Barriers to e-Government in India

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Abstract- This paper deals with highlighting the various problems incurred by citizens of the country that have subsequently affected the overall impact of e-government in India. A number of problems have been discussed in this paper which have been categorized accordingly. The barriers have been discussed initially followed by possible solutions to overcome the same. We have gathered data from various other research papers and newspaper articles. Educational and rural disparity are the major hurdles in the success of e-government in India. Digital literacy is the basic requirement to utilize the facilities of e-government and lack of digital literacy happens to be the consequence of the aforementioned disparities which needs to be tackled if India is to utilize its e-government potential. This is followed by privacy and security of data. Certain policies and measures if implemented, can help solve the problem which can help accelerate the access and use of e-government facilities. With this paper, we wish to provide an insight into the current scenario of e-government service delivery in India so that meaningful steps can be taken to combat the hurdles such that e-government facilities are delivered and utilized better.

Keywords: E-Government, E-Governance, Barriers, Educational Barriers, Financial Barriers, Cyber-Security, Gender Barriers, Infrastructural Barriers, Psychological Barriers, Political Barriers

1 INTRODUCTION

"From creating infrastructure to services, from manufacture of products to human resource development, from support governments to enabling citizens and promoting digital literacy, digital India is a vast cyber world of opportunities for you", prime minister Narendra Modi stated while endorsing the digital India campaign in silicon valley back in 2015. This campaign marked one of the most significant steps India has ever taken towards e-government.

As per Wikipedia, e-government is defined as the "utilization of information technology (it), information and communication technologies (ICT S), and other web-based telecommunication technologies to improve and/or enhance on the efficiency and effectiveness of service delivery in the public sector." in the Indian context, e-government was first brought into implementation through the national e-governance programme (NEGP). Consisting of 27 mission mode projects (MMPS), the programme aimed to improve delivery services to individuals and enterprises such that it was accessible to every citizen [1]. India has moved up 17 places from being ranked 113th to being 96th in the un e-government development index from 2008-2018 [2] . Citizen's willingness to adopt e-government is one of the most dominating aspects of a successful e-government. [3] And the implementation of e-government was always going to be a challenge in a country like India where significant proportions of people suffer from poverty and illiteracy. Adding to this is the poor condition of government infrastructure within the country. The struggle for e-government is evident today. As per a report in livemint, the government planned to spend ₹1.13 trillion within the digital India initiative over the next three-five years after its introduction. Three years later in 2018, standing at 96th rank in the un e-government development index cannot be seen as an achievement with regard to the expenditures made.

2 PURPOSE

The purpose of our research is to analyse the barriers faced by e-government in India to induce a favourable attitude towards the adoption of this form of government within the citizens of the country.

3 LITERATURE REVIEW

3.1 What Is The Value Of E-Government?

E-government provides many opportunities to improve the quality service to the citizen. Citizens should be able to get service or information in minutes or hours, versus today's standard of days or weeks. Citizens, businesses and state and local governments should be able to file required reports without having to hire accountants and lawyers. Government employees should be able to do their work as easily, efficiently and effectively as their counterparts in the commercial world. [4]

3.2 What Is The Difference Between E-Government And E-Governance?

It is important to observe the distinction between e-government and e-governance. The most significance point of differentiation between the two is that e-government refers to the application of

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ICTS for better delivery of services to the citizen without any provision for the regulation of ICTS. E-governance on the other hand, lays down the provisions that form the boundaries limiting the extent of use of these ICTS.
Having understood this distinction, we have drawn on two streams of literature.

3.3 What Is A Barrier?

A barrier refers to a circumstance or obstacle that keeps people or things apart or prevents communication or progress. The word originated from the French word barriere, related to barre. According to Cambridge dictionary, a barrier refers to anything that prevents people from being together or understanding each other.

3.4 What Is An E-Government Barrier?

One of the project's first tasks was to clarify the definition of an e-government barrier that it will use in its investigations. We wanted this to be more precise than an everyday understanding of barrier as a physical obstruction that prevents or inhibits access to a location. Although the kinds of barriers to e-government we are investigating do not usually have such physical manifestations, we have found much value in
An analogy between e-government barriers and blockages in water pipes. This is relevant as the internet can be viewed as a network of electronic 'information pipes', where clearing a blockage to ensure the free flow of digital information and e-public services is as critical as removing physical pipe blockages that prevent the availability of ample supplies of water. [5]

3.5 Barriers Being Faced By Other Countries

TABLE-1 :

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Type Of Barrier	Resources	Countries Facing The Barrier	Definition
Digital Divide	[24] [26]	1-Uae 2-European Union 3-South Africa	The Gulf Between Those Who Have Ready Access To Computers And The Internet, And Those Who Do Not.
Lack Of Technological Infrastructure	[24] [27] [4] [26] [28]	1-Uae 2-European Union 3- USA 4-South Africa 5- China	The Term Infrastructure In An Information Technology (It) Context Refers To An Enterprise's Entire Collection Of Hardware, Software, Networks, Data Centers, Facilities And Related Equipment Used To Develop, Test, Operate, Monitor, Manage And/Or Support Information Technology Services.
Psychological And Social Barriers	[24] [29]	1-Uae 2-Usa 3-Republic Of China	The Psychological Or Emotional Barriers Refers To The Psychological State I.E. Opinions, Attitudes, Status Consciousness, Emotions, Etc. Of A Person That Deeply Affects The Ability To Communicate.
Funding Shortage	[24] [25]	1-Uae 2-European Union	Shortage Of Funds Refers To Deficit In Simple Terms, It Is The Lack Of Funds.
Political Instability	[24] [25] [26] [30]	1-Uae 2- European Union 3- South Africa	The Standard Definition Of Political Instability Is The Propensity Of A Government Collapse Either Because Of Conflicts Or Rampant Competition Between Various Political Parties. Also, The Occurrence Of A Government Change Increases The Likelihood Of Subsequent Changes.
Capacity Deficit	[24]	1-UAE	Deficiency In Amount Or Quality A Deficit In Rainfall. (2) : A Lack Or Impairment In An Ability Or Functional Capacity Cognitive Deficits A Hearing Deficit.

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4 BARRIERS BEING FACED BY INDIA

4.1-Educational Barrier

Educational barriers refer to all the obstacles that arise due to problems related to literacy and digital literacy. The lack of education among people in terms of reading act as literary barriers whereas the lack of knowledge about computers and their usage act as digital barriers. The states having the least literacy rates include Bihar, Jharkhand, Uttar Pradesh, Rajasthan, and Andhra Pradesh. These states alone make up around 38.71% of India's population. The condition of the lack of basic literacy in India makes digital literacy a luxury. As per an article published by the financial express, a report by the digital empowerment foundation suggested that 30% of our population lags in literacy and thrice of that in digital literacy.

The Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) was a flagship programme launched by the government of India to help citizens achieve digital literacy. The PMGDISHA documents say that "digitally literate persons would be able to operate computers/digital access devices (like tablets, smart phones, etc), send and

receive emails, browse internet, access government services, search for information, undertaking cashless transactions, etc. And hence use it to actively participate in the process of nation building". As per an article published by the Indian express, the ministry of electronics and information technology aimed to make a total of 3 crore rural people literate until march 31, 2018 out of which only 57 lakh people had successfully been literate. It means that only about 19% of the total target was achieved.

4.2 Financial Barriers

Financial barriers refers to the presence of limited funding, especially during the process of implementation. It is defined as lack of financial sustainability in a research work by Olusoyi (Richar) Ashaye, Zahir Irani Brunel University, West London, Uk. [6] Financial barriers are related to the developmental, implementational and maintenance cost of e-government (e.g. costs of software, hardware and training for government officials).these costs can be significant inhibitors. Also, issues in calculating tangible long term boons to offset clear, often apparently high, short term costs can adversely hamper the scope of e-government progress; particularly in a case where spending on e-government competes with other critical demands on public resources (e.g. building roads or schools)

In a survey conducted by dg information society and Media European Commission, it was found that difficulty in demonstrating the cost benefits of e-government initiatives was considered an important or very important barrier by 60% of project survey participants [5]

Funding related issues pose a serious threat to the implementation and maintenance of electronic government. The actors acting against e-government funding which are mentioned in an report named challenges to e-governance [7] :

E-government is less likely to win in competition with other public policy goals e.g. health, education, security

It is difficult to measure costs and potential benefits of electronic government, so to develop funding cases for projects

If not treated as capital investment, e-government has to compete with other pressing recurrent funding proposals, and will be likely to involve comparatively large expenditure.

Governments are reluctant to commit expenditure beyond budgeting horizons, and yet many e-government projects are of multi-annual nature

4.3-Cyber Security Barriers

The potential that a given threats would exploit the existing vulnerabilities of electronic government systems, and henceforth cause harm to the information assets online refers to cyber security risk. Cyber security risk pose a threat to CIA (confidentiality, availability and integerity) of information which we have defined below.

The security risk arises when the information assets are being uploaded, transmitted, processed and stored across e-Govenrment domains (ISO-27K, 2008; NIST, 2002, 2007A). Lack of cyber security acts as significant barriers to the acceptance of electronic government. Lack of cyber security refers to inadequate security of government hardware and software, that is, the electronic mode of government is subject to multiple risks like theft, fraud and accidents like hacking. Since most of the technology (software and hardware) which the government uses is prone to exploitation by hackers and other cyber criminals. There exists three aspects to data security mentioned in a paper by Shailendra Singh member,ieee; D Singh Karaulia [8] -

Confidentiality: it refers to the protection of electronic information from unauthorized access. That is not providing the information to those who aren't entitled to it

Availability: it refers to the availability of information when it is required.

Integrity: it is related to protecting information from unauthorized modifications, and ensuring that information can be reliable.

There could be many types of attacks on information available online which are mentioned in Figure 1 & Table 2-

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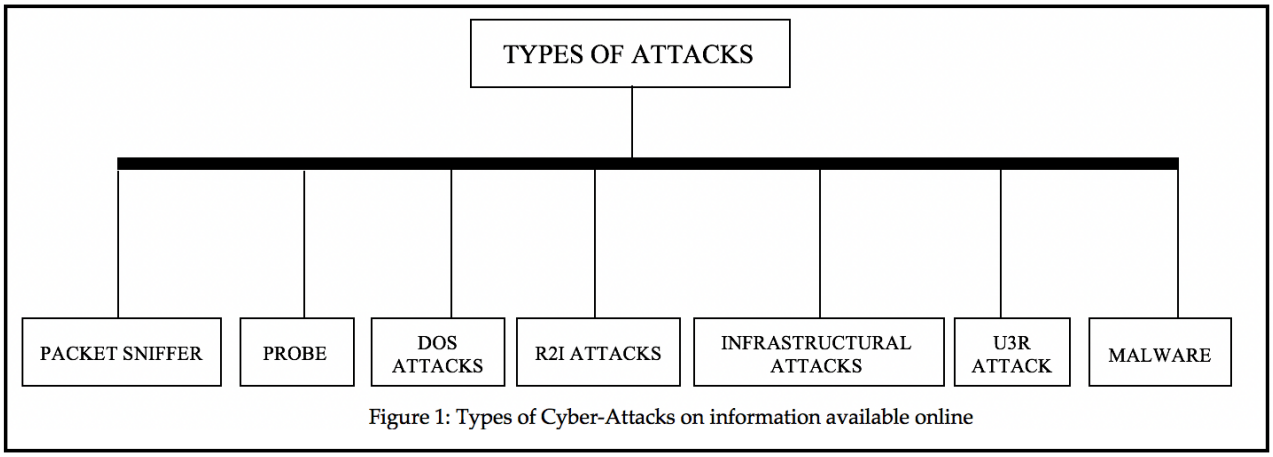

Figure 1: Types of Cyber-Attacks on information available online

TABLE-2 [8]

S No.	Name	Definition
A-	Packet sniffer	A packet sniffer, sometimes referred to as a network monitor or network analyser, can be used legitimately by a network or system administrator to monitor and troubleshoot network traffic. Using the information captured by the packet sniffer an administrator can identify erroneous packets and use the data to pinpoint bottlenecks and help maintain efficient network data transmission.
B-	Probe	Probe is a class of attacks where an attacker scans a network to gather information or find known vulnerabilities. An attacker with map of machine and services that are available on a network can use the information to notice for exploit EG. IPSWEEP, PORTSWEEP, NMAP, SATAN.
C-	Malware	Malware, short for malicious software, consists of programming, (code, scripts, active content and other software) designed to disrupt or deny operation, gather information that leads to loss of privacy or exploitation, gain unauthorized access to system resource, and other abusive behaviour.
D-	Internet infrastructure attacks	These rare but serious attacks involve key components of the internet infrastructure rather than specific systems on the internet.
E-	Denial of service (dos) attack	A denial of service attack is a class of attacks where an attacker makes a computing or memory resource too busy or too full to handle legitimate requests, thus denying legitimate user access to a machine.
F-	Remote to local (r2l) attack	A remote to local attack is a class of attacks where an attacker sends packets to a machine over network, then exploits the machine's vulnerability to illegally gain local; access to machine .
G-	User to root (u3r) attack	User to root attacks are a class of attacks where an attacker starts with access to a normal user account on the system and is able to exploit vulnerability to gain root access to the system e.g. load module, perl, buffer overflow, rootkit.

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4.4- Gender Barrier

The obstacles faced for the success of e-government include the disparity of usage between different

genders. For the purpose of our paper, we have taken only males and females into account. In India particularly, this disparity is not only by choice but also because of the inability of the women and girls to be able to use these facilities.

There are glaring gaps between the literacy rates among men and women. As per the census of 2011, 65.46% of females were literate while men literacy stood at 82.14%. The lack of literacy itself prohibits the individual from using internet. Digital literacy too shows a big difference between males and females. An article in the livemint published in 2018 stated that 42% of the global gender disparity in digital literacy comes from India.

Access to internet by females is also restricted by their families in the country. The women and web report revealed that one in five women in India and Egypt believe that the internet is not appropriate for them, or that their families would disapprove, and that engaging online would not be beneficial regardless. There are other reasons as well that stimulate such a gap. Women are deprived of leisure periods due to household work and motherhood. Adding to that, working women need to look after work at the office and the work at home. Adding to that, Indian households seek men as their sole decision makers and it is men who participate in government –related affairs. The decision-making authority of women in India revolve around the periphery of household work only. And thus, women aren't provided with the adequate opportunities to participate in government related affairs thereby restricting the involvement of women in e-government too. [9]

Women do not be actively involved in the cyberspace due to personal choice as well. It has been found that women generally experience a higher degree of anxiety while using computers in comparison to men. [10] The concern regarding too much sexual content available on the internet is one of the reasons for non-users feeling more anxious about using the internet. Receiving unpleasant e-mails was a primary concern for the non-users. [11] It is highly important that women feel more comfortable and secure over the internet. Thus, inducing this sense of security in women such that more women use the internet and subsequently utilize e-government services is a huge challenge.

4.5 Infrastructural Barrier

The oxford dictionary defines infrastructure as "the basic physical and organizational structures and facilities (e.g. buildings, roads, and power supplies) needed for the operation of a society or an enterprise". The inefficiency or lack of these facilities or structures to enable and promote the online delivery of governmental services are the infrastructural hindrances. This kind of barrier is very prominent and evident in India. Governmental infrastructure has been below standards within the country.

Despite leading the world in payment system evolution, connectivity remains a far cry for India. The lack of optic fiber blackhauls have deprived people from enjoying high broadband speeds at the national level. And despite being fully granted by FDI, the struggling condition of the telecom sector is a proof of lack of investor's confidence within the sector. The other important aspect to be noticed is the lack of smartphone availability among citizens of the country. As of 2016, 85% of the 100 million broadband users in India were mobile. [12] The shortage of smartphone accessibility is also a reflection of lack of digital literacy and trust in using electronic devices to carry out government-related affairs. But it is important for the government to firstly avail these services to the masses with ease so that they can gain information about the same.

Digital divide is one of the key global barriers to e-government adoption as computer illiteracy and low internet and pc penetration are still widespread. [13] India is a country which witnesses great digital divide. The concentration of development of digital resources is in the urban parts of the country. An article published in the Hindu in 2016 presented the data given by TRAI which showed that urban India had 61.9% internet subscriptions per hundred people as against just 13.7% in rural India. The same article stated that Delhi itself had 22 million internet subscriptions indicating the disparity between the urban and the rural areas.

4.6 Psychological Barriers

The psychological barriers also referred to as emotional barriers refers to the psychic state, that are, opinions, attitudes, status consciousness, emotions, etc. Of a person which in effect has a severe impact on the ability to communicate. Psychological barriers creates an obstacle for effective communication and functioning of e-governance.

Psychological barriers here refer to the factors and their subsequent impact on an individual's mind such that the person is not inclined towards utilizing the services of e-government. In this paper, the psychological barriers covered are the unwillingness of people to adopt new techniques, lack of e-trust, perceived risk, and refusal of even

digitally literate people to use these services simply by choice.

E-trust refers to the trust of an individual in digital context. [14] Gaining trust of people to use electronic services is difficult as the use of these services involves the participant to provide sensitive personal data which is both financial and non-financial.
Psychological barriers have been much researched and debated upon. One kind of barrier may be factor for one individual while it may be a consequence of some factor for the other individual. Also, the profession of an individual may also determine one's degree of inclination towards e-government. One potential supply side barrier is organizational or staff resistance, and the
Source of this resistance is the perception that technology replaces the need for people. [15]
Psychological barriers such as the internal belief among the people of a country that the implementation of electronic governance would not be beneficial for the country and would simply result in wasteful usage of the tax payer's money.
Many a times the people do not like to come out of their comfort zone, as coming out of the comfort zone involves learning various new tools that are being implemented in their surroundings.
Another psychological barrier that exist to the acceptance of electronic governance is the involvement of the population in incorrect or unhealthy thought patterns. These can include denial towards digitalisation, a perceived lack of interest and support, dysfunctional attitude towards the situation.
Another major type of psychological barrier that exist is the lack of trust and faith of the general population on the electronic governance. Doubts related to the security and privacy of the data being stored in the online portals always exist among the minds of the people.

The psychological barriers mentioned by Mireia Aina Paulo Noguera in his findings on opportunities and challenges of e-governance: a reality or science fiction for the Chinese government' [16] are as follows-
Lack of protection of information
Minimal citizens' access to information and transparency
Limited citizens' engagement
Trust and faith issues
Existence of the stereotypes among the general population

4.7 Political Barrier
Political barriers relate to the presence of insufficient political involvement.
The hindrances faced by the government to implement and the problems faced by the government to utilize e-government facilities due to the political conditions of the country is covered under political barrier. Every country has a political structure. Some of the countries today have a system that are effectively using e-government while some aren't. There are a few reasons covered in this section as they are prominent and relate to the Indian context.

The integration of technology into government services has bloomed only in the recent years in India. As is the case with Arab states, the various governments recognized e-government as a complementary service rather than a pivotal method to delivering government facilities. In India, it can be argued that the "digital India" initiative has been the biggest nation-wide step taken by the Indian government towards e-government.

Being a democratic republic, the central government has been held by different parties for specific periods of time since independence. But the shuffle in governments is not always healthy for e-government because this prevents the continuous development of e-government plans. Different parties come up with their own initiatives thereby not contributing to the older plan if not replacing it.

Another factor that acts as a barrier is the opposing of e-government plans introduced by existing government by other political parties. Highlighting the limitations of an initiative with an intention to downgrade the ruling party can be an effective tactic adopted by opposing parties for political reasons. In the Indian context, when the current prime minister launched the "digital India" initiative, one of the biggest opposition parties accused the current government of renaming an initiative which is undertaken initially by the opposing party while it was in power. [17]

5 OVERCOMING THE BARRIERS

5.1 Knowledge Networking
Knowledge networks are defined as a set of nodes-individuals or enterprises who act as archives who store knowledge and also act as mediums that search for, create and transfer knowledge who are interconnected by social relationships thereby facilitating or restraining the search, creation, or

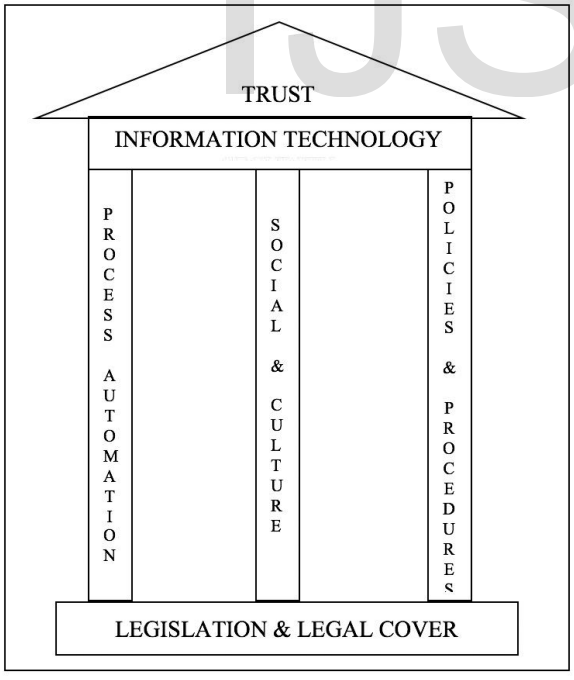
transfer of knowledge. [18] Such networks can be vital to bridge the gender gap.

Networks should be introduced such that these networks recognize the value of knowledge possessed by women and realizes their knowledge as a valuable addition to the knowledge pool where women are seen as vital and equal contributors. ICT volunteers can help local women communities especially in the rural area to be connected to other communities sharing similar interests. [19] In addition, the knowledge extracted from such communities can be transferred to special departments of the government who can look into these findings and can understand their problems better.

The gap between the use of e-government by male and female individuals within the country is mammoth. The inclusiveness and participation of women is key to an effective delivery of e-government services. However, this mechanism can be effectively used in rural areas or smaller cities to help connect to men in such areas as well.

5.2 Building E-Trust

The Proposed Trust Model:



Trust in digital context is known as e-trust. E-trust refers to electronic trust, wherein an organization provides software for safety online, specially while sending personal data or making payments over the internet.

From linguistic point of view, the Webster's New Collegiate Dictionary defines trust as: Noun: 'assured reliance on the character, ability, strength, or truth of someone or something'. Verb: have trust in - 'to place confidence: DEPEND', 'to be confident: HOPE', 'to commit or place in one's care or keeping: ENTRUST', 'to permit to stay or go or do something without fear of misgiving', 'to rely on the truthfulness or accuracy of: BELEIVE', 'place confidence in: rely on'. Morton Deutsch defines trust from psychology point of view as confidence that one will find what is desired from another rather than what is feared.

5.2.1 Information Technology

From a security perspective, trust is the result of applying a combination of IT controls; those controls are:

- The organization knows that the customer is who he says he is.
- The customer has the authority to send the message.
- The message did not change between the receiver and the sender.
- The message came only from the sender.

The goals and objectives of the IT controls are to assure user authentication and data confidentiality [20]

The different components of those controls are focused on:

TABLE-3 *[20]*

S. No.	Component	Definition
1	Availability	Assures that the system works properly and the services are available to authorized users for intended use only
2	Integrity of Data and System	Means that the data is free from unauthorized manipulation, either in storage, during processing, or during transmission.
3	Confidentiality of Data and System	Means only the intended user receives the information and that information is not disclosed to any unauthorized individual. The confidentiality principle applies to data in storage, processing and in transmission.
4	Accountability	Is a requirement that actions of an entity must be traced uniquely to that entity; it becomes significant for issues like non-repudiation, fault isolation, intrusion detection and prevention, after-action recovery, and legal action.
5	Assurance	Is required to show that the security measures have been properly implemented and they work as intended.

5.2.1.1 Process Automation

Using new technologies represent new possibilities and challenges at the same time for businesses. Some organizations block the use of new technologies because the risks are too high. But the risk of not using new technologies could mean an organization is outdated and no customers are willing to deal with it. The impact of using new technologies might positively affect the organization from trust point of view; customers would feel they are cared of by the organizations; this results in good reputation and more trust *[21]* .

5.2.1.2 Social And Culture

System trust is based on the effectiveness of social structures in reducing uncertainty and providing foundations for secure feelings about the *future. [22]*

It recognizes that:

- Culture is a vital concept for understanding the adoption of IT. 106
- Cultural values, beliefs, attitudes, behaviours, norms, experiences, and all of these concepts in conjunction affect the adoption process of e-government.
- The adoption of e-government in the public sector is influenced by the behaviour of employees and how they perceive, use, accept and adopt this technology.
- E-government adoption in the public sector is influenced by technological and social factors.

5.2.1.3 Policies And Procedures

Policies and Procedures followed by e-Government are very important to strengthen trust between exchange parties. They include internal policies and procedures concerning business process implementation, accountability, responsibility, transparency, preserving privacy, compliance investigations and expose punishments and precautions taken to keep personal information safe and secure *[23]*

5.2.2 Legislation And Legal Cover

Legislation and legal cover aspect of e-Governance mostly focuses on:

- Rewriting laws whose applicability is challenged in cyberspace,
- Formulating new rules to address new business models, new consumer's risks, and new ways of delivering government services,
- Ensuring the infrastructure survivability and competitiveness.
- Developing infrastructure, education, and seed funding for start-ups at the society level and in less-advanced digital societies.

5.3 Finance And Feasibility

India Lags Way Behind In The Race Of Adequate Allocation Of Financial Resources For The Adoption Of E-Governance. The Country Must

Focus On Providing Greater Allotment Of Funds To The Adoption Of E-Governance. The government must increase its allotment of funds towards the e-government initiative thereby making increasing its accessibility and availability.

Also Initiatives Like 'Make In India' Would Help The Country In Developing Technological Resources At A Much Cheaper Price And Henceforth Overcome The Issue Of Non-Availability Of E-Governance Due To Presence Of Exorbitant costs. Building technological infrastructure would also help the country overcome the feasibility issue currently being faced.

6 CONCLUSION

In 2015, the government planned to invest ₹1.13 trillion in the Digital India initiative. Three years later, in 2018, India stands at 96th rank in the UN E-Government Development Index, Moving up from 113th in 2008. Even though moving up 16 positions in a span of 3 years, the increment still is not significantly high when compared to initiatives being taken for the same.

The results shows that there exists some severe and critical issues at the grassroot level which are acting as hindrances to the adoption of E-Government in India.

Some of the most relevant and significant barriers to the grieve issue are Lack of allocated funds to the E-Government initiative, Lack of literacy and education, inadequate faith and trust of the population among their leaders, unwillingness to adopt a new technology, lack of technological infrastructure and technological security and last but not the least digital divide as aforementioned in our work.

There exists critical solutions to the mentioned issues like Building the required technological infrastructure by allocating a substantial amount of funds for the same, working on AI like blockchains in order to overcome the current risk of exploitation of resources present online, increasing the human development index by manifolds, etc.

As there are two sides to a coin, E-Government has some disadvantages like huge cost, inequality, inaccessibility and hyper surveillance. However the advantages of E-Governance are more than the demerits.

Merits like ease of doing business, Effectiveness and efficiency, government transparency, facilitating G2G and B2B communication and many more.

Therefore, we cannot call India an E-Government giant but in the coming years it surely would be one.

6 REFERENCES

1. Current Scenario of the E-Governance Initiatives, And Future Prospects of India By Dr Chinnathurai, Arsheed Javid
2. State of Ict Enabled E-Governance Landscape of India For Achieving Sustainable Development Goa By Giribabu Dandabathula (December 2018)
3. Factors Influencing E-Government Adoption in Pakistan Mariam Rehman (Computer Science and Information Management Program, Asian Institute of Technology, Klong Luang, Thailand)
4. E-Government Strategy Executive Office of The President Office of Management and Budget Washington, D.C. 20503
5. Breaking Barriers To E-Government Overcoming Obstacles to Improving European Public Services Modinis Study Contract No. 29172
6. Olusoyi (Richard) Ashaye, Zahir Irani Brunel University, West London, Uk: E-Government Implementation Benefits, Risks, And Barriers in Developing Countries: Evidence from Nigeria
7. Unegov.Net-School-Concepts-32
8. E- Governance: Information Security Issue By Shailendra Singh Member,Ieee; D Singh Karauli, Abusive Behaviourhttp://Www.Us-Rt-Gov/Control_Systems/Pdf/Undirected_Attack0905.Pdf
9. The Gender Digital Divide in Developing Countrie By David Tuffley (October 2014)
10. Frankel 1990; Lowe And Krahn 1989
11. An Evolving Gender Divide by Sonia Liff Academic Visitor, Oxford Internet Institute Reader, Warwick Business School, University of Warwick Adrian Shepherd Survey Research Officer, Oxford Internet Institute (July 2004)
12. A Survey on Challenges to It Sector in Digital India Program by Neha Gupta[1], Arnaja Sen[2], Priyanka Kuwor[3], Ankana Samanta[4]
B. E. Student, Dept. Of I.T., K. J. Somaiya

College of Engineering, Mumbai, India[1,2,3,4]

13. Exploring E-Government Barriers in The Arab States by Fadi Salem (December 2006)
14. Defining Trust And E-Trust By Mariarosaria Taddeo (August 2011)
15. Examining the Barriers To E-Government Adoption, Richard Schwester City University Of New York, New York Usa
16. Opportunities and Challenges Of E-Governance: A Reality or Science Fiction for The Chinese Government by Mireia Aina Paulo Noguera
17. News18 June 2, 2015 Https://Hindi.News18.Com/Tag/2-June-2015/
18. Knowledge, Networks, And Knowledge Networks: A Review and Research Agenda by Corey Phelps, Ralph Heidl, Anu Wadhwa
19. Theory and Practice Of E-Governance in India: A Gender Perspective
20. Building An E-Government E-Trust Infrastructure Hussein Al-Omari And Ahmed Al-Omari Computer Science Department, Applied Science University, Amman, Jordan
21. Gartner Group Report, 2002. Gartner Group Report To The Jordanian Ministry Of Information And Communication Technology (Moict)
22. Luhmann, N., 1991. Trust And Power. Ann Arbor, Mi: University Microfilms International.) (Lewis, J.D. And A.J. Weigert, 1985. Trust As A Social Reality. Social Forces, 63: 967-985.
23. Building An E-Government E-Trust Infrastructure Hussein Al-Omari And Ahmed Al-Omari Computer Science Department, Applied Science University, Amman, Jordan
24. Exploring E-Government Barriers In The Arab States By Fadi Salem
25. E-Government Implementation: A Reflection On South African Municipalities Tendani Mawela, Nixon Muganda Ocharahossana Twinomurinzi Department Of Informatics, University Of Pretoria, South Africa
26. Breaking Barriers to Egovernment Overcoming Obstacles to Improving EuropeaN Public Services Modinis Study Contract No. 29172)
27. E-Government in China: Status, Challenges, And Progress Inderjeet Singh Sodhi (St. Wilfred's P.G. College, India)
28. E-Government Strategy Executive Office of The President Office of Management and Budget Washington, D.C. 205033- Opportunities and Challenges Of E-Governance: A Reality or Science Fiction for The Chinese Government?' By Mireia Aina Paulo Noguera - 包玫兰
29. Department of Informatics, Namibia University of Science and Technology, Namibia School of Computing, University of South Africa

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