

Available Online at http://www.recentscientific.com

CODEN: IJRSFP (USA)

International Journal of Recent Scientific Research Vol. 8, Issue, 6, pp. 17780-17793, June, 2017 International Journal of Recent Scientific Re*r*earch

DOI: 10.24327/IJRSR

Research Article

ICT INITIATIVES AT THE GRASS ROOTS FOR LAST MILE LEARNERS OF UTTARAKHAND, INDIA

Puneet Chandra Verma¹., Abhay Saxena²., Ashutosh K Bhatt³ and Chandra Shekhar Patel⁴

^{1,2,4}Department of Computer Science, Dev Sanskriti Vishwavidayalaya, Shantikunj, Haridwar ³Department of Computer Science, BIAS, Bhimtal

DOI: http://dx.doi.org/10.24327/ijrsr.2017.0806.0421

ARTICLE INFO	ABSTRACT
Article History: Received 06 th March, 2017 Received in revised form 14 th April, 2017 Accepted 23 rd May, 2017 Published online 28 th June, 2017	ICT-Governance, e-Governance, G2C (Government to Citizen): The term ICT-Governance may be implied as the procedures by which people steers itself. This contains the communications in the company of the province, the personal firms and the domestic citizens. With the arrival of information communication and technologies (ICT), the entire development of governance has turn out to be ICT motivated. Several countrywide and province governments are applying ICT to make available facilities to the citizens at their homes and offices and conveying down the price of governance and rising competence and success of distribution. ICT-Governance is the use of
<i>Key Words:</i> ICT, ICT-Governance, G2C, ICT-Strategy, ICT-Initiatives, ICT-Administration, ICT-Citizen, ICT-Society.	governance and rising competence and success of distribution. ICT-Covernance is the use of information and communication technologies to backing excellent governance. It consists: ICT-Administration: Refining government procedures by cutting prices, by handling functioning, by creating planned links inside government, and by making empowerment. ICT-Citizens and ICT-Services (G2C): Associating inhabitants to government by speaking and listening to citizens and supporting accountability and democracy and by improving public services. ICT-Society: Constructing communications outside the frontiers of government by toiling improved with commerce, by evolving groups, by constructing Government collaboration, and by establishing civic society. But are these attempts adequate? Do they really control the man on the street? This article is based on a research thesis to calculate the current construction of ICT solutions deployed in the province of Uttarakhand, a Himalayan region of India, and totally based on outcomes, suggests a amend model of ICT.

Copyright © **Puneet Chandra Verma** *et al*, 2017, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

ICT has incredible functions in G2C form of ICT-governance or e-governance. The government can enhance its competence, answerability and clearness by utilizing ICT. In the more and more rising details of civic administration, the usage of IT has turn out to be essential for successful governance and ICT-Governance is an developing fashion which can re-produce the path the Government toils. But in India, the practice has proved that the achievement of inventiveness rely on the political determination and commitment of system of government. ICT provides in sets of advantages in the field of ICT-Governance or e-Governance - e.g. improved limpidity, online facilities, public contribution, e-business assistance, empowerment of overlooked groups, savings of civic sources, powering the principles of self-governing administration via improved interactivity and appointment with inhabitant and public. ICT-Governance acknowledges citizens to convey with the government, contribute in government's course of action

creating and inhabitants to convey with each other. The ICT-Governance sincerely permits residents to contribute in the government result-making procedures, reproduce their actual requirements and welfare by utilizing ICT-Governance as a gizmo. In India, ICT-Governance created with National Informatics Center's (NICs) attempts at attaching region control centers via computers in the 1980s and through formation of pan-India network. This has made available the backbone to apply different solutions and facilities around G2C. To additional use the potential of ICT-Governance to enhance the excellence of life of the huge populace of the nation, the Government of India has prepared a nationwide ICT initiativethe National e-Governance Plan (NeGP). The strategy search to invent the exact governance and official methods, establish the central substructure and course of action and carry out a number of Mission Mode assignments at the nationwide, province and combined facility sides to invent a inhabitantoriented and trade-focused surroundings for governance. The strategy efforts to shell all the essential zones narrating to ICT-

*Corresponding author: Puneet Chandra Verma

Department of Computer Science, Dev Sanskriti Vishwavidayalaya, Shantikunj, Haridwar

Governance-course of action, substructure, Fiscal, Assignment administration, Government procedure Reengineering, Capacity generation, drill, evaluation and consciousness etc. across the national and province Governments.

NeGP is modified to influence competence and chances granted by ICT to endorse excellent governance crosswise the nation in a time-bound way with clearly defined accountabilities. NeGP is targeted at presenting ICT-Governance methodically via 25 Mission Mode projects, which would affect the lives of more than 1 billion population.

The foresight of NeGP is to create all Government facilities approachable to the normal man in his area via public facility distribution stores. The application scheme imagines clean and clear description of facility objectives and metrics for every scheme and organized stakeholder discussions with all stakeholders as well as inhabitants and public groups in advance the facility targets of every scheme are firmed up. All province governments in the nation have created different ICT initiative assignments below the leadership and monitoring of NeGP. Some key ICT initiatives of Uttarakhand govt. are mentioned below:

- Project Aarohi-Meant for Computer Labs in Schools
- Project Sakshyam
- Project Taleem-Meant for Madarasa"s
- Project Janadhar (Soochna Kutirs)
- Project Shikshya-Meant for School Students
- Project D-Space (contains a digital repository of books, thesis, and papers from all universities in the state)
- Project Uttara portal (for providing information and services to citizens)
- Project Hindi for localization of content
- Project SWAN
- Project Devbhoomi
- Automation of Lokayukta office
- Automation of Sub-Registrar Office/ Property

Registration (CROUN) office

- Automation of Commercial Tax
- Automation of Employment Exchanges
- Land Records Touch-Screen Kiosks
- Automation of Firms, Societies and Chits office
- ICT facilitation during Assembly & Lok-Sabha

Elections

- Website of Chief Electoral Officer, Uttarakhand
- Website of Transport Office automation
- Website Jal Sansthan Department, Uttarakhand
- Land Records Citizen Centric Website
- Website AGMARKNET
- Right to Information (RTI) Website
- CONFONET (Automation of State/District

Consumer Forums

- Multipurpose National Id-Card (MNIC) Project
- MIS for National Rural Employment Guarantee

Assurance (NREGA) Programme

- Unique Id-Project (Aadhaar)
- Common Integrated Police Application (CIPA)
- RTI website
- Uttarakhand State Seed & Organic Production

Certification Agency (USS&OPCA)

The given projects are just examples of the breadth of functions undertaken by the government. They practically affect every single inhabitant, be it a college student, a government employee, a house wife, an agriculturalist, a businessman, a teacher, male, female, resident of rural, hilly, urban terrains, last mile learners etc. This highlights the Uttarakhand government's promise and resolution to take along government at the doorstep of every inhabitant. And IT provides that backbone. But their implementation leaves a lot to be anticipated.

Need and Significance of the Study

In early 1990's very of the provinces in the nation initiated implementing ICT-Governance initiatives. On the other hand, they tackled quite a few implementation encounters. They were:

- Infrastructure capacity
- Scalability of applications
- Geo referencing of assets
- Compatibility with existing IT systems/ databases/ platforms
- Information exchange mechanisms
- Limited ability to carry out financial transactions

Indian Government, as well as Uttarakhand government has also introduced quite a lot of initiatives under the National e-Governance Plan (NeGP) and ICT-Governance roadmap for G2C segment. The projects have been undertaken with a vision to update the government's facilities to inhabitants, to upsurge limpidity, to decrease in use prices, to raise convenience, to upsurge executive competence and efficacy. But these have demonstrated blended outcomes. Regardless of the government spending huge cash and putting in lots of attempts the position on ground is not too gratifying. Thus, it was time to examine additional and check out the justifications for disappointment and suggest a method onward. The government is paying huge money, but not competent to gain the profits, while a lot of province governments have made incredible development and led to an ICT-revolt of sorts. They have saved currency increased competence, convey clearness and inspire normal residents. Uttarakhand is vet to see these advantages.

Objectives

The comprehensive goals of this research was to investigate and analytically estimate the position of the current ICT projects in Uttarakhand and suggest a path forward if details wanted any amendment. To talk the goals, research in the following areas was undertaken:

- 1. ICT-initiatives undertaken and initiated by the central government in the area of G2C.
- 2. Present system of ICT-Governance i.e. G2C applications in the province of Uttarakhand.

3. Consciousness levels and view of inhabitants in the direction of the existence and success of G2C ICT-initiatives in Uttarakhand.

The current document is based on the judgments of the investigation with regard to the first two goals – Position of G2C applications in Uttarakhand. The data items collected during a period of about one year or so were additionally verified by broad intellectual storming sessions managed at distinct levels. It led to the understanding that there is terrific space that wants to be filled in across numerous ICT-plans.

RESEARCH METHODOLOGY

In mandate to accomplish the goals of the findings, the subsequent research methodology has been obeyed. Initial study about the ICT-Governance initiatives of the province has been checked and the opinions of the inhabitants in the direction of the success of Government to Citizen Schemes in Uttarakhand have been examined and understood.

Data Source

It was determined to utilize questionnaires as a source of data collection as the aim respondents are span across the province especially in the far flung area like Pithoragarh district in physically wide-spread geographical sites. It would be structurally and monetarily enormously unwise to get the data collected through face-to-face interviews.

The Questionnaires on the indebtedness of G2C ICT-Governance initiatives in Uttarakhand were prepared, and a reconsidered with trade proficient's and an example of 1000 respondents. Based on the response, the questionnaire design was fine tuned. The report emphasizes on two faces – ICT initiatives of the State government, and ICT-readiness on the part of the inhabitants. To get finish information about these two aspects, two questionnaires were prepared.

The first questionnaire emphasizes on ICT-readiness on the part of citizens. It searches queries about:

- Admittance to technology like mobile phones, landline telephones, Internet, Computers, ATM, Online Banking, Television etc.
- Knowledge about consume of technology by separates and the family members.
- Actual usage by the respondents and the family members
- Present practice of utilizing technology for basic ICT facilities

Profile of respondents in terms of

- Age group
- Sex
- Education
- Occupation
- Earning
- Locality

The next questionnaire finds to know the consciousness of and view of the respondents approximately different government policies. The plans about which the respondents are asked questions are referenced above.

Criteria for selecting parameters

Likewise, in command to have a comprehensive conclusion, it was taken care that all parts of the society were represented.

- Localities (Rural/Rural (Hilly), Semi Urban/Semi Urban (Hilly), Urban.
- Gender (Female / Male).
- Age-wise (< 16 years, 16 to 25 years, 26 to 45 years, > 45 years).
- Occupation.
- Education (Below High School/High school/ Intermediate/Graduate/PostGraduate/Technical /Professional/Any other).
- Monthly Income (a) Less than Rs. 20,000 (b) 20,001 50,000 (c) 50,001 80,000 (d) More than 80,00).

Thus, subsequent basic method was utilized in the findings:

- 1. Preliminary Investigation of G2C ICT-Governance initiatives in Uttarakhand.
- 2. Questionnaires on G2C ICT-initiatives.
 - a. G2C ICT-initiatives-I: a primary questionnaire to find out the basic organization.
 - b. G2C ICT-initiatives-II: to investigate the policies.
- 3. Technical Feedback on G2C ICT-initiatives Professional Remarks on G2C ICT-initiatives.
- 4. Use statistics.
 - a. Explanatory Statistics.
 - b. Inferential Statistics.
 - c. Percentage Analysis.
- 5. Suggestion and conclusions.

G2C ICT-initiatives Scale

A scale named "Government to Citizen ICT-initiatives in Uttarakhand" i.e. "G2C ICT-initiatives" has been arranged for the study of ICT-Governance initiatives. The questionnaires covers the reaction of inhabitants on various ICT-Governance initiatives of the province covering IT consciousness, organization matters, knowledge of government's ICT policies and arrangements and their opinions of the value and influence of these systems. The study contained of two questionnaires:

- The initial survey studied ICT-readiness of inhabitants. It covers 22 declarations. All these declarations have "Yes" or "No" as a response. A "Yes" means "1", and a "No" means "0".
- The second dataset has two parts. In the first part there are 34 questions, with "Yes" or "No" as an answer. Again, a "Yes" means "1", and a "No" means "0". The second part of the second dataset contains 33 statements. Out of these 30 statements are positive and 3 are negative statements.

For a positive detail the succeeding scoring modus operandi has been engaged:-

- 5 Marks awarded for strongly agree
- 4 Marks awarded for agree
- 3 Marks awarded for can't say
- 2 Mark awarded for disagree
- 1 Mark awarded for strongly disagree

For a negative item the scoring procedure is just reversed. The marking system is

- 1 Mark awarded for strongly agree
- 2 Mark awarded for agree
- 3 Mark awarded for can't say
- 4 Mark awarded for disagree
- 5 Mark awarded for strongly disagree

Scores on all the 30 positive items are added together and it gives a score of the respondent on this scale. An individual G2C ICT-initiatives score may be interpreted on the basis of "The higher the score, the more favourable is the perception of the respondent towards the ICT G2C strategies of ICT-Governance initiatives and the lower the score the less favourable is the perception of the respondent towards these". Appendix 1 contains the Questionnaires.

The G2C ICT-initiatives of the Study

The illustration of the investigation contained of 293 and 292 respondents correspondingly. They were Students, General Public, politicians, Government Employees, Service Providers, Bureaucrats, House Wives, teachers, IT professionals and others. Gender and educational qualification wise distribution of these 585 respondents has been mentioned in Table 4.1a and Table 4.1b

As referenced previous, the example contained within Students, General Public, politicians, Government Employees, Service Providers, Bureaucrats, House Wives, teachers, IT professionals and others. The figure of these example respondents has been presented in table 4.3a and Table 4.3b.

The example contained within respondents from Urban and Rural background. The figure of these trial respondents has been presented in Table 4.4a and Table 4.4b.

Data Collection Procedure

The applicable data were gathered by allocation of the above referenced survey i.e. G2C ICT-initiatives - I AND G2C ICT-initiatives - II. Information with referenced to gender, age, scholastic qualification, position /group category of the respondents was also made known. The statistics were gathered by me contacting the respondents personally, through e-mail and through postal services.

Respondents were especially from the Pithoragarh district covering the areas places like Dharchula, Wadda, Kalika, Baluwakot, Gothi and Kathima, Munsyari, Champawat, Jhulaghat etc. district of the state of Uttarakhand. District wise distribution of the sample respondents has been presented in Appendix 2. The data were collected from the beginning to July, 2015.

Table 4.1a Gender and educational qualification wise distribution of the respondents for citizens' -readiness (N=293)

Educational Qualification wise groups Gender wise groups	Upto Intermediate	Graduates	Post Graduates	Technic al	Profession al	Any Other qualificati ons	Total
Male	74	41	36	15	26	0	192
Female	38	17	21	7	14	4	101
Total	112	58	56	22	40	4	293

 Table 41b Gender and educational qualification wise distribution of the respondents for G2C ICT-initiatives (n=292)

Educational Qualification wise groups Gender wise groups	Upto Intermediate	Graduates	Post graduates	Technical	Professional	Any Other qualificatio ns	Total
Male	84	39	43	7	27	0	200
Female	38	13	22	6	9	4	92
Total	122	52	65	13	36	4	292

Gender and age-wise group distribution of these 585 respondents has been mentioned in Table 4.2a and Table 4.2b.

Table 4.2a Gender and age wise distribution of the respondents for citizen's e-readiness (N = 293)

Gender wise groups	Age wise group	Less than 10 Yrs.	16-25 Yrs.	26-45 Yrs	45 Yrs. & above	Total
Male		0	69	71	52	192
Female		4	53	34	10	101
Total		4	122	105	62	293

Table 4.2a Gender and age wise distribution of the respondents for citizen's e-readiness (N = 293)

Age wise groups Gender wise groups	Less than 10 Yrs.	16-25 Yrs.	26-45 Yrs.	45 Yrs. & above	Total
Male	3	82	67	48	200
Female	1	59	25	7	92
Total	4	141	92	55	292

Table 4.3a Gender and category/status wise distribution of the sample respondents for e-readiness of citizens (N = 293)

Category / Status wise groups Gender wise groups	Students	General Public	Govt. Employee s	Service provide rs	IT Professiona l	Teacher s	Othe rs	Total
Male	33	12	16	32	12	11	76	192
Female	32	9	3	13	3	9	32	101
Total	65	21	19	45	15	20	108	293

Table 4.3b Gender and category/status wise distribution of the sample respondents for G2C ICT-initiatives (N = 292)

Category / Status wise groups Gender wise groups	Students	General Public	Govt. Employees	Service providers	IT Professio nal	Teache rs	Burea ucrat	Other s	Total
Male	55	51	9	35	13	13	2	22	200
Female	29	30	0	5	2	17	0	9	92
Total	84	81	9	40	15	30	2	31	292

Table 4.4a Gender and residence wise distribution of the sample respondents for e-readiness of citizens (N = 293)

Category / Status wise groups Gender wise groups	Rural	Rural (Hilly)	Semi Urban	Semi Urban (Hilly)	Urban	Total
Male	55	25	21	25	66	192
Female	27	5	12	15	42	101
Total	82	30	33	40	108	293

Table 4.4b Gender and residence wise distribution of the sample respondents for G2C ICT-initiatives (N = 292)

Category / Status wise groups Gender wise groups	Rural	Rural (Hilly)	Semi Urban	Semi Urban (Hilly)	Urban	Total
Male	57	28	31	29	55	200
Female	25	9	10	13	35	92
Total	82	37	41	42	90	292

Data Analysis

In order to accomplish the goals three of the findings which is "to identify the consciousness level and view of inhabitants regarding the presence and success of ICT policies in Uttarakhand", the following statistics have been employed:

- 1. Reasonable Statistics
- 2. Explanatory Statistics

A master chart (MC) has been prepared which contains the following information with regard to the sample respondents:

a.	Gender	Code
	Male	1
	Female	2
b.	Age -less than	Code
	Less than 16 years	1
	16-25 years	2
	26-45 years	3
	45 years & above	4
c.	Educational	Cala
	Qualification	Code
	Under graduates	1
	Graduates	2
	Post-graduates	3
	Technical	4
	Professional	5
	Other Qualification	6
d.	Category/status	Code
	Students	1
	General Public	2
	Govt. Employees	3
	Service providers	4
	IT Professionals	5
	Teachers	6
e.	Resident	Code
	Rural	1
	Rural (Hilly)	2
	Semi-Urban	3
	Semi-Urban (Hilly)	4
	Urban	5

Descriptive Statistics

In order to appreciate the nature of the distribution of the totals of the G2C ICT-initiatives (measure) of the 292 example respondents, the values of the applicable Explanatory statistics were ready and these have been available in table 4.4 Items in the Table 4.5 show the following:

- 1. The values of Mean, Mode and Median are 109.1, 99.00 and 107 respectively. The lowest score is 79 and the highest score is 113. This shows that there is not a very large deviation in the values of these three central tendencies.
- 2. The values of the Standard Errors of Mean, Median and Standard Deviation are 0.70, 0.95 and 0.51 respectively. There values are not very large and hence the values of the Mean, Mode and Median may be accepted as approximations of the values of the respective parameters.
- 3. The distribution is slightly positively skewed as the value of Skewers is +0.747 in nature.
- 4. The value of Kurtosis is 0.485. It means that the distribution is slightly leptokurtic in nature.

On the basis of the above narration the nature of the distribution of G2C ICT-initiatives scale scores may be assumed to tend towards the shape of a Normal Probability Curve (NPC).

Reasonable Statistics

Appropriate procedure was followed to find out the number and percentages of the respondents to attain the following subobjectives:

- 1. To find out the number of respondents who either "agreed or strongly agreed" with regard to the 33 statements respectively of G2C ICT-initiatives Scale.
- 2. To find out the number of respondents who said "Can't Say" with regard to the 33 statements of G2C ICT-initiatives scale respectively.
- 3. To find out the number of respondents who either "disagreed or strongly disagreed" with regard to the 33 statements of G2C ICT-initiatives scale respectively.
- 4. To make a list of six statements of G2C ICT-initiatives scale towards which "first six highest percentage of respondents" responded in "either agree or strongly agree"

Table 4.5 Values of the various descriptive Statistics with regard to the G2C ICT-initiatives scores of the sample respondents (N=292)

S. No.	Statistics	Symbol	Value
1.	Mean	M	109.1
2.	Mode	Mo	99.00
3.	Median	Mdn	107
4.	Standard Deviation	SD	11.44
5.	Standard Error of Mean	SEm	0.70
6.	Standard Error of Median	SEmd	0.95
7.	Standard Error of Standard Deviation	SEsd	0.51
8.	Tenth percentile	P10	99
9.	Twenty Fifth Percentile	P25	99
10.	Seventy Fifth Percentile	P75	117
11.	Ninetieth Percentile	P90	125
12.	Skewness	Sk	0.747
13.	Kurtosis	Ku	0.485

- 5. To make a list of six statements of G2C ICT-initiatives scale towards which "last six lowest percentages of respondents" responded in "either agree or strongly agree."
- 6. To make a list of five statements of G2C ICT-initiatives scale towards which "first five highest percentage of respondents" responded in "Can't say"
- 7. To make a list of five statement of G2C ICT-initiatives scale towards which "last five lowest percentages of respondents" responded in "Can't Say"
- 8. To make a list of five statements of G2C ICT-initiatives scale towards which "first five highest percentages of respondents" responded in "either disagree or strongly disagree"
- 9. To make a list of "last five lowest percentages of respondents in "either disagree or strongly disagree"

Additionally, percentage analysis has been done to attain the following sub-objectives:

- 1. To identify the statement towards which highest number of respondents "strongly agreed."
- 2. To identify the statements towards which "lowest number of respondents "strongly agreed"
- 3. To identify the statements towards which highest number of respondents "agreed."
- 4. To identify the statements towards which lowest number of respondents "agreed."
- 5. To identity the statements towards which highest number of respondents "Can't Say."
- 6. To identify the statements towards which lowest number of respondents "Can't Say".
- 7. To identify the statements towards which highest number of respondents "Strongly disagreed".
- 8. To identify the statements towards which lowest number of respondents "Strongly disagreed".
- 9. To identify the statements towards which highest number of respondents" disagreed".
- 10. To identify the statements towards which lowest number of respondents "disagreed".

The refusal/acceptance of a hypothesis is decided and determined on the basis of the importance/unimportance of the pertinent statistics of the 0.05 level of significance. The data is statistically examined using MS-Excel and Statistical Package for Social Sciences (SPSS).

Data Analysis

Data are valueless if they were not analysed correctly. Data using questionnaires have been collected from diagonally the state and it needs to be analysed using different statistics to make significant information, which may deliver sufficient solutions.

This section handles with the statistical examination of the data gathered to accomplish the subsequent two goals of the findings:

- 1. To measure the level of e-readiness of the inhabitants for using ICT facilities. Without access, consciousness and knowledge, the inhabitants would not be in a situation to use any ICT facilities promoted by the Government of uttarakhand and also the central government.
- 2. To understand the level of consciousness of inhabitants about ICT applications/facilities previously made obtainable by the Uttarakhand Government.
- 3. To analysis the views of respondents (inhabitants) in the direction of the valuableness of ICT-initiatives in Uttarakhand.

This examination has been divided into the following six parts.

- Part I includes the values of the t-ratios calculated to determine the importance of changes in the mean G2C ICT-initiatives scores of educational qualification wise six groups of the respondents.
- Comparison of the mean G2C ICT-initiatives scores of male and female respondents has been presented in Part II.
- t-ratios calculated to expose the importance of differences in the mean G2C ICT-initiatives scores of age-wise four groups of the respondents have been remarked in Part III.
- t-ratios calculated to examine the value of differences in the mean G2C ICT-initiatives scores of residence location wise five groups of the respondents have been mentioned in Part IV.
- Explanation of remarks of the respondents on G2C ICT-initiatives has been presented in Part V.
- Suitable percentage examination of the outputs of the respondents has been presented in Part VI.

 Table 5.1 Comparison of the view regards the success of G2C ICT-initiatives of ability wise six groups of the respondents

S. No.	Qualification wise Group	N	M	SD	t-ratio, df
1.	Upto Intermediate	122	104.9	11.4	
2.	Graduates	52	108.8	11.6	- t1,2=1.51, 1/2
3.	Post Graduates	65	109.0	11.5	$ t_{1,3}=1.46, 185$
4.	Technical	13	108.9	11.4	-11,4-0.78,133
5.	Professional	36	109.1	11.4	-11,5-0.44,136
6.	Other Qualification	4	108.1	11.7	-11,0-0.91,124

Note: - All the values of the t-ratio are insignificant at the 0.05 Level of significance.

Table 5.2 Comparison of the view regards the success of G2C ICT-initiatives of Gender wise two groups of the respondents

S. No.	Gender wise Group	N	Μ	SD	t-ratio, df	
1.	Male	200	109.11	11.4	t-0.5 200	
2.	Female	92	109.05	11.5	1-0.5, 290	

Note: - All the values of the t-ratio are insignificant at the 0.05 Level of significance.

Part I

Records in Table 5.1 disclose that educational qualification wise five groups of the respondents do not differ in their mean scores with regard to their view regards G2C ICT-initiatives.

Part II

Records in the Table 5.2 show that gender-wise two groups of the respondents do not differ much in their view regards the success of G2C ICT-initiatives.

policy, while government is the instrument (usually, collective) that does it. [Source - Wikipedia]

The World Bank defines governance as "the exercise of political authority and the use of institutional resources to manage society's problems and affairs.

Governance includes the whole procedures of public administration, the procedures underlying the construction of civic decisions, the Human Resource Development attempts

Table 5.3 Comparisons of the Perception towards the effectiveness of G2C ICT-initiatives of age-wise four groups of the Respondents.

S. No.	Age-Wise Group	N	Μ	SD	t-ratio, df
1.	Less than 16 Yrs	4	111.19	12.03	t1,2=0.21, 143
2.	Age(16-25)Yrs	141	109.10	11.47	t1,3=0.23, 94
3.	Age(26-45)Yrs	92	109.08	11.44	t1,4=1.77, 57
4.	More than 45 Yrs	55	109.06	11.55	t2,3=0.10, 231 t2,4=1.59, 194 t3,4=0.87, 145

Note: - All the values of the six t-ratios are insignificant at the 0.05 level of significance.

Part III

Records in the Table 5.3 display that age-wise four groups of the respondents do not differ in their view regards the success of G2C ICT-initiatives.

need for re-skilling the government mechanism, ordering, and well-organized management of public reserves and above all re-designing the different tools utilized to understand the idea of a beneficiary state.

Table 5.4 Comparisons of the view regards the success of G2C ICT-initiatives of residence location-wise five groups of the

	K	espondents	· _		
S. No.	Residence Location	N	M	SD	t-ratio, df
1.	Rural	82	108.80	11.5	t1,2=0.21, 117
2.	Rural (Hilly)	37	109.09	11.5	t1,3=0.23, 121
3.	Semi-urban	41	108.09	11.6	t1,4=1.77, 122
4.	Semi-urban (Hilly)	42	111.05	11.3	t2,3=0.10, 76
5.	Urban	90	109.08	11.4	t2,4=1.59, 77
					t34=0.87.81

Note: - All the values of the five t-ratios are insignificant at the 0.05 level of significance.

Part IV

Records in the Table 5.4 display that residence location-wise five groups of the respondents do not differ in their view regards the success of G2C ICT-initiatives.

Part V

Respondents' Opinion Analysis

Governance is the motion of governing. It connects to choices that describe *hopes*, allow control, and confirm functioning. It contains either of a distinct procedure or of a particular portion of organization and guidance procedures. Erstwhile persons establish government to administer these procedures and systems.

"Governance" is what a "government" does. It might be a geopolitical government (nation-state), a corporate government (business entity), a socio-political government (tribe, family, etc.), or any number of different kinds of government. But governance is the kinetic exercise of management power and

ICT Consciousness of Schemes

Part two of the II survey contracts with inhabitant's consciousness of the government's ICT-governance schemes. The upcoming record and diagram show the extent of visibility that different projects have.

The above information show that there is very less consciousness about government projects with the inhabitants. On an average only 29% respondents showed consciousness about government's ICT-initiatives. It was as low as 16% and the highest was 51%. This paired with the fact that over 60% senses that ICT-initiatives are helpful for the development of the people. Thus, a willingness to receive technical alteration is there, a belief of the significance of the ICT-initiatives is there but consciousness approximately government's program is very low. There seems to be a large cut off. On one hand government is paying huge money with nice purposes, and on the other hand inhabitants are also open to benefit the innovative style of facilities but they are not conscious.

S. No.	Questions	Yes %		
1.	Do you know about Government to Citizen strategies	51		
2.	Do you know about Project Aarohi?			
3.	Is adequate infrastructure available for Project Aarohi?			
4.	Is it possible to benefit our society by the e-initiatives?	46		
5.	Do you know about the Project Sakshyam?	23		
6.	Do you know about the Project Taleem?	25		
7.	Do you know about the Project Janadhar?	24		
8.	Do you know about the Project Shikshya?	38		
9.	Do you know about the Project D-space?	12		
10.	Do you know about the Project Hindi?	37		
11.	Do you know about the Uttara portal?	42		
12.	Do you know about the Project SWAN?	26		
13.	Do you know about the Project Devbhoomi?	40		
14.	Do you know about the Automation of Uttarakhand's Lokayukta office?	20		
15.	Do you know about the Automation of Sub-Registrar Office/Property Registration (CROUN)?	16		
16.	Do you know about the Automation of Commercial Tax?	29		
17.	Do you know about the Automation of Employment Exchanges?	39		
18.	Do you know about the Land Records Touch-Screen Kiosks?	24		
19.	Do you know about the Automation of Firms, Societies and Chits office?	20		
20.	Do you know about the ICT facilitation during Assembly & Lok-Sabha Elections?	32		
21.	Do you know about the Website of Chief Electoral Officer, Uttarakhand?	34		
22.	Do you have information about the Website of Transport Office automation?	30		
23.	Do you know about the Website Jal Sansthan Department, Uttarakhand?	35		
24.	Do you know about the Land Records Citizen Centric Website?	20		
25.	Do you know about the Website AGMARKNET?	22		
26.	Do you know about the Right to Information (RTI) Website?	38		
27.	Do you know about the CONFONET (Automation of State/District Consumer Forums)?	19		
28.	Do you know about the Multipurpose National Id-Card (MNIC) Project?	31		
29.	Do you know about MIS for National Rural Employment Guarantee Assurance (NREGA) Programme?	43		
30.	Do you know about the Unique Id-Project (Aadhar)?	35		
31.	Do you know about the Common Integrated Police Application (CIPA)?	16		
32.	Have you ever accessed AGMARKNET?	19		
33.	Have you ever used RTI website?	27		
34.	Do you know about "Uttarakhand State Seed & Organic Production Certification Agency (USS&OPCA)"?	18		

The alteration will come when the government sheds its, department computerization attitude and relooks at the ICTgovernance initiatives as a novel model and a means to attach with the inhabitants. This will happen if the scheme citizens are made answerable with usage being the important standard of achievement of any program rollout and not just rolling out of an Application. The actual test starts when the Application has been introduced. The endorsement and visibility thus seem to be the biggest stumbling block in the success of ICTgovernance initiatives.

Inhabitant's view of ICT facilities

The inhabitants of the uttarakhand are dispersed crosswise the state in both plains and hilly terrains. In spite of this, the literacy levels are very huge. Their overall consciousness about government plans and hopes are also very high. Apart from statistical data, inhabitants have also given subjective data on the bases of their views of the ICT initiatives of the Uttarakhand government. These remarks show the following:

- ICT facilities are essential.
- ICT facilities are important if the government is to reach all the inhabitants.
- ICT facilities decrease price and upsurges competence.

 The consciousness of government's ICT-initiatives is very low. A majority of the respondents deceased the fact that they were not even alert of a huge number of policies, and there was no one at local level to make clear and refine their uncertainties.

The inhabitants are expertise savvy, well-educated and have hopes. On the other hand, the government also appears to have very good ICT plans. On the other hand, the space seems to be in the visibility of these plans, rising consciousness among inhabitants, and also a feasible model of implementation.

Part VI

Records in the Table 5.6 display the following -

- In case of 29 items (out of a total of 33 items), the number of responses were in decreasing order from "Can't Say" to SA+A to SD+D.
- In the case of the following four items the number of responses were not in decreasing order from "Can't Say" to SA+A to SD+D.
- 1. On an average, 31 respondents either agreed or strongly agreed, 108 respondents responded in "Can't Say" and 153 respondents either disagreed or strongly disagreed.
- 2. "Insufficient substructure invents a lot of difficulties in making IT workers."

Item No.	Strongly Agree + Agree	Can't Say	Strongly Disagree + Disagree
1	117	161	14
2	31	108	153
3	177	105	10
4	108	165	19
5	86	179	27
6	73	196	23
7	108	172	12
8	131	140	21
9	94	170	28
10	82	178	32
11	100	162	30
12	128	133	31
13	130	136	26
14	123	145	24
15	139	136	17
16	101	167	24
17	152	118	22
18	111	153	28
19	123	143	26
20	110	157	25
21	102	162	28
22	110	159	23
23	140	137	15
24	88	184	20
25	105	167	20
26	89	187	16
27	128	140	24
28	21	161	110
29	109	167	16
30	93	184	15
31	99	175	18
32	129	143	20
33	20	167	105

 Table 5.6 Percentage analysis of the responses

- On an average, 177 respondents either agreed or strongly agreed, 105 respondents responded in "Can't Say" and 10 respondents either disagreed or strongly disagreed. "People are refining its technical expansions by ICT-Initiatives."
- 4. On an average, 21 respondents either agreed or strongly agreed, 161 respondents responded in "Can't Say" and 110 respondents either disagreed or strongly disagreed. "Usual consciousness with reference to the program Janadhar has not yet reached the ground level."
- 5. On an average, 20 respondents either agreed or strongly agreed, 167 respondents responded in "Can't Say" and 105 respondents either disagreed or strongly disagreed. "There are still different obstacles in the accomplishment of the goals of the project SWAN."

Records in Table 5.7 show that on the basis of the Percentage analysis of the responses regards the 33 items of G2C ICT-initiatives Scale of the 292 respondents, the following main results have been obtained :-

- 1. The Statement which has been either strongly agreed or agreed by the largest number of respondents (60.62%) is as follows: "People are enhancing its technical growths by ICT-initiatives".
- 2. The Statement which has been either strongly agreed or agreed by the second largest number of respondents (52.05%) is as follows: "The portal of Right to Information (RTI) is giving recover of pro-active reveals via a fast hunt able method of the portal".

Fuble 5.7 I electricage examination of the responses in the form of strongly agrees agree	Table 5.7	7 Percentage	examination	of the Re	esponses in	the form	of strongl	y agrees	+agrees
--	-----------	--------------	-------------	-----------	-------------	----------	------------	----------	---------

Item. No.	Number of Respondents	Percentage
3	177	60.62%
17	152	52.05%
23	140	47.95%
15	139	47.60%
8	131	44.86%
13	130	44.52%
32	129	44.18%

- 3. The Statement which has been either strongly agreed or agreed by the third largest number of respondents (47.95%) is as follows: "Project Shikshya is a main educational interference project for activating school children to become IT savvy".
- The Statement which has been either strongly agreed 4 or agreed by the fourth largest number of respondents (47.60%) is as follows: "The automation of transport office is benefiting the public".
- The Statement which has been either strongly agreed 5 or agreed by the fifth largest number of respondents (44.86%) is as follows: "The computerization of employment exchange is bringing success and limpidity in the Department".
- The Statement which has been either strongly agreed 6 or agreed by the sixth largest number of respondents (44.52%) is as follows: "The computerization of land records is profiting the citizens of the province"
- The Statement which has been either strongly agreed 7. or agreed by only 44.18% of the respondents is as "ICT-Governance schemes are presenting follows: outstanding chances to distinct departments by bringing them within the scope of ICT-Governance".

- 3. The Statement which has been either strongly disagreed or disagreed by the third largest number of respondents 35.96% is as follows: "There are still different hindrances in the attainment of the goals of the project SWAN".
- 4. The Statement which has been either strongly disagreed or disagreed by the fourth largest number of respondents 10.96% is as follows: "The automation of Firms, Societies and Chits is providing easy interface to view the status of society and firm for the public".
- 5. The Statement which has been either strongly disagreed or disagreed by the fifth largest number of respondents 10.62% is as follows: "The Website of Chief Electoral Officer is providing much useful information for the benefit of Electorates/Voters".
- 6. The Statement which has been either strongly disagreed or disagreed by the sixth largest number of respondents 10.27% is as follows: "The Website for "Uttarakhand State Seed & Organic Production Certification Agency (USS&OPCA)" is providing required information about the working and various activities of "Uttarakhand State Seed & Organic Production Certification Agency (USS&OPCA)" to the farmers".

Item. No.	Number of Respondents	Percentage
Item No.2	153	52%
Item No.28	110	37.67%
Item No.33	105	35.96%
Item No.10	32	10.96%
Item No.12	31	10.62%
Item No.11	30	10.27%

Table 5.8 Percentage analysis of the responses in the term of Strongly Disagree+ Disagree

Table 5.9 Percentage analysis	of Can't Say
Number of Respondents	Percenta
196	67 12%

Item. No.	Number of Respondents	Percentage
Item No.6	196	67.12%
Item No.26	187	64.04%
Item No.24	184	63.01%
Item No.30	184	63.01%
Item No.5	179	61.30%
Item No.10	178	60.96%
Item No.31	175	59.93%
Item No.7	172	58.90%

Records in Table 5.8 show that on the basis of the Percentage analysis of the responses regards the 33 items of G2C ICTinitiatives Scale of the 292 respondents, the following main outputs have been obtained:-

- The Statement which has been either strongly disagreed 1. or disagreed by 52% respondent is as follows: "Insufficient infrastructure makes different obstacles in making IT workforce.
- The Statement which has been either strongly disagreed 2. or disagreed by the second largest number of respondents 37.67% is as follows: "General awareness with regard to the project Janadhar has not yet reached the ground level".

Records in Table 5.9 show that on the basis of the Percentage analysis of the responses regards the 33 items of G2C ICTinitiatives Scale of the 292 respondents, the following main outputs have been obtained:-

- 1. The Statement towards which the largest number of respondents 67.12% responded in "Can"t Say" is as "The automation Sub Registrar Office follows: (CROUN) is providing registration of all types of deeds such as sale, lease, will, agreement etc".
- The Statement towards which the smallest number of 2. respondents 64.04% responded in "Can"t Say" is as follows: "The project Hermitage has really succeeded

in creating centers of excellence in IT in Uttarakhand".

- 3. The Statement towards which the largest number of respondents 63.01% responded in "Can't Say" is as follows: "Benefit of the project D-space could not yet reach the beneficiaries in the educational sector".
- 4. The Statement towards which the smallest number of respondents 63.01% responded in "Can"t Say" is as follows: "Digitized libraries through the project D-space has revolutionized the access of required information".

Item No.	Strongly Agree	Agree	Can't Say	Disagree	Strongly Disagree
1	16	101	161	13	1
2	3	28	108	112	41
3	50	127	105	10	0
4	13	95	165	13	6
5	7	79	179	21	6
6	12	61	196	20	3
7	22	86	172	10	2
8	24	107	140	14	7
9	30	64	170	26	2
10	16	66	178	31	1
11	17	83	162	25	5
12	32	96	133	25	6
13	22	108	136	19	7
14	30	93	145	17	7
15	22	117	136	13	4
16	25	76	167	20	4
17	33	119	118	17	5
18	27	84	153	26	2
19	26	97	143	21	5
20	24	86	157	19	6
21	21	81	162	23	5
22	21	89	159	20	3
Item No.	Strongly Agree	Agree	Can't Say	Disagree	Strongly Disagree
23	26	114	137	14	1
24	14	74	184	15	5
25	22	83	167	16	4
26	16	73	187	10	6
27	32	96	140	22	2
28	1	20	161	86	24
29	35	74	167	16	0
30	20	73	184	13	2
31	22	77	175	15	3
32	22	107	143	19	1
33	6	14	167	82	23
Total	709	2748	5157	823	199
Average	21.48	83.27	156.27	24.94	6.03



Table 5.10 Combined Analysis

- 5. The Statement towards which the largest number of respondents 61.3% responded in "Can't Say" is as follows: "The automation of Lokayukta Office is expediting the disposals of cases/complaints by using latest ICT tools".
- 6. The Statement towards which the smallest number of respondents 60.96% responded in "Can't Say" is as follows: "The automation of Lokayukta Office is expediting the disposals of cases/complaints by using latest ICT tools".
- 7. The Statement towards which the largest number of respondents 59.93% responded in "Can't Say" is as follows: "The creation of center of excellence of IT through project Hermitage is beneficial for a limited number of experts only".
- The Statement towards which the smallest number of respondents 58.90% responded in "Can't Say" is as follows: "The automation of Commercial Tax is providing activities like Dealer Registration, Return Filing & Assessment, Challan Management and Forms Issuance and Usage of the department".

Second highest is "Agree". Which denotes in areas where there is some visibility, people have readily accepted the schemes. This is a positive sign that people are in an accepting frame of mind, and are positively oriented towards G2C applications.

Figure 2a & 2b shows the gender-wise graphical display of all the respondents. A cursory look reveals that across both the genders, the responses are almost same. In the case of men, it is slightly higher, which can be explained by the fact that men have better access to the external world. The most common rating is " Can"t Say". It means that there is no visibility of the government schemes.

On the basis of the Percentage analysis of the responses towards the 33 items of G2C ICT-initiatives Scale of the 292 respondents, the following important results have been obtained:-

1. The Statement which has been strongly agreed by the highest number of respondents 17.12% is as follows: "Society is improving its technological developments by ICT-initiatives".









Figure 1 displays the graphical figures of all the respondents. A hasty look shows that most of the respondents gave a neutral response. It means that there is no discernibility of the government projects in the eyes of inhabitants. They were neither happy nor unhappy. Their answer was "Can't say". This output informs us that either the respondents had no visibility of the programs, or they have found them simply average.

- 2. The Statement which has been strongly agreed by the lowest number of respondents 0.34% is as follows: "IT awareness is increased by Project Aarohi".
- 3. Statement which has been agreed by the highest number of respondents 43.49% is as follows: "Society is improving its technological developments by e-initiatives".

ITEM NO.		Respondents		Percentage
Item No.3	Strongly Agree	50	Highest	17.12%
Item No.28	Strongly Agree	1	Lowest	0.34%
Item No.3	Agree	127	Highest	43.49%
Item No.33	Agree	14	Lowest	4.79%
Item No.6	Can't Say	196	Highest	67.12%
Item No.2	Can't Say	108	Lowest	36.99%
Item No.2	Disagree	112	Highest	38.36%
Item No.3,7, 26	Disagree	10	Lowest	3.42%
Item No.2	Strongly Disagree	41	Highest	14.04%
Item No. 29	Strongly Disagree	0	Lowest	0.00%

Table 5 11	Datia	analyzaia	Tichast	Transas	T arreat
Table 5.11	Ratio	anarysis	Highest	verses	Lowest

- 4. The Statement which has been agreed by the lowest number of respondents 4.79% is as follows: "There are still several hindrances in the attainment of the objectives of the project SWAN".
- 5. The Statement which has been 'Can't say by the highest number of respondents 67.12% is as follows: "The automation Sub Registrar Office (CROUN) is providing registration of all types of deeds such as sale, lease, will, agreement etc".
- The Statement which has been Can"t say by the lowest number of respondents 36.99% is as follows: "Inadequate infrastructure creates many problems in creating IT workforce".
- The Statement which has been disagreed by the highest number of respondents 38.36% is as follows: "Inadequate infrastructure creates many problems in creating IT workforce".
- 8. The Statements which have been disagreed by the lowest number of respondents 3.42% is as follows: "Society is improving its technological developments by e-initiatives". "The automation of Commercial Tax is providing activities like Dealer Registration, Return Filing & Assessment, Challan Management and Forms Issuance and Usage of the department". "The project Hermitage has really succeeded in creating centers of excellence in IT in Uttarakhand".
- 9. The Statement which has been strongly disagreed by the highest number of respondents 14.04% is as follows: "Inadequate infrastructure creates many problems in creating IT workforce".
- The Statements which have been strongly disagreed by the lowest number of respondents 0.00% are as follows: "IT intervention for minorities in Madarasas through project Taleem is worthy for appreciation".

References

- 1. Vaisla Kunwar Singh, Manoj Kumar Bisht, Prof. Durgesh Pant, "Framework of e-Initiatives for Uttarakhand" in *International Journal of Innovation Management and Technology (IJIMT)*; Vol. 2, No. 4, PP 278-285, Aug 2011.
- 2. Vaisla Kunwar Singh, Manoj Kumar Bisht, Prof. Durgesh Pant, "Impact Analysis of e-initiatives in Uttarakhand" in *International Journal of Engineering and Technology (IJET)*; Vol. 3, No. 4, PP 417-424, Aug 2011.
- 3. Vaisla Kunwar Singh, Manoj Kumar Bisht "SWOT Analysis of e-Initiative in Uttarakhand", in *International Journal of Computer Applications (IJCA)*, PP 5-14, *V*-*12- No.5*, Dec. 2010.
- Sharma, MK, A strategy for e-Initiatives for Uttarakhand, Ph.D thesis, Kumaun University, India, 2009
- 5. NCAER; Draft Uttarkhand Development Report, 2009.
- 6. Bhudeb Chakravarti, M VenuGopal, White Paper on Citizen Centric Service Delivery through e-Governance Portal- Present Scenario in India in May 2008.
- 7. Anita Karwal, "Effective Public Service Delivery and e-Governance: Who Drives Whom"
- 8. Bhatnagar, Subhas. E-Government: From vision to implementation: A practical guide with case studies. New Delhi: Sage Publications, 2004. 202p.
- 9. Sameer, Sachdeva, 2003 "White Paper on e-Governance Strategy in India", World Bank, Washington.
- 10. e-Gov. e-Business strategies for Government: Bouglas Holmes.
- 11. e-Governance Initiative by Uttarakhand Portal, ITDA- e Governance Initiative
- 12. e-Governance: India in-the 21St Century.
- 13. Vikas Nath, Building and Sustaining Democratic and Accountable Governance Structures using ICT. http://www.cddc.vt.edu/digilalgov/gov-menu-html.

How to cite this article:

Puneet Chandra Verma *et al.*2017, ICT Initiatives At The Grass Roots For Last Mile Learners of Uttarakhand, India. *Int J Recent Sci Res.* 8(6), pp. 17780-17793. DOI: http://dx.doi.org/10.24327/ijrsr.2017.0806.0421