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Mid-Term Evaluation

(Analysis of effectiveness & assessment of impact on stakeholders)

of

Mobile Seva

(A Project of Department of Electronics and Information Technology, Govt. of India)

July 2013

Evaluation Team

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About the Project

Mobile Seva is a revolutionary concept launched by the Department of Electronics and Information Technology (DeitY), Government of India. The technical platform for this project is being developed by the Centre for Development of Advanced Computing (C-DAC). This initiative of Government of India stems from the realization that millions of less-privileged individuals without access to the Internet have no realistic chance of accessing government/ public services which hinders inclusive development. In the last decade, the mobile phone scenario has changed across the world. Given the fact that majority of Indian citizens reside in rural areas, mobile devices are ideally suited as alternative access and delivery channels for public services in these areas. The success of the proposed initiative on m-governance will greatly depend upon the ability of the government departments and agencies to provide frequently needed public services to the citizens, create infrastructure for anytime and anywhere mobile-based services, adopt appropriate open standards, develop suitable technology platforms, make the cost of services affordable, and create awareness, especially in underserved areas.

Having implemented Mobile Seva on such a large scale, it was felt appropriate to conduct an independent third-party evaluation to assess the mid-term impact of this project on various government organizations that have registered for and used the Mobile Seva platform. This mid-term evaluation also aimed to understand the difference in perceived and actual benefits, if any. To ensure a fair and unbiased evaluation, Narsee Monjee Institute of Management Studies (NMIMS), Mumbai, was entrusted the entire task of assessment and analysis.

Aditya Aggarwal, Eshan Gupta, Hasan Aijaz and Zoya Mehani, who are all MBA students at NMIMS, Mumbai, conducted this study under the guidance of Prof. Nilay Yajnik, Area Chairperson – Information Systems.

Dr. Yajnik is a Ph.D in Management Studies from NMIMS (University of Mumbai). He has worked with companies such as Wipro Infotech and Digital Equipment (HP). He is on the editorial board of the Innovate Journal of Online Education of the Fischler School of Education of the Nova Southeastern University, Florida, USA and AIMS International Journal of Management, Texas, USA.

Mr. Aditya Aggarwal has worked with the education and research team of Infosys, Mysore and has interned in the sales and marketing department of Dell. **Mr. Eshan Gupta** has worked in the Research and Development team of Amdocs and has interned in the sales and marketing team of Café Coffee Day. **Mr. Hasan Aijaz** has worked as a Business Analyst in Accenture and interned in Wipro as a marketing intern. **Ms. Zoya Mehani** has worked as a marketing analyst in WNS and interned in the competitive intelligence team of Microsoft.

Executive Summary

Mobile Seva/ Mobile Governance is a revolutionary framework which is aimed at leveraging the exponential growth that has happened in the wireless communication technology and the far reaching acceptability it has received in the country. It has been conceptualized and formulated by the Department of Electronics and Information Technology (DeitY), Government of India.

In the last decade, the adoption to mobile phones and other wireless technology has changed drastically across the country. This development has been leveraged upon to provide public services which have a far reaching impact.

Mobile Seva is envisaged to evolve as a one stop solution to address all transactional procedures of the citizens with the government departments. To realize this ambitious project, it's important for the government to facilitate creation of reliable technology platforms and technically qualified human resources which would accelerate adoption of these services.

C-DAC, on behalf of DeitY, has designed platforms and implemented gateways for delivery of integrated government services to citizens over mobile devices using mobile communication channels like SMS, USSD, IVRS, CBS, LBS, and through mobile applications installed on the smart phones.

Narsee Monjee Institute of Management Studies (NMIMS), Mumbai was entrusted by C-DAC to conduct an unbiased third party assessment into the effectiveness and impact of this initiative.

This report is a result of the study conducted by a team of researchers. It aims to use research methods to establish key performance indicators that can gauge the efficiency of DeitY's Mobile Seva initiative, and assess its impact on stakeholders.

The objective of the study is two-fold:

1. Establish key performance indicators to gauge efficiency of Mobile Seva initiative, and solicit response on these KPIs from the end-consumers of the service
2. Assess the impact of the service on stakeholders and identify gaps between perceived and actual benefits

Over a period of 10 days, 70 government departments across India that have implemented PUSH SMS, PULL SMS, M-Applications, and /or Voice/IVRS services by C-DAC were contacted for this research.

The research methodology was a mix of qualitative and quantitative research methods. The qualitative methods were used to explain and interpret our findings from the quantitative analysis of data points in a survey.

The quantitative research used a formalized and unconcealed questionnaire with close ended questions (Dichotomous, Multiple Responses, and Scale Based). Data were collected through means of survey administered via email or telephone, depending on convenience of the respondent. Key performance indicators were identified to measure the effectiveness of Mobile Seva initiative. These KPIs were measured using 4-point scale, percentage of responses, and co-relation.

The qualitative research used in-depth interview conducted over telephonic medium. The interview form was semi-structured with open ended questions. Data collection was interactive and used an unstructured approach. To analyze the qualitative response received, we mapped every answer to a theme and identified the tone of the respondent as positive or negative based on keywords being spoken for every question type. This technique is derived from the mood-sense algorithm used by Twitter and other noteworthy analytics engines such as Google. The subjective feedback received was further categorized under broad impact assessment parameters (with some feedback being repeated across categories due to its qualitative nature) to help identify a generalized insight and recommendation.

Mobile Seva being a service offered to end citizens and government officials, a number of key performance indicators (KPIs) have been devised to measure the effectiveness and assess impact of the service. The report identifies the KPIs - responsiveness of the DeitY and C-DAC teams, on-boarding and ease of implementation for the platform, technical performance and reliability, effectiveness of the M-GOV portal, transparency, end-user orientation of the service and awareness.

Mobile Seva service has fared very well on almost all KPIs stated above. The DeitY and C-DAC teams have been very responsive with respect to addressing queries and incorporating suggestions for improvement from the users. A small number of instances where slightly complex issues remained unaddressed leave scope for improvement. While the on-boarding process for deploying the applications has been very simple and fast for more than 80% of the departments, the implementation and rollout of services is constrained in a few cases by the lack of qualified resource and infrastructure at the end-user side.

The technical performance and reliability is consistently rated high for the platforms developed by C-DAC. The Mobile Governance portal is found to be extremely useful by the platform users but exploration of the portal offerings beyond the PUSH-SMS is very limited. Most of the queries have answers available on the portal itself but there is a need to publicize the portal more.

With regards to transparency of the platform, the stakeholders believe that transfer of correct and uninfluenced information from the government departments to the end citizens would lead to elimination of certain malpractices. Majority of the officials using the application found the

process of design and implementation participatory, but expansion of the initial set of services might be limited by the lack of micro level understanding of the end user system.

It was found that lack of a consumer helpline does not let C-DAC officials track specific user complains. Although C-DAC has successfully incorporated direct inputs from end-users about generic improvements in the applications from time to time, in a number of cases, the end users are unaware as to who should be contacted for resolution of issues.

With a low awareness of the diverse uses of the portal and the use of information available, users often tend to mistake a simple impediment as a lack of availability of the service and/or a technical problem. Also, less than 20% of the officials surveyed are aware of the social media presence of the initiative, which leaves considerable scope for creating awareness through online and conventional channels, a medium that is being extensively used today.

Another objective of the study was to determine impact of the Mobile Seva services. The impact has been measured on parameters – monetary savings to government departments, simplification of procedures and improved interface with stakeholders. 78% of the departments agreed that the service resulted in cost savings out of which 48% believed that the savings were quite significant. A number of departments moved from private service providers for sending bulk-SMSes to MSDG once it was implemented. This resulted into significant cost savings for them, and also helped them cut wasteful third party interactions with private carriers.

One reason for less adoption of PULL-SMS service is the high charges incurred by the end users on the networks of some of the telecom service providers (TSPs). This needs to be addressed to make the platform's use more extensive. Almost 80% of the departments believed that the platform has brought in efficiency and simplified procedures. The service has enabled communication of important messages in a timely and cost effective manner.

Deployment and use of the Mobile Seva service has led to bettering of interface with the end citizens for more than 90% of the departments surveyed. The service has brought about efficiency in the system and has also led to greater credibility amongst the community. Farmer communities in the rural areas as well as people living in disaster prone areas have been the greatest beneficiaries of the service. 95% of the departments would recommend the service to other departments as well.

Another deliverable that this report has brought out is a central theme that connects Mobile Seva to its end users. The hypothesized themes that the initiative could have been have been enlisted and looked upon from the perspective of what the users have to say.

The research team with the help of C-DAC envisaged the following four themes for the initiative

1. Implementation of Innovative Schemes/Projects

2. Making Public Delivery Systems Efficient and Corruption Free
3. Customization and Adaption to meet Stakeholders' Requirements
4. Setting High Standards of Services and Continued Improvement

After running through the responses received from the users at large, the central theme that the users perceive the service to be is 'Making Public Delivery Systems Efficient and Corruption Free.'

The service fares well on other three themes as well but research identified areas like a more streamlined feedback mechanism, a more involved operating model wherein the Mobile Seva is brought closer to the partnering departments, etc which makes them lose out from being a selling proposition for the initiative.

The research also identifies areas where the service is facing problems. These have been linked to the KPIs that they are bringing down. The biggest problems that the users are facing, or are becoming limitations for rapid and effective adaptation of the service, are lack of awareness and the lack of a customized solution for the diverse genres of departments that are under the purview.

The research also asked the users for their insights and recommendations for the service. The responses ranged from improving the usability of the processes by benchmarking them with usability provided by private commercial service providers, to improving the customer service mechanism, to taking up initiatives to increase the awareness of the high impact potential service.

Based on all the analysis, and keeping in mind the end objective of the service, it is recommended to establish a special purpose vehicle for developing the business side of the service. With the core operations receiving positive responses from a majority of the respondents, the service needs to be helped from the functional side to achieve all of its objectives effectively.

Objectives of Mobile Governance

The Framework for Mobile Governance, notified in The Gazette of India in February 2012, aims to utilize the massive reach of mobile phones and harness the potential of mobile applications to enable easy and round-the-clock access to public services, especially in the rural areas. The framework aims to create unique infrastructure as well as application development ecosystem for m-Governance in the country.

Government of India will progressively adopt and deploy m-governance in a time bound manner to ensure inclusive delivery of public services on mobile platform to both the urban and rural populace in the country in accordance with this framework.

The following are the main measures laid down in the Framework for Mobile Governance:

1. Web sites of all Government Departments and Agencies shall be made mobile compliant, using the "One Web" approach.

2. Open standards shall be adopted for mobile applications for ensuring the interoperability of applications across various operating systems and devices as per the Government Policy on Open Standards for e-Governance.

3. Uniform/ single pre-designated numbers (long and short codes) shall be used for mobile-based services to ensure convenience.

4. All Government Departments and Agencies shall develop and deploy mobile applications for providing all their public services through mobile devices to the extent feasible on the mobile platform. They shall also specify the service levels for such services.

Role of Stakeholders

Department of Electronics & IT (DeitY), Govt of India, has launched Mobile Seva, a countrywide initiative on mobile governance, to provide public services to the citizens through mobile phones and handheld devices. As a part of this initiative, a centralized platform named Mobile Service Delivery Gateway (MSDG) has been created by DeitY through its implementing agency, Centre for Development of Advance Computing (C-DAC). MSDG has been developed around open standards and cloud-based solutions by DeitY, and is a key implementation strategy under the Framework for Mobile Governance that was notified in February 2012.

C-DAC plays the key role of technology provider. It has undertaken the challenging task of realizing the ambitious Mobile Governance project. It has implemented the integrated platform for delivery of government services to citizens over mobile devices using SMS, USSD, IVRS, CBS, LBS, and mobile applications installed on the mobile phones.

MSDG is the core infrastructure developed by C-DAC for the enablement of the above services. It uses interoperability protocols so that a multitude of participants can work together.

About Mobile Seva

Mobile Seva, through the Mobile Service Delivery Gateway (MSDG), aims to provide a one-stop solution to all the central and state government departments and agencies across the nation for all their mobile service delivery needs. The objective of the initiative is to centrally provide m-enablement and m-delivery infrastructure and platform that allow all government departments and agencies to expeditiously start offering their services through mobile phones without having to invest heavily in creating their own mobile platforms. Mobile Seva enables integration of mobile applications with the common e-Governance infrastructure for delivery of public services to the users. Availability of government-wide shared infrastructure and services enable rapid development and reduced costs for the integrating departments.

Mobile Seva aims to enable all integrating government departments and agencies to provide their services on various mobile channels such as SMS (Short Message Service), Voice/ IVR (Interactive Voice Response), USSD (Unstructured Supplementary Service Data), and through mobile-applications (m-apps).

A long-term vision of the project is to offer all non-emergency public services to all citizens in the country through a single 3-digit nationally available number. For this purpose, DeitY has already obtained the short code 166. Deity has also obtained another short-code 51969 for mobile governance. Over 210 public services are already operational through these two short codes.

A Mobile Payment Gateway has also been integrated with MSDG to allow citizens to make payment for government services through their mobile phones. USSD and IVRS based services have also been developed. A mobile AppStore has also been made operational that currently hosts over 150 live and fully integrated mobile apps.

The various solutions envisioned under Mobile Seva are as follows:

1. **SMS Gateway**: The SMS Gateway provides both Push and Pull SMS services for government and citizens respectively. In the push service, a common information service can be pushed to group of people based on gender, location, community, etc. Citizens can also request information at individual level by sending an SMS in a particular format to a particular number.
2. **USSD**: Unstructured Supplementary Services Data is a session based service normally used for checking balance, etc. It is being used to create an interactive menu based session with the user for various government services.
3. **IVRS**: The Interactive Voice Response System (IVRS) allows to pre-record greetings and menu options that a caller can select using his telephone keypad. In the context of mobile governance, the IVRS application is intended to serve the C2G and G2C wings of

the e-governance model. The important (Passport) and some basic (Ration card) services of the government are compelling services and draw a lot of enquiries from the citizens.

4. **Location Based Services (LBS)**: These are very useful for the departments for customizing their services according to the location of the citizen which can be found out using a Global Positioning System (GPS).
5. **Cell Broadcasting Based Services (CBS)**: This service is particularly relevant when certain notifications / alerts have to be passed to the citizens in a particular area. This can be very helpful in case of pre and post disaster management.
6. **Mobile Payment Service**: Some transactional government services involve some payment to be made to a government department. This service will aid that.
7. **Mobile Applications (m-apps**): A mobile application is a software application designed to run on smartphones, tablet computers and other mobile devices. M-apps are fast becoming the preferred mode of accessing a particular solution or service, especially amongst young citizens of the country.

Project Methodology

Objective

The objective was two-fold:

1. Establish key performance indicators (KPIs) to gauge efficiency of the Mobile Seva initiative, and solicit inputs/ responses against these KPIs from the end-consumers of the platform (i.e. user departments)
2. Assess the impact of the service on stakeholders and identify gaps between perceived and actual benefits

By undertaking this study, the evaluation team was able to analyse the performance of the platform and provide recommendations in the following areas:

- Implementing innovative projects/ schemes
- Making the public delivery system more efficient and transparent
- Adapting the platform to diverse needs of stakeholders
- Setting high standards of delivery, support, and improvement unmatched in the Government machinery

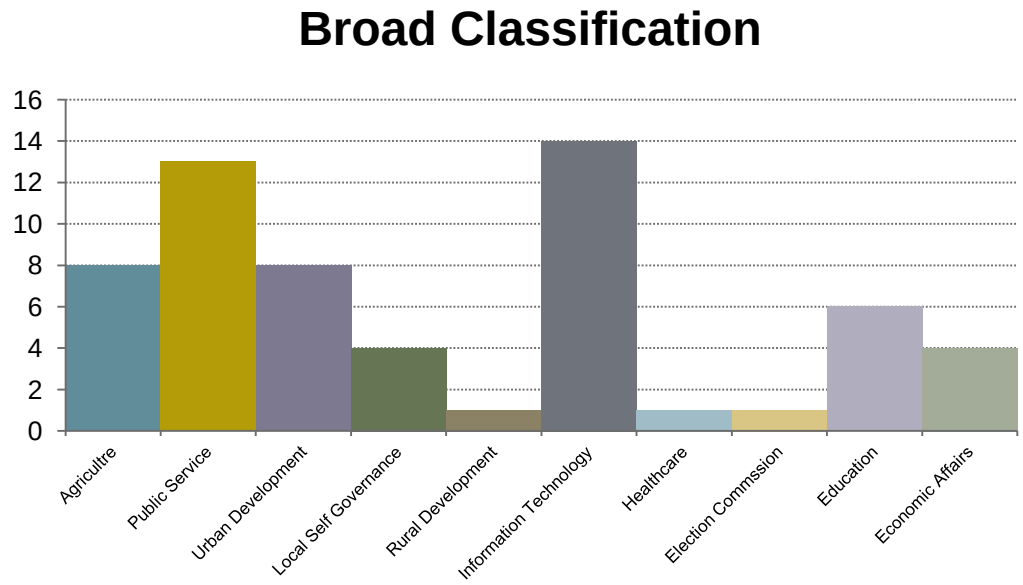
Research Sample

Universe: Government departments across India for whom PUSH SMS, PULL SMS, Mobile Applications (m-apps), and/ or Voice/ IVRS channels have been implemented through MSDG

Sample Size: 70

Responses Analyzed: 60 (10 departments in the sample were in the process of onboarding the platform, and hence, did not have any significant feedback as of then)

Department Classification



Research Methodology

Both qualitative and quantitative methods were used. The qualitative methods were used to explain and interpret the findings from the quantitative analysis of data points in a survey.

	Qualitative Research	**Quantitative Research**
Research Objective	To assess the impact of the Mobile Seva initiative on end-users, identify mismatch between perceived and actual benefits (if any), and provide recommendations to address gaps	To establish and measure key performance indicators that can holistically measure the effectiveness/ efficacy of the Mobile Seva initiative
Research Design	Formalized and unconcealed questionnaire; close-ended questions (dichotomous, multiple responses, and scale-based)	In-depth interview conducted over telephonic medium; semi-structured interviews with open-ended questions
Data Collection and Analysis	Formatted collection of data through survey; quantitative measurement of data collected	Interactive and unstructured approach of collecting data (mostly verbal); textual interpretation and content analysis
Research Deliverables	Insights from user experiences; assessment of impact of Mobile Seva on end-users and stakeholders by understanding their usage pattern and opinions; recommendations based on feedback	Conclusive findings and generalizations; measure of KPIs that determine effectiveness of Mobile Seva initiative

Questionnaire Design

The questionnaire variables were designed based on research objectives provided by the Mobile Seva team. A formalized and structured survey was created through an online survey tool (www.surveymonkey.com) with close-ended questions for quantitative analysis and open-ended questions for qualitative analysis. The responses were collected manually in some cases and directly online on the survey tool in others (depending on the convenience of the respondents).

Quantitative Measures

Key performance indicators were identified to measure the effectiveness of Mobile Seva. These KPIs (elaborated in a later section of the report) were measured against a 4-point scale, percentage of responses, and correlation.

In-Depth Interviews

To understand how end-users were interacting with the platform, semi-structured open-ended questions were incorporated in the survey. The flow of the interview depended on the responses. Themes being addressed by respondents through the experiences and feedback they were sharing were identified and recorded.

Qualitative Measures

Every answer was mapped to a theme and the tone of the respondent was identified as positive or negative on the basis of key words used for every question type. This technique has its roots in the mood-sense algorithm used by platforms such as Twitter and Google. The subjective feedback was further categorized under broad impact assessment parameters (with some feedback being repeated across categories due to its qualitative nature) to help identify a generalized insight and recommendation.

Key Performance Indicators (KPIs) for Measuring Effectiveness

Responsiveness refers to the willingness of the Mobile Seva team to assist the end users. It also involves providing a timely response to the customer/ user.

Onboarding and ease of implementation refer to initial set of issues and problems faced while deployment and first use of the platform. It also refers to how soon the platform/ service is accepted by the users/ operators.

Performance reliability is the ability to perform the required service in an accurate and dependable manner. The platform/ service should be expected to work correctly at the first instant.

Portal effectiveness is judged by the ability of the portal to provide easy access and understanding of the service as well as ease of use. Portal effectiveness can also be rated by determining the extent to which the portal allows a user to view information relevant to service usage.

Transparency in government functions, thereby improving communication with citizens and increasing credibility, is one of the key objectives of developing the Mobile Seva platform.

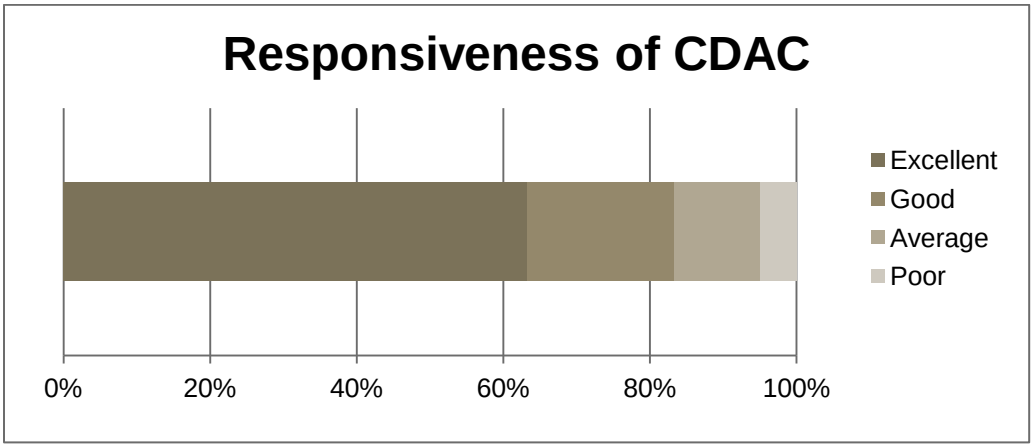
Participatory refers to the extent to which stakeholders are involved in designing and implementing the platform/ service.

Knowledge about customers determines the ability of the service provider to understand and fulfill end user expectations.

Note:
Awareness about Mobile Seva and potential uses of the platform are key to assessing overall performance and efficacy of Mobile Seva.

Research Findings

Responsiveness

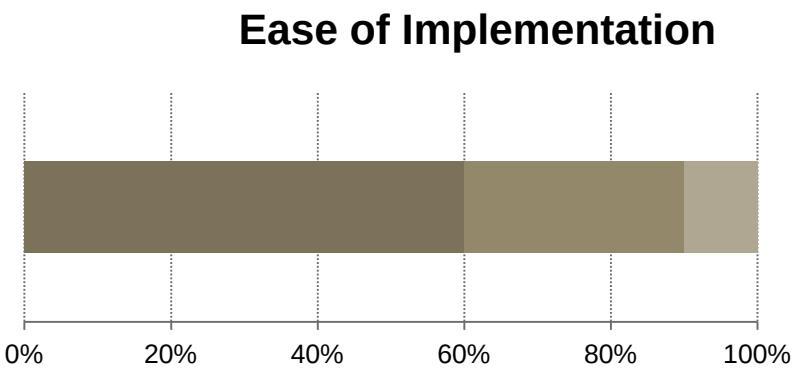


On a scale of 4 the responsiveness is rated at 3.42.

Fig. 2

Respondents have highly appreciated the responsiveness of the MSDG team. In most of the cases, immediate response was provided to them by the MSDG team. More than 80% of the respondents have given a positive rating. A number of small functionalities were added from time to time based on needs expressed by the respondents. However, in cases of problems being complex or of more technical nature, the responses got delayed and issues remained open.

Onboarding and ease of implementation



On a scale of 4 the ease of implementation is rated at 3.5.

Fig. 3

Respondents have conveyed that they feel that implementing the service is relatively easy. Respondents have appreciated the fact that they were provided complete documentation and code that was easy and self-explanatory. The needs of the ten percent of respondents, who found the implementation difficult due to lack of technical knowhow, can be met through training which can be imparted, where required, at the time of integration with Mobile Seva. Implementation of the service was found to be constrained by the lack of availability of qualified resources to generate and maintain data. One respondent also mentioned lack of reliable internet and power infrastructure as a bottleneck to implement the services.

Performance Reliability

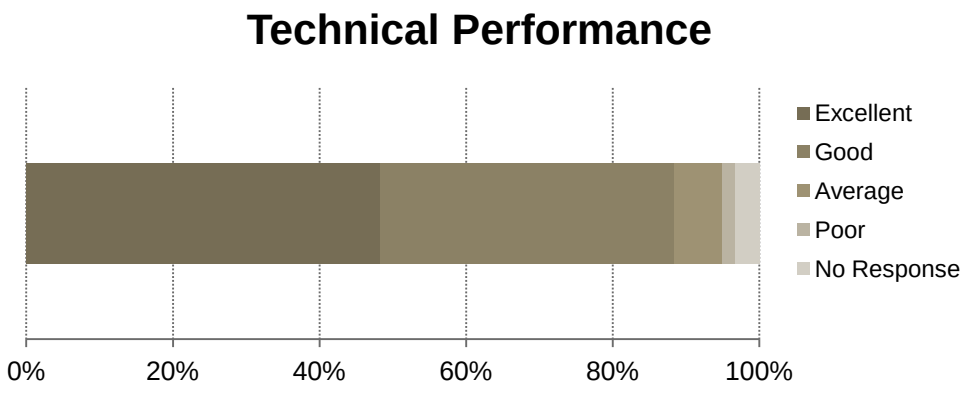


Fig. 4

More than 90% of the respondents have appreciated the technical performance and reliability of the service. However, some respondents who were dealing with large numbers of SMSes have experienced delays in the processing and dispatch of SMSes.

Portal effectiveness

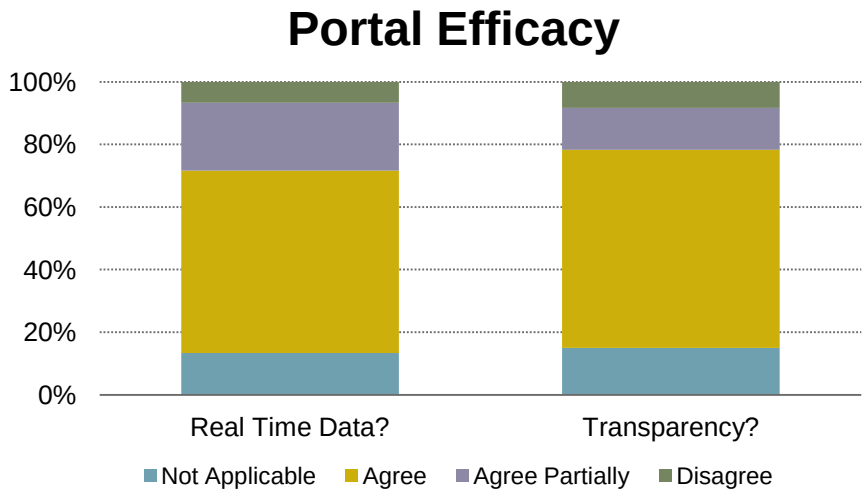


Fig. 5

Majority of the people have not explored the portal beyond basic services like PUSH SMSes. Those who have visited the portal have appreciated the interface, the functionalities provided as well as the data presented. Most of the queries have answers available on the portal itself but there is need to publicize the portal more.

Transparency

One of the remarks by the respondents was - *"The service is very useful in immediate communication and protects people from getting cheated".* Transfer of correct and uninfluenced information from the government office to the end user leads to elimination of malpractices.

Participatory

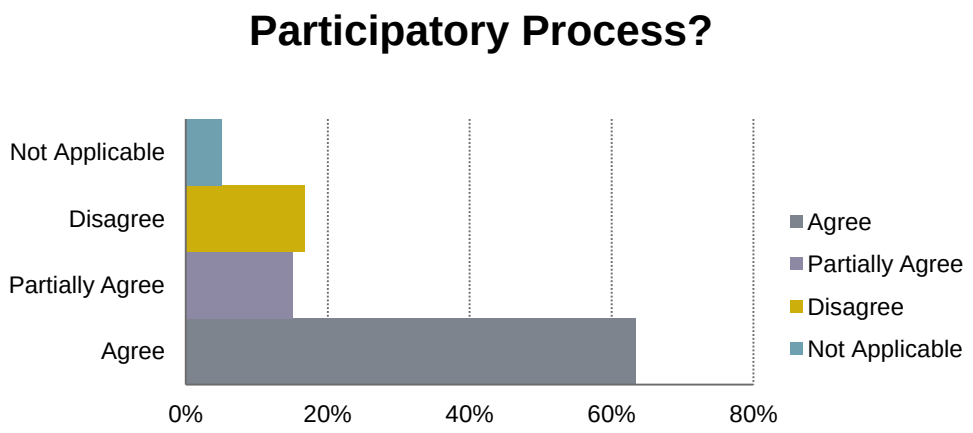


Fig. 6

Majority of the respondents believe that the design and deployment of the service has been participatory. While the process tries to involve stakeholders at every level, lack of face-to-face participation limits the scope of implementation and usage. Further on, expansion of the initial set of services is limited by the lack of micro level understanding of the end user system by the implementing agency.

Knowledge about customers/end-users

Lack of a consumer helpline limits the ability of C-DAC officials to track specific user complaints which may be critical. Lack of preliminary assessment of the department where the service is to be implemented constrains customizability of the solutions. C-DAC has incorporated direct inputs from end-users about generic improvements in the platform/ applications. However, very specific and technical cases are unresolved. In a number of cases, the end users are unaware as to who should be contacted for resolution of issues.

Impact Assessment

Awareness

Due to unavailability of a helpline and low awareness of the diverse uses of the portal and of the information available online, users tend to mistake a simple impediment for a lack of availability of the service and/ or a technical problem.

Presence on Facebook and Twitter serves as an effective medium for developing better understanding of the service and sharing of experiences and insights with the fellow officials as well as the end users. Less than 20% of the respondents surveyed are aware of the social media presence of the initiative, which leaves scope for creating more awareness.

Cost/monetary savings

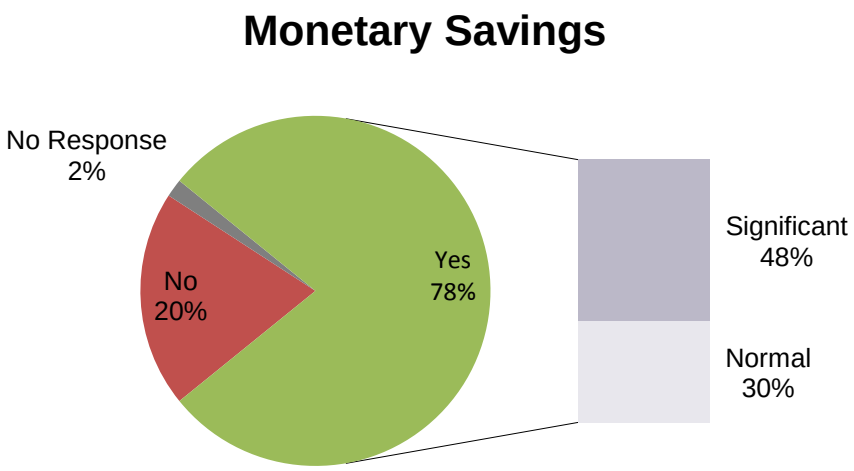


Fig. 7

78% of the departments agreed that the service resulted in cost savings out of which 48% believed that the savings were quite significant. One of the respondents from the rural development department remarked that the savings were as high as Rs. 20 lakhs. A number of departments relied on private service providers for sending bulk-SMSs which they moved to MSDG once the platform was implemented.

Simplified procedures/efficiency

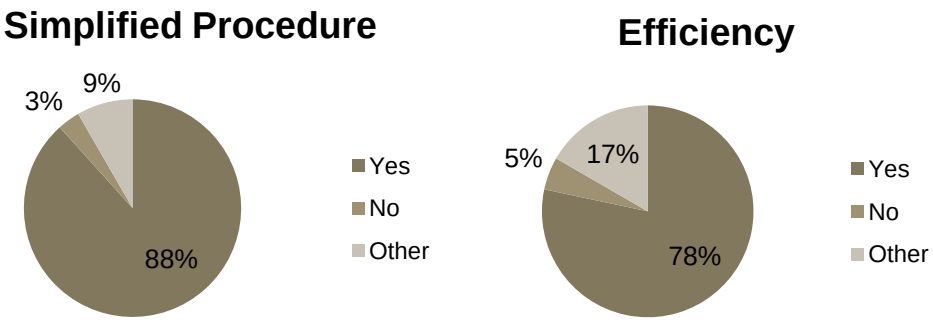


Fig. 8

More than 85% of the respondents believe that the service has eased procedures and 78% of the respondents believe that it has brought in efficiency. The service has enabled communication of important messages in a timely and cost effective manner. Day-to-day procedures have been simplified and considerable time saved by using the SMS service. For example, instead of making a large number of calls to officials/ citizens, bulk-SMSes containing the necessary information can be sent to all concerned. Also, meetings can be scheduled with ease while ensuring good participation.

Interface with stakeholders

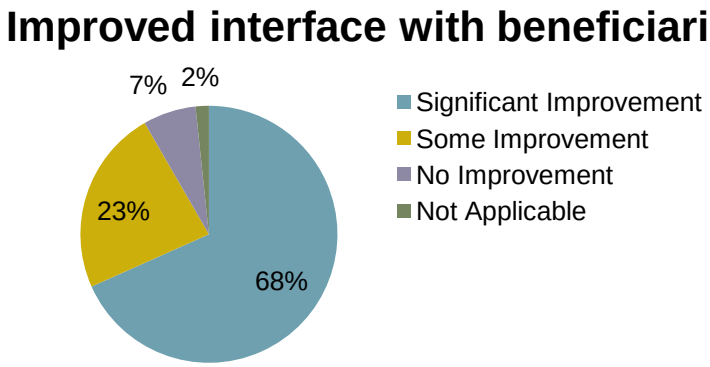


Fig. 9

Deployment and use of the Mobile Seva service has led to a better interface with the end citizens for more than 90% of the departments surveyed. Government officials believe that the service has brought about efficiency in the system and has also led to greater credibility amongst the community. Farmer communities in the rural areas as well as people living in disaster prone areas have been the greatest beneficiaries of the service.

95% of the departments that used the Mobile Seva service would recommend other departments to also use it.

Identification of Central Theme

In this section, the report analyses the various hypothesized themes and tries to identify the central or key theme that connects the Mobile Seva initiative with the end users.

The analysis mentioned against each of the themes is derived from the qualitative analysis of the responses captured in the survey and have been highlighted and discussed at length in the preceding section of the report.

Implementation of Innovative Schemes/Projects

The heaviest users of Mobile Seva today are the departments who use it to push a major chunk of their outbound communication through bulk SMSes to the beneficiaries.

The service is innovative given the idea of providing the capability of connecting to the specific and targeted end users, solving the last mile connectivity issues. On the other hand, the service does not have the same appeal for the departments for which last mile connectivity was not the most painful area. To such departments, the initiative (PUSH SMS) was just another, at times more expensive way, of accessing/ delivering information that is easily available via other mediums like the internet.

A few of the innovative ways in which the service is being used is highlighted by the following graphic, which highlights key phrases that are takeaways from the qualitative interviews.

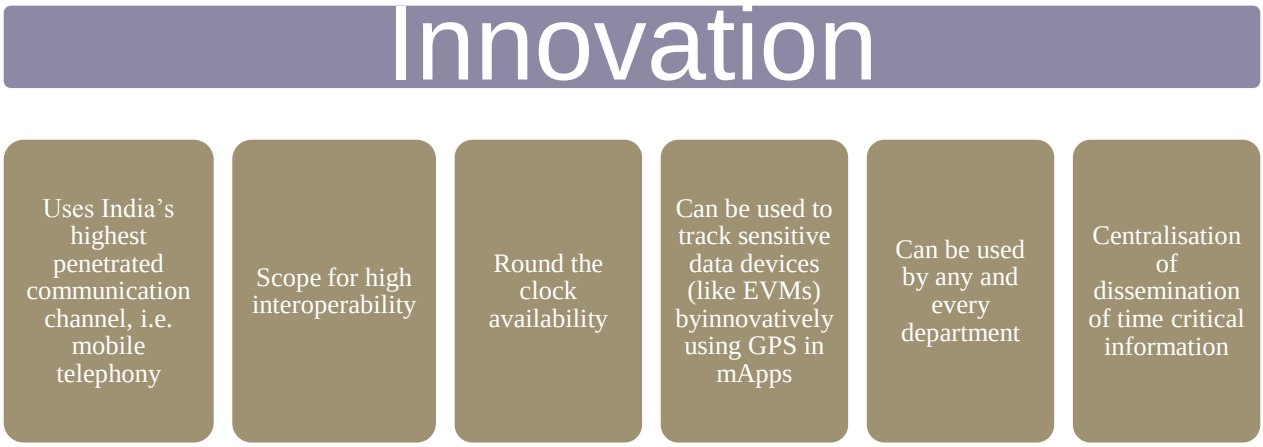


Fig. 10

Although these are important breakthroughs for any Government initiative which envisages such a high reach and impact, still innovative is a word that does not form a central theme for the Mobile Seva.

Having said that, although innovation is not a central theme as of today for the service, but given the scope and potential of handheld devices whose penetration is expected to reach to 72% by 2016 (Source: Gartner Research- http://www.gartner.com/newsroom/id/1963915), Mobile Seva has immense opportunities to develop itself as an intrinsic part of the e-Governance enablement drive.

Making Public Delivery Systems Efficient and Corruption Free

The report findings thoroughly corroborate that fact that the system is poised to make public service delivery systems more efficient, transparent and bring them closer to the common man. With the ability to reach out to the departments a citizen wants and vice-versa is what makes this one of the central themes of the initiative.

The following info- graphic shows the number of SMSs sent by the citizens to get statuses of their concerns and SMSs that were pushed by the departments to communicate with the citizens in the last year.

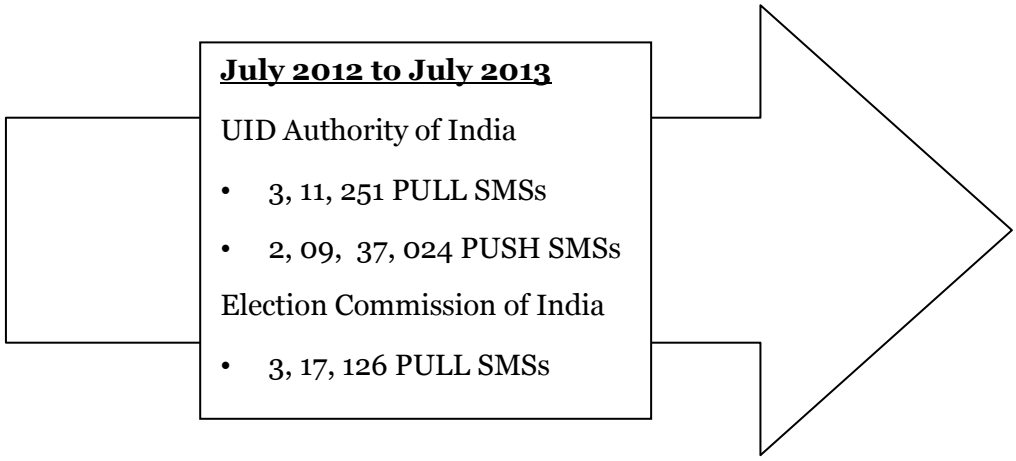


Fig. 11

Further, more than 90% of the departments feel that the implementation of the Mobile Seva service has simplified their procedures. Transmitting information earlier was cumbersome and almost always did not convey the message in its entirety. It took the form of sending letters to stakeholders or government officers themselves having to travel to the villages and transmitting information that the department wanted to be sent (like information related to pest waves, fertilizers to be used, advanced warnings, etc) or TV advertisements needed to be made and the process was long winded.

Fig: 12 A screenshot of the SMS that the Department of Agronomy plans to send to the farmers educating them about the rainfall figures, and scientifically advising and warning them for a certain set of treatment for different crops

Remarks by Respondents

"Government should push the initiative further as it is free from third party type restrictions and brings great transparency"

"Ease of communication is great. The authenticity of information is improved, and there is no malpractice or corrupt communication as the information goes straight to the farmers."

All these insights and responses make a strong point in favour of making public delivery systems efficient and corruption free a central theme.

Customization and Adaption to meet Stakeholder' Requirements

Driven by the heavy inclination of Mobile Seva users towards PUSH SMS service, the initiative is perceived to be a ready-made solution rather than a customizable service.

C-DAC pushes a fairly standardized code in the systems of the partnering departments. An in-depth analysis of the specific requirements is not taken care of. Following is a set of responses which highlights the requirement for the same.

Remarks from respondents

"Face to face interaction with senior C-DAC officials can tell us how m-gov can be used and tell them what new arenas can be developed. At least 1 week of exposure to our office is needed"

"…senior C-DAC official should visit and assess the situation at our department. then he should tell us about all services available with C-DAC and exactly how our department can benefit from them. For instance, we would be the first people to use Pull SMS if someone explained how it can be used by us…"

"…we want customized applications for our department, and we are hoping to hear from C-DAC very soon"

All these responses establish that C-DAC has not been able to adapt to the requirements of the various departments while rolling out the services to them. As an additional note, respondents who had reached out to C-DAC for customizing the service were satisfied by the responsiveness of the MSDG team in attending to their issue and delivering them a customized solution.

It is also to be highlighted that services other than the PUSH SMS service need high levels of customization for specific departments, and have been subscribed to in far lesser numbers than the PUSH SMS services.

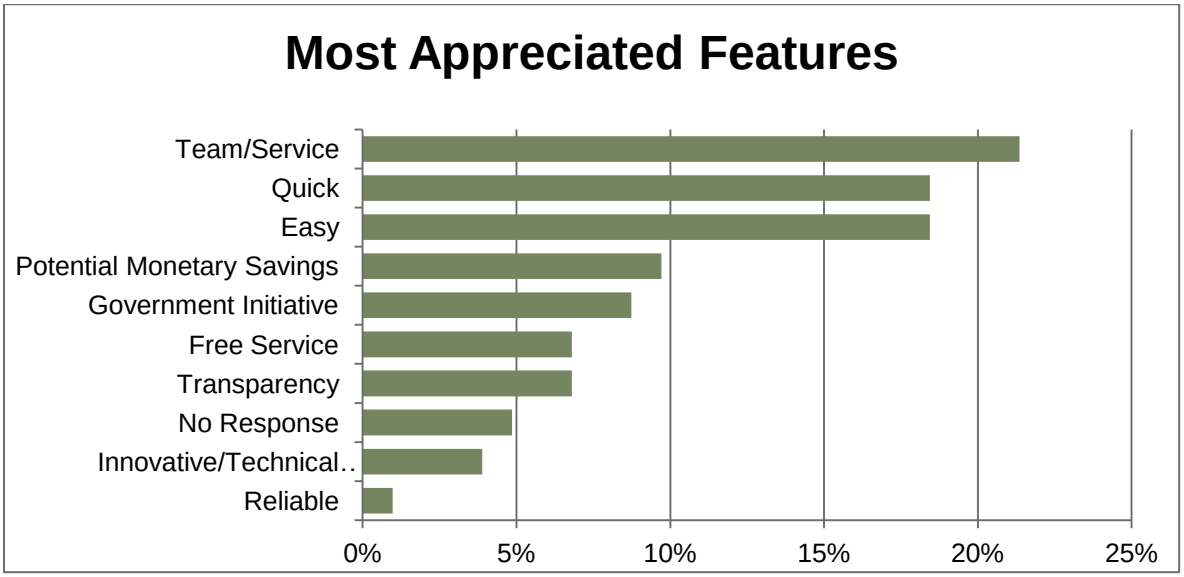


Fig 13: Most appreciated features of Mobile Seva

A heartening finding is that barring a minor percentage of respondents from the sample, all of them were extremely satisfied with the way their issues were handled.

This is exclusive of the fact that there is a clear gap between the number of problems arising at the users end and the number of problems reaching the right people. This finding has been highlighted in the report.

Channel of communication and the redressal mechanism are two vital parts of a service system. When both of them work correctly, and in tandem, they help organizations achieve high rankings in terms of service. Mobile Seva needs to put in place a proper channel of communication for it to make this as one of its USPs.

Identification of Problem Areas

The evaluation team has looked at the key performance areas and has mapped the qualitative responses to each one of them. These problem areas are the ones that are bringing down the rating of the system.

Responsiveness

Grievances received at CDAC	Grievances not received
• The point of contact personnel did not have sufficient and/ or necessary information. Escalation to senior members of the response team was required to solve the issues	• The assessment team came across a minor percentage of respondents who were clueless about who to reach out to in case of issues • A proactive respondent wanted to know the eventuality preparedness of the system.

Onboarding and ease of implementation

Complicated spreadsheet upload patterns to form groups	Need technical help at times, which is not readily available

Performance Reliability

Easily accessible, and real time lifetime status of SMSes being pushed, required	Universal document format uploading should be incorporated	Choked gateways exception handling missing	Preparedness for high traffic days, e.g. communication for a disaster on Diwali

Portal effectiveness

Access to archived reports needed by users	Rather complicated interface; Help not readily available	SMS tracker unavailable- unused SMSes cannot be tracked

Awareness

Very poor--there are cases where officials of the departments which have onboarded MSDG are unaware about this development	Centralized awareness initiatives required	Analysis of the business needs not being taken care of

Knowledge about customers

Proper communication channels absent	Meetings and formal interactions with the stakeholders missing	No formal business analysis being taken up to look for the next best opportunities

Insights on Improving the Platform

Looking at the problem areas that are highlighted above, and the recommendations made by the respondents, the evaluation team has prepared a near exhaustive list of solutions that the users (respondents) feel should be undertaken

- A flexible user interface, benchmarked with private bulk SMS senders like Way2SMS, SMS4YOU, will add great value in terms of user friendliness and the portal's acceptability, usability and thereby ease of adaptability
- A 24x7 call centre manned with well trained and highly professional executives, is essential to achieve the high standards of service and responsiveness that the Mobile Seva team strives for. This will also streamline response effectiveness and closure of various query/ complaint tickets in the prescribed resolution time.
- A formal training to the officials and end-users while the services are being rolled out will improve awareness about the service and increase the ease of onboarding and implementation.
- Face to face interactions with C-DAC officials to discuss and leverage opportunities for better service delivery to citizens
- Every state should take up publicity of the initiative and can make it compulsory for at least one major department per quarter to implement the initiative
- A commercial SMS based solution for budding entrepreneurs of the country, under the aegis of, say, a government department like the SME Chamber of India
- Need an awareness series about the various services that are a part of the basket of offerings and can be rolled out to the current/ existing partner departments to help them do their business better
- Secure handling of user data, like telephone numbers, email ids, etc

Recommendations

Based on the feedback gathered from the participating departments of Mobile Seva, the evaluation team suggests the following:

- Establish a Business Development Vehicle
- Identify high impact departments, where impact is a function of need and reach. Departments with a high need are those that have potential areas where all or more than one service being offered under Mobile Seva can be implemented. Reach will be measured as a function of the number of people that the department has the potential to impact with these services
- Set up a business needs analysis team that can look into the business requirements of the partnering departments and develop ideas for customized solutions
- Work on strengthening client relationships by working closely with partnering departments, and communicating periodic updates and conducting regular feedback exercises
- Partner with various private and public service providers to facilitate access to Mobile Seva services at nominal rates

It is to be noted that these recommendations stem from the key pain areas identified during the research.