

Cloud Computing Is An Integral Tool For E-Government: Challenges And Prospects

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Abstract

Another worldview of cloud computing can support the customary government, residents, foundations, workers, and organizations through utilizing the advantages of cloud computing like versatility, dependability, and cost-sparing to be progressively viable, these days logical specialists right now roused, discussing the advantages, difficulties, and models of cloud government. Over the previous years, numerous organizations, government, and people have been begun to embrace the web and online innovations in their attempts to take advantage of cost decrease, adequate capacity, security, and improved usage of prevailing assets. The cloud technology is another method for computing that intends to give better correspondence style and capacity assets in a protected situation using the web stage and will get every sundry resident to take an interest in government undertakings. The electronic governments around the globe are confronting the proceeded with spending difficulties and increment in the size of their computational information so they have to discover approaches to convey their administrations to residents as moderately as conceivable without trading off the accomplishment of wanted results. Seeing e-government is one of the areas that are attempting to offer types of assistance using the web so cloud technology can be a reasonable model for executing e-government design for security, on-request benefits, stockpiling proficiency, and legitimate residents in the government exercises.

Keywords: Cloud Computing, E-government, G2C, Stakeholders, Public Services.

1. Introduction

The advancement in ICT has advanced a new aspect to governance pitch and the idea of electronic governance has begun. ICTs are developing faster than at any other time and these guide the process of development of good governance. The essence of e-government is to connect government activities with the advanced technology that the world is having today. This technology has already indicated remarkable employment in getting efficiency private sector through e-banking, e-business, e-procurement, etc. E-government is engaged in giving citizen services as well as in improving open sector efficiency, transparency, and responsibility in government works and decreasing the expenses of the open organization. Indeed, the crucial objective of the electronic government is to be able to offer open services to citizens in an efficient and perceptive manner, which is likewise the acceptable governance proverb. Therefore, e-government can be seen as an efficient apparatus for good governance in numerous countries on the planet, which are chipping away at open organization reform, attempting to make government more proactive, efficient, transparent, and especially more service-oriented. It permits the public to make the best usage of automated organizational processes that are accessible remotely. Governments globally are in consideration manner versus structures, processes, and actions to deliver effective and financially perceptive services over the net. Electronic government, which is the outcome of e-governance, possibilities the persistent advancement of Facility Delivery, Community support, and power by changing internal as well as external relations over technology, New Media, and the net [1].

For example, the European authorities explicitly stated cloud technology in its digital plan for 2020. It intends to strengthen the European local market through exploiting cloud technology benefits (Kuldeep, 2012). Cruz (2011) cited in Anjali Jain and U.S Pandey (2013) “Cloud computing is a collection of applications and technologies which can be accessed and manipulated by a large number of users in real-time” [1].

2. Cloud Computing

Cloud Computing defined “as a set of hardware and network resources that combine the power of multiple servers to deliver different kinds of services via the web”. The U.S. NIST described cloud-computing technology and outlined them as:

“Cloud computing is a model for enabling convenient, ubiquitous, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction”. In an organization, effective cloud computing technology can create high quality and more efficient applications and services as well as higher levels of satisfaction among end-users [2].

2.1 Essential Characteristics of Cloud Computing

As indicated by NIST, it recognizes five particular highlights of distributed computing as given underneath:

- a) **On-demand Self-Service:** A cloud's endorser can get to assets, for example, registering abilities, stockpiling, and so on whenever required without a need for specialist co-op.
- b) **Broad Network Access:** Any gadget, for example, cell phones, PC, workstations, and so forth can be utilized to get to the assets accessible over the web.
- c) **Resource Pooling:** Computing assets can be gotten to by more than each client in turn utilizing a multitenant design. In any case, clients are inexperienced with the specific area of

the gave asset however on account of a more significant level of deliberation, for example, the datacenter area may be determined.

- d) **Measured Service:** Cloud frameworks gives pay as scrutinize administration, which screens and control asset utilization to give straightforwardness to both client and specialist co-op.
- e) **Rapid Elasticity:** The administrations of distributed computing are flexible to the point that one can include assets when required and discharge them once they finish. Furthermore, assets are open to clients in boundless amounts whenever.

a. Cloud Structure Blocks Towards Electronic Governance

Structure blocks of cloud technology are embedded in software as well as hardware design and systems administration gadgets that empower creative framework virtualization and scaling. Nevertheless, the following framework advancements are increasingly powerful and transfer on unique provisioning to oversee in enormous groups inside the structure. Likewise, suggestions to the cutting-edge program configuration to utilize assets and adaptation capacities in an organization [3].

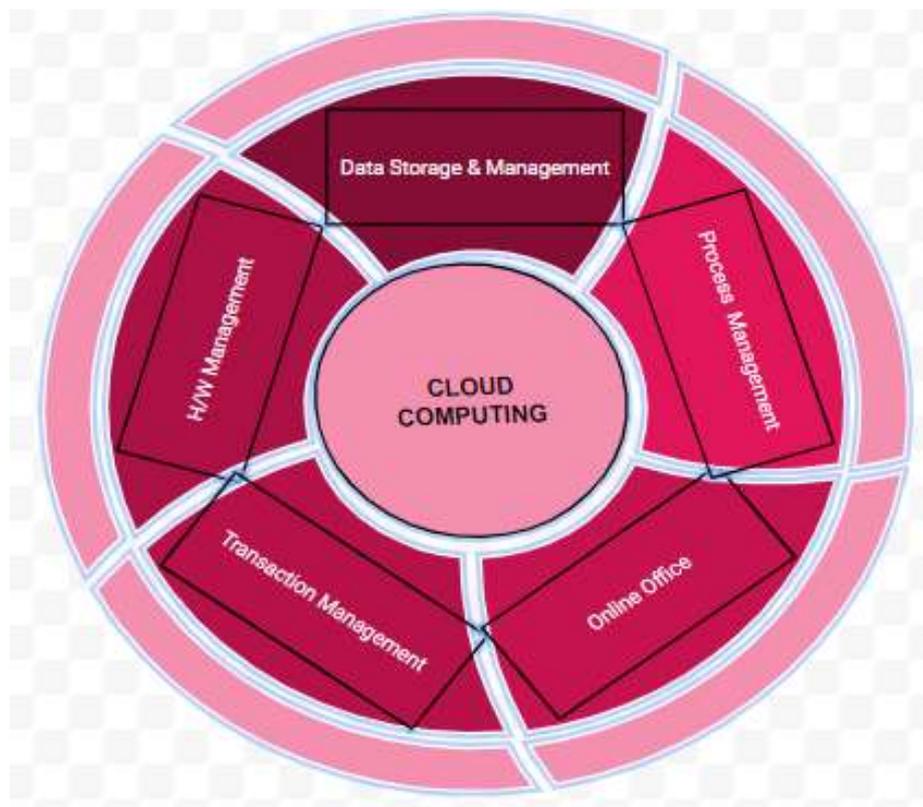


Figure 1. Incorporation of Public Facilities through Cloud

Cloud frameworks can present great implementation practices. However sharing a huge framework can normalize the inconstancy of personal outstanding tasks, it is hard to forecast the specific implementation attributes of an application at a specific period. Comparable any mutual foundation, shifting personal outstanding tasks at hand can affect accessible Networks, CPU, and I/O assets bringing about unpredictable performance conduct of the joined applications [3].

3. E-Government

E-Government is an ICT that utilizes the Internet and the Web to encourage connection between business, citizens, and government. E-government improves cooperation with industry, improves access to taxpayer driven organizations for citizens, citizens can be able to get the information they need, and effective administration of government.

E-governance mentions as digital government or online-government, it can be further defined as the public sectors' use of ICTs including the internet, mobile devices, advanced content, etc. to advance and improve the effectiveness and efficiency of the conveyance of information and facilities to peoples, businesses and organizations. "eGovernment" essentially is viewed as an influential instrument in the hands of government for enhancing revenues, cutting cost and improving the delivery of public services (Saeed, 2012) cited in {Formatting Citation}. It also purports to ensure the efficiency, transparency, and accountability in the running of government and show the method of good governance (Harris, 2000) cited in (Fang, 2002). Heeks (2001) [4], also point out three leading contributions of e-governance like connecting citizens (e-services), improving government processes (e-administration), and building external collaborations (e-society) [4].

Good governance is a concept that has newly come into regular use in public administration and political science. Inside the public administration discipline, great governance has been regarded as a new worldview in Public administration, which emphasizes the new type of method of public officers in giving top-notch services to citizens. As indicated by the World Bank, six significant issues need to be considered when talking about and assessing the level of Good governance improvement. They as follows [5];

- i) **Voice and Accountability:** Captures views of the degree to which a nation's peoples are capable to join in choosing their leaders, just as the right of expression, free media, and affiliation;
- ii) **Government Efficiency:** Internments insights of the nature of civil services, the nature of the common service and the level of its freedom from pressure groups, nature of approach plan and operation, and trustworthiness of the leader's obligation towards such strategies;
- iii) **Political Constancy and lack of violence:** Measures insights of the possibility that the leaders will be threatened or conquered by illegal means, like politically-encouraged crises and intimidation;
- iv) **Rule of Law:** Seizures bits of knowledge of how much causes have affirmation in the ways of individuals, and explicitly the idea of understanding authorization, property rights, the courts, and the police, similarly as the likelihood of defilement and brutality;
- v) **Regulatory Quality:** Seizures impression of the limit of the administration to edge and actualize far-reaching strategies and rules that allow and advance private division improvement;
- vi) **Control of Corruption:** Seizures' impression of the degree to which elites and private interests practice people influence for a private bit of leeway, including both insignificant and excellent types of degradation, similarly as "capture" of the state;

Good governance has significant ramifications for equity, poverty, and personal satisfaction. Therefore, moral governance ought to be transparent, participatory, and accountable in distinctive. This provides a framework, which enables decision-production based on wide consensus in society,

respecting the needs of the poorest and most vulnerable gatherings while distributing open assets and resources [5].

3.1 Categories of E-government Stakeholders

Categories can be arranged into five classifications [5]:

- 1) Government-to-Business and Business-to-Government (G2B & B2G): The utilization of electronic intends to actualize tenders and government buys.
- 2) Government-to-Citizen and Citizen-to-Government (G2C & C2G): Services gave toward citizens using the Internet or electronically which encourages the trading of information and communication.
- 3) Government-to-Employees and Employees-to-Government (G2E & E2G): Submission of appointments and jobs electronically, and public servants write a lot of requests with the internet or an email.
- 4) Government-to-Non-profit and Non-profit-to-Government (G2N & N2G): Cooperation between government segments and private divisions or NGOs (Non-profit making organizations).
- 5) Government-to-Government (G2G): Providing collaboration and communication with the different government divisions and other states.



Figure 2. Categories of E-government Stakeholders

4. The Connection Among Electronic Government With Cloud Technology

Cloud technology is utilized to support e-governments towards offering the most ideal types of assistance to its stakeholders for example businesses, NGOs, and citizens to decrease the expenses by diminishing monotonous activities and increment the viable utilization of resources globally. A few organizations in Australia look for imaginative approaches to convey taxpayer-supported organizations and need to excuse their technology resource so they started little aviators to assess the capability of the presentation, stages, and framework of cloud innovation [5].

UK government in 2011, distributed her ICT system, which secured the cloud figuring and included diminishing ICT budgets for administrations, advancing the utilization of records center framework, and expanding open segment deftness utilizing G-Cloud. However, in 2006, set Kuwait cloud computing was set up and has accomplished a few activities including information organization, which was expected to create an electronic government to consolidates applicable authorities. Her setup information arranges that joins more than 56 government sectors, sharing electronic records and information at a fast where the point of utilizing cloud figuring is for simple information reviewing and capacity, [5]. Cloud figuring innovations have numerous advantages in various pieces of e-government. These advantages talked about in the accompanying focuses.

4.1 Cloud Technology Advantages to Electronic Government

Cloud technology has numerous advantages in diverse pieces of electronic government. These merits are not restricted to the contents deliberated right now [6].

- a) **Rapid Elasticity:** The technology has planned to deliver services through unrestricted versatility, which is regarded as one of its fundamental features. Customers have access to an enormous pool of virtual resources, which permits them to respond to unpredictable times of peak load with an efficient, flexible, and financially savvy technique. Consequently, performance and economic dependability are balanced. Besides, cloud resources can be purchased consequently in any amount whenever.
- b) **Logging and Auditing:** Traceability is a need for a slight modification in the data resources of e-government facilities. Defilement in government organizations can use ICT services and accomplished service providers' responsibility. System audit and security processes ought to be performed periodically to confirm system security. Cloud can analyze enormous information and help to detect any misrepresentation. This can provide and place defense instruments to help to enhance the safety, so it can result in accessibility and reliability of the applications can be formed.
- c) **Budget and Efficiency:** The frameworks of cloud technology absorbed to deliver cheap services to companies and government activities. It creates a chance to change from expenses of investment to operating expenses by reducing the expense of buying very expensive systems and employ qualified personnel to accomplish and keep up. Hence, one of the significant barriers of having an enormous and expensive ICT infrastructure will be minimized and new chances for investment in emerging countries will grow further.
- d) **Disaster Recovery:** Cloud technology contributes to increasing powerfully the number of references to keep the nature of service even in congestion time, which is normal in the government in universal. It is designed in the cloud infrastructures, just as more choices for organizations restore data rapidly and efficiently than the usual model which provides disaster recovery. Right now disaster recovery, cost, and recovery time cheap. Governments can save a

backup server regularly by utilizing the cloud as storage for disaster recovery and they can store it out of the site by utilizing a third-person facility provider who stores in diverse areas or locations.

- e) **Policy Administration:** Policy management: the government in interaction with its citizens should implement the utilization of e-government policies. These policies ought to be run based on infrastructures and data centers to point better everyday functioning. Cloud technology Design aids the implementation of this arrangement in the data centers. Security policies, and deploy applications in the data centers can be deliberate and applied.
- f) **Attention in an Environment:** The utilization of ICT resources in the Public segment has made a negative impact on the eco so the pace of carbon dioxide rises and needs extra force utilization. Cloud technology is moderately proper for low vitality usage and gives all-around coordinated natural arrangements through virtual administrations. By utilizing web-based services, the force use of a run of the PCs reduced radically. As of late has been given a lot of thought with the impact of a data center. Force utilization and automated waste get natural impacts on the air. This could be one purpose behind the government's exchange towards the cloud benefits Instead of building new offices; the cloud administration gives the opportunity of coordinating utilities.
- g) **Data Scalability:** Datastore ought to be versatile to insurance the measure of expanded information in electronic government uses throughout the centuries. Whereas ensuring the trustworthiness of information in a database is close to nothing. The Cloud assets record has scaling abilities and be utilized for this kind of activity. The database gets cumbersome deprived of an unsettling influence on its implementation. First worry is the versatility and on-demand if the most significant stages of flexibility with high flow capacity are required at this point, not in the common condition, increment in the scale of the cloud databases utilized.
- h) **Security:** To achieve electronic government, Unique of the critical difficulties of authorities, was safety issue particularly information safety which earlier cloud innovation made various issues including interference of data centers or servers, nonappearance of access to specific administrations at specific periods, for instance, casting a ballot during election periods for leaders and citizens anyway introduction of cloud innovation incorporates propelled security advancements [6-8].

4.2 Challenges of Cloud Technology to e-government

- a) **Data Scaling:** Probably aware, the electronic governance works deal with the enormous measure of information (of citizens), in this way, the alternative of scaling of databases as indicated by the information ought to be there. Cloud databases bolster top of the line versatility and additionally distributed adaptability. These databases can be used for on-demand adaptability of e-governance applications.
- b) **Security:** Security: Cloud technology safety worries the "accessibility, privacy, and integrity of information". Security assumes a significant role in establishing the trust of the users in cloud technology. On the off chance that we study, cloud technology in the context of e-government it is significant that e-government based on cloud technology ought to be secure.
- c) **Scalability and Performance:** Universally e-governance hoped to facilitate the developing figures and demand of citizens. Whenever executed, the e-governance entrances could become the major consumers and recipients of Information Technology. Adaptability is inbuilt in Cloud Architecture. E-governance applications can be scaled largely with the support of cloud technology.

- d) **Auditing and Logging:** E-governance facilities following are essential at a periodic interval. ICT Services can be utilized for controlling dishonor in government parastatals. Consistent Audits (process just as security audits) must be done to ensure adequate security of the system. Cloud technology can make the review process easier by examining a huge measure of information and detecting any extortion. With the help of the cloud, a defense mechanism can be developed to improve security.
- e) **Data Leakage:** It touches the confidence of peoples and civic sector society in cloud-based e-government applications. E-government system contains sensitive data and information about users and industries therefore the security of sensitive information is significant. Information leakage can be likewise the primary source of discouragement for the government to use a cloud-based e-government system.
- f) **Reporting and Intelligence:** Various aspects like server farm usage; peak-load hours, utilization level, power usage, etc. are to be watched for the better utilization of assets. Diverse services provided by the Government can become better and more citizen approachable if they can be visualized appropriately. Unlike frameworks like MapReduce (Apache Hadoop) can process big dataset accessible on clusters of workstations. Cloud technology offers easy incorporation with these types of frameworks.
- g) **Policy Administration:** Policy Administration: The government has convinced rules in ways of interacting with peoples. E-Governance additionally observes to these strategies. Alongside the organization and data center, rules should be imposed on everyday tasks. Cloud assistance in applying these guidelines in data centers. Regulations like application, deployment, securities, and so on are excessively useful to data centers flawlessly.
- h) **Frameworks Integration and Legacy Programs:** Fundamental preferred position of e-government can be data sharing among diverse areas. This mutual information can be utilized for various situations in public organizations. The IT enables e-government in co-relating information through applications and offers communications across various frameworks to serve the citizens. Service-Oriented Architecture of Cloud technology gives a wonderful response to the coordination of various resources [7-8].

5. Samples of Cloudy Governments

- A) **United Kingdom:** The "G-cloud," has been implemented by UK authority which is to be a legislature wide cloud-computing system, a key need. The Digital Britain Report gave mutually in June 2009 by the Department for Culture and the Department for Business Innovation and Skills, Sport and Media, which requires the UK government to start to lead the pack in a wide-going digital system for the nation. Executive Gordon Brown declared the issuance of the report: "Digital Britain is tied in with giving the nation the devices to succeed and lead the path in the economy of things to come". A significant part of the Digital Britain technique is to improve ICT use in government and take into consideration more administrations to online relocation. To help this activity, the UK's ICT obtainment efforts will be centered on empowering the legislature to turn into the main force in the utilization of the cloud. The report expresses that: "The Government's effect on the digital economy goes path past its job as a policymaker. In conveying public administrations, as a huge client of ICT items and administrations and as the proprietor of information frameworks, the open area has a huge effect available. In numerous territories, for example, instruction, wellbeing, and guard, the Government can utilize its situation as the main procurer of administrations, to drive up standards (at times to set standards) and to give a venture system to innovative work". The Digital Britain group from both bureau workplaces has an

official forum, where invested individuals can get familiar with the arrangement and remark on it [9].

- B) **Thailand:** Government Information Technology Service is setting up a remote cloud for utilized by Thailand's government workplaces. GITS has quite recently settled a cloud-based electronic mail provision, and it wants to incorporate SaaS contributions soon. GITS acknowledges that such blend will increase service contributions for government associations, while concurrently cutting their general ICT expenses "essentially" [9].
- C) **Japan:** The central government is embraced a huge cloud technology activity, named the "Kasumigaseki Cloud" (called for the fragment of Tokyo where various Japanese authority pastoral agencies are found). Activity hopes to improve a remote cloud condition that would have the whole of the Japanese government's registering at last. As per Japan's Ministry of Internal Affairs and Communications, the Kasumigaseki Cloud will give increasingly significant data and assets distribution, advance more standardization, and blend in the ICT resources of the governing body. By uniting all legislative ICT in a particular cloud structure, the Japanese government trusts it will see decreased expenses and operational advantages, yet increasingly "green," ecologically inviting IT activities. The Kasumigaseki Cloud is a piece of the Digital Japan Creation Plan. This speaks to an administrative exertion planned for using ICT investments (esteemed at just shy of 100 trillion Yen) to support spike fiscal recuperation by forming a few thousands of new ICT occupations in the following scarcely any existences and repetition the size of Japan's ICT display by 2020. MIC accepts that "accelerating the utilization of ICT across the country will require the administration to step up to the plate in implementing measures," and that the central government's advancement of cloud technology will not simply aid spike ICT improvement, however, to support reduce the digital separation in that nation [9].
- D) **Singapore:** Authority recognizes that each perfect of cloud architecture gives its degree of affirmation and advantages. Thusly, the policy of the cloud for their government is to influence the correct cloud for the best possible requirement by accepting a multi-prong way to deal with cloud technology as follows;
- ✓ Advantage industrially accessible open cloud aids for legitimate desires to profit by the lower charge of digital assets.
 - ✓ Implement a remote G-Cloud for entire departments utilized wherever safety and governance prerequisites cannot be achieved through the technologies.
 - ✓ Allow collaboration among initiatives and departments by many local technology ethics.

Government Cloud is the up and coming group of entire authority structure. Give proficient, adaptable, and strong assets for cloud computing and intended to achieve various degrees of safety and authority necessities:

- High Assurance Zone –A committed Digital asset pool that may be utilized by the management to help its great affirmation desires.
- Medium Assurance Zone –Figuring resource pool that will be granted to NGOs cloud clients to cut down the cost of registering properties for the government.
- Elementary Assurance Zone – A Figuring asset pool that is imparted to community cloud clients.

Moreover, total the whole-of-government request to limit the budget of administration, the government will perceive and offer ordinary sorts of help, for instance, customer relationship the executives, business investigation, and web content administration, SaaS and stage as an assistance submission on G-cloud. New central administrations like government web administration trade and passages to approval and portion administrations will be

remembered for the accompanying time of G-cloud. It engages institutionalization and sharing of recording assets and utilized at the whole-of-government's segments, right now rate investment funds to the government [9].

E) **United States of America:** The official online interface of the USA government (www.usa.gov) is one of the busiest web-based interfaces on the planet as it gets around 342,000 visits every day. It is the best website to visit when USA taxpayer-supported organizations are required. It is intended to help the residents of the USA to interface with the administration offices effectively. Nevertheless, clients regularly endured long deferrals and personal times during high traffic periods, for example, casting a ballot seasons, month to month joblessness measurements discharge days, and cataclysmic events. To conquer this issue, the USA government chose to grow new IT equipment gadgets, which remains Idle more often than not when there is no appeal to get to the online interface. It likewise utilizes more force and requires extra security highlights, for example, multifaceted validation and physical on-location security at the server farm building. The time required to overhaul this site was as long as nine months. The General Services Administration (GSA) was paying around \$2,000,000 for application licenses and equipment updates notwithstanding \$350,000 for employee's costs each year [9].

US first government Chief Information Officer (CIO), Vivek Kundra has recommended a superior methodology to relocate to the mists was chosen for the accompanying contemplations:

- Cloud-figuring stage's adaptability: the advantage of paying for a pattern limit for typical traffic periods, however, it can suit huge traffic when required and spare cost when it is not being utilized.
- Minimize time for efforts: Because of the offered types of assistance affectability, it needs the base time to finish the relocation. The genuine relocation procedure took ten days just, while the test approval happened in a week.
- Extra security components: Entirely the safety necessities for the site organization are met, for example, multifaceted validation (MFA) to get to the entryway, bundle stream investigation, 128-bit encryption for traffic, and asset following. Moreover, as indicated by the Ministry of Defense measures; an exceptional server farm has been worked to meet the security particulars of the physical structure [9].

The result of relocation to the cloud brought about lessening budget (up to 90%), improved abilities, framework adaptability, and complete procedure mechanization. Hence, client demands are taken care of continuously and permitted clients to get information to incorporate with different sites. The cloud-based arrangement made moves up to the site takes just a solitary day, which recently took nine months to achieve. Subsequently, the accessibility of the site expanded up to 99.99 % with right around zero personal time month to month. The assigned spending plan to www.usa.gov decreased to just \$650.000 each year [9].

5.1 Five Ways ICT Improving Public Services

- a) **Participatory Budgeting:** In the DR of Congo, peoples of South Kivu Province are using "mSurvey" to get data about budget gatherings. Via just their cell phones, they can actively monitor, discover what was decided at meetings, and evaluate those decisions via online voting. The Participatory Budgeting project encourages accountability by actively reminding local authorities of their commitments while ensuring that citizens are getting services they deserve.
- b) **Challenges of Addressing Policy:** How frequently do you acquire to co-plan results in facing problems in your city or country? Residents of Rio Grande Do Sul State, Brazil, can do that via their "Governor asks" initiative. More than 60,000 citizens have submitted proposals via the mobile, web, and face-to-face exchanges to address policy challenges.

- c) **Checking Toilets and Schools:** A public watching instrument on instructional services in the Philippines called CheckMySchool uses technology to motivate government responsiveness for development results. For example, locals are using CheckMySchool to crowdsource reports on the quality of toilets in schools. This incentivized government authorities to respond to the reports: first with inspections and second with funding to improve the poor facilities.
- d) **Transforming Connection among Citizens and Civil Services:** Kerala, a lovely state in India, is using the internet to improve its public services. A program called Akshaya is starting to transform the relationship between citizens and public services. Akshaya makes it easy for citizens to obtain a driver's license or keep the government accountable. Akshaya "focuses on efficiency, equity, and transparency of services by reducing the burden of physical visits to separate agencies, providing ready access to information, diminishing the discretion of officials, curtailing leakages and corruption in services delivery."
- e) **Giving Response in Real Time:** Would not it be helpful on the off chance that you could easily report in real-time if a teacher does not appear for a class? OnTrack is an engagement mechanism that permits citizens to provide feedback to the government implementing agencies of World Bank-financed programs. OnTrack uses SMS, web, and interactive mapping to engage citizens who can consider their governments accountable and improve services. OnTrack is currently being implemented in Bolivia, Ghana, Nepal, and Zambia [8].

6. Conclusions

This article presumes that the Cloud gives a viable response to each issue looked to implement the e-governance successfully. The Cloud offers a consistent combination with all the innovations present today. The projects of e-governance can be vigorously profited by the introduction of Cloud Framework. Loads of research must be directed before actualizing cloud innovation in electronic administration. Previously, moving to cloud innovation, one should have security issues as a top need. The safety of any cloud-based administrations must be firmly audited to comprehend the assurance of data.

Thinking about the advantages of cloud innovation, it is right now the best option for e-government, particularly for the creating nations that have not yet totally actualized e-government. This will diminish costs and upgrade productivity, data respectability, accelerating procedures, and client satisfaction. Indeed, even anyway, there are various drivers for development to a cloud-based arrangement; cloud innovation is not without downsides. The basic block in the cloud framework is that it is under the upkeep and supervision of an untouchable. Due to the quick advancement of innovation; it appears that in future the cloud processing will support various data frameworks. E-government executed on a cloud offers huge advantages to the governments, residents, and organizations. Various advantages like cost-adequacy, adaptability, accessibility, and reinforcement that cloud registering gives, has changed over it to a suitable choice for utilized in e-government.

7. Future Research

This article gives knowledge into the matters of cloud technology in e-government and examines the centrality of the novel advances to be grasped in completing e-government, for instance, cloud forms that give the general technique and strategies to achieve e-government content when in doubt. Later on, we might want to focus on the best way to impact e-administrations upheld associations using cloud innovation in more detail by giving a couple of recommendations on the most capable strategy

to pick the best organizations in the cloud to realize the best utilization of e-government utilizing cloud processing and will give an exceptional highlight to Kano State in Nigeria.

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