

## Challenges and Prospects of E-Governance in a Backward Region: Citizen's Perception Analysis in Jhargram, West Bengal, India

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### Abstract

E-Governance is now considered as a top priority in India because it offers citizen friendly good governance with low operational cost, faster service delivery and transparency by using information and communication technology. This paper mainly aims to study the degree of acceptance of e-governance by the people of Jhargram, a backward tribal district of West Bengal. The study has gone through an intensive field survey among 400 respondents selected by proportionate stratified random sampling technique across age, gender, ethnicity, income and educational level using semi structured questionnaire schedule. Perception analysis of citizens following Likert's scale, SWOT, ITPOSMO matrix, correlation regression and cartographic techniques etc. have been applied to justify the significance of e-governance, scope and its challenges. The study reveals that the citizens of Jhargram municipality are still lagging behind in utilization of online services except Government to Government (G2G) sectors.

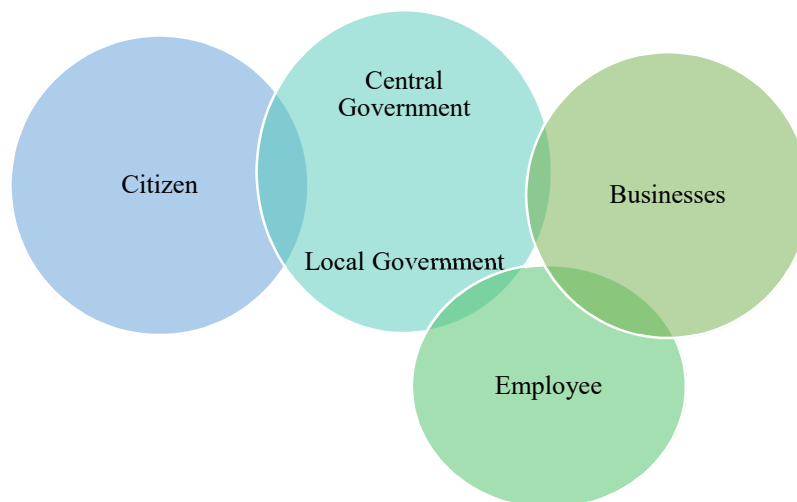
**Key words:** E-governance; acceptance; backward; tribal; SWOT; ITPOSMO matrix challenges; government to government.

### 1. Introduction

Generally, e-governance claims the use of technology in the basic web-based platform and helps to communicate with every individual department working for the government (Heidegger (1993)). It helps to break the hierarchy dominances from the administration and makes it better, cheaper & efficient to public. It also works to circulate government information and services to every citizen including business partners and employees. Information and Communication Technology (ICT) is used in the system to make the process easy with advanced interaction,

and collaboration between government and other sectors (Paul,2007). E-governance is represented as the strongest medium to spread digital dependency across the different economic, social, and administrative sectors for each and every developed or developing countries (World Bank,2009). The introduction of e-governance is the rule of adding Information Technology (IT) to synthesize the working sectors along with the ordinary citizens (Singh, 2011). To get the various services people need not to go anywhere, just sitting on the couch and monitoring the gadget where they can acquire their services (Heeks,1998).

E-governance has classified into four types of government functions. The online co-ordination between National, State, Local government is known as G2G (Government to Government), interaction between Government to Citizen through digital processes known as G2C (Government to Citizen), online data or information circulation for business requirements in between Government to Business is known as G2B, online communication of Government to their Employee known as G2E. These four components of e-governance are depicted in the following diagram (fig 1).



*Figure 1: Components of the e-governance.*

Source: Computed by authors, 2022

It is very necessary to implement e-governance in the vast country like India where top to down and bottom to top level communication and co-ordination is important (Backus,2001). West Bengal government and other associate institutions display tender notice, vacant notice, and profit-loss chart from various departments, in the official website from where one can search for any query or any document.

The main properties of this e-governance are -

1. Providing citizens services, with secure and fast access through the infrastructure created by e-governance.
2. To give the people a unified and simple view of different services regarding information of government.
3. To allow the government employees for easy access to necessary information throughout all offices perfectly (Alam and Hassan,2011).

In developing countries e- governance can work as a magnificent tool to spread digital dividends across various social segments (Apleni and Smuts,2020). A study has defined the term interaction as it stands for the delivery of government products and services, interchange of information, communication, transaction and system integration (Chowdhury and Satter, 2013).

E-governance is a system that provides opportunities to harness the power of information and communication technology to make the work of governance inexpensive, responsive, and encompassing (Dwivedi and Bharti,2010).

The ICT study creates lots of paths from government to provide better cost-effective services to the citizens. The successful application of e-governance is based on the satisfaction of users, their availability and capabilities that are major factors to determine the system (Ghosh, 2018). From the portal [myscheme.gov.in](http://myscheme.gov.in) the citizens can match their essential needs related to agriculture, rural & environment, banking, business, education, health, shelter, public safety, science, skills, sports, travel etc.

Kofi Annan (1999) comments on the benefit of this system as the practice of good governance should be the vision of government in respect to human right. Its helps to promote democracy rule, tidy public administration, smooth working function and strengthen government citizen interaction performance. The studies of Kumar and Bhanti (2012) reveal that e-governance is a novel system which adopts factors like, auxiliary facilities, customer support, corruption avoidance, transparency, fairness process, and connect endless.

By reducing the hierarchical profession, desk to desk rotation and corruption just little steps into digital machine, administrative can take care of the objective of e-governance. (Barthwal, 2005; Ayaluri and Gupta,2015). Governance through electronic media is helping state and local governments to control over their power and resources. It makes a revolutionary step to promote good quality governance through elimination of corruption and unemployment (Afzaal and Masood, 2019; Singh, 2011).

Above all discussions are related to the positive aspects of e- governance system but it is obvious that this system is not an exceptionally good system. It has also various shortcomings. The most important drawbacks are the educational quality of the common people. Digital illiteracy is the major problem till now in developing and under developed countries. Availability of digital platform and electronic gadgets are another significant barrier for the successful implementation of this system.

The implementation of ICT is significantly increasing in the advanced countries of highly economic advancement but it is challenging in the countries who are immensely fighting with poor housing, deprived health facilities, high unemployment rate, and huge income gap. Only 35percent of Indian urban population gets the advantage of E-Governance service (Bwalya et al., 2012) whereas the rural people do not adopt any new system easily

Some effective digital portals are created by Central and State governments of India such as 'National Portal of India', 'Prime Minister of India portal'. Aadhaar card application form, objection or requirement filing page, online pay slips for taxes, online land record and land related information, recruitment, entrance tests etc. In every portal there is an option for giving feedback status, by which government can judge their e-service status (Hossan et al., 2006).

The citizens of Jhargram municipality are enjoying the facilities available in the above-mentioned digital portals for getting Aadhar or Voter card, doing online from fill up, claiming online money under governmental schemes. Almost all the departments of West Bengal Government are advertising their propaganda regarding their schemes.

The main objective of this research is to study the success rate of this type of newly set up administrative unit where the implementation of e-governance system is the main challenge.

The specific objectives are:

1. To assess thoroughly the existing e – Governance services in remote areas.
2. To examine the challenges faced by the administration for implementing this e-governance system.
3. To evaluate the success rate of this system in this tribal dominated district
4. To recommend the pathways for better implementations of this online services.

## 2. Study area

Table 1: General information of the study area

Categories	Jhargram municipality	
Area (sq km)	21.4	
Total population	61712	
	Male	Female
	30876	30836
Total SC population	5916	
	Male	Female
	2941	2975
Total ST population	6077	
	Male	Female
	2975	3102
Total literate population	49870	
	Male	Female
	26109	23761
Total main worker	18709	
	Male	Female
	15009	3700
Total cultivator	112	
	Male	Female
	61	51
Total marginal worker	3148	
	Male	Female
	1521	1627
Total non-worker	39855	
	Male	Female
	14346	25509

Source: Census, 2011

Jhargram district which is the extended part of Chhotanagpur plateau is situated in the South West corner of West Bengal, India. It has beautiful natural landscape with natural forest mainly sal (*Shorea robusta*) and very low height hillocks with rolling topography. It enjoys tropical monsoon climate with hot summer and cool winter. The soil is mainly of red lateritic type. It is also a well-known tourist destination with woodlands and historic monuments. Jhargram municipality is extended between 86°58'45" E to 87°01'45" E and 22°22" N to 22°29'15" N

(fig 2). South Eastern railway line passes through the middle of this town. It is situated 173 km away from Kolkata and 32 km away from the border state of Jharkhand and 15 km away from the NH-6 Highway.

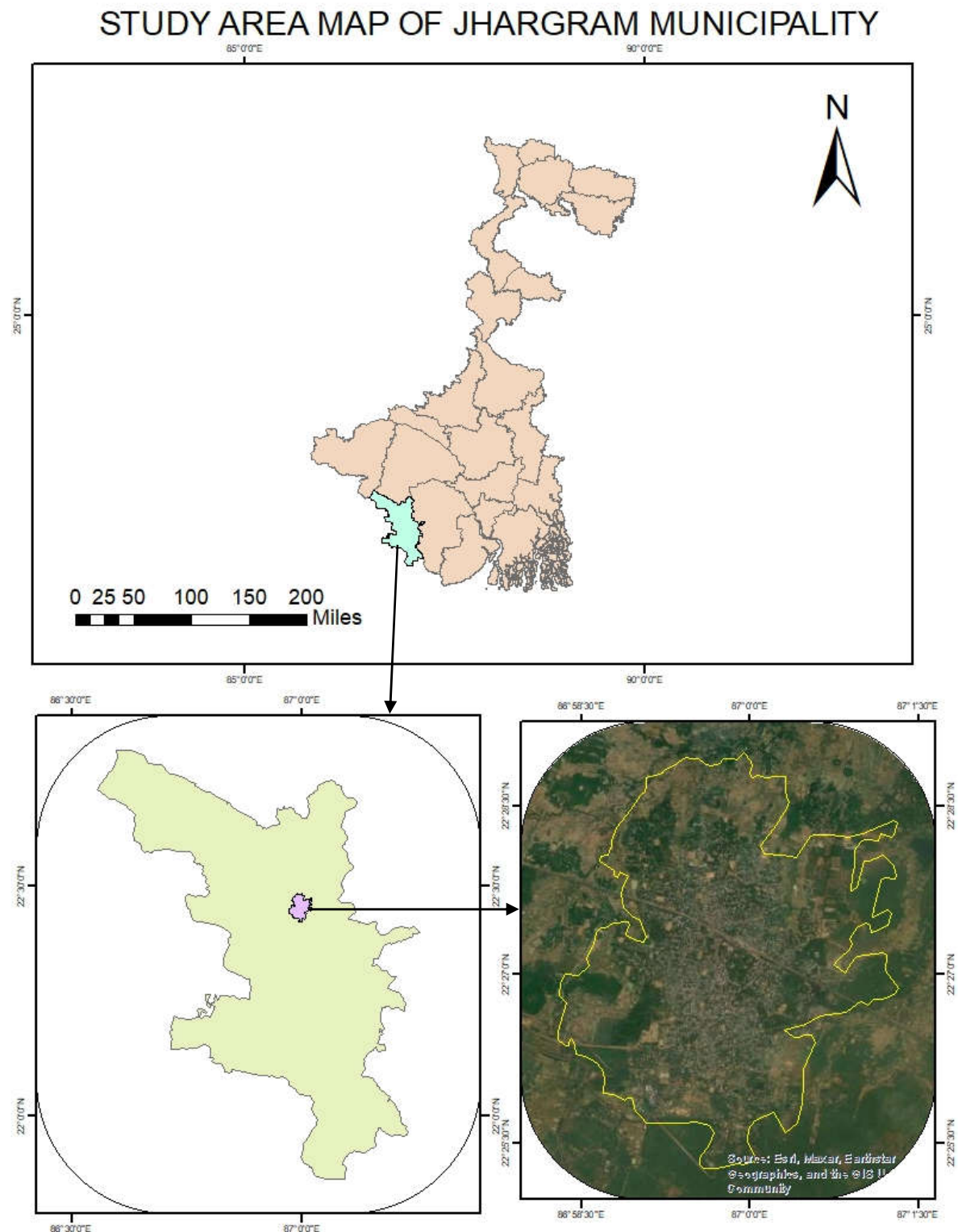


Figure 2: Location of the study area

Source: Computed by Authors

Jhargram district has a population of 170097 according to the 2011 India census. Jhargram municipality town has 61712 total populations where males are 30876 and females 30836. The average literacy rate in Jhargram municipality is 80.81percent percent. The present Scheduled Caste (SC) and Scheduled Tribe (ST) population is 9.5percent and 9.8percent. Agriculture and Business are the main economic activities of this region. Some people work for the government, as school instructors, or in the private sector. The majority of the population belongs to middle-class financial status.

### 3. Methodology

This research is typically based on primary data collected from the field. The list of e-governance service has been gathered from various government website and portals. Few relevant demographic data have been collected from census reports, 2011, Government of India for checking the background of the residents of the study area. The study area map has been prepared by compiling Google Earth images and administrative maps using Arc GIS 10.3 software. Interviews are taken from both users and administrative end through semi structured questionnaire schedule. Sample respondents are selected proportionately in terms of four stratification levels such as gender, caste, literacy and occupation (Mangal and Mangal, 2015). These four sampling parameters are very essential determinants for assessing the individual performance level. The sampling has been done by using the following formula.

The formula of Proportionate Stratified Random Sampling is as following (Vaidya,2022)

$$: n_h = ( N_h / N ) \times n$$

$n_h$ = Sample size for  $h^{\text{th}}$  stratum

$N_h$ = Population size for  $h^{\text{th}}$  stratum

$N$  = Size of entire population

$n$  = Size of entire sample.

The whole sampling process has been shown for study areas in the following (fig 3)

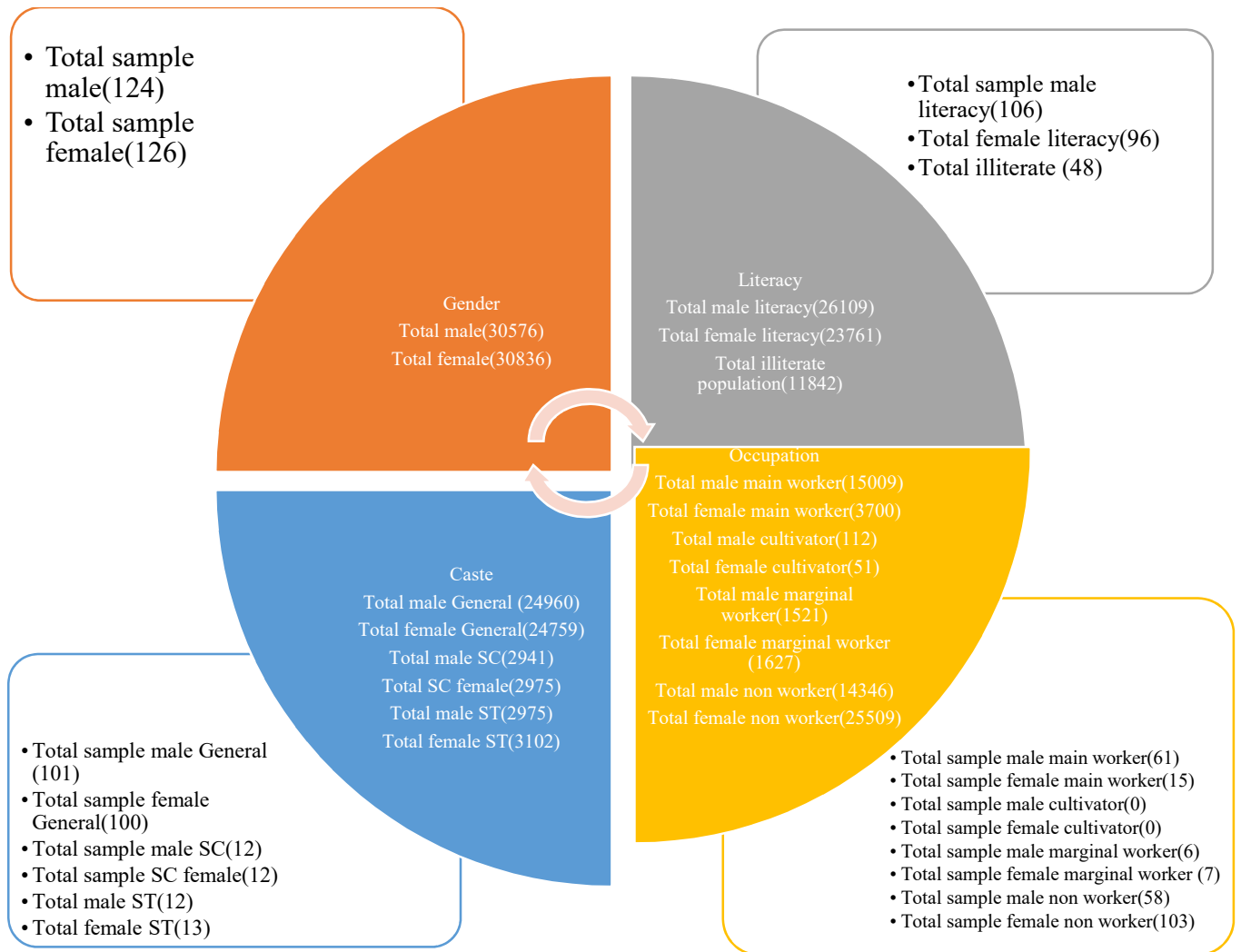
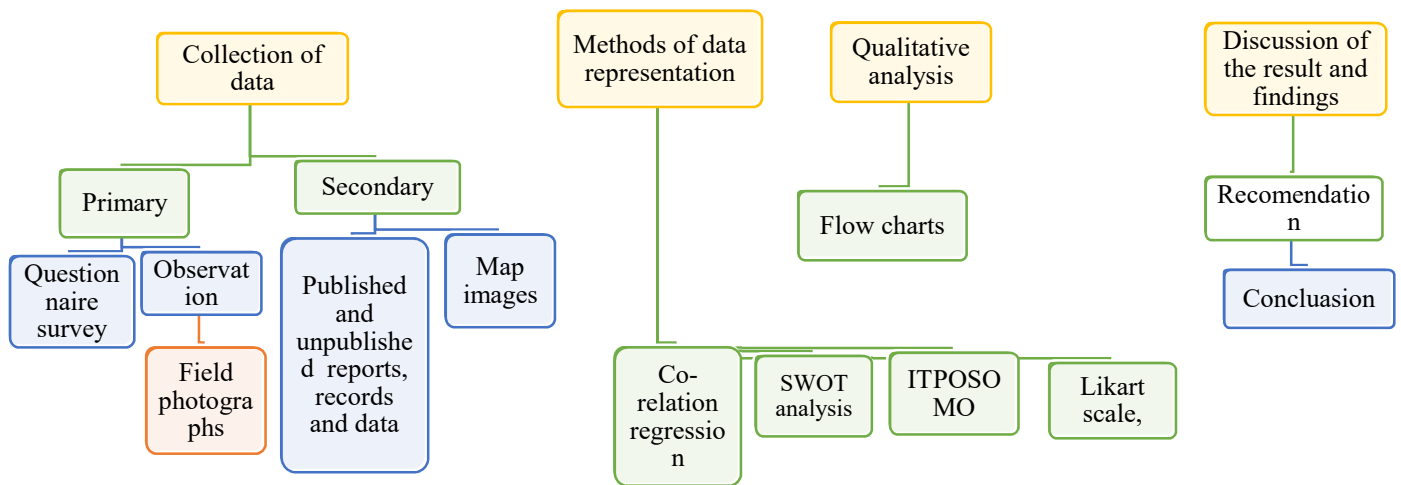


Figure 3: Sample collection of Jhargram municipality

Source: District Census Handbook of Paschim Medinipur Part XIIB, Census of India 2011

Above 250 from Jhargram Municipality sample respondents have been selected for personal interview (fig 5). Likert scale (Losby and Wetmore, 2012) has been used to assess the perception level of the respondents about various aspects of e-governance system. The 5-point scale has been categorized in ‘strongly disagree (5), disagree (4), neutral (3), agree (2), strongly agree (1).’ Bivariate regression analysis is also used to establish the relation between non parametric variables (Spiegel and Larry 2017). ITPOSMO Matrix has been used in this study to highlight the gap of the technological performance of the local administration. Where 0 rating indicates no change, 5 rating indicates some degree of change and 10 rating indicates radical change between proposed services and its current reality. Hence 0 rating considered as a good result, 5 rating as medium and 10 rating considered as poor performance of the administration regarding e-service (Hwang and Syamsuddin,2008).

The following flow chart shows the total methodological aspects of the study (fig 4).



*Figure 4: Methodological Chart*  
 Source: Computed by authors, 2022



*Figure 5: Primary survey in Jhargram Municipality*

Source: Field survey, 2022

#### **4. Result and discussion**

In this modern technological era, electronic invention is just like a magical click where every search is possible with a touch electronic device. Now, these techniques run into the government system and ‘bang’ the whole service world into the virtual monitor. It has been perceived to ordinary people that the government facilities are now present in their handful distance and time. But the thought of the implementation of online governance is not easy to ground reality (Ngulube, 2007). The main drawback of the electronic government is only conducting the whole system by electronic media. An uninterrupted networking system is a basic requirement to keep flouncing to e-governance work. In this system a major fear is that, if any discrepancy occurs in official work, it’s hard to recover this. In the virtual system there have small chances to direct communication(person-to-person). For that one can face a lot of confusion in doing their online job. Sometimes they get into trouble in terms of network issues and even excuse by the government office too. Literacy is another fact to precede the e-governance system spontaneously. Awareness, knowledge, ability, and affordability of digital users are varied from person to person. Therefore, the factors which are responsible for the successful implementation of e- governance are briefly mentioned in the following fig 6.

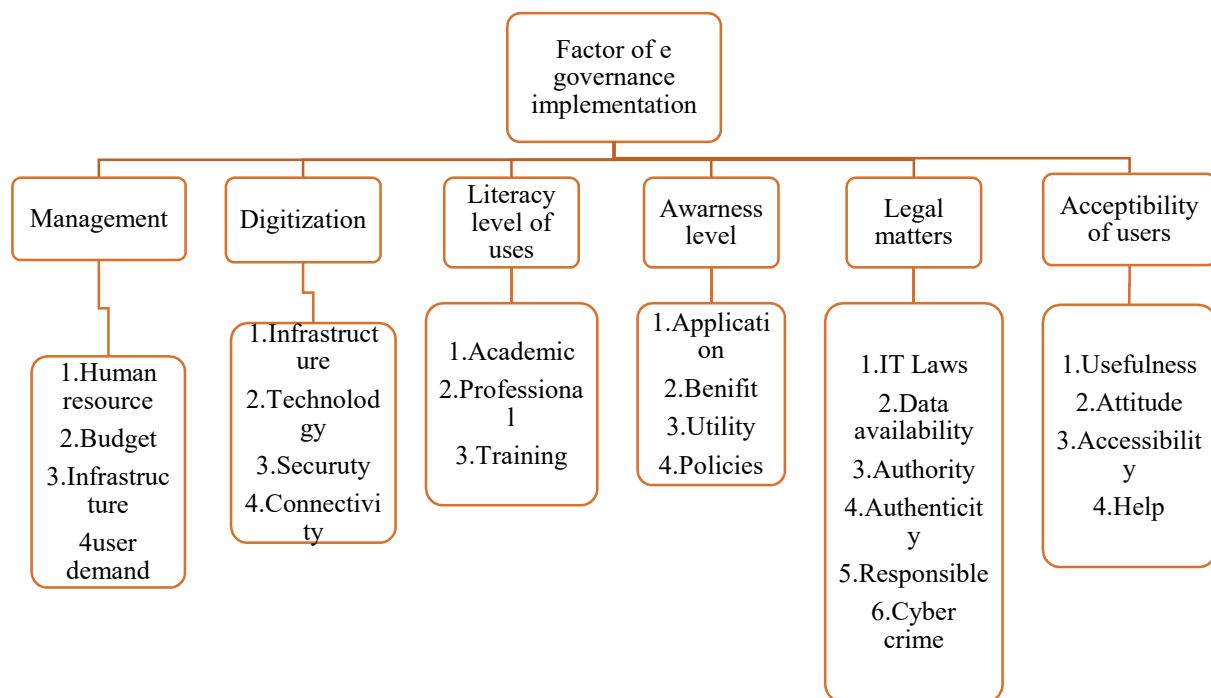


Figure 6: Factor of implementation of e-governance system

Source: Computed by authors, 2022

The West Bengal government is eagerly wanted to promote digital awareness and make e-society through ‘Duare Sarkar Prakalpa’(Government at door step), ‘Paray Samadhan’(solution in the locality) (<http://www.wb.gov.in/>) etc schemes. By this method West Bengal government reach those citizens who are unable to create a portal on digital medium. All of the state governments including the district level administrations have a Web portal like <http://www.wb.gov.in/> , <https://jhargram.gov.in/> . The Web portal provides to the public about government information services 24x7 and related valuable forms in soft copy. Overall, the level of services provided by government through e-governance portal only facilitates “one-way service delivery,” and this model is conducted by the IT department of the government. Government has taken the step of launching computer education into school level syllabus and added a special ICT branch for higher education by which future generation will attract for tertiary investment. The West Bengal government wants to make upcoming generation skill full-from root, by teaching not only to younger but also older. Computer learning and ICT awareness will prepare the state for the better future to cope with the changing world, and help to improve government position. various local organizations from government or non-government ends have already set up the facilities of cyber cafes, Tathya mitra Kendra (Friendly & Informative centre) etc. to guide the citizens.

As Jhargram municipality is situated in a backward region, e-governance concept is hard to understand by the citizens. Lack of computer skill and knowledge, poor economy, poor infrastructure, and ignorance are the main obstacles for smooth implementation of e-

governance but the local administration claim for successful implementation of e-governance (Signore et al, 2005).

#### 4.1. Determination of satisfaction level of e-governance

The effectiveness, efficiency and satisfaction level of the local residents about the use of e-services of Jhargram municipality is discussed in the following sub-chapters.

People of the Jhargram municipality have different perceptions regarding thee-governance functioning or performance. The attitude of the citizen towards electronic advancement in governance function is identified by some selected parameters. The satisfaction scale from the respondent's answer is identically considered as their perception. Agreed perceptions show a good satisfaction level whereas, disagrees represents the dissatisfaction level. The satisfaction levels are shown using Likert scale in the following fig 7.

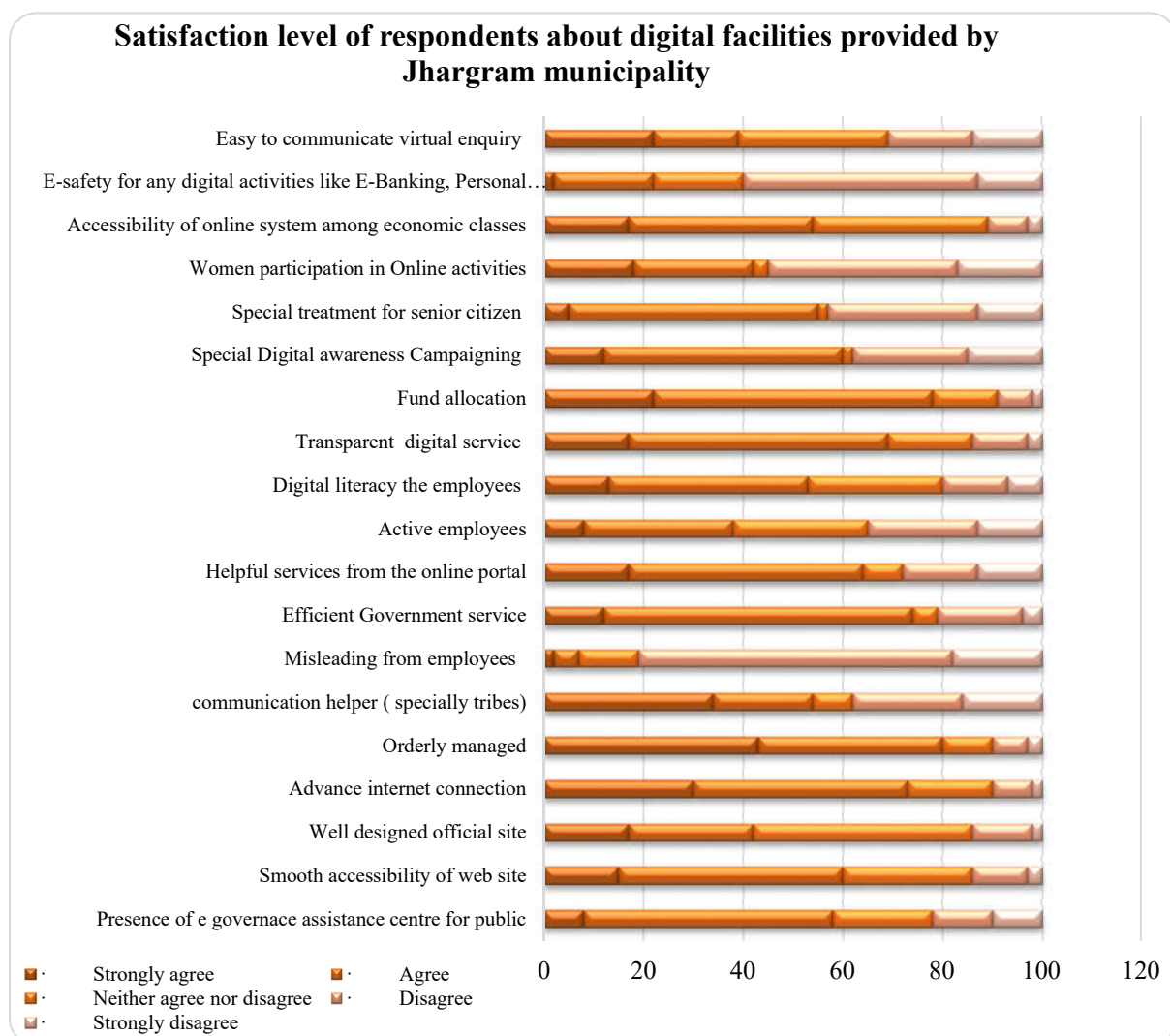


Figure 7: Satisfaction level of respondents about digital facilities provided by Jhargram municipality

Source: Field survey, 2022

From the government side every possible management have been tried to distribute e-governance facilities smoothly. The above listed data depicts the status of citizen’s awareness level about thee-governance facilities provided in the government websites which they can

avail in their hand gadgets. Jhargram municipality is the main urban center of the Jhargram district so relatively positive responses are observed. More than half of the respondents are aware about the e-governance system. About 60 percent people can access these services from online easily. For them government website is well designed and running smoothly. About 73percentis agreed have well internet connection so that they can perform online activist own selves. More than 50-60percent people depend on the capability of official working staffs those are genuinely tried to provide valuable online information regarding e-governance schemes in the municipality. Government has organized campaigning programs frequently to promote digital literacy and its advantages (Vassos, 2013). The administration even is starting to include those governance facilities which need physical appearance in the offices into online for making more efficient G-C services. For this purpose, government initiates the schemes like ‘Duare Sarkar’ (government in door step) ‘Parai Samadhan’ (solution in the locality) which are becoming very popular now. About 80percent respondents are agreeing on having enough funds for the developing governance system with newly technology equipment’s in this newly set up municipality as well as for the benefit of the whole district. In Jhargram municipal citizens get enormous help form these centers which really help to reduce the pressure of the government offices and people also get untroubled working experiences. Above 70percent believe in transparent governance services and they have faith on the government online portal. Government has promised on safety and security in the citizen personal data while using online banking or other data sharing. Senior citizens get some special treatment from the government schemes which are acknowledged by 55percent respondents (fig 7). Sometime user gets the option on extra pay for the fast and smooth services from government offices. In Jhargram municipality, the status of participation women for availing these services online is not so satisfactory (42percent). They feel fear to do mistakes in using the computer. Government tries to increase women participation and to give them digital education. ICT knowledge becomes compulsory in school education to give basic computer handling knowledge to future generation. Approx 80percent respondents state that governance service into online is orderly managed. There is less harassment report in finding online services. Below 10 percent respondents are facing misbehavior from the officer’s end.

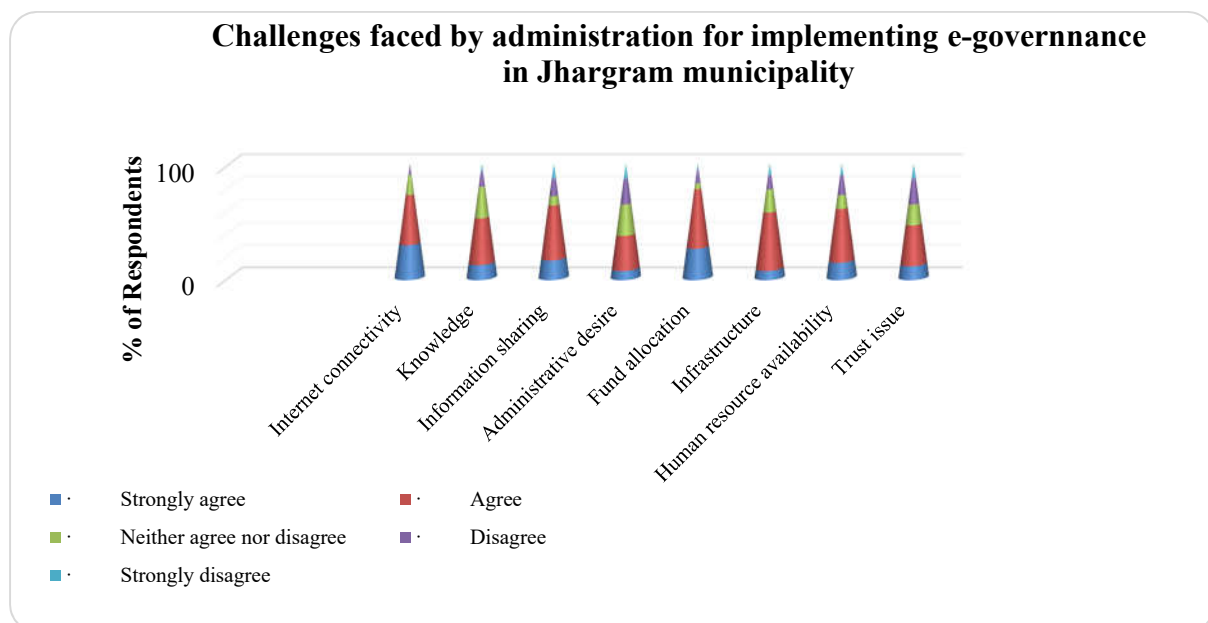


Figure 8: Challenges faced by administration for implementing e-governance in Jhargram municipality

Source: Field survey, 2022

The problems of implementation electronic governance have been shown in the above diagram from administration end in Jhargram municipality. Government has provided computer, LAN, WAN connection to the offices but 70percentrespondents agree on strong internet speed. But this speed is not enough to run the whole system efficiently. About 70percent agree about the fact that Jhargram municipality gets direct special attention from the government and have sufficient funds. But the irony is that minimum fund has been used for installation of electronic needs. Only 50percentemployees have the knowledge of computer operating. The aged employees are not at all interested to acquire ICT knowledge. Most of them complain against convenience gap of the government. Only 58percent agree to the well-organized system for thee-governance integration. They accuse that they cannot provide proper service to the people for the poor online infrastructure. To circulate good quality and fast online information government should provide high technology set up and skilled employment generation. About 50percent respondents are agreeing in this matter. More than 40percentof total respondents doubt about the quality working experience on electronic devices (fig 8). For the lack of ICT expert, administration is failed to sharp the management of e-governance facilities towards citizens.

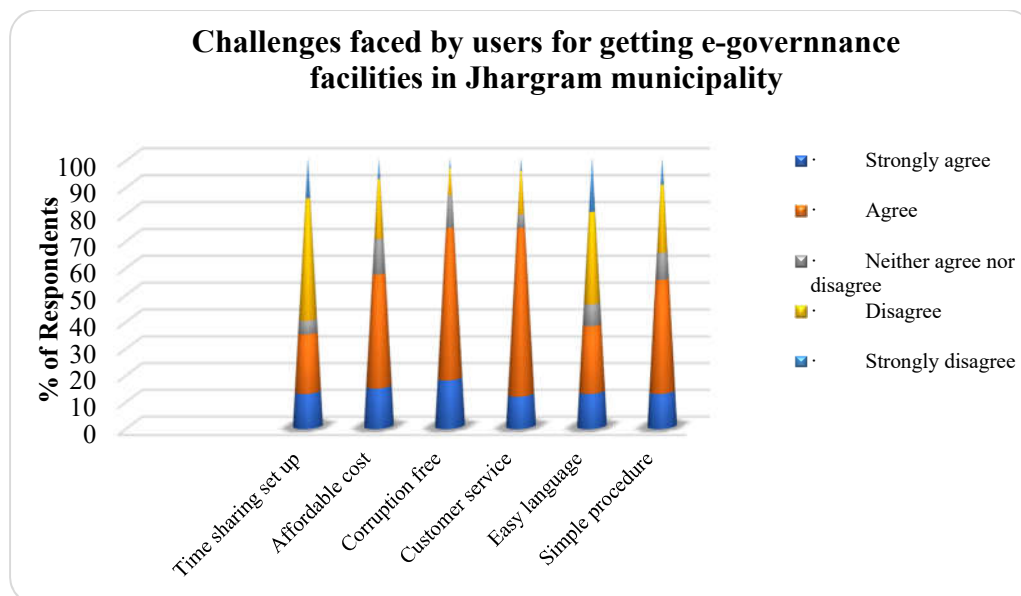


Figure 9: Challenges faced by users for getting e-governance facilities in Jhargram municipality

Source: Field survey, 2022

The users get suffer from poor services in Jhargram municipality because of the lack of management in e-governance performance but the ignorance of people on electronic benefits puts a serious threat for the implementation of e-governance. The most challenging factors are the time taking and language barrier in online activities. About 60percent respondents are thinking that online working is time consuming because of slow network and lack of unskilled employees. Urban life is run with rush time so they always demand on fast results. Slow governance procedure is dissatisfying them. Another grievance is that the use of foreign language in online website. Less than 40percent agree on understanding English notification notified in the governance websites. Maximum people in Jhargram municipality belong from service sector of medium to high income group, so they can acquire electronic gadgets. The

problem is that because of traditional thinking only 50percent users use e-governance system online smoothly. To them the online activities are not safe and internet cost is useless extra expense. About 70percent people are agreeing on corruption free e-governance service and this is a positive response that has been observed in the field (fig 9).

## 4.2. Challenges for implementation of e-governance

Reliability and availability of e-services are the key point to make e-governance successful. People are insecure about the authentic performance from the administration side and fear to share the confidential documents in online platform. Lack of clear and comprehensive idea about the computer, people usually ignore to electronic facilities. With poor ICT infrastructure and minimum skills people are like to prefer manual systems to save time and money. All the challenges for the better implementation of e governance services identified from field survey are discussed in the following

### 4.2.1. Infrastructural Challenges

Progressive IT infrastructure is the backbone of e-governance. Mostly technical fault is associated with the incapable digital functioning along the software and hardware system. The assurance of legal security and privacy of vital information of people remains not doubtless.

### 4.2.2. Technological challenges

The main technical challenges are interoperability, privacy and safety, use of foreign language, unknown of application. In Jhargram municipality maximum respondents clarify that they don't have a laptop or similar online gadget though they are only able to use mobile phones for this type of work (table 2). It is the reason behind their dependency on some other experts.

Table 2: Technological challenges

Challenges	Perception of respondents (%)
	Jhargram municipality
Lack of knowledge on computer	45
Lack of Internet connection and data speed	32
Lack of Computer availability	36
Problem in Changing of work pattern from traditional to technological	48

Source: Field survey, 2022

### 4.2.3. Information System

From the field survey it has been observed that most of the respondents address the issue of information system due to various factors which are summarized in the following table 3.

Table 3: Service Challenges

Problems	Perception of respondents (%)
	Jhargram municipality
Lack of skilful instructor	42

Lack of digital illiteracy among employees	38
Lack of understanding of the aim of e- governance among employees	52
Lack of management capabilities among employees	32

Source: Field survey, 2022

#### 4.2.4. Circumstantial challenges

There are various situational challenges found in the survey for the successful implementation of e-governance. Actually, these problems impose the serious threats for this system. These are mentioned in the following table 4.

*Table 4: Circumstantial challenges*

Challenges	Perception of respondents (%)
	Jhargram municipality
Lack of sufficient electricity supply	34
Ignorance of people	28
Costly electronic gadgets	41
Language problem	52
Lack of patience of employees	42
Lack of structured planning and policy	38
Unwillingness for taking IT training among employees	42
Insufficient employees	36

Source: Field survey, 2022

#### 4.2.5. Economic Challenges

The fund allocation for smooth running of e-governance and the capability to afford minimum a smart phone of the people are the major economic challenges. From the administrative ends the authorities of Jhargram municipality claimed the insufficient fund allocation (table 2). The following table shows the monthly income status of the respondents of the study area.

*Table 5: Monthly income status of Jhargram municipality*

Monthly income	Percentage of respondents
	Jhargram municipality
5000-15000	32
15000-25000	35
25000-35000	20

>35000	13
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Source: Field survey, 2022

The above table clearly depicts the picture of low to middle income status of the respondents. Many people have not the capacity to afford a smart phone. So, how they can afford the facilities of e-governance in online mode? This picture has been noticed in the following statistical diagram (fig 10)

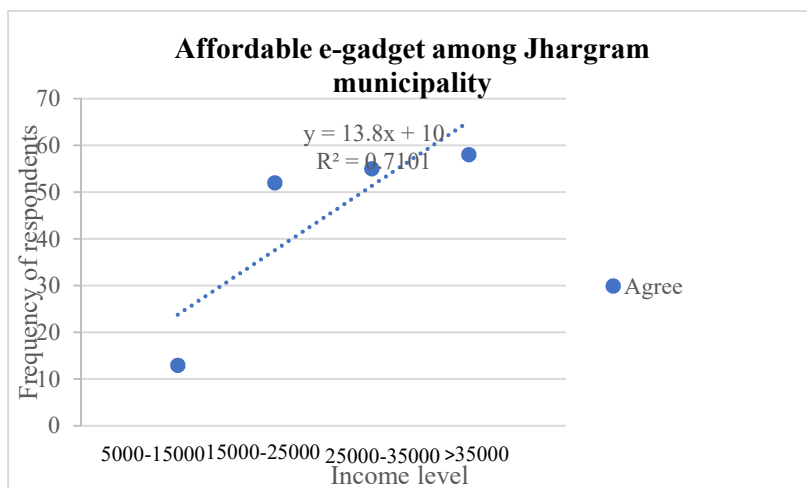


Figure 10: Affordable e-gadget among Jhargram municipality  
Source: Field survey, 2022

#### 4.2.6. Social Challenges

The urban populations of Jhargram municipality are relatively smart and habituated in urban needs and functions. They are more comfortable for using computer etc.

The dominance of English in ICT is main obstacle as because more than 80 percent of the population does not speak English (Census, 2011). English is used as medium of language which is very difficult to understand in Indian villages (Beniwal and Sikka, 2017).

A high-level digital illiteracy from both the users and administrative ends also retrogrades the implementation of this online system. From the survey, Jhargram municipality reported only 57of people working their banking facilities by themselves. It has also been observed that Jhargram municipality have more than 70percent literate population but they cannot able to access the computer easily.

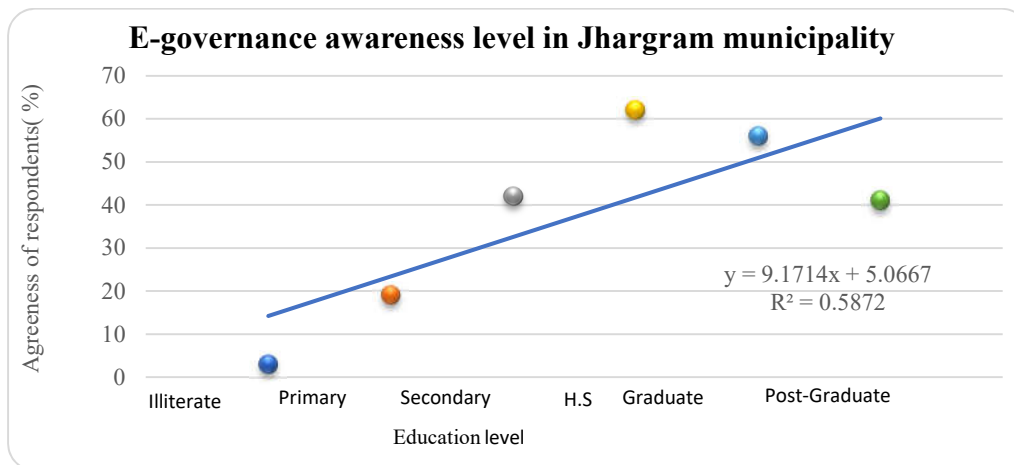


Figure 11: E-governance awareness Level in Jhargram Municipality

Source: Field survey, 2022

The relationship between educational qualification and e-governance awareness is positively shown in the areas of Jhargram municipality. Illiterate people cannot operate electronic functions and unable to read and write any system. The more literacy among people means more electronic gadget is understandable (fig 11). For this now the government puts emphasis on computer learning in elementary education.

The following diagram show the people’s performance for operating banking system. As usual, 57 percent people of Jhargram municipality doing by them remaining are taking help from others. (fig 12).

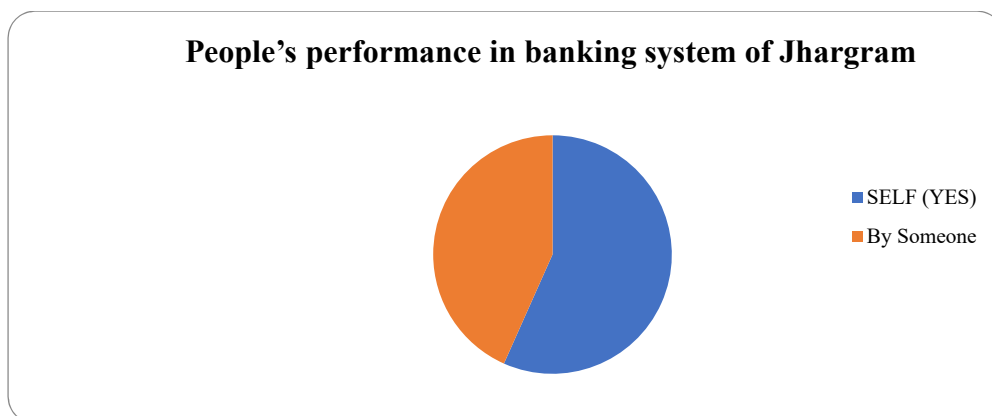


Figure 12: People’s performance in banking system of Jhargram municipality

Source: Field survey, 2022

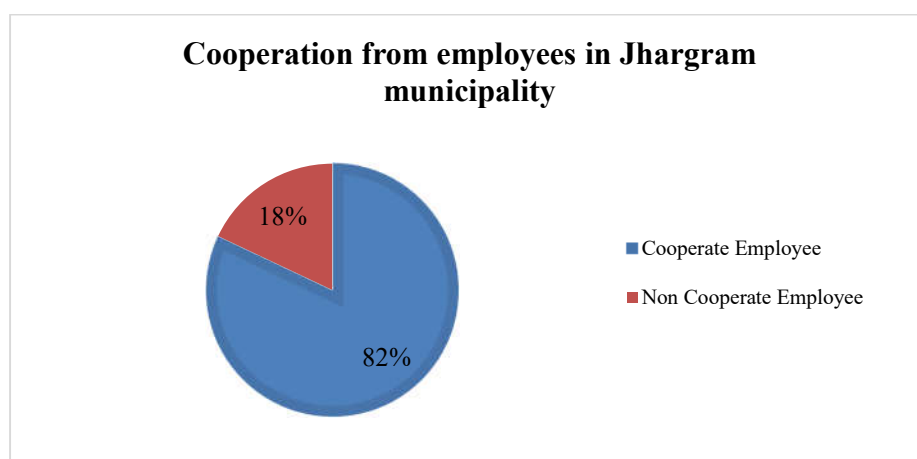
Another serious obstacle is the behavior of employees. People generally expect good quality behavior from the office staffs instead of harassment. To protect thee-governance principles employees must be gentle towards citizen. It is found that without significant incentives, one could not expect from government employees an improved public service quality. Ruler can successfully rule when their tenants are satisfied by the leadership behavior (Paul and Paul,2015). The objective of e-governance is to reach the milestone by providing better public services. The employee attitude of employees toward citizens is considered as one of the backbones of e-governance service. (Monga,2008). The researchers have noticed during visit in administrative offices that many people coming from far away are still waiting several hours

but the officer is not in his chair (fig 13). About 18percent respondents in Jhargram municipality agreed on noncooperation behavior (fig 14).



*Figure 13: No technical staff at the time of 12.17 p.m.*

Source: Field survey, 2022



*Figure 14: Co-operation from employees in Jhargram municipality*

Source: Field survey, 2022

India is a land of diversity in culture, tradition, language, geography, and the economic condition of the people. It is a nation that has a significant number of people who are below the minimal socio-economic benchmarks. As Jhargram municipality have had a poor socio-economic status so that the people cannot adopt this type of technology as fast as other relatively developed regions. The national to local governments are trying their best to update their citizens in online platforms but in most cases, it is not easy to succeed due to a lot of disparities.

High demands of technical support in working sectors are the pillar of modern management. Education, ICT skill, and digital awareness are the only methods to transform the traditional society into digital mode. The status of education qualification of this study area has a better score in comparison to the state result and the people in Jhargram municipality particularly have this potentiality to adopt this system.

### 4.3. Analysis of the stage of e- governance status through ITPOSMO Matrix

National e-Governance Plan (NEGP) has proposed a model where they introduced four different stages fore-governance model for the successful implementation of e-governance. To omit the main challenges regarding technology and literacy, government need both long-term and short-term strategies for electronic integration. For the successful implementation of e-governance projects there should be standard infrastructure, legislation, and master plans into the operational places (fig 15). Government of Index (GOI) has presented the four stages into e-governance model to understanding the function of its implication (Paul and Paul, 2011).

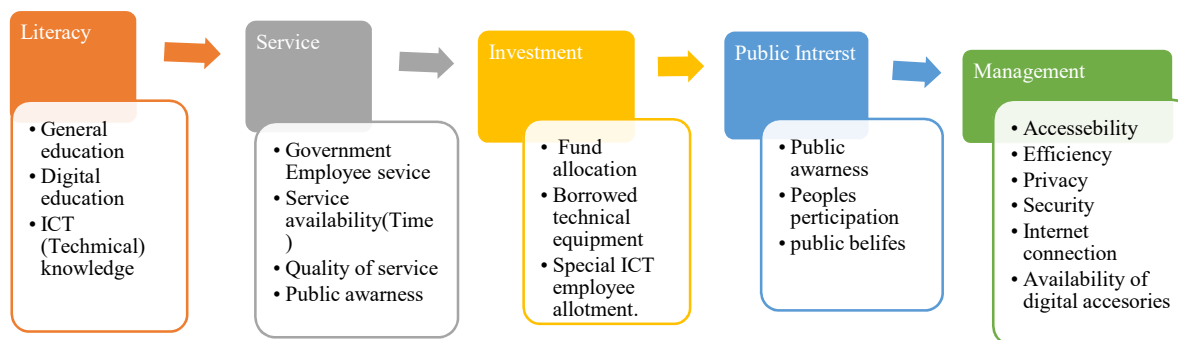


Figure 15: Pillars of e-governance system.

Source: Computed by authors, 2022

Information, interaction, transaction, and integration are the four stages in GOI model. In the first stage, information related to government is published into online platform and distributed to needy population. After that, a strong communication is established to make G-C interaction fruitfully (Scherlis and Eisenberg 2003). Initially, administration has to use properly of LAN, WAN, intranet connection to exchange information between G-C and G-G. In the transaction stage citizens enjoy the facilities of bills payment, purchasing online tickets and shopping, verbal meetings, without moving anywhere. The final stage is the integration (transformation) of e-governance action, where e-functions and e-services are working together from various departments. It has helped to the citizen to interact government system at a single time. Currently, India is in between stage two and stage three, that is, the transactions can occur into online and available the valuable information into online portal for ease of citizens' access. The study focuses on the position of e-governance system in Jhargram municipality on the model described above. For this, a ITPOSMO Matrix has been prepared on the basis of the responses recorded by the respondents of the study area. According to this matrix Jhargram municipality has been marked the position between communication and transaction as mentioned the GOI four-stage model (fig 16). As Jhargram has the municipality status and headquarter of this district so, obviously citizens enjoy the good governance infrastructure facilities. Jhargram municipality recorded comfortable amount of the respondents are accessible to the e-services by themselves. Naturally, Jhargram municipality falls under the 2nd stage of this model. Below the matrix table its help to show how the factors related toe-governance structure are present in the Jhargram municipality.

#### ITPOSMO Matrix for Jhargram municipality

Factor	Good	Medium	Poor
Information			
Technology			
Process			
Objectives			
Skills			
Management			
Other			

Figure 16: Exert the gap of the technological performance in Jhargram municipality.

Source: Field survey, 2022

#### 4.4. Accessibility of e-facilities from user's end

A survey has also been carried out about the accessibility of e-facilities from user's end. It helps to know the confidence level of the respondents to access these facilities in their own hands without seeking help to others.

Table 6: Accessibility of E-Facilities from User's end

E- Facilities	Jhargram municipality		
	Yes by self (%)	No (%)	By Someone (%)
Updated Information	71	7	22
Birth & Death Registration	88	1	11
Migration Up gradation (certificate)	6	94	
Voter list up dated	82		18
E-Voter card issue	80		20
E- Aadhar card issue	86		14
Aadhar card, Ph no Link up	86		14
E- Ration card advantages	79		21
Pre- Election E-Voting learning camp	87	13	
Gov schemes for Female (Kanayashree, Rupashree, LakshmiVhandar)	49		51
Pension Scheme into website portal	45		55
Land record data into website portal	75		25
Mutation Record into website portal	22	55	23
Income Tax Filling	67		33
Online Bill payment (Electric Bill)	74		26
Online Caste certificate registration	65		35
Online examination results checking	71		29
Scholarship scheme for Matrix, Higher Secondary, Higher study into online	36		64
Online registration for any other Gov. Scheme (With specific)	31		69
License Issue (Vehicle, Driving, Commercial) into website portal	18		82
Electric Supply application from online	63	10	27
Water supply application from online	50	26	21

Source: Field survey, 2022

From the above table, it is clearly identified that Jhargram municipality citizens access the online facilities by themselves. About 80-85percentis able to do online registration for getting the facilities (table 6). Gap of digital literacy and advance technology have created this difference between the areas. Females are mostly dependent on their male counterpart for these digital works in the areas. Maximum access has been found in registration of birth and death certificates, voter card and aadhar card etc. In the case of online bill payment, tax filling, showing personal record or exam result, Jhargram performs 60-70percent. In the government website there is a bulletin where the total number of online applications for demanding water,

electricity and other urban amenities has been shown. About 60percent people of Jhargram municipality get benefits by doing this objection (table 6).

**4.5. Scope of implementation of e-governance by SWOT Analysis:**

The SWOT analysis is such a technique which evaluates the internal and external insights and practicability of any perception survey. It presents an overall knowledge about any strategic management planning (Bonnici and Galea 2015). On the one hand it enlightens the internal capacity, resource strengths and weakness and external threats, challenges and opportunities on the other hand. It is a useful and easy tool for the qualitative analysis and thinking (Sarsby, 2012).

This SWOT analysis is based on the feedback of the respondents about thee-governance facilities accessibility from personal interviews taken by the authors.

DIMENSION	VARIABLE	GRADE ON 5 POINT SCALE	TOTAL SCALE	DIMENSI ON SPECIFIC INDEX	SWOT INDEX(%) $\frac{\{(SSI \sim WSI) + (OSI \sim TSI)\}}{2} \times 100$
		Jhragram municipality	Jhragram municipality	Jhragram municipality	Jhragram municipality
Strength	Availability of E-Service	5	15	15/4 =3.75	25.00
	Effort of administration	4			
	Availability of budget	3			
	Availability of electronic gadget	3			
weakness	Lack of infrastructure and resources	3.5	15.5	15.5/4 =3.875	
	Lack of manpower	5			
	Lack of transparency in purchases	3.5			
	Substandard behaviour of service provider	3.5			
opportunities	Patience of local people	3	15	15/4 =3.75	
	Popularity among generation	5			
	Scope for building good infrastructure	3			
	Awareness campaign	4			
Threat	Digital illiteracy	3	13.5	13.5/4 =3.375	
	Corruption	3.5			
	Lack of monitoring	4			
	Inefficient employees	3			

Table 7: SWOT analysis with e-governance variables

Source: Calculated by authors, based on field survey, 2022

**4.5.1. Strength**

The major strength is the availability of e-governance facilities in the portal of West Bengal Government. The efforts to offer the services to the users from the administrative ends are also praise worthy. The budget allotted to maintain these services is not so sufficient but hard and fast they can manage. There is acute need for more electronic gadgets for providing better services at a time. The situation is rather better in Jhargram municipality The strength Specific Index (SSI) of 3.75 (table 7) indicated the well strength of this facilities.

#### 4.5.2. Weakness

The major weakness for the accessibility of these e-services is the lack of manpower for the study area. Most of the time people who usually walk for 5-6 kms far away to get these services have to wait for another several hours. Another major problem is lack of infrastructure such as rooms, gadgets, networks, electric power. There is also no transparency in purchases. The officers admitted that they could not get the amount of money which was actually allotted. Moreover, the respondents blamed the government employees for their sub-standard behavior particularly towards marginal people. The WSI of 3.875 (table 7) is strong evidence of the exposed weaknesses of this e-governance system.

#### 4.5.3. Opportunities

All things in a system are not bad. So, there is a silver line also in this e-governance service system. First of all, the authors become speechless to see the patience of the local resident's particularly tribal people. Fig 17 is the evidence for this comment. People are waiting for several hours for availing these facilities which are very essential to them. These e-services gradually gain the popularity among young generations. There is a sure scope to build good infrastructure if the corruption can be minimized. Administration frequently arranges the awareness campaigning to aware the people about benefit of these services. The OSI of 3.75 (table 7) indicated the positive sides of the implementation of these services.



Figure 17: Long waiting for e-service in front of Shilda panchayet office

Source: Field survey, 2022

#### 4.5.4. Threats

The threats imposed upon these systems are really very serious because all identified threats are from administration ends except one which is the digital illiteracy of the local residents. The major threats encountered are corruption, lack of monitoring and inefficient rude employees. Actually, the success of these services is depended on the efficient and speedy service management strategies which are mostly absent in this case. The overall threats value 3.375 (table 7) is seriously a threat for this e-service system.

## Recommendations and conclusion

SWOT analysis the researchers prescribe a sustainable pathway for the better implementation of e-governance in the study areas.

- i) Government should first look after the situational factors and natural set up of the study area. Jhargram has a municipality status and the main administrative centre of the district with the dominance of Scheduled category people. So, these areas have different demands. Government should fix these demands in priority basis.
- ii) Jhargran Municipality serves larger amount of people. So, it needs more fund allocation rather than present for up gradation and development of more infrastructure and manpower.
- iii) The weaknesses of these schemes have to be mitigated first. Opportunities should be tracked in urgent basis. Threats should also be minimized and after that make the strengths stronger than before. If this is done then these schemes will be certainly successful in any region.
- iv) Transparency at every level is the ultimate demand in any government scheme to be successful. For this, frequent monitoring from government's end is necessary.
- v) The behavior of office staffs should be polite and loyal towards users. All people are not the same like them. The poor and backward people have also the right to avail all government facilities properly and timely. The staffs are in the service to the common people.
- vi) Government should increase the training and awareness camps for enhancing the digital literacy and giving the better service to the people. For this purpose, the government of West Bengal already initiated 'Duare Sarkar' (Government at door step) scheme. These types of schemes should be extended in remote villages.
- vii) Government should take initiatives to raise the income status of the poor rural people. For this, these people will able to purchase at least a smart mobile phone to access the facilities. If the people do not access these facilities, then this type of scheme will also be meaningless.
- viii) People planning should be taken with the consideration of user's participation and demands.

The success of e-governance is based on a user-oriented approach and depends on the user's satisfaction. Opportunities, availabilities, and capabilities are the key factors that determine the success of e-governance (Ghosh,2018). Government should establish a specific department to run thee-governance function efficiently and before that it needs to improve online supplement. More participation of people in digital awareness must be helpful to give pace in e-governance implementation in these relatively backward areas (Yadav and Tiwari 2014).).

E- Governance is not only profitable to citizen but also helpful to the growth of the economy. The business sectors will then show their interest to work with government after establishing an easy connection with foreign investment. It will be beneficial for the improvement of regional productivity.

The present study mainly focuses on the problems and prospects of e-governance implementation in a newly urban set up. This is like a drop of water in the ocean. More elaborate researches are necessary for finding out the solution of the problems. Literature reviews clearly show the reason of the failure of this scheme in many developing counters due to improper planning particularly the gap between planning design and the ground truth. As this is a new concept to the common people so, there is a scope to mitigate these gaps. This study areas have few individual specific problems. These problems should be specifically mitigated without hampering their original cultural set up. The obstacles are found from both

administrative and user's end. Both are to be honest to minimize these obstacles. To make these areas digital, the government should take more initiatives to make it user's friendly, secure and transparent. This scheme will be very helpful not only for building the confidence level of common people but also make e-governance more democratic. It will be converted such a medium which can build E-Citizen, E-Administration and above all the E-Society (Beniwal and Sikka, 2017).

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