CHAPTER - 3

PROBLEM DEFINITION
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3.1 e-GOVERNANCE - A DEMON

3.1.1 INTRODUCTION

The e-Governance applications helps citizens with web based services at lower cost, convenience and efficiency. Its activities are extended to all categories of public and in every iota of government activity. Though its intention is good - "service all and hurt none" owing to some environmental, financial, economic limitations it is causing inconvenience and becoming issues of demon.
"The Information Society for Illiterate & Poor People" by Dr T.H. Chowdary[62], "e-Procurement-Case Study Experiences from Andhra Pradesh" by P. Raghuvantar[63] in their literature clearly questions "e-Governance Ban or Boom?" for which the various issues are analyzed and discussed.

3.1.2 FACTORS CAUSING e-GOVERNANCE AS DEMON

Among various G2C activities, the citizens are reluctant to use them because of their poor technical skills, lack of confidence in it, security and privacy concerns etc. As most of the Indian population is illiterate and causing the public feel inferior to technology and it is not in reach of poor. This causes discrimination between poor and wealthy citizens - It is a demon.

It is noticed that there are improper, lousy security infrastructure and access control mechanisms. Security issues like authenticity, confidentiality, integrity, non repudiation, accountability also need to be addressed. As severe security problems rose in the initial projects, it caused a phobia of threat to work with e-Governance applications - It is a demon.

There is a necessity for maintaining a secure environment for hosting the government’s data. Storage and archiving the data is necessary for certain period of time depending on the e-Governance application. Access roles and access permissions are to be properly defined and maintained. Proper authentication and authorization is necessary, at the time of accessing sensitive data. As this failed with some the applications, the confidence is weakening with many of its stakeholders - It is a demon.
In many of the G2G applications, the role based access is a consistent, efficient and secure method to enable the access of right resource by the right user. This is to be trained, failing which causing the civil servants think twice about e-governance - It is a demon.

The life of the citizen's data depends upon the application and the regulatory requirements. The question is whether the data is confidential? This is making citizens to be away from e-Governance applications - It is a demon.

Increased contact between government and its citizens goes both ways. Once e-Governance becomes more sophisticated, citizens will be forced to interact with government electronically in a larger scale. This could potentially lead to a lack of privacy for both parties leading to hyper surveillance - It is a demon.

The funding strategies, grants, utility and outcome are not up to the expected levels. Draining the funds to waste causing more implementation cost and less benefits - It is a demon.

Opponents of e-Governance argue that online governmental transparency is doubtful because it is maintained by the governments themselves. Information can be added or removed from the public eye with or without public notice. This is creating a pseudo transparency - It is a demon.

With increased use of computers in homes and offices, there has been a proliferation of computer-related crimes. These crimes include crimes committed by using computers as a means, including conventional crimes and crimes in which computers are targets. The investigation of such crimes is
complex. The evidence is often in an intangible form. The challenges in such cases are not only technological, but also jurisdictional - It is a demon.[64]

To combat computer-related crimes, the CBI, India has the following specialized structure

- Cyber Crimes Research and Development Unit (CCRDU)
- Cyber Crime Investigation Cell (CCIC)
- Cyber Forensics Laboratory
- Network Monitoring Centre

Staffing, funding, organizing, coordinating these departments is costly affair as well as risky process - It is a demon.

The chief problem is inadequate assistance from the Internet Service Providers located in other countries through which the criminals had entered into Indian and lack of support from the foreign law enforcement agencies concerned. Government of India has designated CBI as the national nodal agency for coordination in High-Tech Crimes. In this environment, the e-Governance is troubling the public, business communities and civil servants with disturbances - It is demon.

The problems of e-Governance applications are classified as G2C, G2B and G2G issues and are elaborated in the sections 3.2, 3.3 and 3.4.

3.2 GOVERNMENT TO CITIZENS (G2C) ISSUES

3.2.1 INTRODUCTION

The Government-to-Citizens (G2C) category of e-Governance includes all the interactions between government and citizens that can take place electronically. The goal of e-
Governance is to have greater citizen participation in the nation's capital. G2C applications enable citizens to ask questions and receive answers, pay taxes, receive payments and documents and so forth. For example, citizens can renew driving licenses, pay traffic tickets and make appointments for vehicle inspections and driving tests. Governments also can disseminate information on the Web, conduct training, help citizens to find employment and many more.

e-Governance allows citizens to interact with government at any time from any location eliminating the necessity of physical travel to government agents. Improved accounting and record keeping can be noted through computerization, information and forms can be easily accessed with reduced processing time. On the administrative side the information can be stored in databases and backup copies in various locations, increasing speed and security of transactions for both parties[06].

There are also some technology-specific sub-categories of e-Governance to serve citizens, such as m-Government (mobile governance), u-Government (ubiquitous governance), and g-Governance (Global Positioning System applications for e-governance). Despite of the said positive narration, the various G2C issues are discussed below.

3.2.2 G2C ISSUES

POPULATION EXPLOSION: India is fifth biggest country in area and stands second with dense population of 1,015 millions. Increased population increases the need of citizens and can be answered through computerization of the public needs through e-Governance applications. This satisfies to some
extent but it is not in a position to meet the demands of the huge public.

POVERTY: About 30% of the Indian population is below poverty line. They don’t even have proper food, clothing and house to reside. It is becoming meaningless to computerize the government activities, which are not in reach of poor citizens.

ILLITERACY: Literacy rate is around 60% and rest 40% are dependent on farming and labor works and can’t even read or write. The G2C online activities are not in approach to the illiterate public.

VILLAGES: India is with more than 6 lakhs of undeveloped villages with 72% of rural population. The urbanization and other development activities are far away from the near feature which ripples the G2C activities.

CORRUPTION: Improper utilization of funds, Corruption and favoritism, unnecessary involvement or negligence of officials and political leaders is hampering the growth of G2C implementation.

TELECOM PROBLEMS: The infrastructure of telecommunication services are to be developed and existing system should be improved. Telecoms lack advancements like ubiquitous, broadband and other future technologies [12].

UNAFFORDABLE COST: The cost of telecom and internet activities is not within the reach to earnings of the general public. Lack of financial affordability with public, telecom rationing system, free browsing centers etc is limitations for G2C progress.
FUNDING PROBLEMS: India is a developing country requiring a greater financial support to launch G2C projects. Insufficient allotments of funds for investigating the project, analysis, developing, launching and maintaining is one of the major issues.

LACK OF RELIABILITY: Reliability of the political parties and the stability of government is the foremost factor for G2C development. Various G2C projects are proposed to initiate but nagging because of various political reasons and regional discrimination.[63]

LACK OF TECHNICAL SKILLS: Lack of technical knowledge of our politicians, authorities is other aspect making G2C activities lagging behind hampering the progress.

COMPUTER ILLITERACY: Public lack technical knowledge, which is making them move away from the G2C activities. Citizens are far away from minimum computer and internet operating skills.

CATEGORY OF CITIZENS: The G2C activities should target the category of citizens to whom they are designed for. Improper target designing leads to ambiguity of application leading to its failure.[44]

HUMAN TOUCH: Value should be given for "human touch". Rather than totally concentrating on the technical aspects and designing activities, the G2C activities should give importance for human feelings, pleasing interactions and concern towards citizens.

ECONOMIC AND FINANCIAL ISSUES: Lack of clarity on financial or economic transaction over internet on government tariffs, customs and taxation policies creating mishap to G2C application utility. Lack of proper
regulatory agencies, online economic strategies correlating traditional strategies is a troublesome factor.

**LACK OF TRUST:** The key financial barrier of G2C is electronic payment systems. Suspicious of fraud in money transfer activities and the incidents of cyber crimes, online bank thefts supported it[63].

**LACK OF ONLINE SUPPORT:** Public require online support in clarifying their doubts while working with G2C applications. Lack of privacy, protection, confidentiality, online documents and other transactional activities of some applications is increasing distance.

Apart from the discussed issues the factors like pseudo e-Governance applications, regional, religious, linguistic and other social factors are catalyzing the G2C issues.

### 3.3 GOVERNMENT TO BUSINESS (G2B) - ISSUES

#### 3.3.1 INTRODUCTION

Government interaction with business organizations is dealt by G2B. The activities of G2B, though we consider as Government to business, in other sense it can even be considered as Business to Government. Thus, G2B refers to e-commerce in which government sells to businesses or provides them with services, as well as to businesses selling products and services to government. Two key G2B areas are e-Procurement and auctioning of government surpluses to business parties.[37]

#### 3.3.2 E-PROCUREMENT AND AUCTIONING

Government buy large amounts of Maintenance, Repair and Operational items and other material direct from suppliers.
In many cases, law mandates a Request For Quote (RFQ) or tendering system. For years, the manual tendering system is with problems like Discrimination in issue of tender schedules to suppliers [Annexure 1], Ring (group) formation suppresses competition [Annexure 2], Physical threats to bidders and tender boxes at multiple locations, Manual movement of tender files, Delays in finalization of tenders causing possibility of tampering or loss of records[Annexure 3], Human interface at every stage, Lack of adequate transparency, Adverse Press coverage on Tender fracas.

e-procurement.gov.in showing that number of tenders and value of tends increased

To minimize manual tendering and auctioning problems the online e-Procurement and e-Auctioning applications were introduced by government of India[Annexure 6]. Though it is boom to the business society, it is with some issues which are discussed below.[Annexure 4,5]
3.3.3 G2B ISSUES

INTEGRATED SERVICE REQUIREMENT: In many situations, integrated services are required by enterprises and government agencies which are presently not available in most of the G2B activities.

LACK OF INFORMATION: Lack of information about business organizations and about different government agencies may cause problems on both sides and leads to loss of business. Both the government agencies and business bodies should have awareness on each other to have proper coordination and communication among themselves.[37]

LACK OF TRAINING: Due to lack of knowledge on ecommerce activities, many business organizations could not operate the online G2B activities. To make them accustom with the G2B operations, certain training programs are to be conducted which are lacking.

CIVIL SERVANTS PROGRAMS: The civil servants are accustomed to traditional operations but not to the latest electronic technology. Adapting to the recent trends is time consuming process and in due course of time the G2B applications are causing certain issues.

START-UP SERVICES: Most of the G2B programs, though commenced, due to unawareness the business community are not utilizing the opportunity. Certain awareness and startup programs are to be conducted to initiate the G2B activities, lacking which raising to issues.

LICENSING CHECKUPS: The government should carry out proper checkups before conducting G2B online activities to ensure that the business party possesses proper licensing, genuine
experience in particular service, quality of goods and other related parameters.

**BUSINESS FUNDING:** Lack of funds on both the sides, that is Government to Business and Business to Government, is obstructing the speed of the G2B activities for which certain budgetary planning and allotments are demanded.

**CHANNEL CONFLICT:** Many traditional retailers establish new marketing channels when they start selling online. Some business persons institute direct marketing initiatives in parallel with their established channels of distribution, such as retailers or dealers. In such cases channel conflicts may occur. This refers to any situation in which the online marketing channels upset the traditional channels.

**DISINTERMEDIATION:** In direct traditional business activities, in supply chain management activities, there will be certain middle men or some intermediation. Because of the online G2B activities, the Government can directly interact with the business parties ignoring the middle man which may lead to certain problems in long run.

**RE INTERMEDIATION:** The disintermediation may cause new relations and new technical mediators and this re intermediation may cause new problems in online and in traditional government to business activities. Hence the role of the restructured mediators should be defined.

**CYBER MEDIATION:** Apart from re intermediation, there comes a new concept called cyber mediation. These are nothing but special web sites that use intelligent agents (logical programs) to facilitate intermediation. The improper design
of the intelligent agents may rise to new issues in G2B activities.

**HYPER MEDIATION PROBLEMS:** Extensive use of both human and electronic intermediation to provide assistance in all phases of G2B activities is hyper mediation which may rise to new issues in government to business activities.[42]

**RIGHT PRICING PROBLEMS:** Pricing a product or service on internet, especially by a click is complicated and the business community should see that pricing is very competitive on internet. There are many online price comparison software products, with which government is at liberty to check the price of product or service of various business organizations. The challenging issue for the business organizations is to get profits out of competitive pricing.

**PERSONALIZATION FAILURES:** One significant characteristic of many business organizations in online marketing is personalization for government agencies. For example the business organizations may use cookies and other technologies to track the specific buying behavior of each government agent. With that information, the business people can create a marketing plan. But this type of personalizing the plans will not always be successful.

**SECURITY ISSUES:** The major risk of online G2B transactions is security. Although all trading sites require users to have an ID and password, problems still may occur because of intruders and hackers. Problems of this nature may occur specially in financial transactions like banking sectors.[07]
INCORRECT REVENUE MODEL: Many G2B applications failed because of incorrect business models. The revenue generations plans are not designed properly and they could not reach the sight of government agencies. This retarded progress of many business organizations and their relations with government.

LEGAL ISSUES: While performing the business transactions with government bodies, many legal issues are to be maintained and sometimes notaries are mandatory[63].

TAXATION ISSUES: Every transaction of G2B activity gets recorded officially and there will be pressures from government agents in deduction of tax from the billing they receive. This may cause the business organizations to avoid online G2B activities.

UNAFFORDABLE COST OF NET: The cost of telecom and internet activities is presently not within the reach of small business groups. They should be affordable and government should open free browsing centers for the sake of small business and public transactions with government.

COMPUTER ILLITERACY: The computer illiteracy of business community is making them move away from the G2B activities leading to draining of funds and awesome efforts.

Apart from the discussed issues the factors like globalization, liberalization, financial crisis, economic recession and other local and global factors are flaring up the G2B issues.
3.4 GOVERNMENT TO GOVERNMENT (G2G) ISSUES

3.4.1 INTRODUCTION

The Government-to-Government (G2G) category consists of electronic commerce and communication activities between units of government, including those within one governmental body and those between different governments. Within the government system there is large scale processing of information and decision making and the G2G initiatives helps to gear up the internal government processes work with efficiency and precision. Many a time G2C and G2B processes necessitate the improvements in G2G processes[33].

G2G applications include online interactions carried out by various intelligence agencies like National Crime Records Bureau (NCRB)[72], Common Integrated Police Application (CIPA), Crime and Criminal Tacking Network and System (CCTNS), applications of Forensic science labs, police communication network-POLNET etc. The transactions between various governmental departments exchange their goods and other document related transactions online through the government websites. e-Procurement among government departments is being conducted and the government to government transactions are not only taking place between state and central governments but also among governments of different nations. Government-to-employees activities are accelerated in present day environment[75]. The organizations with successful G2G applications are Reserve Bank of India, Financial Intelligence Unit (FIU-IND), Department of economic affairs, Intelligence Bureau and Central Statistical organization[03].
Despite of the benefits there are many issues which are discussed below.

3.4.2 G2G Issues

COORDINATION: There should be proper coordination among various departments in understanding the problems, their approach to solution, timely completion and communication which is lacking in the current scenario.

POLITICAL SUPPORT: Political support at the highest level is a sign of successful implementation of G2G e-Governance initiatives which can be attained by electing highly qualified educated contestant. Such representatives are hardly available in Indian politics.

RE-ENGINEERING: Major G2G projects bear successes only when applications of G2G are preprocessed with re-engineering techniques. Lack of skilled manpower and other budgetary concerns are troubling this activity.

EMPOWERED LEADER: Successful projects require an empowered leader with a dedicated team members, who can conceptualize, implement e-Governance projects with the help of officials at all levels and technological solution providers. The failure of team building is directly affecting the G2G activities.

SUCCESS OF SPECIFIC EVENTS: Initiatives which save the employee’s time, money and effort are able to succeed whereas the other G2G implements went into vain wasting lot of funds.

SCALING: Scaling up should be attempted only after the success of pilot projects. Systems should have the
flexibility to incorporate changes mid-way, missing this, the G2G applications are getting failed.

**INFRASTRUCTURE:** In rural areas, issues of infrastructure, network connectivity and electricity supply are of paramount importance in G2G applications.

**COMPONENTS:** In case of complex projects, all components need to be identified and analyzed at the outset, followed by careful planning and project implementation which is missed in many of G2G applications.

**CAPACITY BUILDING:** Capacity building of staff is essential for success of any G2G e-Governance project which is interlinked with various technical and budgeting factors.

**CLOSE MONITORING:** Lacking of close monitoring and continuous feedback with necessary modifications are pushing the G2G applications into vain.

**COOPERATION:** Cooperation among the technology solution provider and the in-house domain experts is crucial for success of G2G or any e-Governance projects.

**TIME DELAYS:** Installation and stabilization of the system, acceptability by staff and its efficient usage is time consuming process. Digitization and validation of data is a slow and error-prone process, especially when migrating from a paper-based system to online activity which is irksome.

**DOMAIN SPECIALISTS' PARTICIPATION:** Extensive staff participation with involvement of domain specialists is a key pre-requisite. Most of the government organizations are missing the technical specialist leading to chaos[76].
**ADMINISTRATIVE ISSUES:** One of the most contentious areas of global G2G activity is the resolution of international legal issues for which a number of national governments and international organizations are working together to find ways to avoid uncoordinated actions and encourage uniform legal standards which was not yet concluded.

**GEOGRAPHICAL ISSUES:** The geographical issues of shipping goods and services among G2G ecommerce across international borders is one of the major problems. Barriers posed by geography differ based on transportation infrastructure between and within countries and the type of product or service being delivered. For example, geographical distance is almost irrelevant in online software distribution among organizations.

**ECONOMIC ISSUES:** Economic and financial issues encompassing global G2G electronic commerce include government tariffs, customs, and taxation. In areas subject to government regulation, tax and regulatory agencies have attempted to apply the rules used in traditional commerce to electronic commerce, with considerable success.

The solution for the discussed issues can be found with the various information system audit controls and proposed framework elements discussed in succeeding chapters.
Contractors conspire to seize tenders

File for irrigation projects worth nearly Rs 5,000 cr

TIP OF THE ICEBERG
Tender scam busted in MCD office
Tribune News Service

New Delhi, August 19
The Crime Branch of the Delhi Police today claimed to have unearthed a tender mafia racket in the Municipal Corporation of Delhi with the arrest of eight contractors and an employee of the corporation.

Hyderabad: Tenders for irrigation works were filed on Tuesday amidst high drama and police intervention, even as the Telangana High Court restrained the state from awarding any contracts.

Manual Tender disturbances - News articles

ANNEXURE 2

Survival of the Strongest!

A typical scenario:
1. Contractors assemble outside the office premises
2. Contractors filing tenders in the Tender Box
3. Contractors scuffle outside - Police intervenes
4. A Contractor escorted by Police to file Tender

Manual tenders - fraud activities
Students Union Exposes Contractor Syndicate

ANNEXURE 4

eProcurement brings openness in a connected world

Aneel Kumar/TNN

Hyderabad: Initiatives like eSeva are aimed at bringing benefits of technology to the doorstep of the common man. But there are many other initiatives like eProcurement, that are aimed at streamlining various government systems. And for a system, which is dogged by absolute corruption and red tape, these initiatives would mean absolute power to the people.

Rs. 1,000-crore saving for State Government through e-procurement

eSeva centres referred to as 'front-end delivery mechanism'

THE TIMES OF INDIA

Appraisals on E-Procurement by Journals
E-procurement hits right chord with state govt.
Implementation Made Mandatory In All States From April '07

- Possible savings come up to 16% of total procurement
- Expected to lower costs by 10%, or save around Rs 45,000 cr
- Time for tender initiation and processing cut short from 6 months to 36 days
- Increased supplier participation with 4.75 players per tender at present as against 5.5 earlier

The savings amount to an estimated Rs 5,400 crore over the two jurisdictions covered - Andhra Pradesh and Madhya Pradesh. Andhra Pradesh has reported savings of around Rs 5,000 crore in the last two years, officially

The Economic Times - 8th June 2006

"EProcurement has secured demonstrable benefits to the govt. departments by way of significant cost and time savings. Further more, the transparency in the system has delivered social benefits by eliminating suppliers cartels and the citizens are now assured that procurement transactions are fair and devoid of subjectivity"

Dr. Y.S. Rajasekhara Reddy,
Chief Minister, Andhra Pradesh, India

EX-Chief minister of Andhra Pradesh - Message on e-Procurement