

# INFORMATION AND COMMUNICATION TECHNOLOGY



GOVERNMENT OF NEPAL  
INVESTMENT BOARD NEPAL

APRIL 2024

# 1. OVERVIEW



Global IT spending was projected to reach USD 4.6 trillion in 2023, marking a 5.5% increase from 2022



In Nepal, IT companies invested **USD 41.26** million in 2022 and generated USD 515 million as revenue



IT service exports contributed **1.4%** of GDP, equivalent to USD 0.25 billion



Most clients of Nepal's IT companies are in the United States (**77.8%**); number of clients from Asia and the Middle East has begun to increase



Graduates in IT related courses: **5,935** in 2018, **8,301** in 2019, **9,242** in 2020, and **10,084** in 2021



## Application of ICTs in Nepal

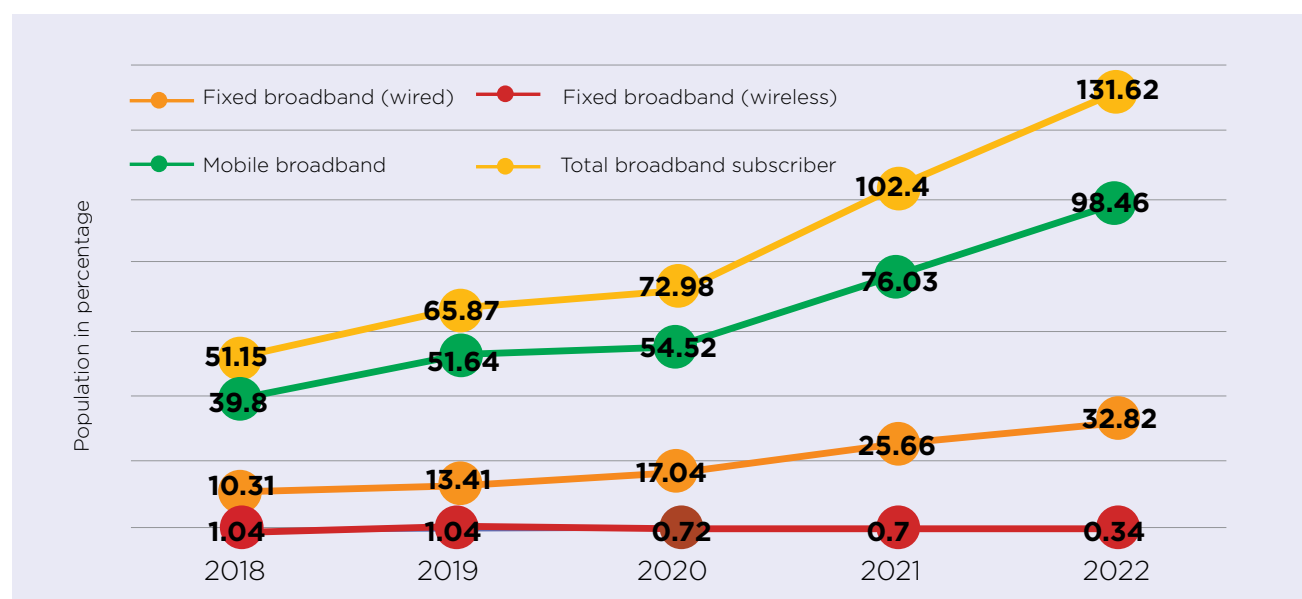
<b>Government</b>	<ul style="list-style-type: none"> <li>National ID, MRP/e-Passport, Voter ID, Driver's License, immigration, and the Nagarik (Citizen's) App</li> <li>Company and Tax Registration, Management Information Systems (MIS), Revenue Management Information System (RMIS) and integrated GON emails</li> </ul>
<b>Banking/finance</b>	<ul style="list-style-type: none"> <li>Almost all banks and financial institutions have Internet/Intranet based core banking systems to provide 24-hour services</li> </ul>
<b>Corporate houses</b>	<ul style="list-style-type: none"> <li>Individual Management Information Systems (MIS)/Decision Support Systems (DSS)</li> </ul>
<b>Mobile applications</b>	<ul style="list-style-type: none"> <li>Both in public and private sectors</li> </ul>
<b>E-Commerce</b>	<ul style="list-style-type: none"> <li>Shopping, door-to-door delivery and ride sharing applications</li> </ul>
<b>Fintech</b>	<ul style="list-style-type: none"> <li>Digital payment services</li> </ul>

## IT services export 2020-2022 (USD million)

Year	IT companies		IT freelancers		ITeS freelancers		Total services exported	
	Amount	Growth (%)	Amount	Growth (%)	Amount	Growth (%)	Amount	Growth in %
2020	88	25.8	43.2	4.2	177.21	-7.2	308.3	2.0
2021	111.5	26.8	52.7	21.9	149.7	-15.5	313.9	1.8
2022	20.31	80.5	69.6	32.0	244.5	63.4	515.4	64.2

Source: IIDS, 2023

## Broadband internet penetration



Source: Nepal Telecommunications Authority, 2021/22

## 2. INVESTMENT OPPORTUNITIES

### Digital foundation



- Connectivity (5G Internet Service Providers)
- Data centres
- IT Park in the Kathmandu Valley and Special Economic Zones (SEZs)
- Internet of Things and Big Data for digitalisation of agriculture, health, tourism, education, finance, e-Commerce, transport, manufacturing, and public services
- Cyber Security Centre
- Fostering e-Governance by applying GEA in all potential sectors

### Agriculture sector



- Precision farming
- Crop monitoring and disease detection
- Smart irrigation
- Automated harvesting
- Climate prediction/ forecasting
- Agricultural data analytics
- Traceability and food safety

### Health sector



- Health chatbots for patient support
- Remote health coaching
- Blockchain for health records
- Telemedicine platform

### Urban infrastructure



- Water ATMs in public places
- Intelligent waste management system
- Automated Waste Sorting



### Education sector

- School management and e-Learning system
- Personalised learning platforms
- Augmented and virtual reality
- Digital literacy and media literacy
- Online learning management systems
- Artificial intelligence
- Interactive textbooks
- Mobile learning
- Adaptive learning



### Tourism sector

- Tourism analytics
- Sustainable tourism
- Tourism security
- Smart tourism app
- Language translation app



### Energy sector

- Renewable energy grid integration
- Smart grid technology
- Energy-efficient building design
- Electric vehicle infrastructure
- Sustainable agriculture
- Energy-efficient transportation
- Energy storage
- Smart home technology



### Finance sector

- Robo-advisor platform
- Blockchain-based payment system
- AI-powered fraud detection
- Automated trading algorithms
- Financial data analytics platform
- Digital wallet and mobile payments
- Cryptocurrency exchange
- Investment portfolio management tool
- Personal finance management app

# 3. SUPPORT SYSTEM

## Broadband Policy 2014

It address key issues and challenges related to broadband access and outlines institutional arrangements, resource mobilisation, and legal and regulatory frameworks.



## Information and Communication Technology Policy 2015

It provides framework for development and implementation of ICT, emphasising the expansion of broadband and telecommunications infrastructure and the enhancement of e-government services



## Legal framework

The Electronic Transactions Act 2008 provides a legal basis for transactions



## Cybersecurity

National Cyber Security Policy 2023 focuses on securing digital infrastructure, mitigating cyber threats, and promoting reliability of online services



## Digital Nepal Framework 2019

A government blueprint for enhancing socioeconomic growth by using ICT, has listed eight potential sectors and 80 digital initiatives



## ICT education

The Education Master Plan seeks to enhance ICT infrastructure and human resources for fostering digital literacy and skill development



## E-Governance initiatives

E-Governance Master Plan encourages digital government services for fostering transparency and efficiency



## Regulatory oversight

Nepal Telecommunications Authority (NTA) ensures adherence to telecommunication regulations and promotes fair competition



## Incentives

50%

exemption on income tax leviable on foreign currency earned through export of Business Process Outsourcing, software programming, cloud computing and other IT enabled services

2%

digital service tax levied on digital services provided by non-residents to Nepali citizens



No digital service tax on annual transaction up to NPR 2 million



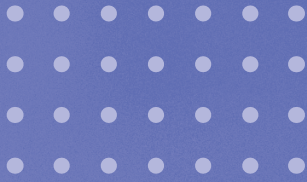
**No minimum investment threshold** for FDI in ICT sector



IT Park operating within SEZ eligible for other exemptions applicable for industries located in the zone

Scan for full sectoral profile, including the data sources.





For this document



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