Introduction

Electronic government (referred to as e-Government) is often seen as a way forward for governments around the world to achieve effective regulations and improved service delivery to both nationals and to traders; due to this, e-Government has become not just a desire but a necessity for all those countries seeking for good governance and quality public service delivery. In fact, various scholars recognized many benefits of e-government adoptions, e.g. vast political involvement by citizens, greater transparency in public administration, and downsizing of corruption at the public sector level.

The implementation of e-Government projects during a global health crisis (e.g., coronavirus pandemic) let countries give appropriate health and safety-related information and emergency contacts by using numerous e-Service platforms, which including mobile apps and social media platforms etc.
In today’s world, which is based on technologies the information technology (referred to as IT) should promote an information-based conceptualized society. Electronic governance is a combination of information and communication technology (ICT) in its functioning to enhance the strength of government to fulfil the requirements of citizens. E-governance is remarkable because it decreases corruption, augments transparency, increases convenience; moreover, it enhances gross domestic product (GDP) growth, gives way for the people to interact directly with their country, minimizes overall costs, and extends the spread of a government. Through a noteworthy e-governance system, e-governance augments the quantity and quality of enlightenment and service delivery to the citizen by the use of ICT in the simple, intellectual, economical, political and productive ways, as earlier the models of e-governance have endorsed that e-government can project and promote the economic growth of the country e-government always has a remarkably positive impact on the achievements and developments of those countries those of the underdeveloped.

The World Health Organization (WHO) announced the COVID-19 outbreak as the sixth public health of emergency of international concern on January 30, 2020. As it begins from Wuhan, China, and it has affected more than 209 countries

in the Munich Security Conference, which was held on February 15, 2020, the WHO Director-General Tedros Adhanom Ghebreyesus stated that “We are not just fighting a pandemic; we are fighting an infodemic.” WHO stated a new information platform called the Information Network for Epidemics (EPIWIN) after declaring COVID-19, a public health emergency of international concern? The reasons behind this new information platform were to make it clear that customized information with concerned focus groups. Finally, on March 11, 2020, WHO declared COVID-19 a global pandemic.

The approaches to slow down the spread are the strategies such as social distancing (physical distancing), 14-day quarantine, self-isolation, lockdowns etc.

On or around June 17, 2020, there was no vaccine available for COVID-19, but many countries have used medicines to cure this disease, having no regulatory approval; due to this, the only ways to stop the spread of coronavirus is self-isolation and social distancing. This practice requires the powerful combination of e-governance, modern and innovative use of current and advance technologies also strong community harmony; not just that, but it also requires the participation and will of citizens to fight against the disease and its long term effects.

E-governance has always been focusing on sustainable developmental goals, which are abbreviated as SDGs; the word sustain means to support, endure or maintain and sustainable development is defined as those activities that are directed to stabilizing the present and upcoming challenging requirements such as the current and future impact of coronavirus. Suitable developmental goals have developed from those social, environmental and economic fields to get the attention of institutions such as political, economic and technological around the whole world; this pandemic has affected human beings, the family atmosphere and also each step that was taken toward the social and economic development, all of this has resulted as uncountable loss that has happened to stable development after all this, yet there is no contract/agreement about how information and communication technology and e-government or governance can help us to unify the differences that we have as countries this pandemic has created obstacles for every country social, political, economic and environmental institutions and it became a challenge for all those countries to continue the same patterns for their sustainability and its developmental process.

**Concept of E-Governance**

The concept of e-governance is understood as it is a significant tool for digitalized government in today’s times. This e-governance can be observed as technology by governance which is used to upgrade the recent work of organizations and acknowledge the chain of reciprocal actions between the citizens and a government also among employers and their employee in the business. E-governance can also be defined
as a technology based tool for the delivery of services. When we talk about e-governance, the following paths must be considered and be given foremost priority.

The path from Government-to-citizen this way facilitates the citizen with the basic rights such as the right to transmit, produce, search, receive, impart information regarding important state management issues; by these methods and abilities, transparency and accountability can be accumulated in government, in public authorities and in monitoring the safety of nationals etc.

The second path is between government-to-business, which directly focuses on cross activities between government and its private sectors in many fields such as taxation, customs, issuance of documents (licenses and certificates), and the dissolution of those institutes. If the technology (IT) will be used in this way and such type of interaction will ameliorate the supply chain and optimizes the state’s competitiveness in business entities.

The third path is government-to-government this path is used to strengthens the ability of public authorities and local level government because of the use of information technology and electronic information management system also the making of new administrative processes such acts will in return allow the better corporation between public institutions, reduction in the cost from an economic and all social prospective.

Lastly, the path between e government-to-employee which encourages the transactions such as pensions, salaries and enhancement in the labor market, which will directly affect and improve the productivity of labor. Now, this advanced technology system aims to remove obstacles between political communications.

**Pakistan and its Recent System, Policies, and Processes regarding E-Governance**

In 2002 the e-governances was first introduced in Pakistan also the ministry of science and technology of Pakistan has made platform for the implementation of e governance which is electronic government directorate abbreviated as EGD, since the electronic government directorate is developed Pakistani government has taken many remarkable and unforgettable steps such as generalizing the use of mobiles and gave access to fast internet service, Pakistan’s technological media and those sectors of telecommunication have worked on and off moreover the steps taken by the electronic authorities have empowered the media and played pivot role to increase the speed of internet by recognizing the 4G (LTE) services. Further to strengthen the future of information and communication technology Pakistan's telecommunication authority(PTA) have taken initiative of smart Pakistan, by creating government of Pakistan portal which is governed by both electronic government directorates and ministry of information technology these are some projects that are developed by the these sectors, the work of government of Pakistan portal is to digitalized Pakistan also every government sector have its concerned website with the name of its province also the e governance is not limited but it is being expanded towards disposal of salaries through ATM, the verification of SIMs, verification of NIC and registration of all other documents in any department of Pakistan same as documents relating to educational department such online testing services, the certification at all levels of school and students can see their results online also there are many online services that are being provided by governance.

The use of internet have been increase with the time and it has been phenomenal that how Pakistan is adopting all latest technologies easily and the population is technologically friendly environment, Pakistan is known as the developing country but the people living in Pakistan are always ready and demanding towards that the government should make e services common in the country and the result would be that Pakistan has encouraged its sustainable development the prime minister of Pakistan Imran khan have inaugurated citizen portal in October 2018 to facilitate and allow the citizens to submit their grievances and recommendations by using this e service platform, the number of complaints that were bought was 260,000 of 430,000 complaint and 55% of the response was satisfactory from the public further the plain
was encouraged by the prime minister which has aim to augment the digital payment platforms which will have positive affect of National Financial inclusion strategy at all levels there have been services regarding health matters as well for e.g., National Database and registration authority have launched e-health card and the program launched by the government of Punjab and khaibr pakhtukhuwah have inaugurated e-vcc with coordination of WHO and Pakistan’s Federal Ministry of Health.

As the world is fighting against COVID-19 and some precautions are mandatory to prevent surfing one of them is social distancing so when we talk about Pakistan which is one of those states who have been victim of COVID-19 due to this Pakistan has also gone to digitalization the ministry of education have an agreement with Pakistan television PTV to launch the first tele school for the students further Pakistani government has developed a helpline on what sap in the pandemic, the government of Pakistan have evolved the app named Geo Tracking App to facility the citizens by this app the telecommunication companies will be consulting when a person is recognized as affected, by this app a massage will be delivered to the concern authority for the safety and precautionary measures one of the biggest example of this thing is Telemedicine Center at Nishtar Medical University situated in Multan apart from the pandemic many self assessment portals and WebPages are developed for those who are not affected by COVID-19.

**Government and the COVID19 in the world**

E-governance is one of the systems that play a pivot role when it comes to the relationship of citizen and the government also; this is the link, and it gives noteworthy facilities to both citizens as well as governments by creating electronic apps and assistance of ICT from the time e-governance have developed the digital opportunities worldwide are revolutionized.

The online services are important for the states to move ahead and develop more digitalized government to encourage quality, and many countries have expanded the use of e-services and have developed the facilities of (digital by default), which are most important for taking advantage of online service and it also gives some off-line advantages. Denmark is the well-known country that has embraced (digital first) way; communication through digital methods have become mandatory even though the state also provides off-line service t with all people who, for any reason, are unable or incapable of completing the service online. After Denmark, UK has also made an initiative towards digital assistant to look after electronic improvements.

Wider electronic skills may be used in support of social additions and may facilitate in times of emergency, the electronic knowledge is important, and it should especially be used to train the children’s in all schools to improve their skills, and it must be generalized among all citizens no matter what profession or the sector they belong to; further these people be provided courses through which these people can learn the skills such as the course of an electronic assistance starter it will help and encourage all the citizens who are not known to these technologies. Here we have an example of another country which is Singapore the government of Singapore have introduced the Silver Infocomm Initiative, which refers to (SII). The purpose of the silver Infocomm initiative is to build an electronic device for senior citizens that are aged 50 years; this is the landmark start that has made Singapore focus on the electronic economy and the connectivity of digital societies, among this important feature it has also encouraged the awareness of information technology and knowledge to all seniors to made them confidence and empower them to work in the technological environment. When we talk about the benefit of e-government, one of the vital roles that to plays is improvement in digital skills among all the employs and employees, which has also been recognized by the European Union commission

Yet there is another country that developed the concept of rapid diagnoses kit "drive-through screening" kit after this Korea have the ability to diagnose COVID-19 from the infected person at the very initial stage now this way, fortunately, decreases the rate of causalities is the unique methods by which
Changing Dynamics of Governance after Pandemic Situation in Pakistan

thousands of people can be tested on daily bases, and there are many other benefits of this diagnostic kit such as it gives the result faster than the traditional, methods it diagnoses the debases within 6 hours rather than taking 24 hours just by applying the real-time reverse transcription-polymerase chain reaction “RT–PCR” this method got rapidly considered by Ministry of Food and Drug Safety (MFDG) and Korea Centers for Disease Control and Prevention (KCDC).

It was first executed in Yangii Hospital in Seoul in the month of March 16 after that; a booth was executed by the Korean government in China airport, which was also in march 25th is walk-through booth was installed for outsiders moreover Korea Centers for Disease Control and Prevention (KCDC) as an app as self-diagnosis it was mobile app by this app it was directed that to enter into Korea all foreigner and local travellers have to diagnose themselves through this app and submit the result that comes afterwards to Korea Centers for Disease Control and Prevention (KCDC) if not to KCDC then to any other health care center which is established. This app will ask the user to enter all information regarding the quarantine period the things that this app may require are name, belonging and information relating to passport after the entering information process now KCDC will have access, and it will monitor the person all the time for which they stay in Korea in addition to these facts the Ministry of Interior and Safety (MoIS) have made self-quarantine safety protection mobile app which will be used to minimize the cold hose self-isolator. Throughout the COVID-19 pandemic, the use of electronic health system has decided to minimize the risk. The aforesaid digital applications have the ability and power to minimize risk transference by subsiding physical contact among affected persons and healthcare service providers. Moreover, this technological health involvement lets the health service providers handle the global pandemic by doing their work remotely or by practising self-isolation methods.

Importance of national integration through CPEC

With the passage of time, the economies of the world have been growing rapidly. In China, there is Belt and Road Initiative (BRI) budget is approximately 1 trillion USD and 65 countries are including; the goal behind all these efforts the purpose is to connect china across Asia, the Middle East, Africa, Asia. By this connectivity, there are many direct and indirect impacts that can be define and separated, classified into four main categories

1. Easy way to do business and commerce
2. Increases the energy resources
3. The drive to the global health development
4. Information harnessing technology.

CPEC is one of the most important part of BRS, it facilitates china with sufficient alternatives to the Strait of Malacca sea route by outstandingly decreasing the time of shipping from 43 days to 10 days and works as the game changer for Pakistan’s technological, social and manufacturing developments CPEC will connect China with Indian subcontinent, central Asia and Africa, this connectivity will play most important role because it has many benefits and it will make many lives easy and will facilitate 3 billion people in this eminent region. CPEC have up to 6 years short term goals while when we look at the long term affects it will take 10-15 years time to be fully developed CPEC demands china’s huge investment package of 46 billion USD this includes an impressive display of projects of infrastructure which includes those of railways, highways that are used to connects Gawadars (Baluchistan) and Kashgar (Xinjiang) to many other Islamic countries, other than that it will also connect to Asia, and Europe. When we see the effect of CPEC, particularly on Pakistan’s economy, which has improved after the involvement of CPEC, this project can provide different type of comforts whither directly or indirectly it will make entry of life’s much more convenient in all levels such as marking, education, healthcare transportation and will take Pakistan towards the better living standard and it will further help Pakistan to grow and successes in the world.
This project (CPEC) is the most beneficial and value adding project which connects China and Pakistan directly, its foremost object is to make and enlarge the activities that are going on between China and Pakistan to the Middle East, Africa, and Central Asia; also the sustainable development have begin to be most important object of CPEC, because of this CPEC have also included the central interconnectivity, constitution of infrastructure, advancement in the technology, construction of economic zone, improvements relating to agriculture, making and production of energy resources not only that but it also include the working to reduce the poverty in the country by providing education, environment that promotes livelihood, and improvement in health facilities further CPEC includes many different projects in many fields such as industry, agriculture, technology this start can permits the developing markets to make their trade level upgraded and enhance marketing by adding the value and further it will provide entrepreneurship and competition new market on amid trade allies, business tactics, effective discussion and policy advancements with all the member states also it will enhance Pakistan’s economy by letting it to enter into new market.

The example that we have in front of us is many new possibilities in Africa that have come after mobile phones, among all urban as well as to rural areas as mobile phone are used to create connectivity among all individuals these impacts can be limited specifically in a rural part of Africa because for many areas mobile phone is most new and very first invention of modern telecommunications infrastructure, people as well as in states along with many benefits of mobile phone one benefit is that it has reduced the cost of communication by letting institutions to seek, receive and impart information by very less expensive now when it comes to the current situation of COVID-19 countries are working to develop their data networks, those applications which are used to collect the important and concern information, there is this new concept of big data, and the whole world is focusing on this modern concept.

Enhancement of E-Governance in Pakistan and Combating the COVID-19

Now if we see the development of e-governance in Pakistan we can say that it has been improving since 2017 but still it requires so much to come close to China when it comes to technological advancement in 2018 when the now government came in function many new initiatives were made which have positive impact on the country also the prime minister so Pakistan introduces a website (www.pmo.gov.pk/) for the complaints by which people can submit their complaints to the government for the people belonging to every area and province this application is also for those Pakistanis who does not live in Pakistan also the visa, passports, NIC and other registrations are done online now days all of these acts done by the administrative authorities are the indication that how much a state requires to be digitalize to have impact on the peoples and facilitate them at every stage of their life now the above said act were done by government in peace times but these initiatives are not limited to as there is National Health service plan which was launched in 2020 to fight against the pandemic and get the knowledge and complaints relating to it the government have launch the website relating to it by which people can call the get all the information that they need relating to covid-19 ((https://covid.gov.pk/) this is the exact website that is launched in combating the covid-19 pandemic it provide the updated information to the general public also to aware the people relating to how serious this pandemic can be along with these websites there are also other benefits that have also been launched and e-services have played remarkable role, Further the national action plan was also introduces and it was done by the government of Pakistan in connectivity to the provinces and all institutional heads its purpose was to made the response, affective, timely, efficiently and control the spread of COVIS-19, further this plan is launched to control the spread, aware the people and to launched such emergency platforms to the patients which can respond immediately and affectively when we talk about particularly Pakistan then it would not be wrong to say that government of Pakistan have made several initiative to combat with the situation and these steps are not limited to digital work but also it has created so many centers and hospitals that were converted into quarantine centers.
There has been great work that has been shown socioeconomic enhancement and has been fighting against poverty and has set an example for the rest of the world as the government of China has successfully administered the pandemic, further it has uplifted 600 million people from crises of poverty from past 20 years when we compare both the countries Pakistan and China we can say that their strategies relating to covid-19 have been really different either they are lockdown strategies or any other as Pakistan has imposed smart lockdown in the country while China’s has imposed complete lockdown in the city of Wuhan, but due to economic instability and weak economy Pakistan had to remove the lockdown while China being the greatest manufacturing country that has made much protective equipment’s also China has used its e-services to provide those protecting equipment throughout the country.

Now because of CPEC, China will help to reduce the severity of COVID-19 and economic insufficiencies by removing the hurdles and dealing with those obstacles to improve the environmental stability and give rise to the trade of import and export because Pakistan is facing these crises so much that it is why China has provided them full care and amend assistance to fight against these timely crises. Further, China’s companies, particularly technical companies, have amalgamated with Pakistan so that e-governance in China can be improved. China has given its samples, models to the Pakistani government its has further provided technical assistance to Pakistan for the manufacturing of testing kits and masks (KN95), and with the time, Pakistan is now manufacturing these necessary things by themselves now these initiatives will show that CPEC is much beneficial to both the states Conclusions and Policy Inferences.

I would like to conclude this paper in such a way that in today’s time, Pakistan need to adapt and learn many digitalized ways from China further by adopting any successful method to integrate CPEC and to achieve the goal of sustainable development, e-governance is really important for the states because it brings the control of government and involvement of the citizens, transparency, accountability and increases GDP rate moreover with the help of BRI, CPEC will make easier for the region to combat with pandemic, because of CPEC both the countries can work together hand in hand and resolve their collective problems such as social and economical and get their work done from this digitalization hence e-governance is correlated to CPEC particularly.

In today’s times, there is great necessity and requirement of IT use because the implementation of National Digital Pakistan policy is much needed, it shall provide developing formulation in each and every sector to assure the economic and social growth in the country takes place, quick technology adoption, knowledge base economy.

Things on which Digital Pakistan Policy should be working on.

1. Decrease digital territorial inconsistency by spreading the telecom network,  
2. Change in obtainment and system of payment just to make these things effective by developing the financial system through advanced channels, and  
3. Giving the access to all unprevailed person to health and education and make the use of internet more common.

When we talk about particularly e-governance in Pakistan, we should say that Pakistan should not only be limited towards e-governance by just providing access to things, but further, it should also focus on providing the digital transaction methods at every level, whether government or public, just the way China is doing it, China has adopted these methods and efficiently use the Alipay and WeChat and have made everything digitalized by implementing the e-commerce, e-health, e-agriculture, e-energy, and e-governance and these efforts have added valuation to the economy of China. Pakistan shall also rebuild and execute those technologies and digital policies that can be the reason for value-adding characteristics of digital policy for the improved e-governance. It shall be proved that it has the ability to fight against pandemic and other future crises or diseases; this shall include many other factors such as.

1. Pakistan’s government should make visualized creating databases from all ministries and committees those that are answerable to others along with, clouds generating facilities should also be introduced.
just to centralize information which will become more reachable and safe by “G-cloud” servers. The technical mechanism should be used in every public platform or institute to produces and provide goods and services

2. such a portal shall be made that can indicate all information that is an online information portal for the e-agricultural use and make Pakistan modern in these terms just like the china as it has its agricultural system framework.

3. The effective e-health system is required in today’s times to give satisfaction to health-related issues, and as now after the pandemic, the governments’ foremost priority should be to stop the spread of covid-19 and other future crises like this pandemic for this, there should be different advisory facilities especially in those rural areas where people do not have an awareness of many things and these things should be made through internet and other mobile apps to monitor and have a record of the patient.

4. It is the responsibility of the state to strengthen the economic growth of the country and Pakistan’s government should focus on all the aspects inclusion with awareness of finance, the online payment service and making of regionalized payment gateway system these things will make add triple value to e-commerce of the country.

Since these digital technologies have developed with the time we need to put our lives in such a way that we can progress in future these technologies are the need of time they can facilitate people in many different ways which we have mentioned above, the world is changing day by day it had started to become digitalized Pakistan being developing state has the strong responsibility to adopt things which the whole world is adopting in times where each and every state is trying to move forward from one another Pakistan has to take an equal and important part in this race, china can begin one of the great examples can help Pakistan to achieve what is needed.
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