

Title: Mainstreaming Digital Skills Through Information and Communication for Sustainable Development During COVID-19 Emergency



Dr. Kalpana Chaudhari

Department of Electronics and Telecommunications
Engineering

Shah & Anchor Kutchhi Engineering College, Mumbai,
India

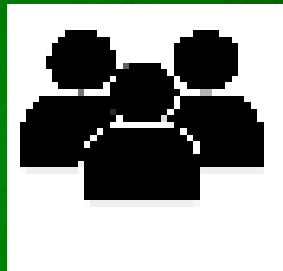
isdrklc@hotmail.com

17/07/2020

**WSIS+15
FORUM 2020**

Digital Scenario around the world (2019)

Total Population



7.676 BILLION

URBANIZATION

56%

Unique mobile users



5.112 BILLION

PENETRATION

67%

Internet user



4.388 BILLION

PENETRATION

57%

Active social media users



3.484 BILLION

PENETRATION

57%

Mobile social media user



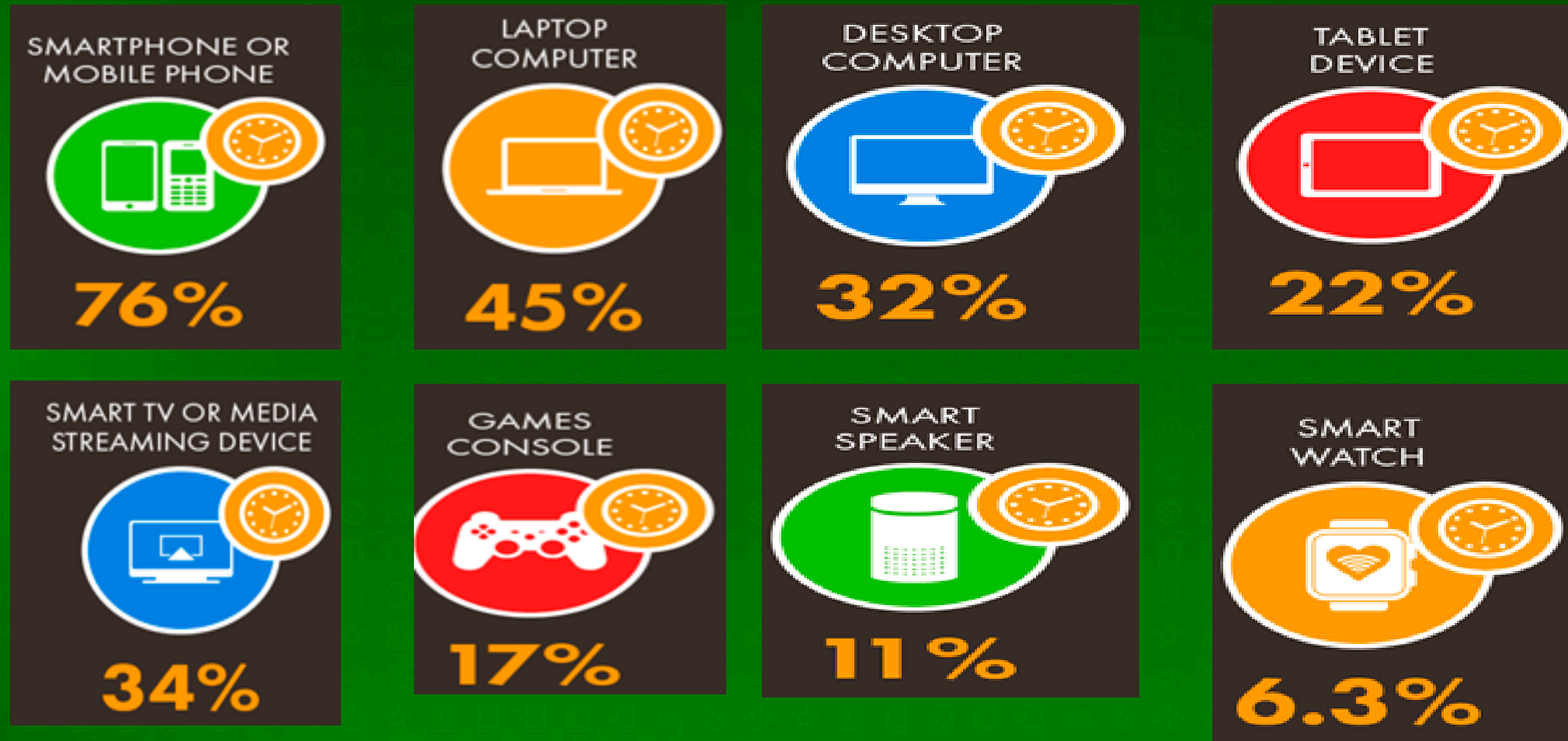
3.256 BILLION

PENETRATION

57%

Covid-19 & Digital Device Use (April 2020)

Internet users aged between 16 and 64 in surveyed countries say they've been spending more time using their smart phones

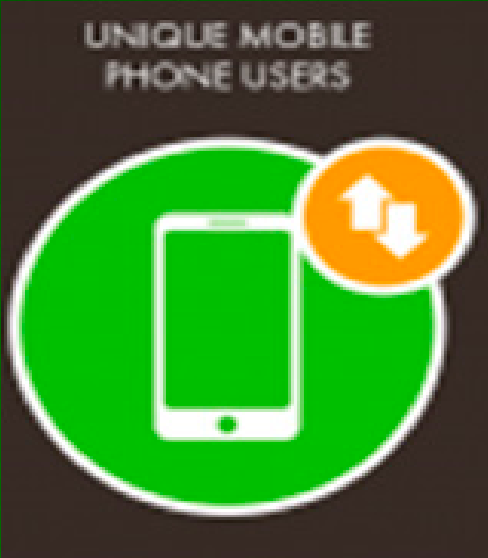


Global Digital Growth



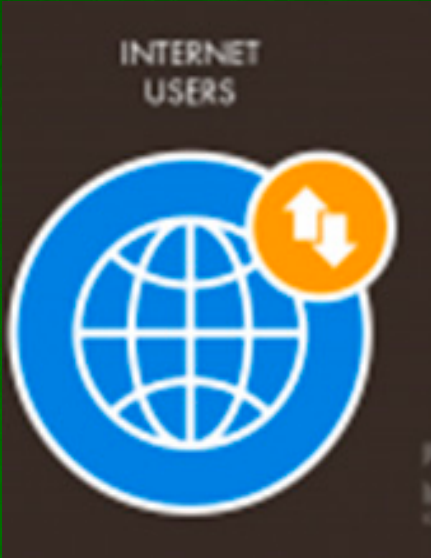
+1.1%
April20 vs.April19

+82 Million



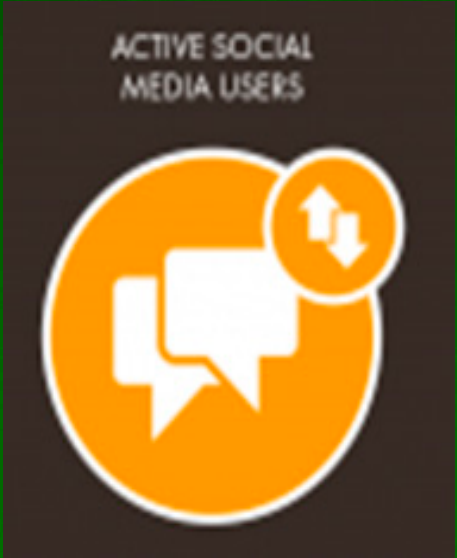
+2.5%
April20 vs.April19

+128 Million



+7.1%
April20 vs.April19

+301 Million



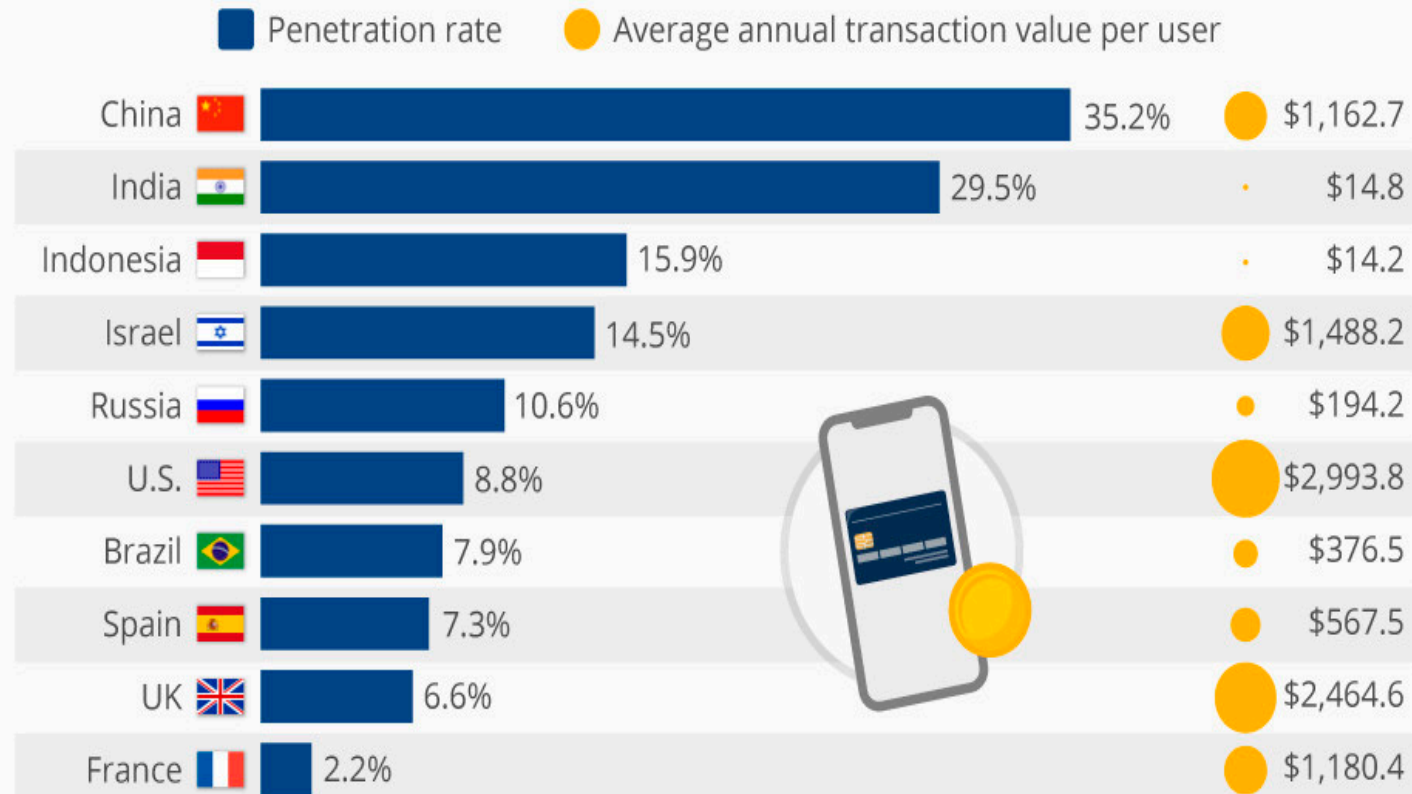
+8.7%
April20 vs.April19

+304 Million

Mobile payment adoption by the peoples (2019)

China's Mobile Payment Adoption Beats All Others

User penetration in the mobile point-of-sale segment in 2019* (selected countries)



Mobile Payment Adoption By The Peoples (2019)



- ❖ The ability to leverage digital tools has become a must for entrepreneurs, to survive the ongoing crisis.
- ❖ The pandemic has accelerated the process of digital transformation across almost all sectors.
- ❖ Greater social mobility and shared value creation are among those factors that entrepreneurs can leverage using digital tools on the recovery path.
- ❖ Although the current pandemic had a severe impact on the global economy, the digital economy has proven instrumental in the battle against COVID-19

Digital innovation to battle COVID-19

- Emerging technologies such as Artificial Intelligence (AI) help to accelerate the development of vaccine
- Predict which public health measure would be most effective & update scientific information to the public
- Need to boost AI Enabled Public Health Mobile Application to Manage the COVID-19 Pandemic.
- Need AI application to empower individuals to monitor their own health by alerting them if they have crossed paths with an infected individual, provide them with a real-time evaluation of their exposure to COVID-19

Digital innovation to battle COVID-19

- ❖ Already call initiated to young developers, innovators, data scientists, and designers to use their digital skills, creativity and entrepreneurial spirit, and to team up to inspire digital solutions to current and future pandemic-related challenges.
- ❖ Contact tracing & clinical management is initiated digitally in some countries from Pandemic period

➤ Planning and tracking:



❖ Big data and artificial intelligence (AI) have helped to facilitate COVID-19 preparedness and the tracking of people, and to not to spread of infection, in several countries. Tools such as migration maps, which use mobile phones, mobile payment applications, and social media to collect real-time data on the location of people.(China)

❖ Developed a platform for health-care workers to report real-time data on volumes of patients with COVID-19, personal protective equipment, staffing, ventilator usage, and other resource information& share nationwide with health-care authorities to track the status of facilities, allocate health-care resources, and increase hospital bed capacity (Sweden)

➤ Screening for infection

- ❖ Systematic screening technologies are expensive and require trained personnel, restricting their uptake in many countries
- ❖ China uses free, web-based and cloud-based tools to screen and direct individuals to appropriate resources.
- ❖ Taiwan uses High-performance infrared thermal cameras set up in Taiwanese airports to capture thermal images of people in real time, rapidly detecting individuals with a fever.
- ❖ Singapore have their data tracking system to identify hotspot .
- ❖ USA used digital thermometers to collect real-time data on clusters of febrile illness, and a national study is capturing resting heart rate with a smart watch application, which could be able to identify COVID-19 emerging outbreaks.

Digital innovation to battle COVID-19 in India

INDIAN AUTHORITIES HAVE LAUNCHED NEARLY 62 COVID-RELATED APPS SO FAR

FUNCTION	APP NAMES	WHO MADE IT	WHERE IT IS USED
CONTACT TRACING	 AAROGYA SETU	National Informatics Centre (NIC) - IT Ministry	Pan India
	 MAHAKAVACH	Maharashtra State Innovation Society- Maharashtra Govt.	Maharashtra
QUARANTINE MONITORING	 BSAFE TRACKING	Kerela Police Cyberdome	Kerala
	 SMC COVID-19 TRACKER	Surat Municipal Corporation (SMC)	Surat
PROVIDE COVID 19 & HEALTH RELATED INFORMATION	 GOK DIRECT	Qkopy Online Services Pvt. Ltd., Kozhikode ; backed by Kerala Govt.	Kerala
	 KAVACH	Chhattisgarh Infotech Promotion Society - Chhattisgarh Govt.	Chhattisgarh
ESSENTIAL SERVICES - RELATED (GROCERIES & MEDICAL SERVICE)	 COVA PUNJAB	Uengage Services Pvt. Ltd., Haryana ; Punjab Govt.	Punjab
	 JAN SAHAYAK - HELPME APP	Electronics & IT Dept – Haryana Govt ; (OfBusiness) OFB Tech Pvt. Ltd., Gurugram	Haryana
COLLECT USER - SUBMITTED COVID RELATED INFO	 COVID-19 FEEDBACK	IT Ministry	Pan India
	 GCC CORONA MONITORING	Greater Chennai Corporation	Chennai
FINANCE RELATED	 JHARKHAND SAHAYTA	Jharkhand Space Applications Center - Jharkhand Govt.	for people of Jharkhand currently out of state
	 WEST BENGAL EMERGENCY FUND	West Bengal Govt.	anyone can use app to donate

- ❖ India has at least 62 apps to deal with Covid, but they all do the same job mostly.
- ❖ App developers say multiple apps providing the same services is a waste of resources, but state administrations feel an app personalized their own monitoring and dealing with the Covid-19 spread.

Digital innovation to battle COVID-19 in India

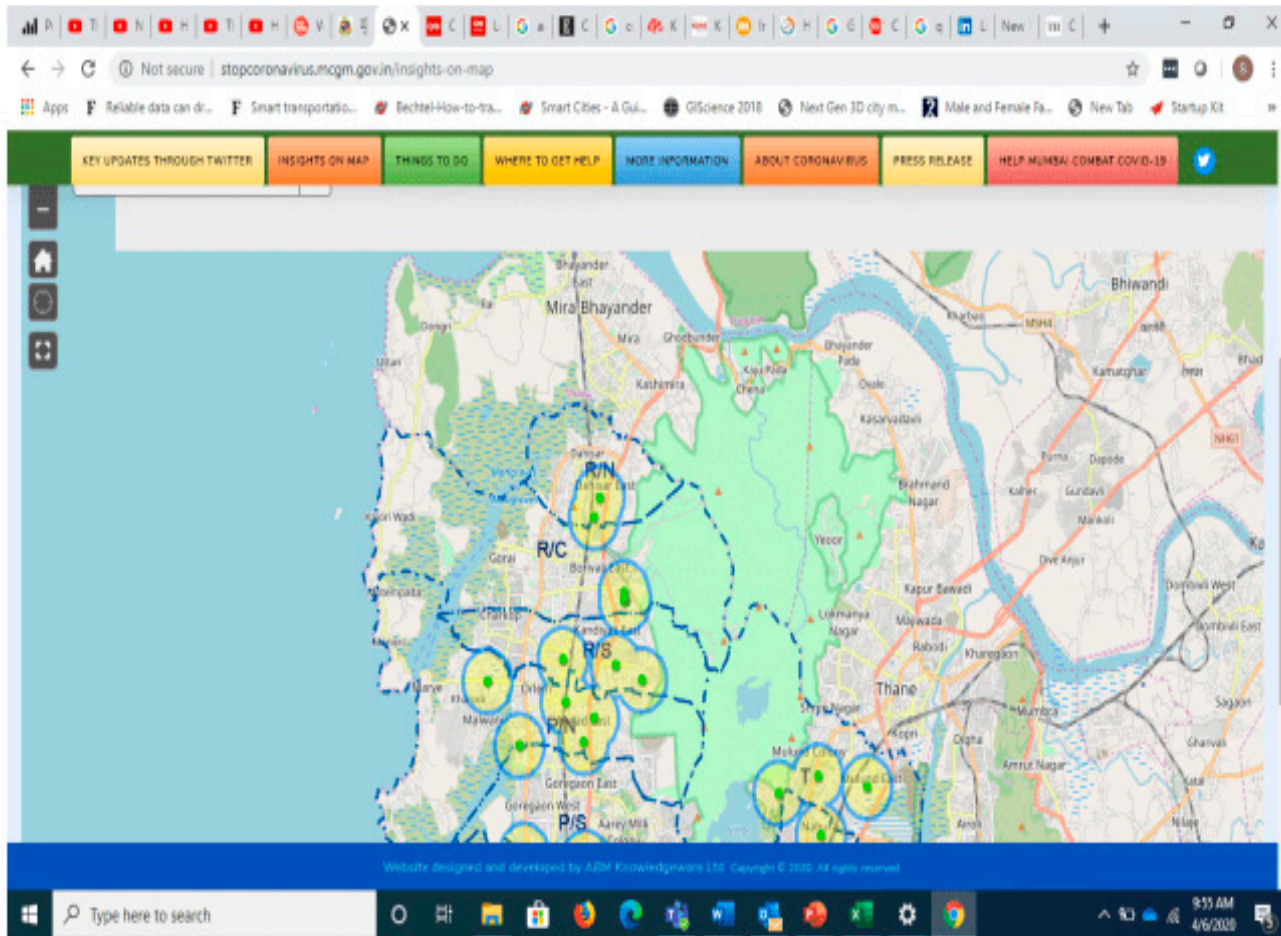


Aarogya Setu app & corona App
:

- ❖ Tell you locations where Covid patients had travelled to, so you can avoid them.
- ❖ list out Covid-19 designated hospitals, updated real-time information to check bed availability .

Digital innovation to battle COVID-19 in India

Brihanmumbai Municipal Corporation (BMC) GIS Map



❖ 249 containment zones in Mumbai.

❖ These zones show up as a green dot on the map and are areas that have been sealed off by the Mumbai Police.

❖ Those living in these zones are identified COVID-19 patients or their close relatives and they are not allowed to leave these areas and other people are not allowed to enter them keeping the risk of community transmission at a minimum.

Digital mode for education In COVID-19 outbreak



Learn Anytime, Anywhere



School Education

Out-of-School Education

UG Education

PG Education



FREE ONLINE EDUCATION


swayam

INDIA MISS, JUNE 2018

- ❖ Some 1 billion students and youth across the planet are affected by school and university closures due to the COVID-19 outbreak.
- ❖ The Global Education Coalition launched by UNESCO seeks to facilitate inclusive learning opportunities for children and youth during this period of sudden and unprecedented educational disruption.
- ❖ Investment in remote learning should both mitigate the immediate disruption caused by COVID-19 and establish approaches to develop more open and flexible education systems for the future.

Work from home has been 'successful' during Covid-19 lockdown.

WHAT INDUSTRY WANTS



Changes in labour laws to redefine working hours and shift timings 


Option to choose NPS over EPFO since employees may work for more than one co

A relook at role of employer with respect to safety and health measures at workplace

Change in I-T laws since expenses incurred by employers to enable WFH will need to be treated as business expenses

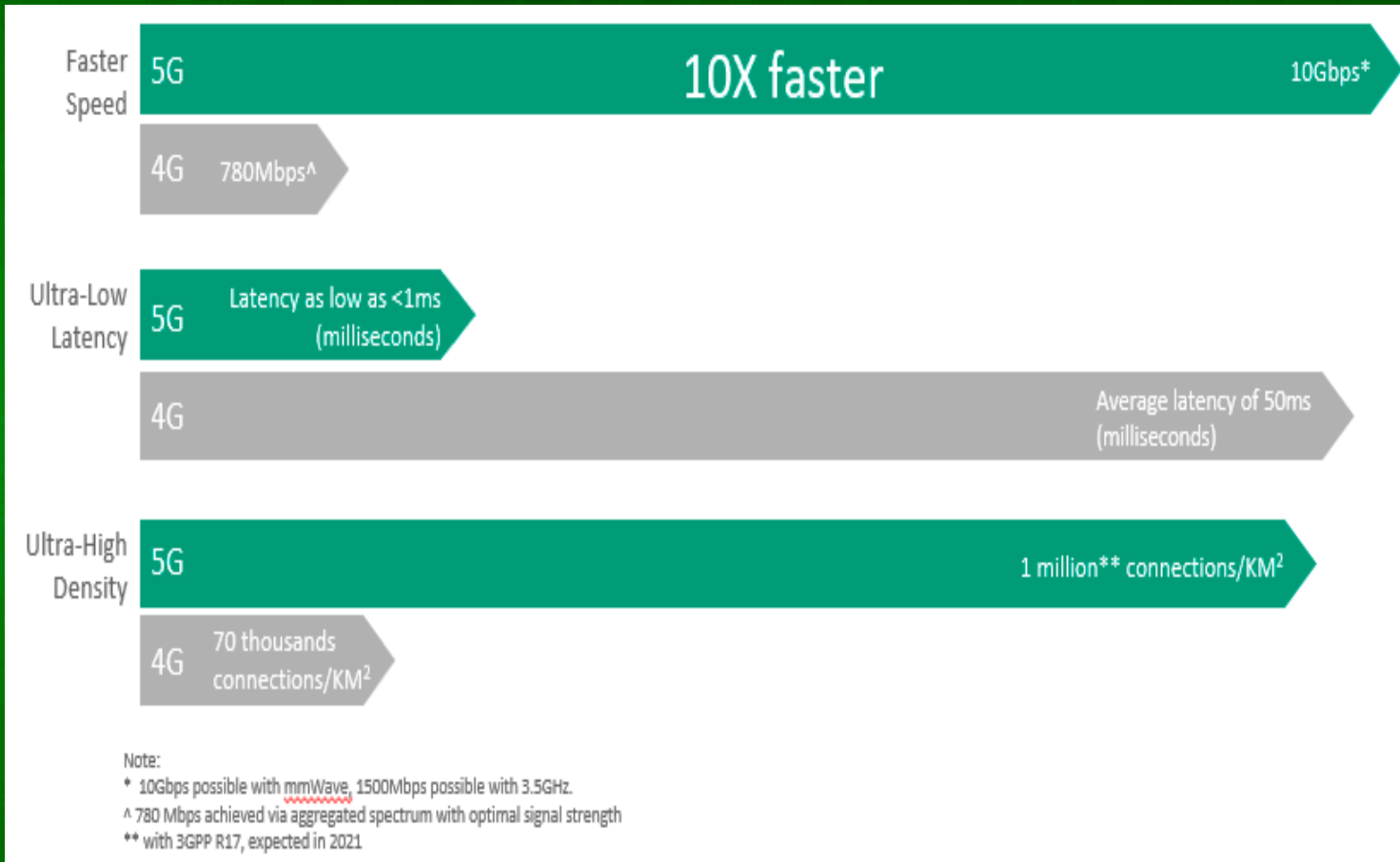
Make DoT exemptions on work from home permanent

Improve telecom and broadband infra in residential areas  



- ❖ World is witnessing the impact of Covid-19 on all facts of life, in all countries and in all industries.
- ❖ No one is certain about how much and how long the impact of the pandemic will last on the global economy

5G's deployment could hamper due to Covid19



❖ Meet 5G, the innovative new fifth generation of cellular technology.

Designed to increase speed, reduce latency, and improve flexibility of wireless services.

❖ This groundbreaking new network will change the way you live, work and play.

Thank You!

Dr. Kalpana Chaudhari

Department of Electronics and Telecommunications Engineering
Shah & Anchor Kutchhi Engineering College, Mumbai, India
isdrklc@hotmail.com