IMPACT ANALYSIS OF GOVERNMENT TO CITIZEN INITIATIVES OF UTTARAKHAND, INDIA

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ABSTRACT

Governance, e-Governance, G2C (Government to Citizen). The term Governance may be understood as the process by which society steers itself. This includes the interactions among the State, the private enterprise and the civil society. With the advent of Internet and networking and communication technologies, the whole process of governance has become ICT driven. Different National and State governments are utilizing ICT to provide services to the citizens at their door steps and bringing down the cost of governance and increasing efficiency and effectiveness of delivery.

e-Governance is the use of information and communication technologies to support good governance. It includes:

e-Administration: Improving government processes by cutting costs, by managing performance, by making strategic connections within government, and by creating empowerment.

e-Citizens and e-Services (G2C): Connecting citizens to government by talking and listening to citizens and supporting accountability and democracy and by improving public services.

e-Society: building interactions beyond the boundaries of government by working better with business, by developing communities, by building Government partnerships, and by building civil society.

But are these efforts sufficient? Do they actually impact the man on the street? This paper is based on a research project to evaluate the existing framework of G2C solutions deployed in the state of Uttarakhand, a semi-hill state of India, and based on findings, proposes a revised model of G2C.

KEYWORDS: *e-Governance, G2C, e-Strategy, G2C Initiatives, e-Administration, e-Citizen, e-Society.*

1. INTRODUCTION

ICT has tremendous applications in G2C form of e-governance. The government can improve its efficiency, accountability and transparency by using ICT. In the increasingly growing complexities of public administration, the use of IT has become indispensable for effective governance and e-Governance is an emerging trend which can re-invent the way the Government works. But in India, the experience has shown that the success of initiatives depends on the political will and commitment of bureaucracy.

ICT brings in lots of benefits in the area of e-Governance – e.g. enhanced transparency, online services, civil society participation, e-trade facilitation, empowerment of marginalized groups, savings of public resources, strengthening the principles of democratic governance through enhanced interactivity and engagement with citizen and civil society.

e-Governance allows citizens to communicate with the government, participate in government's policy making and citizens to communicate with each other. The e-Governance truly allows citizens to participate in the government decision-making process, reflect their true needs and welfare by utilizing e-Governance as a tool.

In India, e-Governance started with National Informatics Center's (NICs) efforts at connecting district headquarters through computers in the 1980s and through establishment of pan-India network. This has provided the backbone to implement several solutions and services around G2C. To further utilize the potential of e-Governance to improve the quality of life of the vast population of the country, the Government of India has formulated a national programme – the National e-Governance Plan (NeGP). The plan seeks to create the right governance and institutional mechanisms, set up the core infrastructure and policies and implement a number of Mission Mode Projects at the center, state and integrated service levels to create a citizen-centric and business-centric environment for governance.

The plan attempts to cover all the important areas relating to e-Governance – Policy, Infrastructure, Finances, Project Management, Government Process Reengineering, Capacity Building, Training, Assessment and Awareness etc. across the Central and State Governments.

NeGP is designed to leverage capabilities and opportunities presented by ICT to promote good governance across the country in a time-bound manner with clearly defined responsibilities. NeGP is aimed at introducing e-

Governance systematically through 25 Mission Mode projects, which would touch the lives of more than 1 billion people.

The vision of NeGP is to make all Government services accessible to the common man in his locality through common service delivery outlets. The implementation strategy envisages clear definition of service goals and metrics for each project and structured stakeholder consultations with all stakeholders including citizens and civil society organizations before the service goals of each project are firmed up.

All State governments in India have implemented several G2C projects under the guidance and monitoring of NeGP. A few key G2C e-Governance initiatives of Uttarakhand govt. are mentioned below:

1. Project Aarohi – Meant for Computer Labs in Schools
2. Project Sakshyam
3. Project Taleem – Meant for Madarasa's
4. Project Janadhar (Soochna Kutirs)
5. Project Shikshya - Meant for School Students
6. Project D-Space (contains a digital repository of books, thesis, and papers from all universities in the state)
7. Project Uttara portal (for providing information and services to citizens)
8. Project Hindi for localization of content
9. Project SWAN
10. Project Devbhoomi
11. Automation of Lokayukta office
12. Automation of Sub-Registrar Office/ Property Registration (CROUN) office
13. Automation of Commercial Tax
14. Automation of Employment Exchanges
15. Land Records Touch-Screen Kiosks
16. Automation of Firms, Societies and Chits office
17. ICT facilitation during Assembly & Lok-Sabha Elections
18. Website of Chief Electoral Officer, Uttarakhand
19. Website of Transport Office automation
20. Website Jal Sansthan Department, Uttarakhand
21. Land Records Citizen Centric Website
22. Website AGMARKNET
23. Right to Information (RTI) Website
24. CONFONET (Automation of State/District Consumer Forums
25. Multipurpose National Id-Card (MNIC) Project
26. MIS for National Rural Employment Guarantee Assurance (NREGA) Programme
27. Unique Id-Project (Aadhaar)
28. Common Integrated Police Application (CIPA)
29. RTI website
30. Uttarakhand State Seed & Organic Production Certification Agency (USS&OPCA)

The above programs are only illustrative of the breadth of applications undertaken by the government. They practically touch every citizen, be it a school student, a government employee, a house wife, a farmer, a businessman, a teacher, male, female, resident of rural, hilly, urban terrains etc. This reflects the Uttarakhand government's commitment and resolve to bring government at the doorstep of every citizen. And IT provides that backbone.

However their implementation leaves a lot to be desired.

2. NEED AND SIGNIFICANCE OF THE STUDY

In early 1990's most of the states in India started implementing G2C e-Governance initiatives. However, they faced several implementation challenges. They were:

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

Government of India, as well as government of Uttarakhand have also launched several initiatives under the National e-Governance Plan (NeGP) and e-Governance roadmap for G2C sector. The projects have been undertaken

with a view to streamline the government's services to citizens, to increase transparency, to reduce operational costs, to increase accessibility, to increase administrative efficiency and effectiveness.
But these have shown mixed results. Despite the government spending big money and putting in lots of efforts the status on ground is not too flattering. Thus, it was time to investigate further and look into the reasons for failure and propose a way forward.
The government is spending big money, but not able to reap the benefits, whereas many State governments have made tremendous progress and led to an e-revolution of sorts. They have saved money increased efficiency, brought transparency and empowered ordinary citizens. Uttarakhand is yet to see these benefits.

3. OBJECTIVES

The broad objectives of this research was to study and critically evaluate the status of the existing G2C projects in Uttarakhand and propose a way forward if things needed any improvement.
To address the objectives, research in the following areas was undertaken:

1. E-initiatives undertaken and initiated by the central government in the area of G2C.
2. Existing system of e-Governance w.r.t. G2C applications in the state of Uttarakhand.
3. Awareness levels and perception of citizens towards the existence and effectiveness of G2C e-initiatives in Uttarakhand.

The present paper is based on the findings of the research with respect to the first two objectives – Status of G2C applications in Uttarakhand.
The data items collected during a period of about six months or so were further corroborated by extensive brain storming sessions conducted at different levels. It led to the realization that there is tremendous space that needs to be filled in through various e-Strategies.

4. RESEARCH METHODOLOGY

In order to attain the objectives of the study, the following research methodology has been followed. Preliminary investigation about the e-Governance initiatives of the state has been checked and the perceptions of the citizens towards the effectiveness of Government to Citizen Strategies in Uttarakhand (G2CSIU) have been analyzed and understood.

4.1 Data source

It was decided to use questionnaires as a source of data collection as the target respondents are spread across the State in physically wide-spread geographical locations. It would be logistically and financially extremely unwise to get the data collected through face-to-face interviews.
The Questionnaires on the appreciation of G2C e-Governance initiatives in Uttarakhand were prepared, and a reviewed with industry experts and a sample of 15 respondents. Based on the feedback, the questionnaire design was fine0tuned.
The study focuses on two aspects – G2C initiatives of the State government, and e-readiness on the part of the citizens. To get complete information about these two aspects, two questionnaires were prepared.
The first questionnaire focuses on e-readiness on the part of citizens. It seeks questions about:

- Access to technology like landline telephones, Internet, Computers, ATM, Online Banking, Mobile phone, Television etc.
- Knowledge about usage of technology by individuals and the family members
- actual usage by the respondents and the family members
- Present practice of utilizing technology for basic G2C sevices
- profile of respondents in terms of :
  - Age group
  - Gender
  - Education
  - Profession
  - Income
  - Location

The second questionnaire seeks to know the awareness of and perception of the respondents about various government schemes. The schemes about which the respondents are asked questions are mentioned above.

4.2 Criteria for selecting parameters

The NeGP or the State government does not differentiate between G2C or G2G projects. While selecting the projects to be covered in the study, care was taken to select those Projects which had a common citizen connect.

Similarly, in order to have a broad based study, it was taken care that all sections of the society were represented.

- Locations (Rural/Rural (Hilly), Semi Urban/Semi Urban (Hilly), Urban).
- Gender (Male / Female).
- Age (< 16 years, 16 to 25 years, 26 to 45 years, > 45 years).
- Profession.
- Education (Below High School /High school / Intermediate /Graduate / Post Graduate / 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, following basic approach was used in the study:

(1) Preliminary Investigation of G2C e-Governance initiatives in Uttarakhand.
(2) Questionnaires on G2CSIU.
  (a) G2CSIU – I: a preliminary questionnaire to check the basic infrastructure .
  (b) G2CSIU – II: to study the strategies.
(3) (i)Technical Feedback on G2CSIU (ii)Experts Comments on G2CSIU.
(4) Apply statistics.
  (a) Descriptive Statistics.
  (b) Inferential Statistics.
  (c) Percentage Analysis.
(5) Recommendation and conclusions.

4.3 G2CSIU Scale

A scale named 'Government to Citizen Strategies in Uttarakhand' G2CSIU has been prepared for the study of e-Governance initiatives. The questionnaires contain the feedback of citizens on different e-Governance initiatives of the state covering IT awareness, infrastructure issues, knowledge of government's G2C strategies and schemes and their perception of the value and impact of these schemes. The survey consisted of two questionnaires:

- The first survey studied e-readiness of citizens. It contains 22 statements. All these statements have 'Yes' or 'No' as an answer. 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 item the following scoring procedure has been employed :-

  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 G2CSIU score may be interpreted on the basis of "**The higher the score, the more favorable is the perception of the respondent towards the G2C strategies of e-Governance initiatives and the lower the score the less favorable is the perception of the respondent towards these"**. Appendix 1 contains the Questionnaires.

4.4 The G2CSIU of the Study

The sample of the study consisted of 293 and 292 respondents respectively. 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

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	Technical	Professional	Any Other qualifications	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 4.1b Gender and educational qualification wise distribution of the respondents for G2CSIU (N=292)

Educational Qualification wise groups / Gender wise groups	Upto Intermediate	Graduates	Post graduates	Technical	Professional	Any Other qualifications	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)

Age wise groups / Gender wise groups	Less than 16 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 16 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

As mentioned earlier, the sample included Students, General Public, politicians, Government Employees, Service Providers, Bureaucrats, House Wives, teachers, IT professionals and others. The number of these sample respondents has been presented in table 4.3a and Table 4.3b.

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. Employees	Service providers	IT Professional	Teachers	Others	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 G2CSIU (N = 292)

Category / Status wise groups / Gender wise groups	Students	General Public	Govt. Employees	Service providers	IT Professional	Teachers	Bureaucrat	Others	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

The sample included respondents from Urban and Rural background. The number of these sample respondents has been presented in Table 4.4a and Table 4.4b.

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 G2CSIU (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

4.5 Data Collection Procedure

The relevant data were collected by distribution of the above mentioned questionnaires i.e. G2CSIU - I AND G2CSIU - II. Information with regard to gender, age, educational qualification, status / category of the respondents was also made known. The data were collected by personally contacting the respondents, through e-mail and through postal services.

Respondents were from across the State covering the areas places like Almora, Bageshwar, Udham Singh Nagar, Nainital, Chamoli, Deharadun, Hardwar, Rudraprayag 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, 2010.

4.6 Data Analysis

In order to attain the objectives three of the study which is "to understand the awareness level and perception of citizens towards the existence and effectiveness of G2C strategies in Uttarakhand", the following statistics have been employed:

(1) Descriptive Statistics
(2) Inferential 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 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

4.7 Descriptive Statistics

In order to understand the nature of the distribution of the scores of the G2CSIU (scale) of the 292 sample respondents, the values of the relevant Descriptive statistics were prepared and these have been presented in table 4.4

Table 4.5 Values of the various descriptive Statistics with regard to the G2CSIU 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

Entries in Table 4.5 reveal 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 G2CSIU scale scores may be assumed to tend towards the shape of a Normal Probability Curve (NPC).

4.8 Inferential Statistics

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

1. To find out the number of respondents who either "agreed or strongly agreed" with regard to the 33 statements respectively of G2CSIU Scale.
2. To find out the number of respondents who said 'Can't Say' with regard to the 33 statements of G2CSIU scale respectively.
3. To find out the number of respondents who either "disagreed or strongly disagreed" with regard to the 33 statements of G2CSIU scale respectively.
4. To make a list of six statements of G2CSIU scale towards which "first six highest percentage of respondents" responded in "either agree or strongly agree"
5. To make a list of six statements of G2CSIU 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 G2CSIU scale towards which "first five highest percentage of respondents" responded in "Can't say"
7. To make a list of five statement of G2CSIU scale towards which "last five lowest percentages of respondents" responded in "Can't Say"
8. To make a list of five statements of G2CSIU 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"

Furthermore, 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 rejection /acceptance of a hypothesis is decided and determined on the basis of the significance/insignificance of the relevant statistics of the 0.05 level of significance. The data is statistically analyzed using MS-Excel and Statistical Package for Social Sciences (SPSS).

5. DATA ANALYSIS

Data are meaningless if they were not analysed properly. Data using questionnaires have been gathered from across the state and it needs to be analysed using various statistics to create meaningful information, which may provide adequate results.

This Chapter deals with the statistical analysis of the data collected to attain the following two objectives of the study:

1. To gauge the level of e-readiness of the citizens for using G2C services. Without access, awareness and knowhow, the citizens would not be in a position to utilize any G2c services launched by the Government.
2. To understand the level of awareness of citizens about G2C applications / services already made available by the Uttarakhand Government.
3. To study the perceptions of respondents (citizens) towards the usefulness of e-initiatives in Uttarakhand.

This Analysis has been divided into the following six parts.

- Part I contains the values of the t-ratios computed to ascertain the significance of differences in the mean G2CSIU scores of educational qualification wise six groups of the respondents.
- Comparison of the mean G2CSIU scores of male and female respondents has been presented in Part II.
- t-ratios computed to find out the significance of differences in the mean G2CSIU scores of age-wise four groups of the respondents have been mentioned in Part III.
- t-ratios computed to find out the significance of differences in the mean G2CSIU scores of residence location wise five groups of the respondents have been mentioned in Part IV.

- Elaboration of comments of the respondents on G2C e-initiatives has been presented in Part V.
- Appropriate percentage analysis of the responses of the respondents has been presented in Part VI.

Table 5.1 Comparison of the Perception towards the effectiveness of G2C e-initiatives of qualification 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	t1,2=1.51, 172 t1,3=1.46, 185 t1,4=0.78, 133 t1,5=0.44, 156 t1,6=0.91, 124
2.	Graduates	52	108.8	11.6	
3.	Post Graduates	65	109.0	11.5	
4.	Technical	13	108.9	11.4	
5.	Professional	36	109.1	11.4	
6.	Other Qualification	4	108.1	11.7	

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

5.1 Part I

Entries in Table 5.1 reveal that educational qualification wise five groups of the respondents do not differ in their mean scores with regard to their perception towards G2C e-initiatives.

Table 5.2 Comparison of the Perception towards the effectiveness of G2C e-initiatives of Gender wise two groups of the respondents

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

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

5.2 Part II

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

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

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

Entries in Table 5.2 reveal that gender wise two groups of the respondents do not differ much in their perception towards the effectiveness of G2C e-initiatives.

5.3 Part III

Entries in Table 5.3 reveal that age-wise four groups of the respondents do not differ in their perception towards the effectiveness of G2C e-initiatives.

Table 5.4 Comparisons of the Perception towards the effectiveness of G2C e- initiatives of residence location-wise five groups of the Respondents.

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
					t3,4=0.87, 81

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

5.4 Part IV

Entries in Table 5.4 reveal that residence location-wise five groups of the respondents do not differ in their perception towards the effectiveness of G2C e-initiatives.

5.5 Part V

Respondents' Opinion Analysis

Governance is the activity of governing. It relates to decisions that define *expectations*, grant power, and verify performance. It consists either of a separate process or of a specific part of management and leadership processes. Sometimes people set up government to administer these processes and systems. [Source - Wikipedia]

"Governance" is what *a* "government" does. It might be a geo-political 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 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 encompasses the entire process of public administration, the process underlying the formulation of public policies, the Human Resource Development efforts required for re-skilling the government machinery, prioritization, and efficient management of public resources and above all re-designing the various instruments used to realize the concept of a welfare state.

5.5.1 G2C Awareness of Projects

Part two of the second questionnaire deals with citizens' awareness of the government's e-governance projects. The following table and graph reveal the extent of visibility that various schemes have.

Table 5.5: G2C Awareness Survey Findings

S. No.	Questions	Yes %
1.	Do you know about Government to Citizen strategies	51
2.	Do you know about Project Aarohi?	26
3.	Is adequate infrastructure available for Project Aarohi?	23
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 above data reveal that there is very less awareness about government schemes with the citizens. On an average only 29% respondents revealed awareness about government's e-initiatives. It was as low as 16% and the highest was 51%. This coupled with the fact that over 60% feels that e-initiatives are useful for the progress of the society. Thus, a readiness to accept technological change is there, an acceptance of the importance of the e-initiatives is there but awareness about government's program is very low. There seems to be a big disconnect. On one hand government is spending big money with good intentions, and on the other hand citizens are also open to avail the new mode of services but they are not aware.

The change will come when the government sheds it's 'department computerization' mindset and relooks at the e-governance initiatives as a new model and a means to connect with the citizens. This will happen if the Project people are made accountable with 'usage' being the key criteria of success of any program rollout and not just rolling out of an Application. The real challenge begins when the Application has been launched.

The promotion and visibility thus seem to be the biggest stumbling block in the success of G2c e-governance initiatives.

5.5.2 Citizen's Perception of G2C services

The citizens of the state are scattered across the state in both plains and hilly terrains. Despite this, the literacy levels are very high. Their general awareness about government schemes and expectations are also very high.

Apart from numerical data, citizens have also given subjective data on the bases of their perceptions of the G2C initiatives of the Uttarakhand government. These comments reveal the following:

- G2C services are needed
- G2C services are imperative if the government is to reach all the citizens.
- G2C reduces cost and increases efficiency
- The awareness of government's G2C initiatives is very low. A majority of the respondents lamented the fact that they were not even aware of a large number of schemes, and there was no one at local level to explain and clarify their doubts.

The citizens are technology savvy, literate and have expectations. On the other hand, the government also seems to have very good G2C schemes. However, the gap seems to be in the visibility of these schemes, increasing awareness among citizens, and also a viable model of execution.

5.6 Part VI

Table 5.6 Percentage analysis of the responses

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

Item No.	Strongly Agree + Agree	Can't Say	Strongly Disagree + Disagree
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

Entries in Table 5.6 reveal 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.
"**Inadequate infrastructure creates many problems in creating IT workforce**."

(2) 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.
"Society is improving its technological developments by e-Initiatives."

(3) 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.
"General awareness with regard to the project Janadhar has not yet reached the ground level."

(4) 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 several hindrances in the attainment of the objectives of the project SWAN."

Table 5.7 Percentage analyses of the Reponses in the form of strongly agree +agree

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%

Entries in Table 5.7 reveal that on the basis of the Percentage analysis of the responses towards the 33 items of G2CSIU Scale of the 292 respondents, the following important 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:
"Society is improving its technological developments by e-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 website of Right To Information (RTI) is providing retrieval of pro-active disclosures through a fast searchable mechanism of the website.".

(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 major educational intervention programme for enabling school children to become IT savvy."

(4) The Statement which has been either strongly agreed or agreed by the fourth largest number of respondents (47.60%) is as follows:
"The automation of transport office is benefiting the public.".

(5) The Statement which has been either strongly agreed or agreed by the fifth largest number of respondents (44.86%) is as follows:
"The automation of employment exchange is bringing efficiency and transparency in the Department.."

(6) The Statement which has been either strongly agreed or agreed by the sixth largest number of respondents (44.52%) is as follows:
"The automation of land records is benefiting the citizens of the state"

(7) The Statement which has been either strongly agreed or agreed by only 44.18% of the respondents is as follows:
"e-Governance projects are providing excellent opportunities to different departments by bringing them within the ambit of e-Governance.."

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

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%

Entries in Table 5.8 reveal that on the basis of the Percentage analysis of the responses towards the 33 items of G2CSIU Scale of the 292 respondents, the following important results have been obtained:-

(1) The Statement which has been either strongly disagreed or disagreed by 52% respondent is as follows:
"Inadequate infrastructure creates many problems in creating IT workforce.

(2) The Statement which has been either strongly disagreed 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.

(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 several hindrances in the attainment of the objectives 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 many 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."

Table 5.9 Percentage analysis of Can't Say

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%

Entries in Table 5.9 reveal that on the basis of the Percentage analysis of the responses towards the 33 items of G2CSIU Scale of the 292 respondents, the following important results have been obtained:-

(1) The Statement towards which the largest number of respondents 67.12% responded in "Can't Say" is as follows:
"The automation Sub Registrar Office (CROUN) is providing registration of all types of deeds such as sale, lease, will, agreement etc."

(2) The Statement towards which the smallest number of 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."

(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."

(8) 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."

Table 5.10 Combined Analysis

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

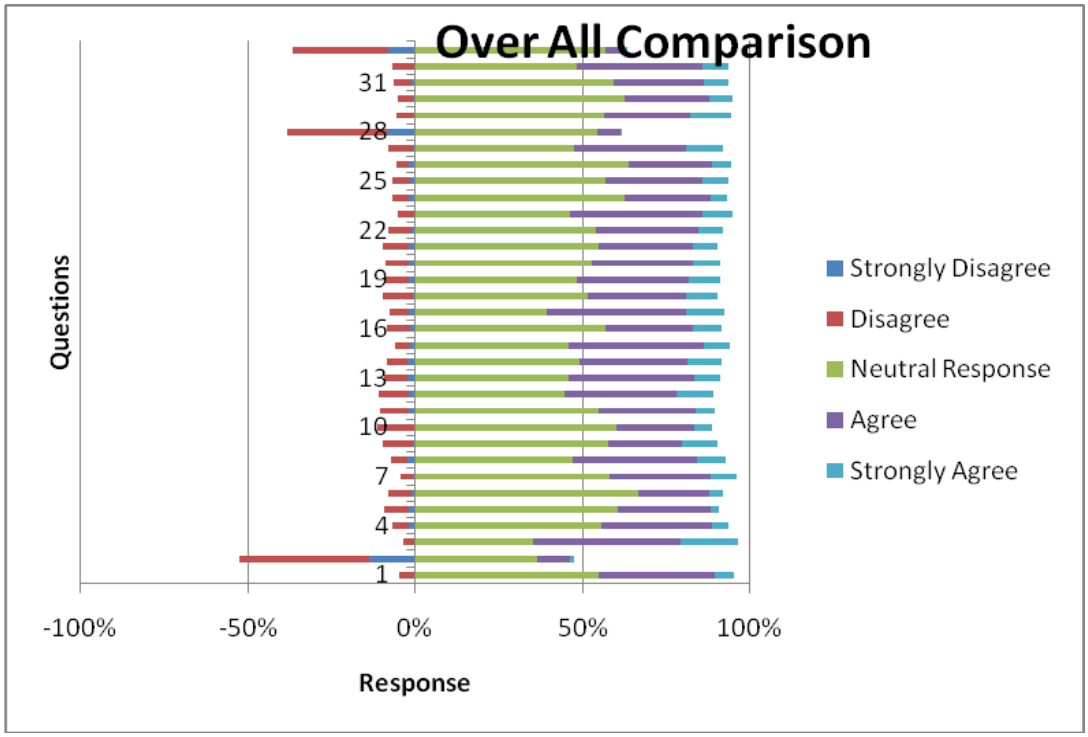

Fig. 1 Overall Comparison

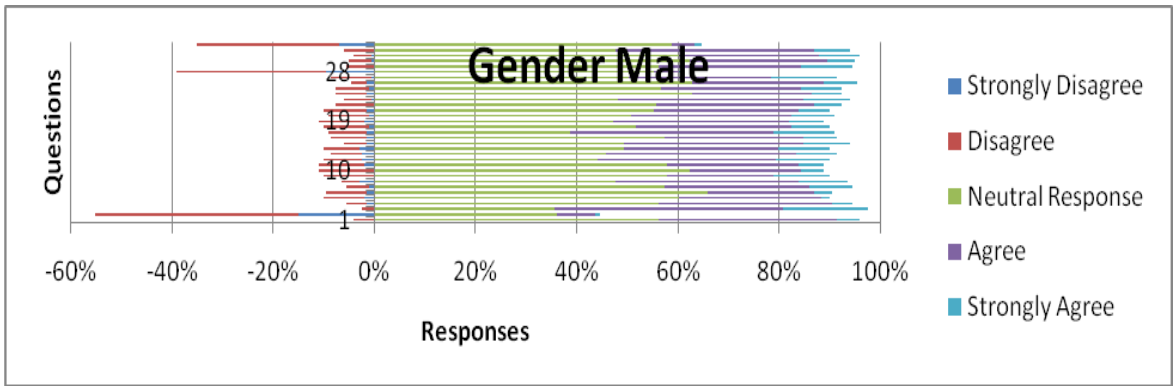

Fig. 2a Gender Male Analysis

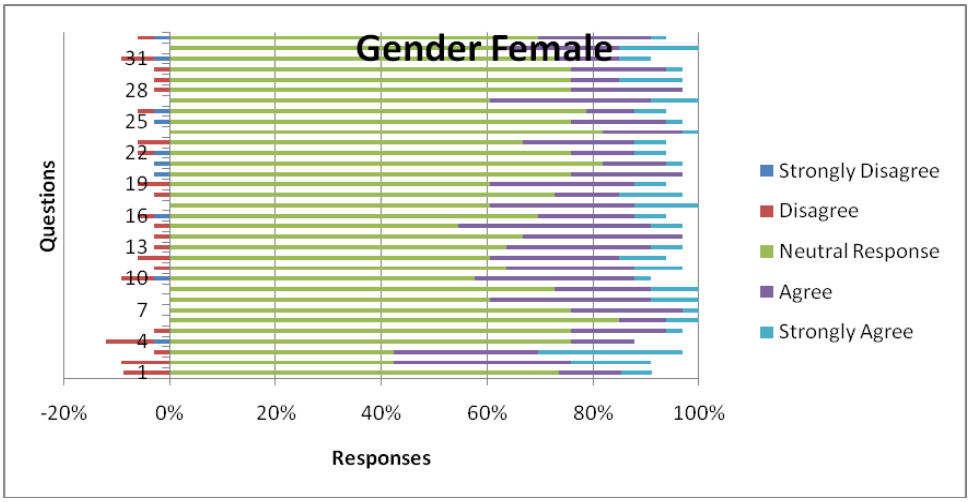

Figure 2b Gender Female Analysis

Figure 1 shows the graphical display of all the respondents. A cursory look reveals that most of the respondents gave a neutral response. It means that there is no visibility of the government schemes in the eyes of citizens. They were neither happy nor unhappy. Their answer was 'Cant say'. This feedback tells us that either the respondents had no visibility of the schemes, or they have found them simply average.

Second highest is 'Agree'. Which means 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.

Table 5.11 Ratio analysis Highest Verses Lowest

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%

On the basis of the Percentage analysis of the responses towards the 33 items of G2CSIU 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 e-initiatives."

(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."

(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."
(6) 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."
(7) 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.
(10) 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."

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