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Study on the Effect of ICT on E-governance and its Distribution of Facility for Rural Development in Satna District of Madhya Pradesh
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ABSTRACT
Information and communication Technology (ICT) has been reformed the appearance of traditional government. By the usage of ICT our government can changed into electronic governance (E-governance) and Government of India had launched the massive Digital India program and also provides the various services and facilities to various departments and all customers also. ICT has been used in different departments of government like in agriculture department to make financial system strong, in healthcare department for easily curing the peoples, in education department for knowledge, in rural development for citizen responsiveness, in women & child development for women empowerment. There are lots of problems faced by the government on implementing the policies on rural area. ICT treat as an activator for activating various administrative transformations. We observe various ICT based problems for limited involvement of rustic persons in e-governance schemes in Satna district. We use Questionnaires as the foremost tackles for prime data collection from the various sectors of Government schemes. In this paper discussed the effect of ICT on E-governance for rural development on implementing the policies and also define the services provides by our government to all the peoples. ICT revolutionized our country to the digital era and the economy also move towards the cashless economy.
Keywords: - ICT, E-governance, Facilities of ICT, Challenges for E-governance.

I.   INTRODUCTION

ICT gives great revolution to the working pattern of the old government and turned the government to the digital era and by the regular usage of automatic media our government is changed to E-government and all the work is done digitally also the economy of India move towards the cashless economy. To fulfill the dream of digital India a lot of effort has been done by our government but the developments are not same to all over the India because India has been separated into two parts one is urban India and another is rural India. It means urban India had been developed rapidly but the rural India needs more efforts as related to municipal India. E-Governance provides services between Government-to-Government (G2G), Government-to-Business (G2B), and Government-to-citizens (G2C).

II.   FACILITY DISTRIBUTION OF ICT FOR RURAL DEVELOPMENT

ICT is very important for the progress of rustic area. It can provide their facilities to different subdivisions of E-governance are itemized underneath-
A. ICT for Agriculture
In India, Agriculture is the heart of the social development of India and also it is the main part of rural economy. But most of the farmers do not known newest information in this field. ICT can be exercises to attentive the deprived farmers by continue updating

approximately market charges, weather predictions, use of insecticides, crop assurance, quality of seed, improved tools and agricultural methods etc. so, by the use of internet or mobiles. Now a day's lots of work has been done in this sector, the Government will still have to initiated advanced and effective ICT based policies to the farmers of rural area to enhance the position of farmers and reduce the gap between farmers, officers, mandi's and government.
B. ICT for Healthcare
In India, healthcare department needed lots of improvements for providing facilities and good treatments to patients. Comprehend for the Nationwide Rural Health Assignment program the government has increased healthcare donation. At the past time there is a sharp lack of skilled doctors and well-prepared hospitals but now a day's government has the focus on these problems and setup various new large and small hospitals and healthcare components in rural areas. For this government launch the lots of scheme for the healthcare departments and rural population.
C. ICT for School Education
Education performs a central role on the growth of at all country. But in rural area, the lack of suitable infrastructure & trained teachers combined among little attendance of students perseveres to be a most important concern. In this situation, ICT tools like E-Learning teleconferencing, audio and video conferencing, TV etc can be typically utilized. Student can be used Internet as an enormous resource of knowledge for students of any

age. Similarly if purchase of books/study-material is too expensive then the Wikipedia can be utilized as learning tools by teacher and students to bring up to date them. The effective use of ICTs can overcome the issues be relating to Female Literacy, Adult Literacy, and improved quality of Higher Education. Free primary education and scholarships for students in government schools also improving the education level.

D. ICT for Rural Development

Rural development is a word which typically spotlight on accomplishment for rural economic system development. Rural expansion involves both economic enhancement of people and the better social transformation. For this government taken lots of actions that connecting the urban-rural divide by encouraging the living level of people in rural areas. Also provide Information about programs, employment opportunities, government schemes, Panchayati Raj organization, cleanliness, road construction, development authorities, electrification of communities is provided.

E. ICT for Women & Child Development

The Organization of Women & Child Development is responsible for creation and supervision of the rules and guidelines and regulations related to women & child development in India. This division provides complete information on schemes taken by the government like start on progressed and helpful ICT based policies for promoting the standard of living of women's and child. In this department government is primarily spotlight on the child's and girl's development. For this they instigated lots of schemes for girls' development like Ladli Laxmi Yojana, Sukanya Samriddhi Yojana, Beti Bachao- Beti Padao Yojana etc.

III. CHALLENGES FOR ICT AND E-GOVERNANCE

1. Lack of Technical Illiteracy is the major problem for rural area.
2. Lake of Resources like internet, electricity, infrastructure, and various supplementary resources are slow down the reliability of services.
3. Lake of citizen's awareness about the ICT projects.
4. Challenge of language in rural influence.
5. People of rural area are resistance to change itself.
6. Lack of trained persons.
7. Shortage of equipments like printer, projector, scanner etc slow down the service delivery of government project.
8. Lake of trust of the user in government system.
9. High level of difficulty for understanding the project.
10. Shortage of fund for policy implementation.

IV. METHODOLOGY

A research methodology using a survey questionnaire as the primary data collected method, where a survey conducted for the review of the technologies, the rural ICT projects and issue associated with the impact of ICT for rural e-governance services in the Satna region of Madhya Pradesh state. There are total around 120 respondents were selected for each problems from Satna district in Madhya Pradesh. The collected data was evaluated by the use of Microsoft Excel and Statistical Package for Social Sciences (SPSS) to find the result. The analysis were done based on reliability test for impact of various ICT based issues (computer illiteracy, awareness of technologies, Challenges of Language in Rural Influence, Resistance to change, resource related issues, Lack of trained person, availability of equipments, and technology difficulties) for problem facing by Governments sectors in e-governance services for execution.

Reliability Testing: Cronbach's coefficient alpha value was assessed to examine the internal research consistency of measuring (Hinton et al., 2004; Field, 2005; Straub et al., 2004). It diverges between one and zero. The closer alpha is to one, the greater the inner reliability of the elements in the questionnaire. Hinton et al., (2004) recommend 4 facts of reliability, excellent (0.90 and directly above), high (0.70 - 0.90), high moderate (0.50 – 0.70), and low (0.50 and below). The reliability values reported in Straub et al. (2004) study must be equal to or directly above (0.70) for a confirmatory study.

Factor Analysis-Factor study is used to discovery factors amongst observed variables, if data encompass various variables, by use factor analysis, diminish the number of variables. Factor analysis collects variables with parallel characteristics composed. With factor analysis can generate a small no. of factors from a largest number of variables which is accomplished of elucidation the pragmatic variance in the larger no. of variables. Factor analysis finds a factor solution to a multiple set of variables (questions). Still, the resolution is improbable to have any factual denotation if the variables examined are not practical. The first item to do when directing a factor analysis is to look at the inter-connection between variables (questions).

V.   RESULT AND DISCUSSION

The data existing in Table 1 indicated that the frequency percentage of survey data of impact of various ICT based problem by government in e-governance services/ schemes for implementation. It is clear that, the frequency of respondents of different schemes, maximum per cent of various schemes are found, 65.00 per cent had resource related use, 64.17 per cent had resources related issue, 70.83 per cent had computer illiteracy, and 76.67 per cent Challenges of Language in Rural Influence.

Table 1: Reliability of Measurements for Different ICT based schemes and their problems

Constructs	Sample Size	Cronbach's Alpha(α)	Type
Resource Related Issues	120	0.943	High Reliable
Level of Computer Illiteracy	120	0.932	Reliable
Limited Citizens Awareness	120	0.880	Reliable
Challenges of language	120	0.842	Reliable
Resistance to Change	120	0.868	Reliable
Lack of Trained Person	120	0.875	Reliable
Shortage of Equipment	120	0.880	Reliable
Level of Difficulty on implementing Technology	120	0.877	Reliable
Gender	120	0.880	Reliable

Factor analysis applied to check the interrelationships between variables set (questions) in order to identify the principal structure of those variables (questions). A in lines renovation that selects a variable structure for the set of data such that maximum variance of the data set comes to lies on the first factor, the second maximum variance on the next factor, and so on. We use this technique on a data set with a huge number of variables; and reduce the total of explained variation to just a few factors.

Table 2: Factor analysis of ICT based problem implementation data 2015-16 for Different Government Departments

Questions	PC$_1$	PC$_2$
Shortage of Printer	0.941	
Slightly Aware Person		0.921
Level of Difficulty		0.944
Shortage of Projector		0.922
Basic Level of Computer Illiteracy	0.868	
Supplementary resources problem	0.951	
Neutral Oppose Person	0.902	
Untrained Person		0.909
Language Proficiency		0. 908

Percent of total variation	77.766	11.595
Cumulative variance explain %	77.766	89.362

For common source identification, factor analysis using PC 1, and PC 2 was conducted. The implementation of schemes for ICT based problems are correlated with two factors / component in which 89.362 % of the entire variance in the survey data was found.

Result for Different Departments indicated that, 2 factors contain 89.362 % of the entire variation of the 26 original variables (questions). PC1/ Factor 1 explains 77.766 % of the variation with high loading factor Shortage of Printer (0.941), Basic Level of Computer Illiteracy (0.868), Slightly Aware Person (0.921), Neutral Oppose Person (0.902), and PC2 / Factor 2 explains 11.595. The left over other factors clarify only few percentages. The first some factors explain comparatively huge quantity of variance (especially Factor 1) whereas succeeding factors explain just little quantity of variance. This relationship powerfully proposes that these variables have powerful interrelationship.

VI.   CONCLUSION

ICT participate a key responsibility in e-governance, and consequently it turn into essential that it reaches rural masses. This will lead to respectable governance, better interaction, better administration, low corruption and higher transparency in the government. Government should think of what type of rural development is required because transformation of village straights to urbanization and village atmosphere vanished. E-governance, this is a standard alteration over the old-style methods in Public Administration, it means changing the services of government and information to the community by using electronic resources. This innovative standard has transported an uprising in the quality of service distributed to the citizens. It has achieved the better transparency in the government processes; simplifies the procedures; provide best office and best ever management; save the time as a result of providing of services through single window; reduction in corruption; performance and handling job capacity of the personnel and improved attitude. This paper discussed about the facilities provided by E-Governance and ICT to various departments, and the factor analysis on the collected data and shows that some factors that explains comparatively great amounts of variance (specifically Factor 1) whereas following factors explain only small amounts of variance for implementing the policies on different government departments.

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