs and ensuring good internet connection to the Citizens at reasonable costs. The Private Sector will be supported to expand their Telecommunication infrastructure to increase the wireless data penetration in the State and the government will examine possibilities of bringing amendments to the Land laws, if required, to facilitate this expansion

2.3.1.3 Intellectual Infrastructure:

In addition to physical infrastructure, the state has already invested in making a strong backbone of intellectual infrastructure to support the exponential growth of technology industries in the State. In addition to a large number of technical institutions that provide talent for the IT sector, a dedicated university for the digital world- the country's first digital university was also set up by the government. The Digital University Kerala along with the proposed Digital Science Park is expected to spur the growth of IP-based technology product companies from Kerala. A statewide training infrastructure- Skill Delivery Platform Kerala (SDPK) covering over 100 technical institutions – helps in developing talent in emerging areas of technology with the support of KSITIL & ICT Academy Kerala, a public-private partnership in IT capacity building. A network will be formed with the Malayali diaspora including entrepreneurs, academicians and professionals holding key positions in various organizations operating in the IT/ITeS sector, to strengthen collaboration between industry and academia.

2.3.1.4 Specialised Infrastructure for High Tech Industries:

The State can focus on the development of High-technology industries in both hardware and software sectors. Development of industries that support the expected exponential growth in the Space and Aerospace sector could be a key priority for Kerala, given the availability of talent and presence of internationally reputed Space research institutions like VSSC, LPSC, IIST etc. Towards this, a specialized park for space industries, KSPACE, will be developed. KSPACE may

concentrate on the high-tech industries related to the Space sector and related domains in Aerospace and Defence. Similar specialised infrastructure will be built over time to create industries in niche evolving areas of technology like electronics and semiconductors, AI, Quantum computing and other emerging technologies. The specialised infrastructure includes a software bank, mech-electronic prototype developing facility, pilot manufacturing, digital fabrication, testing and certification facilities, and facilities for IP creation and protection etc.

2.3.1.5 Social and Private Infrastructure:

Kerala has been declared as the 1st State to be completely Digital in Education, with over 4.5 Lakh ICT equipment deployed to 16000 schools, under the KITE program. The Little KITES IT Clubs operational in over 2000 schools are the largest ICT network of students in the Country and have benefitted over 3.75 Lakh students till now. The Little KITES students train their counterparts and the public as well. KITE VICTERS educational channel which is operational 24/7 was the single source for education for over 4.5 million students during the Covid-19 pandemic and it is a unique model in the State.

2.3.2 Stress on Innovation through startups and government departments

Kerala was the first state in India to develop a startup policy that would help build various projects (software and hardware). It later expanded into the government marketplace and made innovations in government departments. The policy initiatives of IT policy 2017 could enable the State to develop a vibrant startup ecosystem that accounts for more than 10% of startups in the Country. As the Country is poised for exponential growth in startups in the IT product space, Kerala could leverage this initial advantage.

2.3.3 Potential for GCC growth

India is one of the largest innovation hubs for MNCs through the presence of their Global Capability Centres (GCC). The GCC, unlike many service-providing IT Companies, has its unique features. They are

(a) They create products and solutions for the mother company's core businesses, and hence deep tech and domain skills are critical success factors for such entities.
(b) Employee loyalty needs are high, as the level of investments they make among employees, is considerably higher and the risk of losing expertise will be higher compared to service companies.
(c) GCCs use larger office space per employee and hence are more price sensitive on their Operational Expenditure.
(d) Most GCCs have a strong focus on ESG targets and its achievements in addition to the above factors.

Kerala is well poised to support the specific needs of GCCs. The low-cost ICT infrastructure, inherent low attrition rate amongst experienced professionals, high Human Development Index, better living conditions and environmentally friendly workspace infrastructure are unique to Kerala, that can be attractive for the GCC setup. Entry level to deep skill talent

development institutions, Innovation ecosystem, and a large diaspora of experienced Malayalee professionals willing to return to the home state are potential opportunities for GCCs to look upon in the state. Given Kerala's prominence in sectors such as health and life sciences, tourism and hospitality, BFSI etc., there is a readily available workforce with expertise in these domains, which is favourable for establishing GCCs, Business Continuity Planning (BCP) and resilience centers.

Kerala, unlike the normal strategy of promoting selected metros in a state, is building its IT Infrastructure capabilities across the state, leveraging the Urban-Rural continuum of the state. State will offer to GCC the provision of Tier-1 facilities in Tier-2 cities and other towns meeting all the operational needs of such centres. The Government will collaborate with analyst groups, GCC solution providers and business forums for the business development activities pertaining to GCCs.

Kerala would like to offer the following incentives for GCCs

(i) To promote the GCC setup in Kerala, it would be able to extend its Work-Near-Home capabilities to the incoming GCCs.

(ii) To enable High bandwidth capability, Kerala's network provider KFON shall be extended to GCC infrastructure.

(iii) Single window clearances available for Park companies shall be extended to GCC setups in the state.

(iv) The Direct employment-linked incentives on setting up operations shall be extended to GCCs (as elaborated in Sections 4.5 & 4.6).

(v) Private Co-developer status (and associated incentives relating to property tax,) shall be extended to GCCs who are interested in setting up their own ICT infrastructure (As per Sections 4.4, 4.5, 4.6).

(vi) If the setup is in Kerala IT Park rented premises, rent discounts would be extended to GCC's to encourage women, transgenders, neurodivergent and specially-abled citizens (As per section 4.7).

(vii) Special packages including rental waiver for a limited period and extension of schemes such as FOSTeRA, Leap Coworks, and Work Near Home (WNH) will be provided for GCCs setting up their development centers in non-metro cities.

(viii) The Corporate Innovation Program (CIP) of Kerala Startup Mission shall be offered to interested GCCs to tap into Kerala's vibrant startup ecosystem and leverage their strengths in co-creation or for resolving pressing Business problems.

(ix) ICFOSS, through its inherent strength of a large open source community, will support insourcing talent & solutions required for GCC.

(x) To meet the GCC's deep Tech and Research needs, Digital University Kerala and Digital Science Park will offer its talent and expertise for the needed GCCs

(xi) For the new generation talent needs APJ Abdul Kalam Technological University, skills development institutions like ICT Academy, CDIT, ASAP, and community platforms like Mulearn shall support the GCC's specific talent needs

(xii) In engineering colleges academicians and experts from companies operating in the GCCs will be encouraged to jointly teach industry-linked courses.

(xiii) As part of the Earn-While-Learn program, students from higher education institutions will be encouraged to undertake internships in companies in the GCC.

2.3.4 Key Drivers from IT Policy 2017

- One-Stop Digital Government Platform- expanding USDP to provide one government experience to the citizen.
- Interoperability and Open Standards: Enforce common standards. In this policy, the uniform architecture will be modified to open standards with API based microservices.
- Integrate citizen feedback and grievance redressal into the digital service ecosystem to enhance transparency and responsiveness.
- Grassroots Digital Literacy and Upskilling: Intensify digital literacy campaigns for the public and continuous upskilling for the workforce.
- Continue the Unified Digital Identity and Access policy
- While continuing this Kerala Government shall establish a Digital Government Standard which can be a model for all governments with unconnected legacy IT systems with an objective to achieve high quality citizen experience and effectiveness of governance.

2.3.5 Progress in E-Governance

Kerala is one of the top players in E-Governance in the country. The state was declared as a fully e-Governed state in May 2023, with all government services being delivered to citizens through digital means. Kerala State Information Technology Mission, the apex body created by the government in 1997 had streamlined the policy framework for the adoption of e-governance in government departments. Many public and private sector organisations were recognized as Total Solution Providers for providing consultancy services, as well as, for working as implementing agencies of e-governance projects in the state from 1999 onwards. These included NIC, CDAC, KELTRON, C-DIT etc. who undertook various infrastructure and software development projects for different departments. Information Kerala Mission set up in 1999 spearheaded a comprehensive computerisation program for 1200+ local government institutions in the state. The unique model of delivering services to Citizens through Akshaya Kendras, which was established way back in 2002, is a global benchmark for a public service center for government-related activities. Similarly, the award-winning KITE project (formerly IT@ School) for

providing IT-based education to millions of school children is an excellent initiative for developing IT literacy and competency among the masses in the State. The establishment of the International Centre for Free and Open Software (ICFOSS) in 2009 to promote the culture of open-source software usage in public service delivery is another key enabler that could be leveraged for strengthening the inclusive IT ecosystem in the coming years.

Specialised agencies like Kerala State IT Mission, the nodal agency for e-Governance, CDIT, Digital University, and ICT Academy were set up in the past through various policy initiatives to ensure unique e-governance solutions to support common citizens. While IT Mission is supporting various departments of government for their digital transformation, CDIT & Digital University along with ICFOSS and ICT Academy have developed key technology solutions for the same. ICFOSS has also been advocating the use of free and open-source software in government applications resulting in their widespread adoption in Kerala.

2.4 New Policy Framework

The IT Policy 2026 proposes a framework to achieve the twin outcomes of economic growth and social development as indicated in section 2.2 by leveraging on the various enablers that the State could realise through the effective implementation of previous policies. As shown in Figure 1, the framework has four distinct elements that need to be developed/ augmented through policy measures, fiscal incentives or direct investment. These are:

1. E-Governance and Smart Governance for Inclusive Knowledge Society
2. Infrastructure Augmentation for growth of IT & High-tech Industries for Knowledge-Economy
3. Innovation, Start-ups and Entrepreneurship Ecosystem
4. Human Resource Development (with an emphasis on FOSS technologies, in the capacity building programs)
5. Responsible adoption of New Technologies and Data Management

Specific aspects of each of these are explained in the subsequent chapters and policy measures for the development/augmentation are detailed as well.

A separate **cyber security** and **data policy** will be released by IT mission, catering to the changes that were implemented at the central government level.

An exclusive **Electronics and Semiconductors Industry policy** for the development of the Electronics Industry shall be released separately.

An exclusive AI policy and Future Tech policy for the development of emerging technologies shall be released separately.

This policy document focuses on new areas of importance to the current environment and therefore areas that are already implemented/underway will adhere to 2017 IT Policy and are not repeated here.

Implementing institutions will be empowered to take fast track decisions on matters that are approved in this IT policy

2.5 Policy Objectives

With the aim of achieving the two broad outcomes explained in Section 2.2, the IT Policy 2026 is designed to achieve the following specific objectives in the next five years:

1. To garner at least 10% share of IT Industry exports from the Country.
2. To triple the availability of space for housing IT and allied industries in the State through private participation and decentralised growth.
3. To create an IP-based Knowledge industry ecosystem that accounts for at least 20% of IP-based startups in the country.
4. To create at least 500,000 new jobs in IT and allied sectors in Kerala.
5. To garner 5-10% share of the Indian economy in high technology areas like Space, Aerospace, Defence, Electronics and other Emerging technologies such as AI, Quantum Computing, Genomics etc., thereby creating high-end opportunities for the educated youth of the State.
6. To increase the number of startups operating out of Kerala to 20,000.
7. To ensure 100% accessibility to the internet to every household in the State by providing fiber optic connectivity.
8. To make all industrial spaces in the State 5G enabled.
9. To provide a single user interface for easy access to all citizen-centric services in the state through the adoption of Enterprise Architecture for government e-services.
10. To provide predictive and prescriptive governance services through all government departments.
11. To make all government communications digital by 100% adoption of e-office or Digital Workflow Management software developed by government agencies in all government offices.
12. To implement a framework for responsible use of data and new technologies.
13. To migrate at least 30% of e-governance applications to cloud-based services.
14. Efforts to adopt and promote environmental sustainability measures in Infrastructure augmentation
15. To create State-run Data repositories as infrastructure for developing data-driven solution companies. For instance, KGDC will be the repository of all genomics data generated in Kerala, KSDI will provide the spatial data infrastructure.
16. The Government of Kerala has adapted the Free and Open-source technologies as one of the basic guiding principles and shall strive for the promotion and adoption of the same. The government shall make it mandatory for all software solutions made through public funding to adopt free and Open-source Technologies
17. To strengthen the adoption of FOSS-based solutions in all e-government solutions and to replace at least 50% of high-value software (such as ERP systems, HRMS etc.) procured currently through public funds with FOSS software.

18. To encourage community initiatives in the promotion of Free and Open -Source software and hardware
19. To optimise the government processes through the effective use of technology so that there is an increased productive output by 25 % without an increase in the non-plan fund expenditure
20. To create a talent base in new technologies like AI, Blockchain, Data Analytics Bioinformatics etc.by setting up Centers of excellence in emerging technologies.
21. To achieve 100 % digital literacy.
22. To put in place an all-encompassing cyber security policy.
23. To encourage gender equity in employment, for all the IT /ITES/Electronics and Hi-tech Industry setups in the state.
24. To encourage inclusiveness (Women, Persons with disabilities, Transgenders) in the workforce supporting IT /ITES/Electronics and Hi-tech Industries in the state.
25. To create systems and legal frameworks that will ensure the privacy of Citizen / Customer / Employer / Employee data.
26. To promote Digital education in tune with the new era by developing new ICT textbooks for Classes 1 to 10, which will include new-age technologies
27. To impart specialised training to 25 Lakh students in the next 5 years in emerging technologies such as Robotics, IoT, and AI through 60,000 Little KITES IT members through peer-group learning.
28. To transform the Higher Education sector as a hub for FOSS, as a continuation of similar activities in school education.
29. The practice of various government departments separately collecting and maintaining information related to citizens and other public data will be discontinued. Instead, information will be collected and maintained in a single system, and controlled API access will be provided to the required government departments and agencies.
30. A service provider will be selected through a global tender to provide cloud services for the state in a hybrid model. All government departments and agencies shall utilize services only through this cloud. A government agency will be entrusted with cloud application and data management.

3 Chapter III: e-Governance and Smart Governance

3.1 Introduction

As per IT Policy 2017, the vision of the government was to establish best-in-class architectural governance, processes and practices with optimal utilization of ICT infrastructure and applications to offer ONE GOVERNMENT experience to all. Major e-governance applications have evolved in silos, organically fueled by the internal push to roll out electronic services to its Citizens resulting in multivendor engagements leading to departments adopting different standards, technologies, architecture and methodologies for delivering e-services. Lack of a Coherent approach, lack of standards and interoperability have become a major stumbling block in achieving the "One government" vision. Hence it is of paramount importance to set standards/and architectural framework for digital services in the state. Once the framework is set, all further development of apps is to conform to this standard.

3.2 The way forward – IT Policy 2026

The government will provide all its services across one centralised digital platform, to be accomplished over the next five years, covering the entire range of G2C/G2B/ G2E/G2G services, to encapsulate the whole spectrum of government services.

For new services, this will be achieved by creating and maintaining common standards that will run across all the departments & agencies of the government, in terms of business architecture, application architecture, interoperability, database data and cyber security etc., augmented by a standard implementation mechanism. All the existing services of the different arms of the government, including the core Kerala State IT Mission projects, will also be revamped accordingly.

The current e-Sevanam portal provides all government services in one place with the URLs of various departments aggregated to a single point for ease of access and the M-Sevanam app acts as an aggregator platform where URLs of all mobile responsive services in Sevanam were made available. A **Unified Service Delivery platform** being built by KSITM as part of G2C Track will provide a Single Window System for Citizens to avail government of Kerala services digitally without needing to visit the websites of individual departments separately. It will provide features for centralized tracking and monitoring of service delivery and Citizen grievances.

G2C track of Digital Kerala Architecture will be achieved by modifying the current service portal (services.kerala.gov.in) to achieve end-to-end service delivery system. The new platform will act as a Unified Gateway for Citizens to look up for availing any G2C services digitally, through multiple channels such as Web and Mobile, and be able to track their request status and file a grievance in cases of concern. It will be a lightweight platform that relies upon departmental systems for the fulfilment of service requests. The platform captures only basic information about citizens that can be used commonly and across departments. All existing applications may provide necessary APIs for integration and new applications may be built compatible with the identified architecture and prescribed standards.

With the introduction of the centralized Aadhaar Vault, the footprint of Aadhaar numbers across the departments in the State government will be reduced and hence reduce the risk of unauthorized access. Aadhaar Vault is a highly secure Aadhaar data management solution that is independent and isolated from the applications that use the Aadhaar number. It is established to manage Aadhaar-specific authorizations in respect of social security scheme management as well as for schemes for which Aadhaar is mandatory. Since Aadhaar numbers either in encrypted form or masked form should not be stored in any departmental databases, each beneficiary will be given a unique ID (Aadhaar reference number) which does not have any direct link with the Aadhaar number. The Aadhaar Reference number – Aadhaar number pair will be stored in the Aadhaar Vault in encrypted form along with a key management system using HSM, both secured with suitable protocols.

To improve the effectiveness & efficiency of social welfare schemes of Kerala through the establishment of a centralized common platform for beneficiary identification and selection, enhancement of transparency and effectiveness of beneficiary selection process, consolidation and de-duplication of data, providing a safety net from disasters both, in prevention and mitigation from the impact of disasters and to cope with the impact of natural disasters.

This is to be achieved through the establishment of a centralized common platform for beneficiary identification and selection, which helps in efficient monitoring of implementation and supply of schemes- 'Who received What'. The data obtained from such a platform will act as a 'Single source of truth' of beneficiary profiles and the data analytics obtained can be used for better planning and coordination of social protection programs.

3.3 Smart Governance – Need for a data policy

There is a general need to facilitate sharing and utilization of the large amount of data generated and residing among the entities of the government of Kerala. This would call for a policy to leverage disparate data assets. The current regime of data management does not enable open sharing of data under government custody with other arms of the government, nor does it expect proactive disclosure of sharable data available with data owners. Such regimes could lead to duplication of efforts and loss of efficiency in planning activities focused on state development. Efficient sharing of data among data owners and inter and intra-governmental agencies and with public calls for data standards and interoperable systems. Hence, Kerala State Data Policy aims to provide an enabling provision and platform for providing proactive and open access to the data available with various departments/organizations of the government of Kerala. A separate data policy comprehensively describing the various policy elements shall be released

3.4 Information Security

The Kerala state government views Information Technology as an enabler of socio-economic progress presenting innumerable business opportunities cutting across geographic boundaries. The government has taken on the role of an enabler facilitating the adoption of IT in both government as well as private sectors. There is a general mindset change in the government workforce and the willingness to adopt IT at job and in daily life has helped the government to implement e-governance projects across most organizations. As IT adoption increased, risks of

information security also emerged proportionately. It has become critical for the government to protect its IT assets and data from malicious attacks. Threats to information are increasingly organized and targeted, helping criminals, state actors and hacktivists to reap immense benefits out of information compromise, theft, or espionage. Critical information systems must be secured and protected with the highest level of priority lest they should fall prey to cyber-attacks causing even national cyber crises.

The first step towards ensuring cyber security in the government of Kerala is to have a State Information Security Policy that defines the policies and standards to be maintained and followed in securing IT systems at government entities. The purpose of this policy is to establish the information security policy of the State of Kerala to be followed by state entities. It defines the minimum set of information security requirements to be adopted by all state government entities to protect state data and IT systems within the state of Kerala.

This policy is binding on all state entities under the government of Kerala including administrative departments, field departments, autonomous organizations, universities, PSUs, societies, boards, and other bodies. It encompasses all systems for which the state entity has administration responsibility including systems managed or hosted by third parties on behalf of the state entity. It addresses all information, regardless of form or format, which is created or used in support of business activities of the state entities.

3.5 e-Governance Infrastructure – Adoption of new technologies

State data centers provide co-location, co-hosting, and cloud infrastructure to government departments for hosting their various e-governance applications in a centralized and secured manner. To meet the enhanced requirements of the State, the government will leverage the services from the MeitY empaneled Cloud Service Providers (CSP) and implement a multi-cloud architecture. This will create a highly scalable, efficient, resilient, and secure infrastructure for hosting government applications consisting of public clouds and state-owned data centres. Cloud infrastructure, cloud applications, cloud data, etc should be used by institutions controlled by the state government.

Suitable container platforms will be implemented at state data centres as part of modernizing the legacy applications using micro-services architecture.

3.6 FOSS Adoption

Over the past few years, most of the e-governance applications have been migrated to the cloud. All future e-governance applications must be designed to be platform-independent and accessible to all. Choosing FOSS operating systems and applications can significantly reduce capital and recurring costs for the government. The policy promotes FOSS technologies for the development and deployment of all e-governance applications. All computers and peripherals being procured in future should be compatible with FOSS. All government departments should encourage the use of FOSS tools on their computers. Research and development institutions as well as higher education institutions are encouraged to explore the possibility of replacing proprietary tools with FOSS alternatives. Use of proprietary tools, including software shall be avoided in

curricula for both primary and higher education institutions and in exceptional cases, applications for exemptions will be reviewed and decided upon by SCERT and KSHEC.

3.7 Digital inclusion

The objective of digital inclusion policy may need to be updated to reflect the new realities such as remote learning, telehealth services, remote work, virtual communication etc.

Increase access to digital resources: Develop and implement strategies to increase access to digital resources.

Enabling Technological Competency: Training and resources to improve digital skills, promoting the adoption of digital technologies regardless of socioeconomic status or ability.

Ensure Inclusivity: Incorporate assistive technology and design principles to ensure that digital platforms and services are accessible to all, regardless of abilities or disabilities, and user-centric design and community engagement to foster digital inclusion and access, particularly among under-served and marginalized communities.

Focus Areas

3.7.1 Accessibility

Ensuring access to digital infrastructure is critical for digital inclusion, particularly in the post-pandemic world where remote work, online education, telehealth care, and online social interaction have become more prevalent. This involves establishing public Wi-Fi hotspots in areas with limited internet access and providing subsidies for low-income individuals to purchase internet access and devices.

3.7.2 Technology Competencies

The focus of digital upskilling centres is to provide individuals with the skills and knowledge necessary to use digital tools effectively. These centres offer access to training and resources to improve digital skills, promoting the adoption of digital technologies in all aspects of life, including education, employment, and communication. By encouraging upskilling in digital literacy, individuals can continue to participate fully in the digital world and keep pace with the rapid changes in digital technologies, contributing to their personal and professional growth regardless of their socio-economic status, geographic location, or ability. With more than 2,500 Akshaya Centres established across Kerala, with at least one center in each panchayat, selected centres can be converted into digital up-skilling centres by providing financial aid, especially in the remote areas of the state. The State will also look at providing training programs for government employees in the latest digital technologies as well as conduct awareness sessions in critical areas like cybersecurity.

3.7.3 Inclusivity

Digital inclusion aims to ensure that everyone, regardless of race, gender, age, or abilities, has equal access to digital technology. To achieve this goal, various strategies must be employed, such as promoting universal acceptance (UA), multilingualism on websites, and the responsible use of artificial intelligence (AI).

UA involves making the internet more accessible to users from all over the world, regardless of the scripts, characters, and languages they use. This means that all domain names, email addresses, and other internet resources should be able to accept, validate, and display any language or character set. Universal acceptance promotes inclusivity by ensuring that people with diverse linguistic backgrounds can access and use digital technology without any barriers.

Multilingualism on websites and other digital platforms is another crucial aspect of inclusivity. At present, we have bilingual websites, but websites that support multiple languages can help people who are not proficient in the primary or secondary language of the website to access the information or services they need. As the world is growing into a single global space irrespective of borders, supporting multiple languages is becoming increasingly important.

The usage of AI technologies to promote digital inclusion.

AI can aid in the development of assistive technologies that can help people with disabilities to access digital services. AI-powered voice assistants and chatbots can make it easier for people with visual impairments or mobility impairments to use digital platforms. Additionally, AI can be used to develop tools that help people with cognitive disabilities to navigate digital content more easily. Furthermore, AI can be used for identifying the digital skills gap and providing more accessible and effective learning experiences. To ensure that websites are accessible to everyone, including people with disabilities, it's essential to comply with the latest version of WCAG. These guidelines provide instructions for making web content more inclusive and improving the user experience for all users, regardless of their abilities, including those with visual, auditory, physical, speech, cognitive, and neurological disabilities. Ensuring compliance with accessibility regulations and laws is essential for making websites more accessible and inclusive. E-Governance Facilitation Centres will be established. In such centres, where only a supervisor is appointed as staff, the services of students from ITIs, Technical Higher Secondary Schools, and Polytechnic institutions in the State, as well as other volunteers, will be utilized to train the public in the use of e-governance software. Students who render such service will be awarded activity points.

3.8 Future-tech enablement for good governance

Future-Skills Credit Scheme (portable learning wallet): SDPK and ASAP/KASE will be utilised for development of skilled workers through an academic bank of credits. MSME's adopting the workers with credits gets reimbursement for one month pay. Government will design the credits to fund self-paced upskilling for youth, gig workers, and employees with the help of ICTAK, KSITM and KSUM.

4 Chapter IV: Infrastructure Augmentation & IT Industry Development

4.1 Introduction

Infrastructure forms a key enabling factor for supporting development of IT industries in the state. As discussed in the last chapter, there are three types of infrastructure namely physical infrastructure, communication infrastructure and intellectual infrastructure that support the growth of the IT industrial units. In this chapter, the policy proposals for the augmentation of the physical and communication infrastructure are discussed. Intellectual infrastructure development is discussed in Chapter V which deals with Capacity Building for the IT sector.

4.2 Physical Infrastructure

The physical infrastructure facilitating the growth of IT units can be classified as follows.

1. Government-owned spaces within IT parks
2. Private Co-developer owned spaces within IT Parks
3. Government-owned spaces outside IT parks
4. Privately owned spaces outside IT parks

As of now, most of the IT companies of the state operate out of government-owned spaces within IT parks. This could be plug-and-play spaces or raw shell spaces leased out to IT companies. The companies operating within IT parks enjoy a host of privileges both facilitatory and regulatory making it a favourable destination for IT companies.

The Private Co-develop model is successfully demonstrated in Infopark and to a certain extent in Technopark. Under this model, land owned by the government will be leased to private co-developers at a cost and the entire infrastructure is built and managed by them. All the units operating from co-developer space also enjoy all privileges available for units operating out of government-owned spaces in IT parks.

The third category is government-owned spaces outside IT Parks. Kerala IT parks are running IT spaces in government/local body/PSU etc. owned spaces. These spaces serve as bustling hubs for numerous small and medium-sized companies. Kerala IT parks to explore the possibility of extending similar ecosystems to new potential locations

The fourth category is the private spaces, owned or leased by companies or developers outside the IT parks. This could be individual units housing 10-1000 people, private IT parks by builders or developers, or co-working spaces.

The role of Kerala IT parks in developing the IT industry and investment promotion is detailed in subsection 4.7.

With a decentralised model of IT and an increase in the number of startups expected during the next few years, there is a need to strengthen all four models described above through policy support and fiscal incentives, wherever applicable. This is given in the next section.

4.3 Policy for the Augmentation of Infrastructure

The following policy measures will be implemented in a phased manner to augment the infrastructure for support IT, ITES, Electronics and High-tech units:

1. The government will identify at least four IT development corridors for enhancing the development of IT Units. In these corridors, any private building with an IT seating capacity of 1000 or more will be deemed as a Private IT Park and will enjoy all privileges available for units with the government IT park.
2. The government will facilitate marketing of space available and developed by co-developers and private entrepreneurs, in its roadshows and other marketing campaigns.
3. The government will set up small format co-working spaces (Work near Home) in neighbouring towns and support the development of start-ups and small-scale entrepreneurs to setup IT spaces through its FOSTeRA Scheme. All these facilities will have plug-and-play facilities and units operating from these facilities will enjoy the privileges (given in section 4.6) as applicable to units operating from government IT parks.
4. The government will extend some of the remote coworking spaces to tourist locations and promote "workation" models, encouraging tourists to extend their stay and still be able to work from Kerala
5. To support large-scale co-developers to set up facilities within the IT parks or land owned by government agencies, the government will provide encumbrance-free land with a phased payment option for the land owned by the Government as given in Section 4.4.
6. To support private entrepreneurs and builders to develop IT facilities on their premises, the government will act as a key facilitator. Policy support for the same is detailed in Section 4.5.
7. Whether it is in government-owned parks, joint or private parks, the government will consciously promote green building standards, Renewable sources of energy, zero discharge policies, and other environmental sustainability aspects
8. Those companies who offer stipend-based internships to students, give preference to recruitment and conduct industry-linked courses in collaboration with faculty of the respective institutions will be given preference to operate rent- free in the buildings of higher education institutions.

4.4 Policy to support Co-development in land owned by the government

In order to support large-scale co-developers to set up facilities within the IT parks, the government will provide various options for phased payment for leasing the land owned by the government.

The different operating models suggested are:

1. The land lease shall be for a period of 90 years.
2. Land availability will be made encumbrance free (along with all mandatory approvals for establishing facilities meant exclusively for carrying out the specified business only)
3. The government may, based on the scale of investment and the employment opportunities provided within a window of 5 years, provide an option to pay a part of the lease amount upfront with a deferred payment, or completely waive off the payments, as explained in the table below. Only the extent of land recommended as essential by the respective Town Planning Department for carrying out IT-based business will be allotted.

S. Nos	Category	Investment Category (in Rs Crores)	Minimum Direct Employment Generation	Incentives
1	Micro	50 - 100	500	The government may provide an option to pay only 50% land lease amount upfront by the investor. The remaining 50% lease payment can be recouped after a moratorium period of 10 years in 3 equal annual installments.
2	Small	101-250	1,000	Option to pay only 75% of the upfront land lease amount by the investor. The balance amount of the upfront land lease amount shall be waived off based on the achievement of investment and employment generation criteria over a period of 5 years from the commencement of operation. *
3	Large	251-500	2,000	Option to pay only 50% of the upfront land lease amount by the investor. The balance amount of the upfront Land lease amount shall be waived off based on the achievement of investment and employment generation criteria over a period of 5 years from the commencement of operation. *

4	Mega	501-1000	3,000	Option to pay only 25% of the upfront land lease amount by the investor. The balance amount of the upfront Land lease amount shall be waived off based on the achievement of investment and employment generation criteria over a period of 5 years from the commencement of operation*, **.
5	Ultra Mega	>1000	5,000	100% of the upfront land lease amount is exempted for the investor. The land lease amount shall be waived off based on the achievement of investment and employment generation criteria over a period of 5 years from the commencement of operation. *,**

The above land lease waivers will be provided to all sub-urban and panchayath areas except Thiruvananthapuram, Kochi and Kozhikode metro areas. The above land lease waivers will be provided in all areas for the investments in emerging sectors without enough footprint in the state.

* In case the above investment and employment criteria are not met by the investor in a specified time interval, the full land lease amount shall be payable to the government with applicable interests.

** The investor may be requested to pay a refundable deposit, which will be remitted back as the targets of the investment and the employment generation are achieved

4.5 Policy to support the development of IT spaces in private land

The development of IT spaces can be done by a private investor in their land or the land leased/ acquired by them from a third party. Three models are proposed.

4.5.1 Development by a Private Investor

In this model, the government will provide support in identifying land parcels and marketing the lands to private investors who would then decide to purchase the same based on their requirements.

1. Branding/Marketing the land parcels through road shows and other marketing initiatives.
2. Permits/sanctions through Single Window Clearance mechanism within 30 days of submission of application by the investor.
3. Extend benefits like incentives, tax holidays, etc. applicable to private investors in government IT Parks.
4. Development of 5G street infrastructure for the campus to support ultra-low latency connectivity (on request and evaluation of business model)

4.5.2 Joint development by private investors and the government

In this model, the government shall facilitate the Private IT Park proposals brought up by the Private Investors. The government can also initiate the proposals by identifying the land parcels in potential areas; the ownership of land shall be vested with the private landowners. The Government shall ensure Infrastructure facilities like Road connectivity, transport facilities and so on to the Park. The government may consider subsidizing the expenses for development of common facilities like roads, compound walls, water supply, power infrastructure etc. within the Park. In this model, the government shall provide the following services.

1. Branding/Marketing of the IT Parks
2. Permits/sanctions through Single Window Clearance mechanism within 15 days of submission of application by the investor
3. Extend benefits like incentives, tax holidays, etc. applicable to private investors in government IT Parks
4. Investment required, for the development of common facilities in and around the park
5. Land acquisition for approach roads etc.
6. Development of roads
7. Ducting for utilities
8. Development of 5G street infrastructure for the campus to support ultra-low latency connectivity (on request and evaluation of business model)

4.5.3 Land pooling system for the creation of IT parks

The land pooling scheme is an innovative approach to conventional land acquisition, for industrial and economic development. Under the land pooling mechanism, groups of landowners pool their land and hand it over to a government agency for leasing to private investors for the development of infrastructure projects. After the development of the land, the agency shall reapportion the land to the landowners after deducting some portion as compensation towards infrastructure cost and development cost. The primary benefit of the land pooling policy is that the ownership remains with the original titleholder. It reduces the chances of legal disputes and compensation disbursements. However, the land pooling policy requires consent of all landowners for the procedure.

The traditional land acquisition process takes a very long time as it involves several steps with the minimum time stipulated for each activity. However, after LARR Act 2013 19 (1)

notifications, the buyer can engage in direct negotiation with the landowners.

In this model, the government agency concerned may provide the following:

1. Branding/Marketing of the land.
2. Permits/sanctions through Single Window Clearance mechanism within 30 days of submission of application by the investor.
3. Extend benefits like incentives, tax holidays, etc. applicable to private investors in government IT Parks.
4. Development of 5G street infrastructure for the campus to support ultra-low latency connectivity (on request and evaluation of business model)

Detailed guidelines and procedures for land pooling shall be developed in due course by the government through a government agency, for faster decisions/approvals.

4.6 Incentives for IT parks, deemed IT parks and private developers

As discussed earlier, all recognised IT spaces, whether they are operating within the park or outside, owned by the government or private party, will be treated at par for all benefits and privileges listed below. For this purpose, all recognised IT spaces will be treated as Deemed IT Parks. The following incentives are available.

4.6.1 Single Window Mechanism

All companies operating out of IT parks should have a single window clearance with the respective park center as the touch point. All engagement with external agencies like the following will be done through this central mechanism. This is extended to units operating from all recognized IT spaces also:

- State and Central Labour department
- ESI
- Fire and Rescue Department
- Pollution control board
- Shops and Commercial Establishment Workers Welfare Fund / Labour Welfare Fund
- Corporation /Local Self Governance Bodies in Trivandrum, Cochin and Calicut
- Electrical inspectorate
- Provident Fund department
- Department of Social Justice
- Department of Women and Child Development
- District Employment Exchange

4.6.2 Support to IT units in government procurement

Apart from price preference companies based in Kerala, which is already provided for in the IT Policy 2017, all companies operating from recognised IT spaces will be eligible for an exemption in prescribed turnover and minimum period of experience in procurement by Kerala government, PSU's and government bodies. The IT department will issue detailed guidelines in this matter

subsequently.

4.6.3 Marketing Support

An IT / ITES Technology EXPO and Space Expo will be conducted by all Parks as an annual event with support from the IT department to showcase the capabilities of companies operating within the state.

This will help identify opportunities to collaborate among the companies in our ecosystem as well as create connections to the bigger corporates who participate in the Expo.

4.6.4 Simplification of Labour Laws

Given the unique nature of the IT industry marked by frequent voluntary employee attrition and transfers outside the state especially in larger IT companies, setting up of a welfare act and funds for IT /ITES/Electronics/ Hi-Tech companies shall be initiated under IT Department.

4.6.5 Property Tax

Building/property tax for companies occupying government-owned buildings on lease inside the IT parks and outside is already paid by the government.

To encourage more private developers and investors, the government will provide up to 50% reimbursement of land tax for a period of 5 years for Private IT Parks and Co-developers.

In some of the parks that are in priority areas, property tax exemption for IT companies in IT Parks may be available for a limited time by treating IT Parks akin to Industrial areas.

4.6.6 Facilitating Mechanisms for Companies & Employees

The government will consider creating single window mechanisms for facilitating the needs of employees within the park to create an ecosystem that is conducive for easy migration of employees from other parts of the country and abroad to India. The facilitating mechanism includes support for addressing various regulatory compliances, education, training, and entertainment. Special emphasis will be given to enhancing the social life of individuals working in the parks.

4.6.7 Incentives for Private Land Developers

Special incentives will be provided for private land developers and investors, including subsidies and waivers.

4.6.7.1 Data Centre Promotion

The Government aims to promote Data Centers with a futuristic vision for promoting and fostering a knowledge-based economy. Towards that, suitable land parcels in existing IT Parks and other feasible areas will be allocated for Data Centers, ensuring 24x7 power supply and coolant systems along with adequate safety procedures in place.

The subsidies and other incentives for private players and co-developers would be based on the amount of investments brought, in adoption of environmentally friendly technologies such as green energy usage, low carbon emission etc. The Government will monitor the ongoing activities in this space and may extend the support mechanisms and incentives at a later stage.

4.6.7.2 Capital Subsidy

The government of Kerala shall provide capital subsidies based on investment ranges and locations for new or expansion of IT/ITeS/BPO units in Kerala. The capital subsidy will be back-ended and based on investment in Eligible Fixed Assets (EFA).

Category wise incentives (Investment in Rs. Crs)	Employment Nos.	Maximum Limit
Micro (25 – 100)	500	Up to 5% / Company
Small (101 to 250)	1,000	Up to 5% / Company
Large (251 to 500)	2,000	Up to 5% / Company
Mega (501 to 1000)	3,000	Up to 5% / Company
Ultra-Mega (Above 1,000)	5,000	A Special package will be worked out for such projects

#The capital subsidy will be provided to all sub-urban and panchayath areas except urban centers in Thiruvananthapuram, Kochi and Kozhikode.

The subsidy amount will be disbursed in equal 12 – 15 instalments from the date of fulfilment of Investment and employment criteria. In addition, 50% of the employment opportunities should be filled by candidates from Kerala across all the above categories.

4.6.7.3 Other incentives

1. SGST Reimbursement – Up to 25% with a maximum limit of Rs 10 Cr for 3 years
2. Power tariff applicable to Govt IT parks shall be extended to Private IT parks.
3. Stamp Duty Exemptions – Up to 100%
4. Waiver of Registration charges
5. Incentives to units that employ women/ Persons with Disability/ Third Gender
6. Reduction of land conversion charges – Up to 50% waiver of land conversion
7. Quality Certification Incentive (ISO, BIS, CMM level 3 to 5) – Refund up to 50% of expense subject to a maximum of Rs 25 lacs/unit/annum
8. Special Subsidies for Green Campus Initiatives.
9. Development of 5G street infrastructure for the campus to support ultra-low latency connectivity (on request and evaluation of business model).
10. Data-center specific package (making Kerala a Data Centre hub for the West Coast): Kerala will craft a DC-park regime around Vizhinjam/DP World routes with Electricity Duty

exemptions for Data centre.

The government will look into establishing a centralized mechanism to consolidate relief incentives and policy approvals, followed by interdepartmental concurrence.

4.7 IT / Electronics/ Hi-Tech Industry Development

The Kerala government-owned Agencies (IT Parks, KSPACE and others) will act as the primary agencies for IT industrial and investment promotion in the state.

Kerala IT parks – Technopark (estd. 1990) and Infopark (estd. 2004) contributed significantly to the growth of the IT sector of Kerala. The Cyberpark (estd. 2009), Calicut, a reasonably new Kerala IT Park is growing steadily contributing to employment and adding companies to its fold. Kerala IT parks over the years have built around 20 Mn Sq.ft of IT spaces through its buildings and co-developers. Currently, its facilities house 1000 plus companies creating about 1.50 lakh direct employment.

The government IT parks have been an attractive destination for IT/ITES companies to set up their operation in the state. Many MNCs and domestic companies have set up, expanded and continue to grow their operations in the state. The government will focus on augmenting the strengths of the parks for the development of a vibrant and competitive IT ecosystem within and outside IT parks.

As part of the industry development agenda, an exclusive new chapter (Chapter X) has been attached to the New IT Policy 2026, for the Space Tech Industry.

Strategic Areas of Focus

The policy focuses on the growth of IT parks infrastructure, IT businesses within and outside IT parks, attracting global investments promoting technological advancements and augmenting the social ecosystem around the park, leading to the generation of employment opportunities and an increase in software exports.

The strategic areas of focus are to be facilitated through the following Initiatives:

4.7.1 Augmenting IT Parks Infrastructure

4.7.1.1 Optimum utilization of existing Infrastructure:

The government agencies (IT Parks , KSITIL or others) to judiciously utilize the available land parcels at hub and satellite campuses for setting up the required infrastructure for the IT industry or allotting it to IT/ITES /Hi-Tech companies. The IT buildup spaces shall be developed directly by government agencies or by private investors or jointly. The SEZ and Non-SEZ land parcels are to be leased for a maximum period of 90 years at a time.

To optimally utilize the common infrastructure/utilities built by the park at each location, expansion to available land parcels in close proximity is to be considered based on its feasibility.

4.7.1.2 Extending IT parks plug & play workspace to new urban locations.

Kerala is the most urbanized state in India. To develop a comprehensive IT ecosystem across the state which has access to infrastructure, talent pool and industrial partnerships, the government will anchor the development of distributed workspaces for IT industry at urban locations across the state. The development is to be taken up directly or through private participation.

4.7.1.3 Extending IT Parks infrastructure through land pooling

Availability of land and basic infrastructure remains the critical requirement to attract new investments to the state. It is envisaged to develop new IT parks with the participation of public or private entities through a land pooling model, as mentioned in section 4.5, for meeting the requirements of the IT industry.

4.7.1.4 Extending Kerala IT parks facilities to government-owned spaces outside IT parks

Government-owned IT Parks face significant challenges in securing new land at affordable prices and within tight timelines for new projects. Additionally, fast sourcing of additional IT built-up spaces presents another hurdle for these entities.

To minimize land acquisition expenses and prevent project delays, government IT parks could explore acquiring unused land held by government entities or PSUs. Additionally, they might evaluate unoccupied buildings owned by government bodies or PSUs for potential utilization by the government IT parks. The government IT parks can evaluate the feasibility of such unused land and building, and propose recommendations to the government for consideration.

4.7.2 Strengthen IT businesses within and outside IT Parks

Along with small and medium companies operating from IT park campuses, it is estimated that many small and medium IT/ITES companies function outside the IT parks ecosystem, many of them have huge potential to generate large employment opportunities and a greater volume of software exports. Kerala IT parks to initiate an affiliate program that will identify these companies and will facilitate to lower their various risk factors in business, identify ways to increase sales and customer reach without the upfront costs of traditional marketing and sales methods. The affiliation program will be considered for companies under IT industrial parks as well. This will help companies in the sector to grow, leading to employment generation and an increase in software exports.

Further, to promote the growth of Private IT parks, Kerala It parks will associate with private parks by offering brand names and/ or services in a mutually beneficial manner to attract investment and create employment.

- Unified Investor Operation Support with B2B Marketplace: Develop a structured digital marketplace platform to enable startups and enterprises to source from, collaborate with, and access markets through other businesses, thereby strengthening the overall innovation and supply chain ecosystem.

- **IT City / Township playbook:**

IT city refers to an area where state-of-the art infrastructure exists to support IT/ITeS activities and promote the 'walk to work culture'. It consists of IT/ITeS office spaces/ IT park/ co-working spaces etc. complexes that may include auditorium, food courts, gymnasium, conference halls, conveyance facilities etc. Support shall be extended by means of following incentives: - Relaxation of zoning/ land use laws - Flexible Floor Space Index (FSI) norms applicability - Extend utilities doorstep support - Assistance in obtaining necessary statutory clearances - 100% exemption on stamp duty will be granted on the purchase/lease of land by the developer - CAPEX Support – One time support of 25% of the eligible capital expenditure.

The government will promote creation of IT Parks down to the LSGI levels with extended utilities support.

4.7.3 Attracting Global Investments

4.7.3.1 Marketing & Business Development activities

- Government to conduct various brand promotion and marketing initiatives nationally and internationally to establish Kerala IT as a choice destination for IT & ITES investment in the country. Also, with the support of the industry stakeholders conducts events, mini conferences etc.
- To attract investment and promote business development activities, IT parks will participate in trade fairs and expos, and send delegations to identified regions/countries.
- The parks to utilise the International Property Consultants (IPCs) to strengthen the marketing and business development activities.

4.7.3.2 Industry Facilitation – Ease of doing business

- To establish an exclusive **'e-Single Window Clearance System'** for co-developers for speedy processing of applications & issue of various clearances required for setting up industries under IT parks/COEs.
- Single Window Clearance to be headed by a dedicated investment enablement officer under IT Parks to reduce conception to implementation time lag. It is sufficient for the Co-developers and Investors to approach the Investment Enablement Officer and it is the duty of Investment enablement officer to ensure all clearances are obtained as per timelines fixed by government.
- In order to ensure hassle-free working of IT units in the state, policy proposes to setup a high-power empowered committee with concerned stakeholders as members in it.
- Special approval for clearances in setting up of startups and MSME's in Artificial Intelligence, 3D Printing, Internet of Things, Robotics, Cloud Computing, Immersive Technology, Drone, Bio-Informatics, Nanotechnology related industry.

4.7.3.3 IT parks will explore the possibility of extending the benefits of Industrial parks to private IT parks. Establishment of a Fast Track Clearance Procedure

The government to expedite the approval process, for various service requests raised by IT Parks/ KSPACE to various government departments and/or local bodies regarding setting up and/or operation and/or maintenance of Infrastructure or utilities, is to establish a fast-track clearance procedure.

- Fast-track governance cells for high value investments : Formation of special governance cell to fast-track the application for setting up high value industries/ Global Capability Centres.

4.7.4 Promoting technological advancements

4.7.4.1 Human Capacity Development

It is an important component in the development of the IT ecosystem. With new trends in technology, the availability of the required talent pool has become far more critical. In Chapter V, of the policy, various efforts to create a comprehensive human resource ecosystem are narrated in detail.

However, the talent pool and market connection remain critical factors in the development of a valuable talent pool and its utilization. A potential talent pool will attract new investments to the state. Kerala IT parks to facilitate the industry-academia partnerships to nurture talent, especially in focus areas of new and advanced technologies.

Kerala IT Parks, KPSACE, ICT Academy of Kerala, Digital University, APJ KTU, IIITMK, etc will facilitate industry-academia partnerships in research programs for new and advanced technology areas.

4.7.4.2 Development of Domestic Market for the IT industry

Digital Transformation Mission (Chapter IX) will enable digital transformation of different sectors and vocations. The initiatives will open various investment opportunities along the value chain. Kerala IT parks, with the support of Digital University, will identify the potential opportunities in various sectors for the adoption of digital transformation process. The park will also facilitate marketing these domestic opportunities nationally and internationally to bring the stakeholders together to be part of this sustainable digital change.

4.7.5 Augmenting the social ecosystem around IT Parks

The government to facilitate development of self-sustained social ecosystems including amenities in education, health-care, and entertainment in and around IT parks. The aim is to create a symbiotic environment of public infrastructure, private businesses and IT professionals that reinforce each other and benefit the healthy existence of all parties involved. Parks, urban planning officials, local self-government members, and IT Companies to work closely to develop such a social ecosystem around existing and new IT parks. An operational framework is to be established. The government will also extend support for the development of initiatives like Smart Cities, that contribute to the creation of vibrant communities.

4.7.6 Establishment of Critical Infrastructure Fund (CIF)

The un-precedent natural calamities, pandemic etc. need the establishment of a Critical Infrastructure Fund for the smooth functioning of IT parks:

- The fund is to be utilised to maintain, rebuild or construct infrastructure that is damaged, destroyed or needed during a natural calamity and may affect the functioning of the park or its clients.
- To build, maintain, and modify any infrastructure required to encounter a pandemic.
- To meet any funding gap due to the non-availability of funds for a project approved in the budget and is critical for IT Park or affecting its client business in the park.
- To be used for providing fiscal benefits for rural IT parks/spokes as a resurgence measure for conditions caused due to natural calamities or pandemics or economic recession.

The Critical infrastructure is to be held by the IT Parks and to be released as and when required, on recommendation by the IT secretary and on approval by the IT minister.

4.7.7 Special Financial aid for Employee Diversity and Inclusion

An IT/ITES organization with 25 employees or more operating from a leased built-up space in a government-owned IT Park, can claim salary reimbursement as a rent discount, 5% of the monthly rent, maximum up to ₹15,000/month, for one year for providing permanent employment to transgender persons in the campus.

Similar financial aid is applicable for neurodivergent and people with disabilities. If the organization employs more than one category of people (transgender, neurodivergent and disabled people), the financial aid provided for each category is compounded.

For an IT/ITES organization with 25 employees or more operating from a leased built-up space in a government-owned IT park, if it is owned or has on its board of directors, a person or persons who is/are transgender(s), neurodivergent or disabled or a combination of any or all, is eligible for 10% discount on base rent. No ceiling on the cumulative amount claimed. The organization is not eligible for making further claims under provision no 1, under Special Financial aid.

If an IT/ITES organization with 25 employees or more operating from a leased built-up space in a government-owned IT park, has 50% or more women employees working from the campus, is eligible for 10% discount on base rent, for a period of 12 months. No ceiling on cumulative amount claimed.

To qualify the organization should have 50% or more women employees working from the campus for the preceding 12 months. The rent escalation is calculated on the non-discounted base rent. Financial aid can be given consecutively or whenever the preceding 12 months meet the above-said criteria.

Private parks will be encouraged to extend support/incentives to the companies operating in their parks, on the diversity and inclusion agenda of the government.

4.7.8 Co-operatives and Start-ups in government tender participation

In order to promote the participation of co-operatives and local startups,

- Co-operative societies and collectives working in the IT Sector based in Kerala, shall be treated similar to MSMEs in the government tender procedures
- In the bid for projects above 50 Cr, consortia formed with startups in Kerala, to the extent of 25% of participation in the consortia, shall be given preference during tenders

4.8 Communication Infrastructure

In order to support all the units operating from IT parks, private IT parks and IT workspaces, the government will provide facilities to avail high-speed internet through the Fiber Optic Infrastructure led by KFON and other leading bandwidth provider in the state. Additionally, all IT parks and private IT parks will be 5G enabled with high-speed wireless data connectivity 4G/5G, subject to commercial and infrastructure feasibility.

The government will also endeavor to set up landing points of the global information highway in Kerala to reduce the cost and enhance the effectiveness of connectivity.

4.8.1 Strengthening Existing 4G/5G/OFC Networks

Government will support the existing 4G/5G/NLD/ILD License holders to expand their Networks by way of,

- Faster Right of Way (ROW) permissions
- ROW will be granted for construction of 4G/5G Infrastructure (Towers/Poles/Street Furniture/Overhead and underground OFC Cables) in all private land and land under the Control of State government except the prohibited areas notified by government of India

4.9 Specialised Infrastructure for Hi-Tech Industries

Kerala has a successful track record of nurturing Hi-Tech industries making them global leaders. While extant provisions are provided in the state industrial policy for the promotion of such sunrise industries, IT policy will supplement these efforts in a few areas like Space technologies, Electronic Hardware etc. through the establishment of specialized infrastructure and incentive measures. A new agency called KSPACE is setup with IT department for harnessing the opportunities in the Space sector. A space park is being developed in a 20-acre campus in Trivandrum to house industrial units involved in the manufacturing of components, sub-assemblies and products for the Space and Aerospace sector. Special incentive packages will also be formulated to attract industries once Space Park is established.

Kerala Genome Data Centre (KGDC), launched by K-DISC will be the backbone connecting over 125 Life sciences institutions in Kerala and would be the repository of all genetic data of Kerala. The AI powered High-Capacity data center is being set up in the Digital University of Kerala.

5 Chapter V: Innovation, Entrepreneurship and Startups

5.1 Introduction

The Startup Policy 2017 had set out many forward-looking initiatives aimed at making Kerala a preferred startup destination and it has led to the establishment of premier facilities such as Kerala Technology Innovation Zone (KTIZ), Integrated Startup Complex (ISC), Super Fablab Kerala with the support of Massachusetts Institute of Technology (MIT) and the roll-out of the Fund-of-Funds scheme for providing large size venture capital funding to Kerala based startups.

Notably, the policy has enabled access to early-stage capital in the form of grants and soft loans and state-of-the-art plug-and-play infrastructure accessible to entrepreneurs in the state. It has also led to the roll-out of the government-as-a-Marketplace (GaaM) program to help early adoption of innovative solutions through government departments thereby providing early revenues to startups.

The policy has also enabled the expansion of activities into student entrepreneurship, research commercialisation, technology transfer, and furthering the promotion and widespread acceptance of entrepreneurship culture in the state which has helped the creation of Kerala-based angel investment networks to provide early-stage investments to technology-based ventures. This has been reflected in the startup ecosystem rankings and other accolades the state received in national and international rankings and fora.

5.2 Objectives and Targets

The Technology Innovation and Entrepreneurship Policy 2026 aims to build on top of the elements of startup policy 2017 and add additional components for ecosystem development and entrepreneurship enablement to achieve the following objectives.

1. Promote the culture of innovation and encourage the creation of new ventures by making it easier to startup and do business in the State.
2. Make Physical, Digital and Technical Infrastructure available for startups across the length and breadth of the State.
3. Drive programs in key sectors to help startups identify customers, build products, deliver values and scale up.
4. Create more design and fabrication centres to transform Kerala into the leading design and prototyping hub in India.
5. Support venture creation in rural areas, enable social entrepreneurship, and help transform traditional industries towards Industry 4.0.
6. Ensure inclusivity and encourage the participation of women, transgenders, minorities, marginalised sections, etc. in the startup ecosystem.

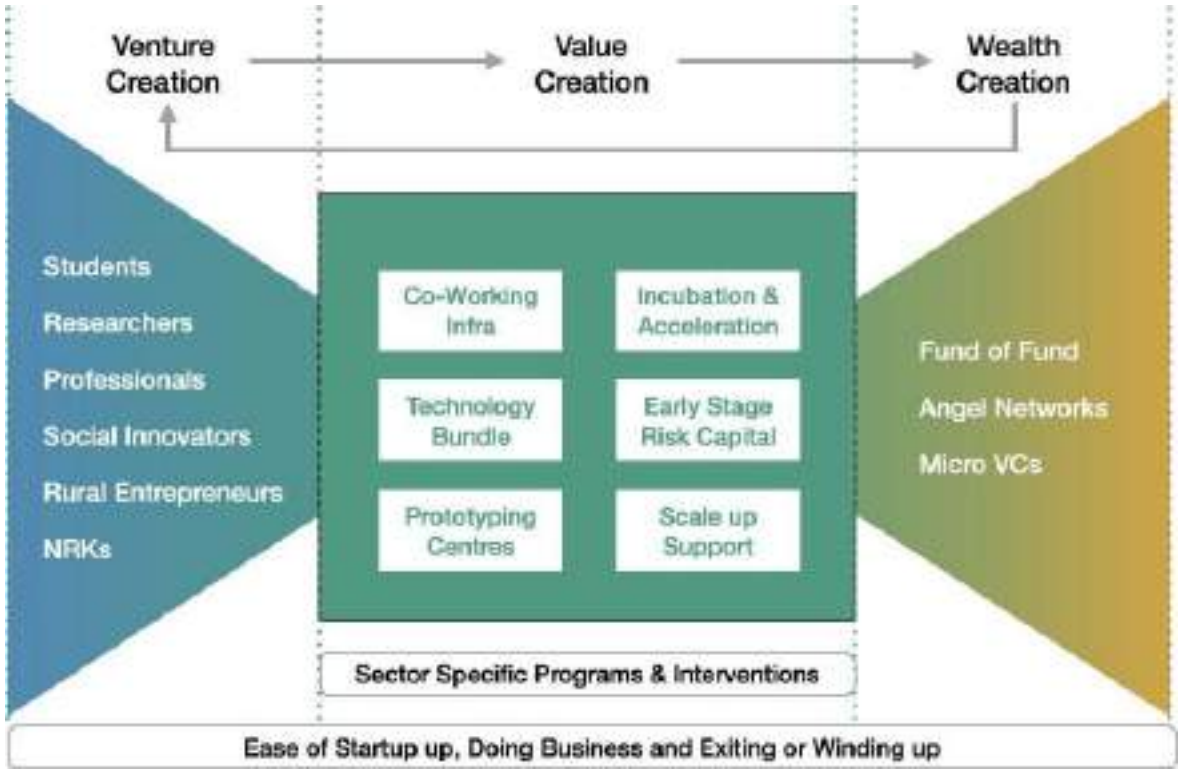
The above objectives will help the State become a hotbed for disruptive ventures and will help

the State achieve the following targets in the next 5 years.

Reach a total of 20,000 startups	Create at least 2,00,000 jobs	10,000 hi-tech jobs in Science, Technology, Engineering and Mathematics (STEM)	10 Lakh sq.ft. of incubation space	Inward investments of INR 10,000 Cr

5.3 Approach: KSUM 3.0

Kerala Startup Mission, the nodal agency for all start-up related activities and schemes in the State, has played a critical role in making Kerala one of the top startup states in the Country. While the Startup policy of 2014 focused on student startups and the 2017 policy focused on knowledge-based innovations, the new policy will focus on the positive reinforcement cycle of venture creation, value creation and wealth creation.



5.3.1 Venture Creation

Over the last decade, the culture of innovation has become prevalent in the State. However, to ensure continuous growth of the State's startup ecosystem, it is important to continue investing in creating a strong startup pipeline. KSUM will work with the following target groups to impart an innovation mindset, provide them with the necessary tools to experiment with new ideas and

encourage the creation of new tech ventures.

5.3.1.1 Students

The network of IEDCs (Innovation and Entrepreneurship Development Cells) in academic institutions will play a key role in scouting promising startup ideas among students and imparting the necessary business acumen to these teams. Students will be encouraged to come up with innovative ideas and solutions through Idea Fests and design thinking challenges conducted in partnership with the industry and other government bodies.

IEDCs with a strong pipeline of startups will be recognised as business incubators and will be provided with the necessary support to be DST-recognised incubation centres.

5.3.1.2 Teachers

Entrepreneurship in participation with teachers in educational institutions will be encouraged that provide products and services arising from academic and research activities with market potential. Students will be offered internships in such enterprises along with a stipend.

5.3.1.3 Researchers

Research projects with the potential to create spin-off ventures will be identified through the Research Innovation Network of Kerala (RINK). These projects from various research institutes will be incubated and be provided risk capital for enhancing the Technology Readiness Level and converting the research into products or services that can scale. KSUM will work with various universities to create necessary frameworks and policies to facilitate technology licensing to new ventures. RINK will also act as a platform for innovators and entrepreneurs to find and make use of various R&D and test infrastructures in the state.

5.3.1.4 Developers, Engineers and Professionals

KSUM will scout for industry problem statements and throw them open for developers, engineers and professionals to come up with disruptive solutions. KSUM will provide risk capital for such promising solutions and work with both the industry and government agencies to adopt these solutions.

5.3.1.5 Social Innovators

Social innovators, especially those in areas like disability rehabilitation, rural education, women's health etc. will be identified and encouraged to create or adopt technology enabled solutions that can scale. Such innovators and representatives from traditional industries will be provided boot camps to help them understand and make use of Industry 4.0 technologies and transform their methods of production and providing services. A special program shall be designed and implemented for the promotion of social enterprises.

5.3.1.6 Rural Entrepreneurs

Facilitation centres and knowledge centres will be set up in rural areas to bring rural innovators together and help them make use of various business opportunities and government schemes.

These centres will also drive the adoption of technology and democratise access to information.

5.3.1.7 NRKs

Non-Resident Keralites (NRKs) are one of our biggest assets with access to wealth, industry experience and exposure to global best practices. KSUM will encourage the participation of NRKs as founders, co-founders and investors in startups. Help will be sought from NRKs' to help startups find customers and set up their operations in other geographies as well.

5.3.2 Communities

KSUM shall work with the other stakeholders of the IT/Industries department to create founder, maker and open-source communities which will drive an innovation and entrepreneurship ecosystem in the state of Kerala.

5.3.3 Value Creation

Value creation is an essential hallmark of top startup ecosystems. The value created by startups helps them sell their products and services to customers. The value created by ecosystem enablers will help startups focus on building competitive products. KSUM will focus on providing shared infrastructure and affordable programs which will help startups build products faster and survive longer. Focusing on the following elements and running sector-specific programs will also attract more startups and ecosystem enablers to the State.

The culture of innovation and startup to be promoted through deep rooted innovation and startup promotion programmes with the help of LSGIs, public representative and CSR consisting of the following

Innovation labs in schools,

Mini- fab labs in IEDIs

Leap centres in colleges,

Freedom squares

Special programmes for the scale up of startups with a target to enable evolution of unicorns in Kerala.

5.3.3.1 Co-working Infrastructure

Access to high-quality plug-and-play infrastructure at affordable prices is vital for young ventures to have a longer runway. Since the enactment of the 2017 policy, the available space in the state under KSUM has grown to 3.5 lakh square feet. KSUM shall work towards increasing this to 10 lakh square feet by 2030. This will include the construction of an Emerging Technology Hub in Thiruvananthapuram with a space of 5 lakh square feet.

To unlock value from the existing infrastructure available within the state, KSUM shall evaluate the supply and demand in various districts and create a network of distributed co-working spaces that is easily accessible to startups across the State. KSUM will also open satellite facilities

known as Startup Infinity Centres in key national and international cities. These centres will act as a launchpad for Kerala startups trying to expand their presence to other geographies.

5.3.3.2 Technology Bundle

Availability and access to cutting-edge technologies and tools are critical for technology-driven startups in Kerala to compete with startups from elsewhere. Startups building disruptive products will need affordable access to technology infrastructure such as cloud and high-performance computing, software suites and licenses, and cutting-edge devices for testing and validation. KSUM shall work with the industry and create a 'Deep-Tech Bundle' comprising such tools and make them accessible to startups in the state in an affordable manner. A dedicated center will be set up for Bio-IT companies, to support with software tools and databases (high tech bundle) than can enable startups to leverage the KGDC infrastructure.

5.3.3.3 Prototyping Labs

A Super Fab Lab has been set up in ISC, Kochi in collaboration with MIT, USA. In addition to this, Maker Village, an incubator under Digital University of Kerala, also houses various advanced fabrication machines. Together, these facilities can cater to almost all hardware prototyping needs. To make it easier for startups to access these fabrication services, both facilities will be integrated into what will be the single largest digital fabrication facility in India.

KSUM will further enhance this digital fabrication infrastructure and create a distributed prototyping network in the State. To enable this, special focus will be put on Machine Making projects in Super Fablab to create affordable open-source fabrication machines that can be made and deployed across the state. These new labs will add to the existing network of Mini Fab Labs and democratise access to tools for rapid prototyping. KSUM will also create a Design Centre of Excellence which will provide product design services to startups and also run programs to impart design skills and provide software and hardware facilities to innovators in the State.

5.3.3.4 Incubation & Acceleration Programs

To handhold innovators and entrepreneurs towards creating successful ventures, KSUM shall roll out structured incubation programs for promising startups. KSUM will also invite globally renowned incubators and accelerators to set up their programs in Kerala.

In addition to this, KSUM will look to set up sector-specific incubators and accelerators in key areas including but not limited to Audio Visual, Comics & Gaming, Automotive, Space Technology, Medical Devices, Enterprise Software & Electronics, Genomics & Life Sciences, Renewable Energy, Agritech & Foodtech, Affordable & Accelerated Construction, Dairy & Animal Husbandry, Sports & Adventure Tourism, etc. Knowledge cluster SPVs shall be created wherever necessary and will include incubators, educational institutions, universities, traditional industries and local bodies. Such SPVs will address key issues like ESG, clean water, food security etc.

Translation Research and Business Incubation centres shall be established in Higher education institutions and research institutions with the partnership of tech companies coordinated by Kerala Startup Mission.

5.3.3.5 Early-Stage Risk Capital

Access to early-stage growth capital is essential for firms to develop their offerings, hire more employees, engage and onboard early customers, and thereby generate revenues. KSUM shall make continued efforts to make early-stage grants and soft loans more accessible by simplifying procedures and utilising a large pool of sector experts and ecosystem leaders within the state to identify and nurture innovative ideas that have market potential.

Such early-stage funding will include idea grants, scale-up grants, R&D Grants and loans for innovators and startups registered in Kerala. KSUM will also provide a help desk to assist startups make use of other grants and funding available from other government and non-government sources and work with banking partners to create necessary credit instruments for working capital support.

5.3.3.6 Scale up Support

KSUM shall also help Kerala-based startups with business development through various national and international market access programs, presence in trade shows/expos, delegations and immersion programs of national and international repute. Government as a marketplace program will be strengthened further to help the adoption of startup products by various government departments. To help scale the ventures by operating within the state, KSUM shall also work with various reputed agencies on a need basis to create the talent pool of the future in specific focus areas.

5.3.4 Wealth Creation

Apart from infrastructure and value-adding programs, startups also need access to growth capital to expand their digital and geographic presence and ramp up their sales. This capital is critical for startups to beat competitors and enter into new markets. The Fund of Fund program envisaged in the 2017 policy has helped Kerala-based startups raise close to a 100 Crore VC funding. KSUM will further strengthen the Fund of Fund scheme and will also encourage the local ecosystem to invest in startups and be part of their growth, thereby creating more wealth in the State.

5.3.4.1 Fund of Funds

KSUM will continue to invest in startups through the Fund of Fund scheme and ensure that at least a 1000 Crore corpus is available through partner VC firms. Further, KSUM shall engage with investors outside the state and also internationally to position Kerala-based startups as viable investment options.

5.3.4.2 Angel Networks

KSUM shall actively scout, educate and convert HNIs into angel investors and facilitate the formation of Kerala-based angel networks that may onboard HNIs and NRKs to make more capital available to startups operating in Kerala. KSUM will make deal scouting and co-investing easier for these investors by bringing all investors onto a single platform. KSUM will explore setting up SPVs or entities that can participate in investments along with Kerala-based angel networks.

5.3.4.3 Micro VCs

KSUM will encourage the formation of Campus Innovation Funds modelled after micro-Venture Capitals which will tap into the alumni network of the institutions and make funding available for innovative ideas and projects from the respective campuses.

5.3.5 Additional Incentives

5.3.5.1 Creating an Inclusive Ecosystem

KSUM shall formulate schemes and implement support measures, including but not limited to financial incentives, aimed at bringing more women, transgenders, people from socially and economically backward communities, rural areas and specially-abled people into the fold of innovation and entrepreneurship, schemes under Employment Department like KESRU, Multipurpose Job Club, Saranya, Kaivalya can cater to the need for creating an inclusive ecosystem. This will make ventures and value creation democratic, accessible and inclusive.

5.3.5.2 Making it Easier to Start Up

A common platform called Startup Commons shall be created for helping innovators with setting up a startup venture, managing finance, compliance and other business-related activities.

5.3.5.3 Tax Incentives

The government will provide tax incentives through SGST reimbursement for startups in select sectors. Such measures and conditions will be formulated to boost venture and value creation in sectors with huge growth opportunities.

5.3.5.4 Ease of Winding Up

KSUM shall work closely with government departments at the state and central government levels to make the process of starting up and winding down easier for entrepreneurs. Necessary due diligence and settlement of loans will be facilitated promptly.

5.3.5.5 MSME-Startup Market Access & Procurement Support

Startup procurement edge: preference will be given for local startups for Government procurement extending the B2B discovery layer, so that MSMEs find customers faster.

5.3.5.6 A dedicated organization for implementation of Incentives and funding schemes for Startups and MSMEs of IT and Emerging Technologies

It is felt that there is a need for a dedicated organization like a development corporation closely tied to KSUM to provide incentives and to create better funding opportunities for Startups and MSMEs functioning in the IT and Emerging Technology Sector.

5.4 Sustainability

To reduce the cost for startups and innovators, KSUM shall offer coworking spaces, incubation programs, and other offerings at discounted rates and take equity from startups in return. This will allow startups to have a longer runway of survival and will also allow KSUM and the State to participate in the growth journey. Through such equity and returns from the Fund of Fund scheme KSUM will aim to become sustainable and reinvest the gains into the ecosystem.

5.5 Translational Centres

KSUM will establish translational support systems in higher education institutions to convert ideas generated through research into products, tools, or services useful for society.

6 Chapter VI: Human Resource Development

6.1 Introduction

Development of Human Resources capable of exploiting the opportunities in the digital world is one of the key priorities of the IT policy 2026. Historically, Kerala contributes a significant share of IT manpower in the country. With remote working and freelance modes of work gaining acceptance, it is expected that in the next five years, about 2 million Knowledge jobs could be sourced from Kerala, a significant portion of the same in the IT sector. The IT Policy 2026 thus aligns itself with the strategy of Kerala Knowledge Economy Mission, which is formed to realise the potential of Kerala to transform itself into a knowledge economy.

Several education and skill providers are operating in the State for creating human resources in IT and allied sectors. In addition to engineering colleges and polytechnics operating under the Directorate of Technical Education, specialised skill-providing institutions and agencies like ITIs, ASAP, KASE etc. also contribute to the development of skilled human resources from the State. KITE, under the Department of Education, provides IT education amongst school children to prepare them for technologies of the future at the early stages of their education itself. Since the operations of all these agencies are governed by policies of various administrative departments governing them, they are not discussed here. Under IT sector specialized Institutions are formed to supplement these efforts to create a comprehensive human resource ecosystem capable of leading Kerala to the next stage of growth in the digital world.

This includes:

1. Kerala University of Digital Sciences, Innovation and Technology (Digital University Kerala)
2. International Centre for Free and Open Source ICFOSS
3. ICT Academy of Kerala
4. Kerala Infrastructure and Technology for Education (KITE)

6.2 Digital University Kerala

As the first Digital University in the Country, Digital University Kerala (DUK) was set up to create talent, lead research and develop applications in various domains of digital technologies. Digital University focuses on imparting skills and knowledge in digital technologies to people from different disciplines to make Kerala a major hub of human resources in the technologies of the future. The IT Policy 2026 envisages further strengthening the activities of DUK through the following measures,

1. Setting up of Centres of Excellence in new technologies like Artificial Intelligence (AI), Big Data Analytics, Quantum Computing, Robotics, Genomics etc. with private participation similar to Kerala Blockchain Academy set up earlier as per IT Policy 2017.

2. DUK will expand the scope of its operations by setting up schools in various parts of the State to ensure inclusivity and equity in the development of quality human resources.

3. Special programs will be designed to develop skilled human resources with domain knowledge to drive digital transformation in priority sectors of the state like tourism, entertainment, media, traditional industries etc.
4. Institute Scholarships for students pursuing postgraduate programs in areas of relevance and socially useful sectors.
5. Enhance the scope of the Post Graduate Diploma in e-Governance program offered by the University for creating talent within government to lead e-governance initiatives
6. A new program to create technology experts within the government to develop and maintain systems within the government using smart technologies.
7. A Centre for freelance and gig work will be established within DUK to accelerate the knowledge economy efforts in a comprehensive manner
8. The Digital Workforce Management System (DWMS) platform developed by Digital University will be developed as a comprehensive digital ecosystem to support talent for gig works.

6.3 International Centre for Free and Open-Source Software

ICFOSS is a specialized COE established by ITD in 2009 to evangelize and promote the adoption of Free and Open Software in the State. IT Policy 2026 envisages transforming ICFOSS as an international thought leader in the responsible use of new technologies. Even though most of the technologies that drive the digital revolution are democratized and is easily accessible, the advanced developments using them still require huge computational resources. ICFOSS will strive to address this by creating low-cost solutions using open-source hardware and software. In addition to such developmental efforts, the IT Policy 2026 envisages the following measures to strengthen the FOSS community in the State through ICFOSS.

1 . Special support to develop talent using FOSS technologies in new technology domains like AI, Data Analytics, Blockchain, Metaverse etc.

2. ICFOSS will create a mission to promote the adoption of FOSS software in all scientific computations in educational institutions. Replacement of proprietary software like AutoCAD, MATLAB, ANSYS, Cadence etc. used in colleges with open-source equivalents will be a priority

3. Support will be provided to ICFOSS to replace proprietary High value (such as ERP, High-value scientific software, graphics software) software used in government applications to reduce the public spending on software procurement by at least 30% during the next 5 years. This includes the adoption of FOSS-based ERP, file flow systems, advanced computing systems, specialised software etc. ICFOSS will develop programs to develop talent to drive this transformation.

4. The FOSS hardware Centre of ICFOSS will be developed as an International Centre of Excellence on open hardware.
5. The source code of all publicly funded government-developed software shall be made available under FOSS license.

6.4 ICT Academy Kerala

ICT Academy Kerala (ICTAK), an institution set up through public-private participation is involved in skill training in various technology domains. IT Policy 2026 envisages enhancing the operation of ICT Academy during the next 5 years to drive the knowledge revolution in the state. To strengthen ICT Academy, the following policy support will be provided.

1. ICTAK will be provided with training infrastructure to train 1 million people in the next 5 years in various digital technologies so as to create a strong ecosystem of talent from Kerala.
2. ICTAK will synergise the training efforts of various agencies in the State in IT and related areas
3. ICTAK will strengthen the Skill Delivery Platform of Kerala to expand the same to at least 100 more institutions in the next 5 years.
4. Support will be provided to ICTAK to create programs to retain the talent within IT industries to scale up their growth
5. Through the Technopark-facilitated IGNITE Program, ICTAK & IT Parks shall support the onboarding of interns for Industry; 5K of Internship fee will be contributed by the Kerala government
6. In association with Kerala Knowledge Economy Mission, ICTAK will provide placement assistance support to IT companies in the State, thereby reducing the talent onboarding time for Companies

6.5 Kerala Infrastructure and Technology for Education (KITE)

Kerala Infrastructure and Technology for Education (KITE) is a State government enterprise, set-up to foster, promote and implement the modernisation of educational institutions in the State of Kerala. KITE has revolutionised the education system of the State with its decade-long operations and its spectrum includes Information & Communication Technology, Capacity Building, Content Development, Connectivity, e-Learning, Satellite based education, Support and Maintenance mechanism, e-Governance or also physical infrastructure upgradation of schools. With the efforts of KITE, the State schools now stand equipped with the latest ICT gadgets supported by high-speed broadband connectivity, necessary digital resource portals, and trained teachers thereby having a total ICT-enabled eco-system. KITE has enabled the State Education Department to ensure the continuance of education to over 43 lakh students during Covid-19 pandemic times through the First Bell Digital Classes through the KITE VICTERS channel, followed by the Online Classes using the customised G-Suite platform.

As part of IT Policy 2026, the following activities are proposed by KITE.

1. To promote Digital education in tune with the new era by developing new ICT text books for Classes 1 to 10, which will include new-age technologies such as Cyber Safety and Digital Media Literacy.
2. To impart specialised training to 25 Lakh students in next 5 years in areas such as Robotics, IoT and AI through 60,000 Little KITES IT members through peer-group learning.
3. To transform Higher Education sector as a hub for FOSS, as a continuation to the similar activities in school education.

6.6 Creation of Intellectual Property

Another significant aspect is the development of capacity to innovate and to create intellectual properties in various domains of technology. To create IP which would eventually transform the State as a harbinger of knowledge-based industries, special emphasis is provided in the IT Policy 2026. The specific measures include:

1. Augmentation of Digital Science Park as the key Centre for promoting IP-based industries
2. Support Digital University and other universities in Kerala to create IP through applied research.
3. Support for translation of IP into products and services.
4. Creation of a risk fund to support industries and startups working closely with universities to translate the IP into products and services.
5. Creation of infrastructure in Digital Science Park for conducting advanced research in key knowledge areas to support intellectual property development and translation.
6. Special incentive packages will be formulated for IP-based product companies operating in IT parks and deemed IT parks.
7. Institute fellowships to promote international scholars to associate with agencies in Kerala for joint IP development.

7 Chapter VII: New Digital Technologies and Responsible Usage

7.1 Introduction

The world is on the cusp of a new technology revolution. A host of new technologies like Artificial Intelligence, Blockchain Technologies, Augmented Reality/ Virtual Reality, Quantum computing, Robotics, Data Analytics etc. are reshaping the future in completely new ways. Like the internet revolution of the 1990s, this digital revolution is expected to create unprecedented opportunities and challenges which need to be addressed through proactive policy measures. The IT Policy 2026, cognizant of the dramatic changes the new technologies can bring to the Society, proposes frameworks for rapid adoption of the same in an ethical, responsible, and inclusive way to bring about sustainable overall growth of the Society. Specific policy measures are proposed for the promotion of business units working in Artificial Intelligence, Blockchain technology, Big Data Analytics, Augmented Reality/ Virtual Reality, and Quantum Computing. The policy also provides measures for the adoption of the same in enhancing the effectiveness of government processes through the deployment of such technologies in the e-governance space.

7.2 Key Technologies and General Framework for rapid adoption and usage

With a vision to attain a leadership position in IP based product development ecosystem in new technologies in the Country, IT Policy 2026 provides a general framework for the adoption of key technologies namely:

1. Artificial Intelligence
2. Big Data Analytics
3. Blockchain Technologies
4. Quantum Computing
5. Animation, Visual Effects, Gaming, Comics and Extended Reality
6. Genomics and Bioinformatics

Following policy measures are proposed for each of the technologies:

1. Creation of a Centre of Excellence in conducting research, developing technology and supporting the productization of solutions using each of these technologies.Creation of a Business Incubation Center to enable startups to create innovative business solutions based on these technologies. These shall be promoted in all universities, colleges in a phased manner by tapping the potential of corporate innovation wherever possible.

2. Creation of a Digital Science Park which provides shareable infrastructure for the development of IP-based products in each of the products.

3. Creation of an emerging technology hub for the promotion of startups working in these emerging technologies.

4. Fiscal incentives like capital subsidy on equipment and IP, operational support for companies developing solutions in these technologies.

5. Special incentive package for commercial establishments for adoption of the technology solutions developed by Kerala-based startups and companies.
6. Fiscal support for developing human resources for these technologies.
7. Measures for the adoption of the technologies in e-governance solutions for improving government service delivery as well as to optimize government processes.
8. Regulatory framework for responsible and ethical use of these technologies for overall development of the society.
9. Special campaigns for enhancing awareness and literacy for the safe and ethical adoption of new technologies by citizens.
10. Provide capacity building and training programs to the government staff and youths on the ethical and responsible AI usage.
11. Ensure that the application of AI technology does not adversely affect the employment prospects of the youth in the state, by equipping them to acquire jobs in emerging technology sectors.

7.3 Creation of the following Emerging Technology Mission

To accelerate Kerala's transition into a future-ready digital economy and innovation hub, the Government of Kerala will launch a set of **dedicated technology missions**. These missions will provide focus, governance, and funding frameworks to develop globally competitive capabilities in critical technology domains, promote industry growth while ensuring inclusive growth, sustainability, and responsible adoption.

7.3.1 Kerala Electronics & Semiconductor Mission (KESM)

Introduction:
The semiconductor and electronics sector is the backbone of the digital economy and a key pillar of national self-reliance. Kerala, with its IT parks, Digital Science Park, Maker Village, and a strong talent base, is uniquely positioned to build capabilities in semiconductor design, advanced packaging, and system integration.

Objectives:

- Attract anchor investments in design, assembly, and advanced packaging.
- Develop a dedicated semiconductor/ESDM cluster with world-class utilities and test labs.
- Establish industry–academia R&D centres and pilot lines for chip-to-system integration.
- Incubate 50+ startups and enable 200+ MSMEs in supply chains.
- Pilot funding will be provided for deploying semiconductor-enabled solutions in government and PSUs.
- Train 10,000+ professionals in VLSI design, test, and packaging.

7.3.2

7.3.3 Kerala AI Mission

Introduction:
Kerala has a legacy of pioneering inclusive digital adoption. The Kerala AI Mission will be a 10-year programme to position the state as a leader in ethical, inclusive, and socially responsible AI adoption, complementing the IndiaAI Mission.

Objectives:

- Establish Kerala as an ethical AI hub with a state-level AI governance framework.
- Deploy 50 AI solutions in governance and PSU modernization.
- Develop an AI-ready workforce of 100,000 professionals.
- Mobilize funds for AI ecosystem growth through grants, CSR, and industry funding.

7.3.4 Kerala Future Tech Mission (KFTM)

Introduction:
Emerging technologies such as Quantum Computing, Blockchain, Big Data, AR/VR, IoT, Robotics, AVGC, Bio-IT, and Drones are shaping the fourth industrial revolution. Kerala will establish the Kerala Future Tech Mission as a flagship initiative to build a statewide ecosystem based on technologies, enabling startups, MSMEs, and PSUs to innovate, modernize, and scale globally.

Objectives:

- Establish Centres of Excellence (CoEs) in Quantum Computing, Blockchain, Big Data, AR/VR, IoT, Robotics, AVGC, Bio-IT, and Drone/UAS technologies.
- enourage startups and MSMEs with prototyping labs, IP support, and shared testing infrastructure.
- Drive adoption in governance, PSUs, and smart cities (e.g., AI-enabled drones for disaster response, IoT-enabled governance, robotics in healthcare).
- Develop drone test ranges, BVLOS corridors, and a UAS CoE at Digital University/Digital Science Park.
- Train a future-ready workforce, including 5,000 certified UAS pilots/technicians and large-scale skilling in immersive, robotics, and quantum technologies.
- Establish a **Future Tech & Drone Fund** pooling government grants and CSR contributions to finance R&D, skills, startup incubation, and governance pilots.

Separate policy documents will be made subsequently for implementing each of the technologies.

8 Chapter VIII: Digital Citizenship & Lifestyle- Digital Transformation Mission

8.1 Background

Throughout human history, the adoption of Technology has played a significant role in changing the nature of work and life of people. Over the years, major technologies like steam engines, electricity, automobiles, computers, internet etc., have drastically changed many of the vocations and disrupted many enterprises. While these changes presented unprecedented opportunities for growth, it also has raised the question of survival for people who could not adopt them effectively. The lack of technology adoption had forced many industries into oblivion and brought misery to people who were depending on the same. With the evolution of the new wave of digital technologies, it is imperative that proactive measures have to be adopted to support people from all walks of life to adopt the technologies to redefine their jobs to excel in the IV Industrial Revolution.

The IT Policy 2017 presented several policy measures to support digitally empowered lifestyles for citizens. However, during the last 6 years, technology has made deeper inroads into the life and vocation accelerated due to rapid adoption during the pandemic. Digital technology is no longer on the periphery supporting a few of the existing services but has moved into the core disrupting most of the conventional ways of society. Digital payments, video-based communication, mobile-based entertainment, online education, online product delivery etc. are all common today, disrupting several traditional businesses. With Artificial Intelligence gaining rapid currency, the disruption is going to continue and there is an urgent need to facilitate inclusive and holistic adoption of the same to improve the citizenship and lifestyle of digital world citizens. This forms the focus of the new IT Policy 2026.

8.2 Digital Era and Need for Transformation

The industrial era progressively replaced the physical labour of humans with mechanical machines which could do the same job much more effectively on a scale. This has resulted in the emergence of large factories and exponential growth in the wealth of industrialized nations. The digital era is characterized by knowledge technologies which are expected to initially supplement and eventually replace the cognitive labour of humans. Akin to the disruption of manual jobs during the industrial era, service jobs are expected to be progressively replaced by *intelligent* machines in the near future. The digital nature of these technologies makes them easily accessible across the world thereby enhancing the pace of adoption. With digital technology removing the handicap of time and space, the adoption is universal and is already making its impact in all walks of life. The emergence of large-scale aggregation platforms like Amazon, Uber, Expedia etc. is challenging the very existence of traditional service units like kirana stores, supermarkets, taxi companies, travel agents etc. The restricted mobility imposed during the Covid-19 pandemic has further accelerated this disruption. While digital technologies are posing threats to several service sectors ranging from education to theatre, it also provides tremendous growth opportunities for those who adopt the same effectively. As digital technologies provide quick and wide access, convergence of multiple formats of communication, easy scalability etc.,

digital transformation can prove extremely beneficial and could pave the way for exponential growth for individuals and organizations, if adopted properly. However, this requires systemic efforts and as a progressive state whose economy depends substantially on service sector revenues, it is necessary that Kerala should lead this transformation.

8.3 Model for Transformation

In this context, digital technologies include all those technologies that have the potential to disrupt, transform and accelerate the current service sector jobs and to create new opportunities. This includes emerging technologies like Data Analytics, Artificial Intelligence, Blockchain, Virtual / Augmented Reality, Cognitive computing, synthetic biology etc. as well as more established technologies of the internet and mobile commerce. While the impact of these technologies will be varied across different traditional sectors, there is a need to understand the potential and support rapid adoption. Some of the sectors which could adopt the same effectively include:

1. Trade and Commerce
2. MSME
3. Traditional art forms
4. Education
5. Travel and Tourism
6. Entertainment
7. Agriculture
8. News Media

Trade and commerce, which forms a key sector in Kerala is facing severe threats from online retailers and global aggregation platforms. The adoption of digital marketing schemes and a strong push on digitally enabled hyper-local marketing through cost-effective solutions can redefine this sector and expand the operations of these players both in time and space. The benefit of data analytics which helps the aggregator platforms to work effectively and efficiently needs to be extended to smaller players through innovative ways to support their transformation.

The new era is characterized by the emergence of “Smart” products and the rapid transformation of business processes that manufacture these products. As several elements of supply chains are increasingly dematerialized due to their transition to digital means, the MSME units which stick to the traditional models of value chain processes are losing out heavily. To arrest this downward spiral, there is a need to innovate the product, processes and delivery mechanisms using emerging technologies. The rapid transformation of the value chain through this business innovation can enhance efficiencies, improve customer services and enable them to venture into new blue oceans of uncontested market space.

Technology always posed a serious threat to the entertainment industry and traditional art and culture. The emergence of Television, the internet, digital music, OTT platforms etc., is challenging the very existence of some of the art forms and entertainment which are tied to specific locations and physical infrastructure. The disruption due to the pandemic has further accentuated this situation leading to severe job loss and misery. However digital technologies can

be effectively used to transform and create new markets for these traditional art forms. By properly harnessing the power of convergence offered by the new age technologies, access can be used to remove the handicaps that hitherto limit the widespread adoption of such traditional art forms. This also requires business innovation and careful adoption of technologies so that the essence and value of traditions are not lost in transition.

Such transformative opportunities exist in various other sectors like agriculture, education, travel and tourism etc. also.

As discussed in the previous sections, while opportunities exist for most of the conventional sectors to reinvent themselves with the adoption of digital technologies, it is necessary that a comprehensive model for such a digital transformation is put in place to facilitate the process. While some individual units and enterprises may adopt by themselves, widespread adoption is possible only through fiscal push. This motivates the need for a **Digital Transformation Mission** proposed as part of the IT Policy 2026 that would develop the appropriate schemes and methods relevant to each sector which are getting threatened by the new technology. Like Kerala State IT Mission which drives the e-governance initiative, the **Kerala Digital Transformation Mission** would focus on supporting the digital transformation of various sectors to avoid marginalization due to technology.

Some of the key functions of the mission will be as follows:

1. Provide common infrastructure for various business units to support their transformation. This includes a common repository of digital tools, business analytics solutions, aggregation platforms with intelligent capabilities, secured and subsidized cloud space etc.
2. Utilize the service of startups to support the digital transformation of individual sectors in a very cost-effective way, through the productive development of solutions.
3. Subsidized access to technology, and expert mentoring in collaboration with leading research, technical and research institutions within the state and outside. Towards this special support to State institutions will also be provided.
4. Fiscal incentives to individual units for the adoption of technology to enhance their value chain. Support for re-learning for employees to adopt new technologies.
5. Special measures to create a large number of digital experts who could drive this transition. These experts will work to minimize the digital divide and foster positive adoption of technology.

Digital Transformation Mission will design and implement specific programs that will be designed in different sectors and vocations to enable their digital transformation. The DTM will be anchored by the IT Department with the support of the higher education sector. The IT Department will work closely with other Universities and other IT Service providers in Kerala in this transformation process. Digital University will work with Kerala Agricultural University to initiate a pilot program for developing “smart farms” for increasing the yield of farmers using technologies like geospatial analytics, sensor-based precision agriculture etc. Similar projects for the adoption of modern technology in various key sectors like Education, Tourism, Trade and Commerce etc. will be driven under DTM by IT Department with other Universities in

association with other knowledge partners. For initiating the digital transformation of various sectors an amount of Rs 100 Crore per year is proposed under the policy for a period of 5 years to meet the expenditure under various components listed above. Through DTM, it is expected to bring about radical changes in productivity, market reach and other value chain enhancement for various sectors chosen for transformation and provide employment to a new breed of digital change agents in the State.

9 Chapter IX: KSPACE Special Incentives

The Kerala Spacepark (KSPACE) is a visionary initiative by the Government of Kerala to promote industries in the space sector and allied domains in aerospace and defense. KSPACE is the first Spacepark established outside of ISRO, with the aim of making Kerala a global hub for the space technology sector.

KSPACE will support industries across all four verticals of the space technology sector: launch vehicles, satellites, ground segments, and space applications. Additionally, KSPACE will promote industries in associated domains such as defence and aerospace, leveraging their inherent similarities.

In order to promote the investments and creation of a vibrant ecosystem KSPACE would like to offer certain special incentives to companies and startups

The main objectives of extending attractive incentives to investors are:

1. To encourage large-scale investments in the Space Technology sector and related domains in Defence and Aerospace in the state to help further the growth of economy
2. To generate large-scale employment opportunities for the youths of the state

The following operating models are promoted by KSPACE

- Companies/units that operate within the KSPACE-owned premises
- Companies/units that operate within jointly promoted industrial parks supported by KSPACE
- Companies/units that operate within other government/private industrial parks and are affiliated with KSPACE
- Companies/units that operate within their premises and are affiliated with KSPACE
- Kerala Technological University in collaboration with KSPACE, will launch undergraduate, postgraduate, and research programs in Aerospace Engineering.

KSPACE incentive policy is prepared in accordance with the state Industrial Policy 2026 approved by the Cabinet on 29-3-2023. All the incentives are applicable as per the State industrial policy 2026 will be extended to KSPACE companies. Those incentives are listed below.

Sl.no	Incentive category	Project category	Description
1	Loans at low interest rates	MSME	Loans up to Rs 10.0 lakhs at 4% interest (through interest subvention up to 6%)
2	Capital subsidy incentive	MSME	• Micro: Up to 45%, subject to a maximum of Rs 40 lakhs • Small: up to 45%, subject to a maximum of Rs 100 Lakh

			• Medium: up to 45%, subject to a maximum of Rs 200 Lakh
3	Electricity duty exemption	MSME	100% exemption for 5 years
4	Fund raising through IPO	MSME	Reimbursement of 50% of cost incurred for IPO through SME platform of NSE and BSE; up to a maximum of Rs 1.0 Cr (Eligibility only if the funds thus raised are utilized for setting up new unit or expanding the existing unit in the state
5	Investment subsidy	Large & Mega	10% subject to a maximum of Rs 10.0Cr
6	SGST reimbursement	Large & Mega	100% reimbursement on capital investment for 5 years
7	Incentive for employment generation	Large & Mega	• If more than 50% of permanent jobs are filled from local population, 25% of the monthly wages of each additional job so created, subject to maximum of Rs 5000/person/month, for one year will be reimbursed to the employer • If more than 50% of the permanent employee are women, 25% of the monthly wages of each additional job so created, subject to maximum of Rs 5000/month/woman employee, for one year will be reimbursed to the employer • If permanent employment is provided to transgenders of the state, Rs 7500/month/transgender worker, for one year will be reimbursed to the employer
8	Exemption of Stamp duty & Registration charges for manufacturing units (to be	All the categories	• Up to 100% on lease deed/purchase of land/building for setting up

	made applicable for all)		manufacturing (to be made applicable for all) unit in government and notified private industrial parks ● Up to 100% on lease/purchase of land/building for Women, SC/ST, differently-abled and transgender entrepreneurs for setting up manufacturing(remove) units anywhere in the state
9	Private industrial estates	All the categories	Up to Rs 3.0 crores for infrastructure development
10	Incentives to participate in trade fairs	All categories	Reimbursement of 100% of the amount incurred as stall charges in one domestic and one international fair/exhibition per year subject to a maximum of Rs 5.0 lakhs
11	Intellectual Property Rights (IPR)	All category	Reimbursement of 50% of the cost of filing for patent, copyright, trademark, GI registration etc subject to a maximum of Rs 30.0 lakhs
12	Quality certification	All category	50% refund of the amount spent for obtaining compulsory markings such as CE, FDA, ISO, BIS etc subject to a maximum of Rs 25 lakhs per unit per annum
13	Incentives for sustainability and responsible industrialisation	All category	25% refund of the expenditure (excluding Civil costs) on plant & machinery/equipment for setting up ETP, off grid installations, rainwater harvesting, zero discharge technologies, recycling of e-waste, recycling of waste water, energy & water conservation audit etc subject to a maximum of Rs 25 lakhs during the policy period
14	Industry 4.0 initiatives in the manufacturing sector (to be made applicable to	All category	20% reimbursement of cost of software (big data analytic tools), machinery etc subject to a maximum

	all)		of Rs 25 lakhs per enterprise during the policy period
15	Research & Development	All categories	Enterprises engaged in R&D with state universities/institutions(add) will get 20% refund of such expenditure, subject to a maximum of Rs 1 crore per enterprise/Annum(add)
16	Scale-up incentives	All category	Startups in the state to get scale up loans of up to Rs 1 crore through KSIDC
17	Made in Kerala (Branding & Marketing)	All category	Reimbursement of 50% of the cost incurred for obtaining "Made in Kerala" certification
18	Special packages to attract investors who are entitled to PLI (Production Linked Incentive)	All the categories	A one-time top-up incentive of 20% of the fixed capital investment, up to maximum of Rs 1.0 crore, will be provided to the industrial units of the state, shortlisted under the Central government's PLI schemes. Such top-up incentive is in addition to other subsidies to the said enterprises

Another incentive that can be added to the state industrial policy 2024 is as below:

19	Apprenticeship incentive (manufacturing sector)	Manufacturing sector	50% of the stipend subject to a maximum of Rs 5000/- per apprentice for 6 months for 1000 apprentices (yearly)

All the above incentive schemes proposed for Space Tech Industry can be implemented through KSIDC, the state nodal agency. KSPACE will act as a facilitator. Extension of benefits for MSME would apply as in the State's Industry policy.

Additional incentives to units in KSPACE

20	Capital equipment purchase aid	All categories	• Will be applicable for individual equipment costing more than Rs 50 lakhs • Maximum aid 10% of the equipment price • Not applicable for land/civil works • Aid for a unit will be limited to 10% of the

			purchase cost ● Aid will be further limited to Rs 50 lakhs/unit/annum ● This aid will be availed for the initial 5 years of operation ● Will be released against an irrevocable bank guarantee ● BG will be released on realization of aid amount, without interest, through SGST paid to the state government. BG will be diluted based on submission of annual statement of SGST statement
21	Subsidy on land lease cost	All categories	● 50% subsidy on 90 years lease premium for land/building ● Subsidy amount can be offered as government equity in the project or by another suitable agreement. ● Will be recouped by government after a moratorium period of 10 years ● 50 % of the equity can be recouped in the 11th year of operation and the remaining as two equal installments in the 12th and 13th year of operation
22	Single window clearance for all the statutory clearances	All the categories	● Government will constitute an empowered committee to review and issue all the statutory clearances on a fast-track mode
23	Subsidy on Electricity bills	All categories	● 10% subsidy on electricity bills for the initial 5 years of operation
24	Subsidy on water charges	All categories	● 10% subsidy on water bills for the initial 5 years
25	Early bird subsidy	All categories	● 25% discount on initial upfront lease/rent payment for a period of 10 years (January 2024 to 2034) to the enterprises availing built-up space or land within KSPACE premises.

10 Chapter X: Implementing Agencies

SL. Nos	Division	Areas of Policy Management	Areas of Operation / Facilitation
1	KSITM	E-Governance, policy monitoring	Supporting Digital Citizenship, Responsible use of Technology
2	IT Parks	Industry Development	1. Marketing of built-up IT spaces 2. Marketing of land assets to attract Co-Developers and Companies 3. Operation & maintenance of IT Parks
3	KSITIL	Infrastructure development IT	1. Conceptualisation, design and construction of IT Infrastructure & Digital Infrastructure (Data Centers, Knowledge Centers), required by various institutions under Department of E & IT.
4	KSUM	Innovation, Entrepreneurship and Startups	Development technology solutions using emerging technologies
5	Universities in state	Research, New Technology Development, Digital Science Park	Adoption of all new technologies in e-Governance Supporting development of Intellectual Property based product ecosystem
6	ICT Academy, K.K.E.M, ASAP, KASE	Capacity Building	Skill training programs for students and faculties, capacity building programs including upskilling requirements. Industry partnerships and Academic Memberships
7	ICFOSS	Driving Digital Citizenship and Lifestyle using Open-source software and hardware	Facilitate organisations for research and development, training, Consultation and Incubation in the area of Free and Open-Source Software and the knowledge development model
8	C-DIT	E-Governance, Capacity building and Project Management Consulting	Facilitate organisations in the area of digital media and information technology systems, developing e-governance software, offering services using cloud, tools and applications; taking up implementation of PMC Contracts, content development for science

			and development communication; design and production using optical image processing tools; imparting education and training in communication, digital media and information technology,
9	KFON	Telecom Infrastructure	Facilitate the organisations for implementing Telecom Infra (5G, Fiber Optic connectivity, etc.)
10	KSPACE	Developing the SpaceTech Ecosystem in the State	Facilitation / Building up of common facilities, implement policies for attracting SpaceTech Companies and Startups to the state, establish relationships with other International Space Agencies and Companies for developing the Business environment in the state, forge strong partnerships with International Research and Development Organisations etc.
11	KITE	ICT education, Training for students, ICT infrastructure deployment in schools	Facilitate ICT education in 16000 schools in the State by use of FOSS, ICT content development for various platforms including KITE VICTERS channel, functioning of Little KITES IT Clubs in all schools in imparting ICT trainings including Digital Media Literacy programs for public also.
12	KELTRON	ICT Project implementation, education, Project Management, ICT Solutions, Digital Infrastructure etc.	Areas of Policy Management: E-Governance, m-Governance, Geo- Governance, Software Development, Capacity building, Skill Training and subsidy, Information security services, IT Infrastructure Services, Cloud infrastructure Services, Project Management Consulting services, Support Services in various sectors, Research & New Technology/Product Development. Areas of Operation / Facilitation: Conceptualisation, design and implementation of ERP, e-Governance and m-Governance Projects. Digitization Projects IT Infrastructure creation and support for all e-Governance initiatives. Digital Infrastructure support for Data Centers, Networking Solutions, Cloud services. Information/Cyber Security Services. AI & IOT based smart solutions.

			Skill training programs for students and faculties, capacity building programs including up-skilling requirements. Industry Partnership & Academic Memberships Establishing various Test facilities to enhance the Security testing of Software applications & IOT devices.
13	K-DISC	Developing Bio-IT ecosystem	Facilitation of KGDC as a State-run repository for use by companies focused in Bio-informatics
14	Information Kerala Mission (IKM)	e-Governance solution provider to strengthen local self-governance	Conceptualisation, design and implementation of ERP, e-Governance and m-Governance Projects for local self government department.

KERALA

KERALA SPACEPARK (KSPACE)
HEX20

TECHNOPARK

I CYBERPARK

KERALA STATE IT MISSION

स्वतन्त्र
സ്വതന്ത്ര
swatantra
GOVERNMENT OF KERALA
DEPT.OF ELECTRONICS & IT
ICFOSS
International Centre For Free And Open Source Solutions

IIITM-K

DIGITAL UNIVERSITY
KERALA UNIVERSITY OF DIGITAL SCIENCE,
INNOVATION AND TECHNOLOGY

ICT ACADEMY
OF KERALA

KITFRA
KERALA STATE IT INFRASTRUCTURE LIMITED

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GOVERNMENT OF KERALA

ELECTRONICS & INFORMATION TECHNOLOGY DEPARTMENT