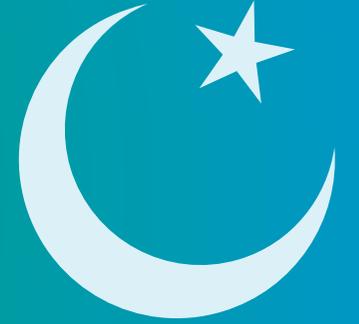


Khyber Pakhtunkhwa Digital Policy

2018-2023



KHYBER PAKHTUNKHWA
**INFORMATION
TECHNOLOGY BOARD**
Government of Khyber Pakhtunkhwa

خیبر پختونخوا، انفارمیشن ٹیکنالوجی بورڈ
حکومت خیبر پختونخوا



Khyber Pakhtunkhwa
Digital Policy
2018-2023

Approved by the Khyber Pakhtunkhwa Cabinet
on 22nd November, 2018

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The Digital Policy of Khyber Pakhtunkhwa takes a deep dive into the regulatory, operational and financial challenges to the growth of IT Sector in the province and presents a set of comprehensive recommendations from a provincial perspective to uplift this Sector. The working group constituted to formulate the policy has made a conscious effort to ensure that the policy is inclusive and forward looking.

Information Technology has a cross cutting role and therefore we considered it paramount to conduct cross sectoral coordination during the course of Khyber Pakhtunkhwa's digital journey. While the entire provincial leadership has been exemplary in supporting the idea of digital transformation, we are especially grateful to the Chief Minister of Khyber Pakhtunkhwa, Mr. Mehmood Khan, Special Assistant to the Chief Minister of Khyber Pakhtunkhwa on ST&IT Mr. Kamran Khan Bangash, Minister for Local Government Mr. Shahram Khan Tarakai and Minister for Finance Mr. Taimur Saleem Jhagra for approving and considering this policy worthy of implementation in the province.

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Dr. Shahbaz Khan,
Managing Director,
Khyber Pakhtunkhwa Information Technology Board

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Definitions

The policy document uses the following acronyms and are further defined to clarify the context. The order is not alphabetical but rather follows the subsequent evolution of the terminology. It is important to understand how the terms have evolved and what technology spheres these terms represent:

Digital	The term digital refers to a larger sphere of capability given to users and machines with the help of internet, ubiquity, computing power, Big Data, the Internet of Things and Artificial Intelligence to transact information.
Digital Access	Providing access to the global digital space through the internet.
Digital Adoption Index	DAI is a composite index developed by the World Bank that measures the depth and breadth of adoption of digital technologies in 171 countries, spanning every region and income group. It is based on three sectoral sub-indices covering businesses, people, and governments, with each sub-index assigned an equal weight. $DAI (Economy) = DAI (Businesses) + DAI (People) + DAI (Governments)$ The DAI uses separate indicators under each sub-index for instance, it uses sixteen indicators for the Government and so on.
Digital economy	An economy that is based on digital technologies. The term broadly refers to economic value derived from the internet.
Digital Economy and Society Index	The Digital Economy and Society Index (DESI) is a composite index defined and published by the European Commission, measuring progress of EU countries towards a digital economy and society. DESI combines 34 indicators which are grouped into five principal policy areas i.e. (1) Connectivity, (2) Human capital, (3) Use of internet service, (4) Integration of digital technology and (5) Digital public services.
Digital financial inclusion	Counts individuals who have an account in their name with a full-service financial institution which also offers digital services such as online account access, debit and ATM cards, credit cards and electronic cash transfers. ¹
Digital governance	Adopting digital technologies to govern institutions, the economy, communities, states and countries with the aim of improving productivity, efficiency and security.
Digital Opportunity Index (DOI)	The Digital Opportunity Index (DOI) is a composite index defined by International Telecommunication

¹ Financial Inclusion Insights (PAKISTAN). <http://finclusion.org>. June 2018

Definitions

Union (ITU) that measures “digital opportunity” or the possibility for citizens of a particular country to benefit from access to information that is “universal, ubiquitous, equitable and affordable”. It combines 11 indicators that are grouped into three areas i.e. (1) Opportunity (2) Infrastructure and (3) Utilization.

Digital skills

The skills required to use digital devices, handle digital information, conduct digital transactions, find solutions to problems using digital tools, and remain safe and legal online.

Ease of Doing Business Index

This World Bank index measures aspects of business regulation and their implications for firm establishment and operations. It does not include all the issues that are relevant for businesses’ decisions, but it does cover important areas that are under the control of policy makers. It uses 11 indicator sets to measure aspects of business regulation that matter for entrepreneurship.

E-Government Development Index (EGDI)

The EGDI, which assesses e-government development at the national level, is a composite index based on the weighted average of three normalized indices. One-third is derived from a Telecommunications Infrastructure Index (TII) based on data provided by the International Telecommunications Union (ITU), one-third from a Human Capital Index (HCI) based on data provided by the United Nations Educational, Scientific and Cultural Organization (UNESCO), and one-third from the Online Service Index (OSI) based on data collected from an independent survey questionnaire, conducted by UNDESA, which assesses the national online presence of all 193 United Nations Member States. The survey questionnaire assesses a number of features related to online service delivery, including whole-of-government approaches, open government data, e-participation, multi-channel service delivery, mobile services, usage uptake, digital divide as well as innovative partnerships through the use of ICTs. This data is collected by a group of researchers under the supervision of UNDESA.

Financial inclusion

Access to formal financial services by individuals and firms to use a range of quality payments, savings, credit and insurance services which meet their needs with dignity and fairness², commonly measured as as the percentage of adults over 15 years of age who report having at least one account in their name.

G2B

Government to Business

G2C

Government to Citizen

² State Bank of Pakistan

Definitions

G2G	Government to Government
Global Competitive Index (GCI)	GCI is defined by the World Economic Forum. It is a set of institutions, policies, and factors that determine the level of productivity of a country, conditions of public institutions and technical conditions GCI presents a framework and a corresponding set of indicators in three principal categories (subindexes) and twelve policy domains (pillars) for 137 economies.
Global Innovation Index (GII)	GII provides detailed metrics about the innovation performance of 126 countries which represent 90.8% of the world's population and 96.3% of global Gross Domestic Product. Its 80 indicators explore a broad vision of innovation, including political environment, education, infrastructure and business sophistication.
Human Capital Index (HCI)	The World Economic Forum defines and publishes the HCI. It measures countries' ability to maximize and leverage their human capital endowment. The index assesses Learning and Employment outcomes across five distinct age groups, on a scale from 0 (worst) to 100 (best), and assesses 130 economies. The Human Capital Index combines 21 indicators grouped into four thematic dimensions i.e. (1) Capacity (2) Development (3) Deployment (4) Know-how.
Information Technology (IT)	IT refers to the use of computers to store, retrieve, transmit, and manipulate recorded data.
Information and Communications Technology (ICT)	ICT stresses the role of unified communications, integrating computers, telecommunications and software in a manner that enables users to access, store, transmit, and manipulate recorded as well as real-time information. ³
ICT Development Index (IDI)	The International Telecommunication Union defines IDI as a composite index that combines 11 indicators into one benchmark measure. It is used to monitor and compare developments in ICT between countries and over time. The 11 indicators are grouped into three categories: access, use and skills.
Network Readiness Index (NRI)	The Networked Readiness Index also referred as Technology Index is defined by the World Economic Forum and published together in collaboration with INSEAD & Cornell University under the Global Information Technology Report. The NRI is used to Benchmark exercise of technology readiness to guide government's' ability to leverage ICT to drive economic progress. NRI combines total 53 indicators into

³ Another distinction between IT and ICT is that in IT, information was limited to textual and recorded audio, video or imaging data. In ICT, the term information also covered real-time audio, video and sensory data.

Definitions

four categories i.e. (1) the overall environment for technology use and creation (political, regulatory, business, and innovation); (2) networked readiness in terms of ICT infrastructure, affordability, and skills; (3) technology adoption/usage by the three groups of stakeholders (government, the private sector, and private individuals); and (4) the economic and social impact of the new technologies.

Online Service Index (OSI)

OSI based on data collected from an independent survey questionnaire, conducted by UNDESA, which measures a government's capability and willingness to provide services and communicate with its citizens electronically. The survey questionnaire assesses a number of features related to online service delivery, including whole-of-government approaches, open government data, e-participation, multi-channel service delivery, mobile services, usage uptake, digital divide as well as innovative partnerships through the use of ICTs. The survey questionnaire is used to measure four stages of the online availability of government development: Stage 1: Emerging information services, Stage 2: Enhanced information services, Stage 3: Transactional services and Stage 4: Connected services.

Transformation

Transformation refers to the adoption of new, innovative concepts and changes, rather than simply enhancing traditional systems. For example, merely creating a web or social media presence or introducing a new software is not digital transformation, but completely changing the way we do financial transactions is.

Context

Pakistan has witnessed an annual growth of 27% in the number of internet users and 13% in the number of social media users since January 2017. But internet penetration stands at 29.92%, lower than the South Asian average of 36%. The following indicators provide an overview of the state of digital transformation in Pakistan:

- E-Government Development Index (EGDI): Ranked 148 in the world based on a score of 0.3566, which is lower than the world average of 0.55 and the Asian average of 0.5779, but slightly higher than the African average of 0.3423.
- ICT Development Index (IDI): Ranked 143 based on a score of 3.34. Pakistan's regional ranking in Asia and the Pacific is 31 out of 34 countries.
- Digital Skills: Ranked 151 in the world.
- Network Readiness Index (NRI): Ranked 110 out of 139 countries according to the Global Information Technology Report 2016.
- The Global Innovation Index (GII): Ranked 109 in the world.
- Global Competitiveness Index (GCI): Ranked 115 out of 137 countries.
- Ease of Doing Business Index: Ranked 147 out of 190 countries in 2018.
- Internet penetration: 29.92%, based on 62 million broadband subscribers where a majority 60 million access the internet using 3G/4G
- Teledensity: 73.23 % based on 152 million cellular subscribers

These indicators present the need for enabling policies and improvement strategies. The Khyber Pakhtunkhwa government is focused on improvement and mindful of the challenges.. In addition, the merger of former Tribal Areas into Khyber Pakhtunkhwa, progress on the China-Pakistan Economic Corridor (CPEC) and increasing political stability has created opportunities for progress. The provincial government aims to capitalise on these opportunities and contribute towards making Pakistan more competitive. This can be achieved by harnessing the potential of our youth.

A competitive workforce can be developed in the province through equitable digital inclusion. It is important to have a critical mass of skilled digital entrepreneurs, a facilitative regulatory framework, and a nurturing ecosystem to improve the competitiveness of our local businesses. Similarly, while we can introduce technology in government systems, we will not transition towards effective digital governance unless the workforce in government departments is equipped with digital skills. On the other hand, the fundamental enabler for any digital transformation is ubiquitous access of citizens to quality internet at an affordable price. Enabling policies, sound regulation and timely financial investments by the government in these areas at this crucial stage will prepare the province for the future.

Vision

A systematic digital transformation in Khyber Pakhtunkhwa by leveraging Information and Communication Technologies for job creation, connectivity, empowerment and inclusive economic growth.

Policy Objective

The Government of Khyber Pakhtunkhwa aims to lead Pakistan's digital transformation. KPITB's strategic goal is to accelerate digitization in all sectors and position the province as a national technology hub.

Scope

The scope of this policy shall encompass the powers and functions of the Khyber Pakhtunkhwa Establishment of Information Technology Board Act 2011 and the subsequent amendments.

Expected Outcomes

The province must make major strides in the next five years to overcome its challenges and achieve its ambitions. If implemented well, this policy is expected to achieve the following outcomes for Khyber Pakhtunkhwa:

- Affordable internet with improved quality of connectivity and footprint
- Reduced cost of deployment of optical fiber networks
- Digital payments enable formal economy and increase financial inclusion to 50% (currently at 14%)
- Enabling and expanding e-commerce/online marketplaces
- Significantly reduced cash based transactions
- All government departments demonstrate improved and measurable transparency, accountability and innovation
- Improved privacy of citizens and government institutions operating in the cyberspace
- Cyber security of government institutions and data
- Government promotes a data-driven culture that enables evidence-informed decisions
- Increased software standardization and replication across departments
- Improved digital literacy and skills, especially through formal education and vocational training
- Khyber Pakhtunkhwa produces successful technology innovators, startups and digital freelancers
- Local small and medium ICT enterprises and startups grow in revenue and numbers, creating jobs and developing a digital workforce
- Better opportunities, access and services for women, youth and marginalised groups.
- Number of women in the technology sector increases by 50%
- More effective and impactful public-private partnerships

Digital Transformation Framework

Digital transformation is achieved through leveraging technology to deliver value for the government, people and businesses. A successful transformation requires more than the introduction of technology. It requires a cultural, administrative and political shift. Khyber Pakhtunkhwa's digital transformation framework therefore has seven key components:

Component	Responsibility
Identifying existing challenges in the province through reliable baseline data	KPITB along with a diverse range of stakeholders using existing data, statistics and global indices
Setting the direction through this Digital Policy	Khyber Pakhtunkhwa Cabinet and KPITB
Translating the policy into an actionable strategy, including innovative projects and activities deliverable over the next five years (2018-23)	Khyber Pakhtunkhwa Cabinet, KPITB, and a diverse range of stakeholders
Aligning various departments of the Khyber Pakhtunkhwa government to the policy and strategy	Various departments of Government of Khyber Pakhtunkhwa
Building the right skills, culture and capacity to delivery the transformation	All public sector employees of Government of Khyber Pakhtunkhwa
Using advanced ICTs to deliver the transformation	KPITB and concerned line departments
Setting up a performance management system to measure progress and assess impact	KPITB

Overarching Policies

The Digital Policy has four pillars: access, governance, economy and skills, but the following policies are overarching and cut across all pillars:

1. Financial inclusion and equitable digital dividends for women and marginalised communities.
2. An increase in public private partnerships to facilitate the province's digital transformation.
3. Rapid implementation of the Digital Policy in the newly merged districts of Khyber Pakhtunkhwa.
4. Provision of the provincial share in ICT services from the federal government.

Digital Access

Pakistan being one of the least digitally connected countries in the world lags on most of the fundamental indicators. The province of Khyber Pakhtunkhwa has a total population of 30.5 million (2017 Census) with nearly 50% of the population under 30 years of age. The growing number of ICT graduates in the province presents a unique development opportunity. However, the poor ICT infrastructure in the province is a major hurdle in deriving reasonable global digital dividends. On the Network Readiness Index, Pakistan currently ranks 110 out of the 139 countries (Global Information Technology Report 2016 by World Economic Forum), which depicts the poor ICT infrastructure in the country. Pakistan in general and Khyber Pakhtunkhwa in particular has extremely low internet penetration. The current internet penetration in Pakistan is only 29.92%, with a major chunk of the population relying on 3G/4G services for their connectivity needs. It is pertinent to mention that reliable and quality internet services such as Fibre to the Home (FTTH) have not gained much traction in the country due to inadequate fiber footprint and limited market players in the country. The policy recommendations focuses on the heavy taxation regime of this particular sector and exorbitant, unregulated Right-of-Way (ROW) charges by various civic agencies, which prevents new market entrants as well as growth of the existing market players.

The government introduces the following policies for ubiquitous, reliable, affordable and accessible internet access in the province:

5. Provincial Sales Tax rationalization from 19.5% on mobile and fixed broadband services in Khyber Pakhtunkhwa to facilitate service providers to enhance their footprint and upgrade technology infrastructure.
6. Infrastructure works and projects shall have a provision for broadband conduit deployment to reduce the cost of fiber deployment.
7. Phase-wise transformation of broadband services from copper-based networks to optical fiber networks will be implemented to improve the quality of service at an affordable price.
8. Purpose built facilities will be provided to enable technology startups, Small & Medium Enterprises and entrepreneurs to create innovative digital products and services.
9. Use of technology in various sectors, especially health, education and agriculture; to connect remote areas and populations to developed areas will be promoted.
10. Investment in digital access projects through public-private partnerships will be encouraged.

Digital Governance



Digital governance focuses on improving institutional capability of the provincial government to deliver better public services, improve accountability, productivity and efficiency with better citizen engagement. Citizen interaction and feedback will drive continuous service improvement. We believe that this digital transformation will enable a true democratic culture in the province.

An effective digital governance framework constitutes various components including Government to Citizen (G2C), Citizen to Government (C2G), Government to Business (G2B), Government to Government (G2G), and Intra-government interventions. Khyber Pakhtunkhwa requires a whole new approach to transform its G2G and Intra-government systems. Effective transformation of G2G and Intra-government systems will improve the other components of the digital governance framework.

Within government, digital transformation is not challenged by the technology component, but rather by change management, process reengineering, digital literacy and the need to internalise the transformation. Outside government, there are new and bigger challenges for the transformation such as low footprint of telecom operators, lack of digital literacy in availing C2G services, very low financial inclusion (14%)⁴, huge gender gap in digital literacy, lack of open-data frameworks, and inadequate capability for ensuring cyber security and privacy of citizens.

These two sets of challenges, within and outside the government, define the principles and priorities for Khyber Pakhtunkhwa's digital transformation. The following policies will be implemented to overcome these challenges:

11. Digital technologies will be introduced into government services to improve efficiency, transparency and transaction costs.
12. Digital governance initiatives will receive an annual financial allocation.
13. Evidence-informed decision making will be promoted in government.
14. Cloud-based services will be adopted where possible to reduce IT infrastructure and maintenance costs.
15. Advanced technologies for distributed storage and retrieval will be adopted to ensure data integrity.
16. Privacy of citizens' personal data will be ensured by the government through introduction of necessary regulations.
17. Appropriate cyber security protocols and systems will be implemented to protect government information, communications and citizen data.
18. Open-source software will be used across government where feasible to reduce costs and encourage SMEs.
19. Software standardization and replication across government will be ensured to enable better integration and scalability.
20. An Open-Data Framework will be implemented across government to improve transparency and accountability.

⁴ Financial Inclusion Insight (Pakistan) Wave 5 Report 2017

Digital Skills

The province of Khyber Pakhtunkhwa has the ‘demographic gift’ of a young population presenting an opportunity for economic growth. There are 6.4 million children* in schools and over six thousand ICT students graduate annually from universities in Khyber Pakhtunkhwa. With improvements in digital access, it is not necessary that digital dividends are equitably distributed. To promote and materialize equitable digital inclusion, it is mandatory to focus on, and strengthen the user capabilities of those having access to the internet to benefit from the available opportunities in the digital realm. For businesses to prosper, and governance to be more effective, the digital skills pillar is necessary to be strengthened as it feeds the digital workforce into the digital governance and economy pillars. It is important that a talent pipeline is gradually nurtured, made sustainable, and kept relevant by imparting skills that are market driven and which make the talent pipeline competitive. Therefore the province has taken several initiatives to impart employable digital skills specifically targeting ICT graduates, marginalized communities and women. Such initiatives have laid the foundations for the Business Process Outsourcing (BPO) industry and have created employment opportunities for the youth. Khyber Pakhtunkhwa is also the only province in Pakistan to have rolled out Digital Skills training at the elementary & secondary level. The young population is now well positioned to derive the digital dividends from the global digital economy.

The pathway towards strengthening the digital skills pillar should start from the ground up. By increasing the basic literacy levels, those with basic literacy can be made digitally literate, and then subsequently the digitally literate can be provided with basic to advanced digital skills.

Khyber Pakhtunkhwa introduces the following policy guidelines:

21. A digital competency and literacy framework will be developed to assess and improve digital literacy levels.
22. The use of technology in primary, secondary and tertiary education; as well as technical and vocational education and training will be increased to improve learning outcomes.
23. Demand-driven digital skills will be taught at the primary, secondary and tertiary levels to prepare our youth for the future.

5 Annual Statistical Report of Government Schools 2017-18 (Independent Monitoring Unit- Elementary and Secondary Education Department, Government of Khyber Pakhtunkhwa)

Digital Economy

The Digital Economy pillar has multiple objectives that include provision of a facilitative regulatory framework for ease of doing business, discouraging anti-competitive behaviour, a thriving and conducive ecosystem for nascent digital startups and entrepreneurs, and increasing financial inclusion through fintech and other innovative financial platforms and solutions, and leading towards growth and innovation. The rest of the three pillars also enable and contribute towards a burgeoning digital economy and therefore the four pillars of this policy are strongly connected and complementary to each other.

Khyber Pakhtunkhwa introduces the following policy guidelines:

24. Mechanisms will be put in place for improving the ease of doing business for investors in the digital space.
25. Digital payments will be promoted to increase financial inclusion, improve efficiency of financial transactions, expand documented economy and increase convenience.
26. Mechanisms to provide financial investments for digital startups and SMEs will be provided to encourage innovation and generate employment.
27. Preferential procurement mechanisms will be adopted for digital services and products from suppliers based in Khyber Pakhtunkhwa to promote the local ICT industry.
28. A supportive regulatory framework and level playing field will be provided to businesses. Uncompetitive behaviour will be discouraged.
29. The Business Process Outsourcing (BPO) industry in the province will be supported to generate employment.

Policy Implementation

Khyber Pakhtunkhwa Digital Strategy

The Khyber Pakhtunkhwa Digital Policy holistically translates into the Khyber Pakhtunkhwa Digital Strategy for implementation. The Digital Strategy maps various projects and initiatives of the provincial government for the 2018-2023 period. A high level outline of the strategy is enclosed as Annex 1.

Coordination Committee

To ensure effective implementation of this policy, a Coordination Committee chaired by the Chief Secretary, Khyber Pakhtunkhwa, who is also Secretary to the Khyber Pakhtunkhwa Cabinet will supervise the progress on various initiatives and monitor the key strategic indicators.

The implementation of the Khyber Pakhtunkhwa Digital Policy involves multiple stakeholders across the federal and provincial government, the private and development sectors. Effective coordination at the highest level of the provincial government is therefore required. The following shall constitute the Coordination Committee of the Khyber Pakhtunkhwa Digital Policy:

- | | | |
|------|---|----------------------|
| I. | Chief Secretary, Khyber Pakhtunkhwa | Chairman |
| II. | Additional Chief Secretary, Government of Khyber Pakhtunkhwa | Member |
| III. | Secretary, Finance, Government of Khyber Pakhtunkhwa | Member |
| IV. | Secretary, ST&IT, Government of Khyber Pakhtunkhwa | Member |
| V. | Managing Director, KPITB, Government of Khyber Pakhtunkhwa | Member and Secretary |
| VI. | Not more than 6 persons from the Private, Public or Development Sector relevant to the implementation of the Digital Policy as the Secretary of the Committee may nominate. | Members |

The Coordination Committee shall perform the following functions:

- A. Review and supervise the implementation progress of the Digital Policy.
- B. Recommend the required financial resources for implementation of the Digital Policy to the Government.
- C. Direct Provincial Government departments to ensure sector-based implementation of the Digital Policy.
- D. Coordinate with private and development sector institutions for effective implementation of the Digital Policy.
- E. Constitute sub-committees for specific tasks and recommendations.
- F. Submit recommendations for revision of the Digital Policy to the Government.
- G. Ensure that the progress review and recommendations of the Committee are placed before the Provincial Cabinet in a timely manner.
- H. The meetings of the committee will be called by the Chairman. Six members shall constitute the quorum for a meeting.

Performance Measurement

Outcomes of the digital transformation of Khyber Pakhtunkhwa will be measured and quantified. Key indicators will be included in the Khyber Pakhtunkhwa Digital Strategy. Indicators may be grouped together to form a composite index which reflects the transformation achieved under each pillar.

The composite indices used for measuring the digital transformation of Khyber Pakhtunkhwa will be designed on the basis of global composite indices, for instance: E-Government Development Index (EGDI), ICT Development Index (IDI), Network readiness index (NRI), Online Service Index (OSI), Global Competitive Index (GCI), Digital Economy and Society Index (DESI), Digital Adoption Index (DAI), Digital Opportunity Index (DOI), Human Capital Index (HCI), and World Bank's Ease of Doing Business Index.

Annexure - A

A five-year plan derived from the Khyber Pakhtunkhwa Digital Policy.

Key Initiatives and plans	5 years targets and outputs	Action Required	Anticipated Outcome and Impact
1. Tax reduction on mobile and fixed broadband services in Khyber Pakhtunkhwa	1. Enhanced Broadband footprint 2. Increased investments by the CMOs	Amendment in the Schedule-II of the Finance Act	1. Affordable internet 2. Improved quality of connectivity 3. Enable digital transformation
2. Broadband-conduit deployment in all new and existing road and infrastructure projects	All roads and infrastructure projects carried out between 2018-2023 have broadband-conduit	1. Policy Formulation 2. Allocation of funds for broadband-conduit	Reduced cost of deployment of Optical Fiber in Khyber Pakhtunkhwa
3. Announcing sunset on copper based networks in the Province	No copper-based networks by 2023	Policy formulation	High speed and reliable internet
4. Investing through PPP mode into Digital Access projects (FTTH)	Fiber to the home (FTTH) and Fiber to the premises (FTTP) deployment through PPP in 05 major urban clusters of KP targeting 0.5 million households of KP (11.4 percent of total), along with businesses and government	1. Feasibility for PPP 2. Budget allocation based on feasible equity by the KP government	High speed and reliable internet
5. Introducing, incentivizing and enforcing digital payments	1. Enabling all G2P, P2G financial transactions through digital payments 2. Increasing P2P payments through digital payments to 70 percent	1. Policy framework 2. Create demand side for the private sector service providers 3. Incentivising FinTech	1. Formal economy 2. Financial inclusion 3. Enabling and expanding e-commerce/online marketplaces 4. Reduced cash based transaction
6. Zero provincial sales tax policy for software development, IT services, call-centers/BPO	Tax Holiday for five years on software development, IT services, call-centers/BPO	Amendment in the Schedule-II of the Finance Act	Jobs and economic growth
7. Prioritizing procurements of digital services and goods from local service providers/ manufacturers especially SMEs and technology startups	Preferential procurements of digital services and goods from local service providers/ manufacturers especially SMEs and technology startups	Policy formulation under section 18 of KP-PPRA, 2012	Jobs and economic growth 1. Growth of local SMEs/Tech Startups and service providers 2. Improved balance of payment and reduction in trade deficit 3. Jobs
8. Encouraging Innovation through technology startups and SMEs	Provision of support system for technology startups and SMEs	1. Extending Durshal network of Community Innovation Labs to every district of KP 2. Supporting 1500 (30x2x5x5) startups	Jobs and economic growth

9. Establishment of innovation fund to support entrepreneurs / startups in the digital space	Establishment of Fund.	1. Feasibility Study for establishment of innovation fund through Public Private Partnership (PPP) to support entrepreneurs / startups in the digital space. 2. Establishment of Fund	1. Economic Growth 2. Digital Transformation. 3. Accelerated Employment Generation
10. Establishment of SEZs/Digital Cities/Technology Cities	1. Pakistan Digital City at Haripur 2. Technology City at the Rashakai SEZ	1. Allocation of Funds for land acquisition, master-planning, designing, development and supervision 2. Declaration of the Pakistan Digital City as an SEZ 3. Provision of ICT clusters in all SEZs	1. Growth of local ICT industry 2. Improved balance of payment and reduction in trade deficit 3. Jobs
11. Provision of the provincial share in the ICT related services from the Federal government	Provincial share in the ICT related services	Government to take up the issue with the Federal government	
12. Consistent annual financial allocation for digital governance	Continued digital transformation of the government departments	Provision of required funds under one line budget to KPITB as required.	1. Digital Transformation 2. Transparency, and citizen facilitation 3. Reduced transaction cost of the government
13. Adoption of Open-Source Software by the Government	Prioritized adoption of Open-Source Software by the government based on the standard open-source framework given by the KPITB	Open-source Standard framework for government departments by the KPITB	1. Cost reduction 2. Standardization 3. Growth of SMEs 4. Increased software standardization and replication across government to enable better integration and scalability
14. Open-Data Framework	Standard APIs for integration based on Open-Data framework	Policy formulation for Data Privacy and Data Protection	Improved transparency, accountability and innovation
15. Data Analytics and Business intelligence	Data driven decision making enabled at the government	Systematic collection of data through IoT and other convenient technology platforms	Evidence-informed decisions making capability by the government
16. Cloud Adoption	Prioritized adoption of Cloud based services and hosting by the government based on the standard framework given by the KPITB	Standard framework and policy for cloud adoption given by the KPITB	1. Cost reduction 2. Standardization 3. Increased software standardization and replication across government departments

17. Adopt Global Data Protection Regulation	KP Government becomes GDPR compliant	KPCERC of the KPITB launches GDPR awareness and ensures compliance through trainings, technical assistance	Privacy of citizens and government institutions operating in the Cyberspace
18. Implement standard cyber security protocols across government departments	KP Government becomes compliant to standard cyber security protocols	KPCERC of the KPITB ensures compliance through trainings, technical assistance	Cyber security of government institutions and data
19. Support the Business Process Outsourcing (BPO) industry in Khyber Pakhtunkhwa	Upto 5000 BPO ready spaces in Khyber Pakhtunkhwa	1. BPO Industry consultation 2. BPO model 3. Allocation of Funds 4. Establishment of BPO ready spaces 5. Marketing the initiative	1. Growth of local ICT industry 2. Improved balance of payment and reduction in trade deficit 3. Jobs
20. Facilitate the government in improving Ease-of-doing-business for investors in the Digital Space	Khyber Pakhtunkhwa ranks equally on the index of EoDB for Pakistan and Pakistan ranks under the 100 on the global index	1. Identify the common issues and barriers 2. Coordinate with the KPBOIT to resolve the issues and recommend restructuring	1. Investments 2. Improved balance of payment and reduction in trade deficit 3. Jobs
21. Develop a digital competency and literacy framework to assess and improve digital literacy levels	Digital Competency index for Khyber Pakhtunkhwa	KPITB develops digital competency and literacy framework and enables ranking through stakeholders	Establishment of a uniform baseline of digital competence and literacy Feedback to constantly improve the talent pipeline
22. Maximize the use of technology in primary, secondary and tertiary education; as well as technical, vocational education and training	Technology assisted education at primary, secondary and tertiary levels in Khyber Pakhtunkhwa	KPITB to extend the 'Early-age programming' initiative across the province	Improved learning outcomes Improved digital competency and literacy index of Khyber Pakhtunkhwa
23. Ensure that demand driven digital skills are delivered at the primary, secondary and tertiary levels	Youth equipped with market relevant and employable digital skills	KPITB to extend and constantly improve the 'Khyber Pakhtunkhwa Youth Employment Program' of digital skills training' across the province Continued feedback of the industry	1. Investments/ freelancing industry 2. Improved balance of payment and reduction in trade deficit 3. Digital Jobs
24. Provision of Gender-Inclusive coworking spaces	Gender Inclusive co-working spaces across the province	KPITB will extend Durshal across the province	Women and marginalized communities get digital dividends

Advisory Panel

KPITB is grateful to the members of advisory panel for bringing in diversity and expertise



Kamran Durrani

Strategy Adviser, Chief of Staff and Shadow Board Member Department of International Development (DFID)



Dr. S. Ali Mahmud

Chief Information Officer
Khyber Pakhtunkhwa Economics Zones Development and Management Company



Anna O'Donnell

Senior Social Development Specialist
World Bank Group



Ahsan Mir

Chief Information Security Officer
Autodesk



Sami Syed

Chief Executive Officer
SMSAMI Inc



Dr. Bushra Ahsan

Silicon Architecture Engineer
Intel Hudson



Dr. Shoaib Khan

Chief Executive Officer
Center for Advanced Research in Engineering



Mohtashim Khan

Associate Director Digital and Commercial Transformation
Ernst & Young, UK



Abu Bakar Alvi (TI)

Tamgha-e-Imtiaz
Founder & Chief Executive Officer
RADEC Technologies Pvt Ltd



Barkan Saeed

Chief Executive Officer
VizTeck Solutions
Ex-Chairman P@SHA



Dr. Faqir Z. Yousaf

Senior Researcher
NEC Laboratories Europe GmbH in Heidelberg, Germany



Dr. Sadaqat Jan

Head of Department
Computer Software Engineering -
UET Mardan



Asad Iqbal

Founder & Chief Executive Officer
Hiwaas



Amin Ahmad

Senior Software Engineer
Google



Muhammad Bilal

Executive Member
SEAK



Waqar Younas

Executive Member
SEAK

The Khyber Pakhtunkhwa Digital Policy is inline with the current government's vision for the digital transformation of the province and is part of the Prime Minister of Pakistan's first 100 days agenda.

The provincial political leadership played an instrumental role in getting the Digital Policy approved by the Khyber Pakhtunkhwa Cabinet on the 22nd of November, 2018. We are particularly grateful to the following members of the provincial assembly for their unconditional support in prioritizing the digital transformation of the province:



Kamran K. Bangash

Special Assistant to the Chief Minister
Khyber Pakhtunkhwa on ST&IT



Taimur S. Jhagra

Finance Minister
Government of Khyber Pakhtunkhwa



Shahram K. Tarakai

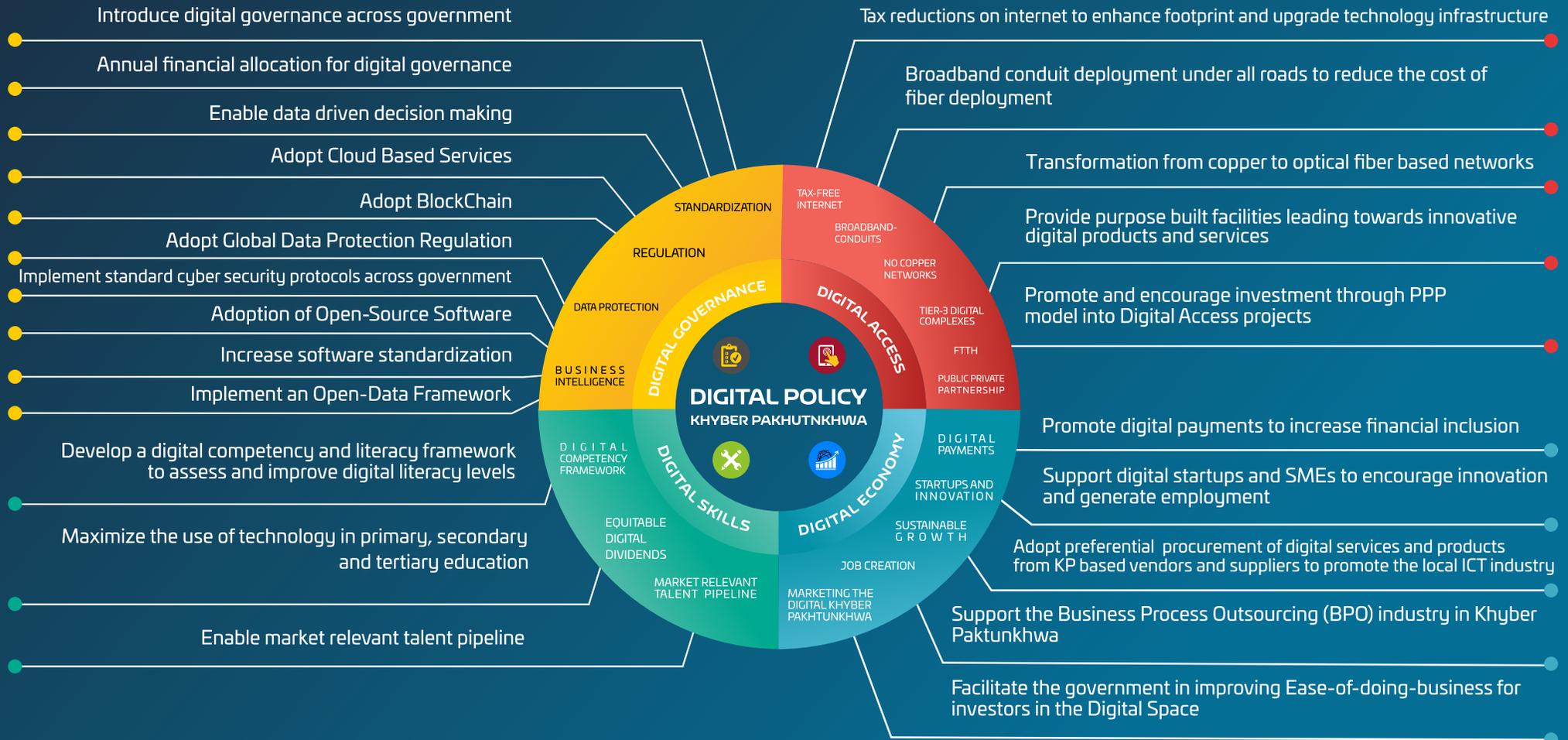
Minister for Local Government,
Election and Rural Development
Government of Khyber Pakhtunkhwa



Mehmood Khan

Chief Minister
Khyber Pakhtunkhwa

Khyber Pakhtunkhwa Digital Policy 2018-2023





KHYBER PAKHTUNKHWA
**INFORMATION
TECHNOLOGY BOARD**
Government of Khyber Pakhtunkhwa

خیبر پختونخوا، انفارمیشن ٹیکنالوجی بورڈ
حکومت خیبر پختونخوا



Plot No: 134, 135 & 136, Industrial Estate Phase V, Hayatabad, Peshawar, Khyber Pakhtunkhwa, Pakistan ☎ 091- 5891513, 091-5891516, Fax, 091- 5891511

www.kpitb.gov.pk ✉ info@kpitb.gov.pk [f](https://www.facebook.com/kpitbgov) [t](https://www.instagram.com/kpitbgov) [kpitbgov](https://www.youtube.com/kpitbgov)

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CREATIVE TEAM