

## Global ICT

# India ICT industry major issues and Implications for a domestic company

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### 1. Overview

Since then, the fingerprint and iris information of all Indians has been digitized.

It is located in South Asia and ranks second in the world with a population of 1.3 billion people.

India, which has a population of this size, is Korea's special strategy 'Smart City Mission' with digitalization as its vision

It is a partnership and a key country in the New Southern Policy (NSP), to create a sustainable innovation ecosystem in India

Korea-India Comprehensive Comprehensive Effective January '2014', in the health sector

Multi-faceted trade/exchange based on the Economic Partnership Agreement (EPA) with Mission (NDHM)' to pursue digitalization

A long-term basis for revitalization has been laid. Especially accelerating the adoption and application of digitization throughout society, including

India has been in power since the inauguration of Prime Minister Narendra Modi in 2014.

The nation through digital economy transformation and digital innovation

'Digital India' in 2015 to achieve development

COVID Pandemic that has continued from March 2021 to the present

Announced the initiative, △For all citizens

The situation has prompted countries around the world to accelerate digital transformation.

Digital infrastructure as a public service, △demand-based

It was an occasion for urging. The big step towards the digital economy

Governance and Service, △ Reinforcement of Citizens' Digital Rights vision was to promote the growth of the Indian economy.

vision was established.

In India, an unprecedentedly long lockdown due to the pandemic

Low internet, especially in rural/remote areas      Low connectivity and accessibility issues have been continuously pointed out and

Digital due to lack of accessibility and digital infrastructure      have. As of May 2021, the communication density (tele-

The issue of the underprivileged has been further highlighted, ~~density)~~ is at the level of 60.22%, 141.62% in urban areas

Face many challenges to be solved in the future      is significantly lower than that of the current Indian telecommunications market.

became In preparation for the post-corona era, the Indian government ~~is a~~ problem and, conversely, a potential opportunity factor in the future.

Compensating for these vulnerabilities, digital      is coming

It is expected to further strengthen policies and initiatives,

In this paper, India emerging in the era of the pandemic      In addition, 5G is one of the major issues in the Indian telecommunication market.

A look at the major issues of the ICT industry by major sector ~~and~~ Currently, in India, for 5G spectrum auction,

We want to draw implications for the company.      The consultation process is in progress and is expected to be completed by early 2022.

is predicted to be In addition, 5G subscribers in India will be

27% of all mobile subscribers by 2026

2. Major issues by sector

A. Communication      It is expected that there will be 350 million people. In addition, in 2021

India's mobile market is the second largest in the world after China. In May, the Ministry of Telecommunications (DoT) of India

It is large and has a population of about 1.198.5 million as of May 2021 of equipment, Korea, excluding Chinese Huawei and ZTE

It appears that there are subscribers.      communication equipment manufacturers in other countries, including Samsung Electronics,

We decided to conduct a pilot service project together for 6 months.

The Government of India has declared 'National Digital Communication Policy 2018', broadband and digital communications      Asia, in the future, Korea will be a huge Indian 5G

Policy 2018', broadband and digital communications      There will be an opportunity to preoccupy the telecommunication equipment market

Strategic plan to increase contribution to 8% of GDP      It is expected. In addition, after 5G commercialization, various

While presenting the target, in order to promote foreign investment, the applied industry sector is also an area that Korean companies should pay attention to.

\$100 billion (about 120 trillion won) in the digital communications sector

Attracting investment, creating innovation-led startups, IoT ecosystem ~~By~~ **Medical field**

A plan for expansion has been proposed. Also in rural areas      Due to the prolonged pandemic situation, many

Through 'BharatNet', an Internet penetration expansion project, The health sector in the country is a new national security sector.

As the first stage, by December 2017, 100,000 village councils The importance of non-face-to-face medical services has been

The Internet network has been established, and in the second phase, the importance of digitalization in the health sector is further emphasized.

There is a plan to build an additional 250,000 village councils. In particular, India ranks second in the world (as of December '21)

Despite the government's efforts, it is still      Corona confirmed, but weak health system and low

Criticism that it should be improved due to access to medical ~~and~~ innovative digital in India leading to the development of related industries

voice is getting louder      It is expected that a health ecosystem will be created.

In August 2020, the Indian government      **C. Education**

Health ID issuance, △ DigiDoctor,      In order to prevent the spread of the corona virus, by the end of March 2020,

△ Electronic Medical Record,      A lockdown was enforced. All educational institutions across the country

△ “National Digital      The sudden transition to distance education was promoted, and

National Digital Health Mission (hereinafter referred to as the National Digital Health Mission)      More than 250 million school students have setbacks in their education

NDHM)" was published. NDHM is India received.  
 It is overseen by the Ministry of Health and Family Welfare (MoHFW).  
 India's National Health Authority (NHA) is in charge of implementation. The Indian government is working to minimize the education gap.  
 NDHM is the future insurance claim platform (Health Claims Platform), Telemedicine, and Online Pharmacy (e-Platform), Diksha and Swayam, as well as in E-book form  
 Pharmacy), etc., will expand its scope. Efforts to strengthen the textbook eBasta project  
 In particular, in the issuance of digital health IDs for all citizens, the existing digital health IDs in private and urban schools  
 You will use your ID, Aadhaar, which Although it has adapted relatively well to the distance education method, national and public schools,  
 In terms of promoting innovative digitalization in the medical education sector, educational institutions in suburban areas  
 You can see the consistent and strong will of the government for digital policy. From traditional face-to-face classes to an online ecosystem  
 have. There were many difficulties in the transition. Real Indian education integration  
 According to Information Systems (UDISE) 2019-2020 data, India  
 According to the BCG-FICC joint report in October 2020, NDHM, 78% of all schools do not have internet facilities,  
 Through implementation, about 1.5 trillion won in India's health care sector in 10 years. More than 10 million schools have computer facilities.  
 Economic value of rupees (about 23 trillion won) is expected to be created appear.  
 It is predicted, and the growth of startups in related fields and  
 Investment is also increasing rapidly. The successful implementation of NDHM is. In the midst of the corona crisis, the issue of inequality in education in India is  
 By accelerating universal health care coverage, has risen to the surface, and this gap has been  
 It is possible to improve the quality of medical services and reduce costs. It should be solved with online education suitable for the digital age.

The voices are getting louder and louder. There are startups that are expanding. India is in the US and China.  
 It has the third largest startup ecosystem after  
 India's edutech market is the second largest in the world, with high average growth rate of 12-15%. Indian technology  
 and various policies of the Indian government to close the education gap. The ecosystem is developing deep tech from the existing IT-BTM business model.  
 As a result, it is a field with high growth potential and investment is expected to be evolving into a digital innovation model based on  
 Noted. Recently, many startups in India have been innovative can Currently, there are about 10,000 tech startups in India.  
 Online education programs using digital technology 2,500, with a total investment of \$3.5 billion in 2020  
 Founded in 2011, the current corporate value is weak was done Unicorn companies born in India will also increase in 2020.  
 It has grown into a \$11.1 billion edutech company. There are 38 standards, and the Indian government will  
 Byju can be seen as a representative example. It has announced a plan to increase the number of unicorn companies to 95.  
 One of the factors that allowed the innovation ecosystem to grow in India was innovation.  
 D. Startups in emerging technology fields such as the Internet of Things (IoT) This is a young population who seeks out and outstanding technical talents  
 Due to the pandemic, non-face-to-face life is increasing, especially only that, but also in the relevant industry fields such as Startup India  
 The demand for various technologies using the Internet of Things (IoT) is increasing. Strong support measures from the Indian government to promote  
 is rising India Data Protection Commission (DSCI) have.  
 According to the report, investment in the Indian IoT market in particular was 5 billion won in 2019.  
 from \$15 billion to \$15 billion by 2021. The potential of Indian tech startups is the potential of many ventures around the world.

It is expected that the manufacturing nurturing policy promoted by the Indian government investment funds. Among them, Japan Thanks to 'Make in India', industrial IoT (IIoT) has already Since 2016, we have been investing in Indian tech startups in earnest. It has been largely adopted for the reorganization of the manufacturing sector. Since May 2021, the accumulated investment amounted to a total of 9.2 billion won. appeared to be In addition, the Indian government is In dollars, especially fintech, healthcare, and mobility The goal of building 100 smart cities by 2022 It was found that the largest number of investments were in the sector. IoT-based system in the implementation of our smart city mission and solutions are essential elements, 3. Conclusion and Implications Investment and growth are expected to continue. As we saw earlier, in 2014, the government of India Development of Korea through the transition to a digital society and economy under the inauguration The growth of the emerging technology sector includes continued growth in India and is an unprecedented

Digital transformation in all fields of society and economy through a pandemic In addition, in January 2021, the Korean government Continue policies and initiatives that will further accelerate acceleration The 3rd International Development Cooperation Proposing a Five-Year Direction expected to be strengthened. Announcing the comprehensive master plan, 27 3rd period (2021-2025) Especially in suburban areas where vulnerabilities have been India has been added as a key partner country. This is the aid effect exposed during the pandemic. Sustainability and diplomatic relations with partner countries, especially the New Southern Policy Problems with low telecommunication connectivity, through digitization in the health sector It can be considered as a result of consideration. In 2021, the existing 18.06 billion won Major issues such as the need for reform and the need to strengthen online education India's ODA budget, which was only a mere, is expected to reach 2022 (based on the required amount) In addition, demand naturally increases due to non-face-to-face life. It approximately doubled to 3.5.54 billion won, including the transportation sector. The growth of emerging technology fields such as the Internet of Things (IoT), which has increased Paid loan (India Nagpur-Mumbai Expressway ITS construction It is expected to gain momentum. Business/ A total of KRW 192.1 billion in 2022-2027) Meanwhile, the current status of Korea-India ICT cooperation As with the KOICA India Small and Medium Business Capacity Building Project (2020- Looking at the 2019 Ministry of Science and ICT, ICT manufacturers, telecommunication companies, 2022 total of 28.73 billion) is the largest, compared to other countries Delivered a "Public-Private Cooperative 5G Delegation" composed of big firms and SMEs India, which had a remarkably low amount of ODA support, It has been dispatched to the National Reform Commission (NRF) as a key partner country, including future ICT Selected as a key partner country, including future ICT In October, under the leadership of the Ministry of Science and ICT, the Korea-India Research and Innovation Center opened. Various projects and grants are expected to be implemented and long-term It was opened in New Delhi, India. From this perspective, it will be easier for Korean companies to enter Expansion of bilateral cooperation in science, technology and ICT innovation It is expected to be expanded It can be seen as a part that shows what is expected.

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