Report on the Mid-Term Evaluation of the
Access to Information – II Project (a2i)
For
United Nations Development Programme Bangladesh

November 2015

Evaluation Team:

Roger Harris (team leader)

Christine Apikul

K. M. Mahiuddin

Monower Mostafa

Acknowledgements

The team would like to acknowledge and thank all those who participated in the evaluation for their time and generosity in sharing their experiences and insights. In particular, the team owes sincere gratitude to UNDP Bangladesh, the Prime Minister's Office and the a2i Project staff for their valuable contributions during the entire process of the evaluation.

This evaluation benefited greatly from the input and organizational support provided by Anir Chowdhury, Policy Advisor, Ramiz Uddin, Monitoring and Evaluation Analyst, Farzana Sultana, Monitoring and Evaluation Officer, Pushpita Saha, Research Assistant, and the Administration Team of the a2i Project.

The team's sincere thanks are also due to all the staff at a2i and the external stakeholders who were interviewed and had focus group discussions with during May and June 2015.

Many government officials, donors, civil society/NGO activists, academics, trainers, business executives, entrepreneurs and beneficiaries provided important thoughts and insights. To all of them the team owes deep gratitude.

Roger, Christine, Mahiuddin and Monower, July 2015

Contents

Boxes

Figures

Tables

Abbreviations and Acronyms

a2i	Access to Information
BBS	Bangladesh Bureau of Statistics
CDC	City Corporation Digital Centre
CIO	Chief Innovation Officer
DC	Deputy Commissioner (the executive head of the district)
DESC	District e-Service Centre
FGD	Focus Group Discussion
GDP	Gross Domestic Product
ICT	Information and Communication Technology
ITU	International Telecommunication Union
IO	Innovation Officer
MoU	Memorandum of Understanding
NESS	National e-Service System
NGO	Non-Governmental Organization
PDC	Pourashava Digital Centre
SIF	Service Innovation Fund
TCV	Time-Cost-Visit
UDC	Union Digital Centre
UNCTAD	United Nations Conference on Trade and Development
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNO	Upazila Nirbahi Officer
UP	Union Parishad
USAID	United States Agency for International Development

1. Introduction

The Access to Information (a2i) – II Project is part of a three-pronged strategy identified in the United Nations Development Assistance Framework (UNDAF) to address the deficits of public administration and public service delivery in Bangladesh. During the first phase of a2i (2006-2011), fundamental progress was made in improving access to public services through electronic means. The objective of this second phase (2012-2016) is to increase transparency, improve governance, and reduce the time, difficulty and costs of obtaining government services for underserved communities of Bangladesh. Hereafter, a2i refers to the second phase of the a2i Project unless stated otherwise.

Implemented by the Prime Minister's Office in Bangladesh, with support from the United Nations Development Programme (UNDP), United States Agency for International Development (USAID) and other development partners, the a2i Project aims to achieve its objectives through the following four components:

Component 1: Strengthening existing e-services and launching a second generation of integrated, inter-operable e-government applications (e-Service)

Component 2: Sensitizing government officials, training for service providers and expanding digital literacy among the general public (Capacity and Awareness)

Component 3: Forging strong policy and strategy links to ensure implementation of needed legal and regulatory changes in support of the Project (Enabling Environment)

Component 4: Promoting innovation in the delivery of e-services. (Innovation)

As per the monitoring and evaluation plan of the Project, an independent mid-term evaluation is scheduled at the mid-term to review Project implementation and the requirement for possible further support beyond the Project end date. In fulfilment of this requirement, this mid-term evaluation was undertaken during May-July 2015 by a team of four independent consultants, two international and two national.

This report presents the findings, conclusions and recommendations of this mid-term evaluation. The reporting is confined to the findings of this evaluation; the team restrained as much as possible from repeating the contents of earlier evaluations as these are already known to Project proponents and are accessible in other documents. Where necessary, a summary of earlier findings might be mentioned with a reference to the source of the original. A list of the Project documents and reports that were provided to the current evaluation is available in annex 1.

2. Summary

2.1. Findings – Assessment against Project Outcomes

2.1.1. e-Services

a2i has been facilitating the development and delivery of e-services in partnership with government, the private sector, and digital centres in city corporations, pourashavas (municipalities) and unions. Service process simplification and innovation are two essential tactics that a2i has used in designing these services. One of the innovations is the National Portal that now has a collection of over 25,000 government websites. a2i has also defined a range of metrics relating to their performance, including the use of Time-Cost-Visit (TCV) analysis. Although the TCV methodology has contributed to the existence of a citizen-centric service mentality among government officials, mechanisms are not yet in place in government to measure user satisfaction with the e-services, and obtain user's perspectives directly from the users themselves. Whilst the early unit of focus for measurement of the a2i Project has correctly been on the quality of the e-services that they provide to the public, the evaluation observes that a more meaningful unit of focus would now be on the outcome of the e-services and the extent to which the e-services are contributing to local socio-economic development.

Conclusions

The a2i Project is well on the way to achieving a successful operating model that augments the social need for public services with private sector profit-orientation in a way that is capable of achieving long-term sustainability for the UDCs as well as further progress towards achieving the digital development ambitions of the Nation.

Close examination of sample UDCs revealed:

- They save time both for service receivers and service providers
- Service receivers are getting service without giving any bribes
- They reduced the work load of the service providers and reduce the visits of the services receivers
- Monitoring becomes easier

In moving forward, there needs to be greater emphasis on the role of the UDC entrepreneur-operator, which is expected to shift from a passive provider of services that have been provided for him/her to that of an active agent of change in defining and promoting other digital services that their clientele will value. It is recommended that other entrepreneurs emulate the entrepreneurial practices that exist among some of them.

Similarly, the National Portal is currently supply-driven with an emphasis on the amount of content, and the number and type of services available on the portal. The National Portal is a good opportunity to further institutionalize the citizen-centric approach where the emphasis is on user satisfaction and the ease of use so that users can find what they are looking for and complete tasks on the portal quickly.

At the same time, the metrics used for e-services delivery should shift from an output and activity orientation to providing a measurement of the outcomes or impacts within the community, and the extent to which the e-services are contributing to local socio-economic development.

The TCV framework has contributed to the rapid adoption of an innovation culture in government, as they are simple concepts that government officials can easily understand and measure. However, TCV does not measure outcome and impact. For example, TCV does not

measure whether an innovation or an e-service has increased literacy rate, raised gross domestic product (GDP) or empowered women.

Recommendations

1. Implement measurement indicators for e-services that measure their outcomes and impacts.
2. Build the capacity of UDC entrepreneur-operators and provide more opportunities for them to learn from each other.
3. Put in place mechanism to monitor user satisfaction of e-services delivery
4. Implement measures aimed at improving the relationships between the UDCs and Union Parishad.
5. Assess the National Portal from users' standpoint and make adjustments to the user interface towards a more citizen-centric portal design.

2.1.2. Capacity and Awareness

The a2i Project has conducted several activities to build capacity among government officials, UDC entrepreneur-operators and school teachers. A number of mechanisms are in place to foster a continued commitment to innovation in the delivery of public services. These measures have been met with much enthusiasm. However, some skill gaps remain and the training provided to the UDC entrepreneur-operators has not produced a corpus of individuals with a uniform skill set. e-Learning is seen as a viable and effective tool for continuing and intensifying the capacity building activities of the Project.

Conclusions

Through its capacity building activities, the a2i Project has effectively begun the inculcation of an innovation culture within the civil service, which has been a critical prerequisite for transforming government services towards digitized client-centric e-services.

Individual capacity building has generally been successful with most of the respondents feeling confident about their ability to innovate. However, there's room for improvement in developing institutional capacity to innovate; and promoting and facilitating innovation networks for learning, sharing ideas, and solving problems through cooperations and collaborations.

a2i capacity development efforts are not only focused on developing skills, but also on changing values and attitudes. These efforts have contributed significantly to the building of an innovation culture in all tiers of government. A component of the innovation ecosystem that could be strengthened is in the area of research to assess the outcome and impact of the innovation and guide policy reform.

The Training Needs Assessment that a2i commissioned BPATC to develop is important for refining and tailoring training specifically for CIOs, IOs and Innovation Team members, with greater emphasis on citizen engagement in the planning, implementation and monitoring of innovations and e-services.

a2i should press ahead with e-learning as a strategy for continuous learning not only for training of government officials on their standard courses, but also to accelerate the transfer of knowledge and skills for innovation, and for other audiences such as digital centre entrepreneur-operators, teachers, students and professionals.

The effectiveness of training for UDC entrepreneur-operators seems to be somewhat patchy. The evaluation observed differences between the computer skills of men and women, and differences between the entrepreneurial skills of the operators, whether men or women.

Recommendations

1. Emphasize cross-organization collaborations and provide government officials with the skills and opportunities to collaborate with other government offices, non-governmental organizations and the private sector.
2. Focus efforts on institutional capacity development and provision of a support system for innovation.
3. Intensify efforts to further sensitize government agencies through partnerships with public training institutions and civil society organizations.
4. Orient elected representatives of local government units and members of parliament on innovation in public services.
5. Continue running the 5-day training workshop on innovation initiation for all IOs and Innovation Team members, particularly those working at the field level. As these officers rise up the ranks with new ideas, knowledge and experiences, and a culture of innovation, this will likely have a significant impact on the whole administration.
6. Enlarge the pool of resource persons and equip them with the competencies to facilitate training workshops on innovation.
7. Commission research to capture the learning from the pilot initiatives. Case studies and video documentaries on both successful and failed initiatives could be used as effective training materials in order to deepen the understanding of the participants about the prospect and challenges of innovation in public services.
8. Commission research to better understand the outcome and impact of innovation in public services and to guide policy reform that will remove remaining barriers and generate further improvements.
9. Incorporate and further strengthen entrepreneurial skills in training for UDC entrepreneur-operators that will improve their ability to deliver locally-relevant information-based services as well as enhance the sustainably of their centres.
10. Develop a strategy for e-learning that explores the possibilities of using the e-learning platform to meet the training/learning needs of different groups including government officials, digital centre entrepreneur-operators, teachers, students and professionals.

2.1.3. Enabling Environment

Based on a2i's reporting and interview with key informants, it can be concluded that the a2i has been playing an active role in catalyzing the needed regulatory and policy changes, particularly in the areas related to service process simplification, e-services and online transactions, financial inclusion and payment methods, security, and innovation. a2i has provided advisory support to the development of new policies and regulations, and the amendment of existing ones.

Conclusions

a2i has been instrumental in catalyzing changes in regulations and policies, and in translating policies into action. The impact of a2i's efforts in harnessing information and communication technology (ICT) for development is being captured in global indices, although a2i should provide advisory support to government in data collection and its proactive engagement in the preparatory processes of upcoming indexing.

The rapid rise of social media in Bangladesh has created an unprecedented opportunity to engage the citizens in decision-making and policy formulation (e-participation). There is now a viable platform for citizens' voices to be heard. The experience and lessons from the UDC blog and the increasing number of government offices hosting public Facebook page taking in citizens' grievances, need to be analysed and formalized within government structure.

Recommendations

Support government involvement in the preparatory process of the United Nations e-Government Survey 2016, and ITU and UNCTAD's upcoming indexing.

1. Advocate for improved regulatory and policy environment for private sector investments and innovations in the area of ICT for development.
2. Prioritize advocacy for gender equality, particularly in the collection and analysis of relevant data to understand gender impacts.
3. Institutionalize the use of Facebook for e-participation to enable engagement between government and citizen, and achieve a more open, transparent and consultative form of government.
4. Encourage full implementation of the National ICT Policy at ministerial level.

2.1.4. Innovation

The a2i Project has embraced innovation as a cornerstone of its strategy for facilitating the implementation of e-services. The Service Innovation Fund (SIF) has sponsored 64 implementations. a2i is formulating a concept note for a Service Innovation Centre, which represents an opportunity to re-envision and re-brand a2i as a facilitator or innovation broker on many fronts. The approach to innovation with public services along with its consequences constitutes arguably the most significant aspect of the a2i Project.

Conclusions

a2i is promoting a culture of innovation through collaboration with PMO and Cabinet division. a2i is involving academic, private and small and medium enterprises (SME) to strengthen the culture of innovation in all spheres. The approach to innovation with public services along with its consequences constitutes arguably the most significant aspect of the a2i Project. Aside from its impact on the culture of government, the evaluation observed that the consequences of a2i's experiences with innovation as a strategic intent have spilled over into wider realms, such as the realization of Digital Bangladesh, as well as (it was suggested) project conduct in UNDP. The service process simplification scheme and the SIF have now gone beyond ICTs and they have proven themselves to be effective mechanisms for promoting improvements in government performance based on innovation. There seems to be an emerging realization within government circles that innovation is more important than a mechanism for designing e-services. Accordingly, it is likely that a more strategic approach towards innovation in government, as encompassed in the proposal for a Service Innovation Centre, will have relevance beyond both the a2i Project and the Governance Innovation Unit in their current composition. However, at this time, the government has not formulated national policies or strategies for innovation. The opportunity exists, therefore, to spread the culture of innovation beyond government circles into wider society. Elevating innovation as a deliberate government strategy raise many challenges, among which are; measuring its effectiveness, identifying instances, scaling successes, maintaining continuity and reforming relevant policies to promote innovation and remove any barriers that inhibit it.

Recommendations

1. Intensify efforts to further embed an innovation culture in government through further and regular training, promotion and sharing of experiences.
2. Consolidate government activities that denote significant levels of innovation into a single high-level organization unit with overreaching powers towards formulating a strategy and/or policy for national innovation.

2.2. Findings – Assessment against Evaluation Framework

2.2.1. Relevance

The a2i Project addresses the deficits of public administration and public service delivery in Bangladesh by digitizing them in order to increase transparency, improve governance, and reduce the time, difficulty and costs of obtaining government services for underserved communities of Bangladesh. In doing so, it underpins the National ICT Policy. Further progress is possible, within and beyond government services and towards the vision of Digital Bangladesh, with sector-specific strategies, now that the Project has instigated the inculcation of an innovation culture in government circles.

Conclusions

The a2i Project is highly relevant to the UNDAF, to the National ICT Policy and to the vision of Digital Bangladesh.

Recommendations

1. Implement sector-specific strategies for ICT for development.
2. Forge closer links with the implementation of the National ICT Policy so that its implementers can benefit from using the a2i methodologies.
3. Formulate policy advisories towards increased broadband penetration and mobile government services.
4. Improve digital centre entrepreneur-operator performance towards better services for their communities that target local development.

2.2.2. Effectiveness

a2i e-services are transacted by 4.5 million citizens each month, comprising 400 different services from 61 ministries through four national web portals, and delivered through establishing digital centres in every union Pourashava and City Corporation ward of the Nation. Independent research has highlighted some of the social value of these services. Partnership arrangements are extensive and diverse, and oversight structures are more than adequate. However, the Project's exit strategy is as yet uncertain, leaving its continuity as the key challenge. The Project could benefit from a stronger impact orientation within its planning processes, through, for instance, a revised set of performance indicators.

Conclusions

The a2i Project has effectively achieved its objectives, but further measures are necessary in order to consolidate and sustain the gains that have accrued into proven and tangible socio-economic benefits for underserved and other targeted communities.

Recommendations

1. Clarify the Project's exit strategy, targeting continuity and extension of the gains achieved so far.
2. Implement measures for digital centres to evolve into local development change agents; using ICTs to foster socio-economic improvements in community life.

2.2.3. Efficiency

Project expenditure as of April 2015 amounted to 44% of budget. Expenditure for the e-Services and Capacity & Awareness components appears on track. There is an overspend of about USD 250,000 in the Enabling Environment component, and a significant underspend in Innovation, which received the largest proportion (88%) of the budget. The low expenditure of the Innovation

component is because of low expenditure on the SIF. Expenditure categorized under capacity and awareness equates to a costing of roughly USD 223 per trained person. Overall, the quality of Project inputs and services were as planned and timely. The administrative, management and coordination mechanisms of the Project were largely efficient and effective. As evidenced only by a cursory review of Project financing, the evaluation can conclude that the Project adopted adequate measures to ensure the resources and funds were efficiently applied, and that financial and procurement systems were efficient. Significant savings for citizens are noted for Internet browsing at the UDCs. Whilst there is a great deal of data on the TCV savings from the e-services provided by the UDCs, there is less data on the extent to which TCV savings have resulted in social or economic impact on a national scale.

Conclusions

The SIF has not yet achieved its full potential. Per capita costs incurred for capacity building and innovation sensitizing are reasonable. Administrative, management and coordination mechanisms are efficient and effective. Cost savings based on TCV analyses are considerable and they far outstrip the amount spent on the Project.

Recommendations

1. Further promote the SIF, building capacity in project management.

2.2.4. Impact

a2i's impact can be observed in at least four major outcome areas; the general public, government, education and development. Impacts on the general public are widespread but generally little understood. Anecdotes of outcomes abound and they are very useful indicators, but they fail to uncover the true impact of the Project in terms of the government's policies for poverty reduction and social equity at the national level. Probably the Project's most profound impact on government is through the appointment of Innovation Officers and Innovation Teams at all levels and the associated beginnings of the inculcation of a culture of innovation. a2i has elevated the citizen's position in their relationship with government and this holds implications for other aspects of the government-citizen relationship. The multimedia classrooms have made a start to reforming education, but a more complete transformation will have occurred with the full implementation of online e-learning. Several respondents noted that a2i's focus on innovation had changed some of their views regarding the conduct of development processes.

Conclusions

a2i's impact is demonstrably broad and deep but its true nature is little understood. Although outcomes are well documented, they have not been as well expressed in terms of government's policies for poverty reduction and social equity, either in terms of existing impact or further potential impact, of which there is a great deal.

Recommendations

1. Implement impact assessment as an extension to the present focus on outcome measurement.
2. Impose e-service impact assessment processes within ministries.
3. Intensify the inculcation of an innovation culture in government; building on existing achievements but extending beyond the implementation of e-services for the public.
4. Increase the visibility and usefulness of impact-oriented research among policy-makers.
5. Promote e-learning towards a non-classroom online interactive mode of national education.
6. Further strengthen ICT-enabled innovation and entrepreneurialism within digital centres in support of government's policies for poverty reduction and social equity.

2.2.5. Partnerships

The formation of strategic partnerships is recognized by a2i as a prime tool for accomplishing its goals. The evaluation is tasked with assessing the Project's achievement in developing partnerships, including evaluating the approach to resource mobilization from development partners, identifying lessons learnt from the various partnerships, and assessing the possibility of broadening, deepening and sustaining those partnerships for the expansion of e-services. Project partners have been drawn from government, the private sector and from civil society.

Conclusions

The concept and practice of partnership has become an integral part of the a2i process. The Project has made considerable progress in partnering with government agencies for delivering e-services, building capacity and promoting innovation. Good progress is underway in the formulation of partnerships with the private sector that carry the potential for the delivery of further useful services to the citizenry. Further considerable potential exists for partnerships with civil society organizations for the same purpose. The Project fully understands the critical role of partnerships in achieving government policies for poverty reduction and social equity, as exemplified by the public-private-peoples' partnerships with digital centres. Further development of its partnerships towards such policy objectives is likely to yield desirable results and will be capable of providing practical lessons for others.

Recommendations

1. Put in place a comprehensive plan to make UDCs sustainable through partnerships with the private sector, including with commercial banks, with the central bank of Bangladesh playing a supervisory role.
2. Accelerate the formation of partnerships with civil society organizations towards the promotion of e-services in line with objectives.

2.2.6. Communications

The Project's communication strategy focuses on keeping stakeholders informed and on facilitating their participation. Communication products are numerous, informative, high quality and varied, but their *effects* are unclear. The communication strategy has further potential for improving the Project's management of its knowledge and for contributing to the achievement of specific Project objectives by commissioning research into the impact of its communication activities.

Conclusions

The formal information-sharing communications activities of a2i have served well for the purposes of public relations and but they lack the strategic direction and focus that will be necessary to foster the wider achievements for which the Project has potential. The impact that existing formal communications have had in contributing to the Project's achievement is unclear. If this were better understood, and communication activities were more sharply focused on specific outcome objectives, accompanied by evaluations of their impact, then it is likely that they would achieve greater contribution to Project goals.

Recommendations

1. Strengthen the communication strategy to monitor progress and impact in both quantifiable and anecdotal ways in order to measure its effectiveness.
2. Refresh the communication strategy to reflect current and future Project priorities, including Project transition (exit strategy), policy influence, sustainability, private sector and civil society partnerships, and innovation.

3. Commission research into the impact of the communication activities.

2.2.7. Knowledge Management

Effective knowledge management delivers gains in terms of greater innovation and improved performance. a2i promotes the use of social media by government which contributes significantly to its knowledge management processes, but its use is not structured or organized. Research is another tool for managing knowledge, which has been used on occasion, but independent research that has already been conducted and is relevant to a2i has not been utilised as much as it could have been. a2i has created opportunities for generating knowledge that can be used to guide its progress towards further desirable outcomes, and a great deal of knowledge has already been generated and shared. A more strategic approach to managing the Project's existing and future knowledge will contribute to improved performance.

Conclusions

a2i has created opportunities for generating knowledge that can be used to guide its progress towards further desirable outcomes, and a great deal of knowledge has already been generated and shared. However, this has not been the result of a formal or structured approach to knowledge management, and further opportunities exist to leverage the knowledge that has already been created as well as giving rise to new knowledge that can usefully contribute towards the Project's strategic goals.

Recommendations

1. Create a network of researchers; fund their research and publish their findings in academic journals.
2. Design research to generate evidence for policy reform.
3. Create a virtual think tank to formalize the network of existing researchers in support of policy reform where required.
4. Communicate research effectively to appropriate audiences in order to achieve improved professional practice and policy reform where needed.
5. Tap the interest of international universities and research institutions, but also partner with local universities to develop national capacity in ICT for development and e-governance research.
6. Establish a Project library.

2.2.8. Project Management

The a2i Project is being implemented under the under the National Execution/Implementation Modality. Project oversight is comprehensive and the Project's management structure reflects its key responsibilities and objectives.

Conclusions

There is unanimous agreement among the key informants that a2i's strength and its ability to achieve significant results within a short time is a result of the project management structure and composition. The a2i teams have been active and strong on implementation, but the process for planning overall what the Project will monitor, and the ways in which learning can be captured, disseminated and used to improve interventions, can be further improved.

Recommendations

Review and revise the Results/Indicators Framework to ensure that a2i results, outcomes and impact are captured, and that the data is available or can be made available to assess progress towards achieving the agreed upon results, outcome and impact.

1. Create a dashboard for monitoring and evaluation.

2.2.9. Gender

The Project's gender strategy is laid out in a March 2015 document. The most visible aspect of a2i's gender sensitivity has been the appointment of women as partner entrepreneur-operators in all UDCs and digital centres, but this is not working out as well as envisaged. Other gender-sensitive outcomes have arisen, some unexpected, and a Gender Task Force has been created. Further positive results can be achieved by fully implementing the gender strategy as a strategic priority, including the use of mobile devices for women entrepreneurs and paying greater attention to the problems and opportunities that exist for the female UDC entrepreneurs.

One possibility is to develop an orientation and training package on gender for a2i staff. It should include practical checklists on issues to consider, questions to ask and things to do when working with ministries or other partners in planning and implementing projects/initiatives to ensure that they are gender-sensitive, and where opportunities arise, gender-transformative. UNDP's "Gender Journey Course: Thinking out of the Box" can be used as a starting point for staff orientation.[1] But this is a very generic course and more specialized training should be developed that relates to how gender can be mainstreamed in the types of projects that a2i are rolling out. The practical checklists developed will be used as key references after training. The monitoring and evaluation of initiatives should also be gender-responsive, i.e. to assess the degree to which gender and power relationships change as a result of an intervention; and ensures the collection of sex-disaggregated data.

a2i could introduce measures to encourage gender mainstreaming in its projects/initiatives, such as mandating the development of at least one results indicator that is related to gender equality. For example: Reduction in women's time burdens and security and safety risks when accessing services and participating economically; or Strengthened partner capacity to consult with female and male stakeholders on their e-service priorities. a2i could also provide incentives and rewards for "Gender Champions".

Another opportunity is to consider a programme such as The Cherie Blair Foundation's Mobile Technology Programme which leverages mobile technology to support women entrepreneurs in becoming successful business owners. It includes: i) Delivering customized mobile applications to address the unique challenges facing women entrepreneurs in developing economies; ii) Increasing the participation and capacity of women in mobile and banking agent networks; and iii) Ensuring financial inclusion by providing mobile financial services to women entrepreneurs. A2i could consider adapting this model to the Bangladesh context, especially since a2i is currently working with different partners to develop the capacity of women entrepreneurs, and introduce agent banking in UDCs. As a first step, a2i could contact the Cherie Blair Foundation to discuss opportunities for collaboration.

Conclusions

Although a2i adopted a gender-sensitive approach to digital centre operation from the outset, there are indications that this is not achieving the full potential of its original conception. The Project came rather late to gender as a strategic intent, but has acknowledged this with a gender strategy that increases gender- responsiveness in the Project structure, leadership and interventions. The evaluation notes that a2i is creating opportunities for self-employment for women by creating income generating opportunities through initiatives like Joyeeta, partnership with SME Foundation, etc. There are opportunities for further empowerment of women through their use of mobile phones, which a2i could facilitate.

---

[1] http://www.jposc.org/documents/courses/gender/

Recommendations

1. Fully implement the a2i Gender Strategy as a priority.
2. Create a new senior staff position for a Gender Specialist, who would, together with the Gender Task Force;
3. Provide clear guidance for gender mainstreaming in the a2i programme and the projects/initiatives that a2i initiates in partnership with different organizations.
4. Identify entry points or opportunities for empowering especially vulnerable groups of women or men through the a2i.
5. Develop a Gender Impact Screening Checklist that all projects must complete, including the SIF projects.
6. Conduct consultations and encourage participation of Gender Focal Points in government as well as local women's organizations in project identification, design, and monitoring and evaluation.
7. Develop a pool of resource persons for gender issues that could incorporate gender in training courses and workshops for innovation officers and teams.
8. Identify and overcome the obstacles to women digital centre entrepreneur-operators achieving their full potential and facilitate them to set up women-only social enterprises.
9. Implement a Mobile Technology Programme for women in Bangladesh, along the lines of that run by the Cherie Blair Foundation.

2.2.10. Challenges

a2i addressed the major challenges to its success from the outset. These included problems relating to inadequate infrastructure, and resistance and limited capacities of government officials. Remaining challenges include project continuity and scaling, effectiveness of digital centres, extending benefits to marginalized groups, and understanding the Project's impact. Facing these challenges is not expected to present serious difficulties owing to the Project's strengths, which include its partnerships, reputation, secondments from government, political support, staff and learning.

Conclusions

The a2i Project was well-aware of the challenges it would confront in working towards its objectives, and it faced them squarely and effectively. In spite of facing substantial challenges at the national level that were beyond its executive control, such as inadequate infrastructure, low levels of ICT literacy, and modest capacities and resistance from the civil service, the Project was able to bring about solutions to them that mitigated their effect. Some challenges remain, but it can be foreseen that, given the Project's strengths, these are readily surmountable.

Recommendations

1. Gain consensus in government on an exit strategy.
2. Mobilize the digital centres towards the delivery of further ICT-based community development activities through increased proactive entrepreneurialism among the operators – for bottom-up initiatives – as well as through further partnerships with private sector and civil service organizations for top-down initiatives.
3. Formulate a programme that prioritizes benefits for marginalized groups; the less-literate, disabled, elderly, and ethnic minorities, as envisaged in the Strategic Priorities of Digital Bangladesh.
4. Instigate research that identifies the Project's impact on a national level.

2.2.11. Sustainability

a2i's sustainability boils down to two questions that reflect the 'bi-polar' nature of its relationships; the institutional relationship with government and other organizational partners on

the one hand, and the social and economic relationships with communities on the other. The first question is "what is the Project's exit strategy?" and the second question is "how can digital centres maintain financial independence?" The exit strategy is embodied in the proposal to create a Service Innovation Centre, which should now be fleshed out in detail. Financial sustainability at the digital centres is seen to be somewhat precarious and can be strengthened with further services and more intensive entrepreneurialism.

Conclusions

a2i's exit strategy will determine the institutional sustainability of its achievements, and this is currently embedded in the proposal for a Service Innovation Centre. Detailed planning for its establishment needs to proceed as a priority as a2i approaches its sunset orientation. Financial sustainability at the digital centres is somewhat precarious and needs to be strengthened to ensure continued satisfactory performance.

Recommendations

1. Finalize the plans for implementing the Service Innovation Centre and agree them with relevant stakeholders.
2. Implement measures to strengthen financial sustainability at digital centres, including developing further private sector-related services and intensifying their entrepreneurialism.

2.2.12. Lessons Learned

Lessons learned relate to uncovering the impact of e-services; the value of regular and structured monitoring, intensifying UDC entrepreneurialism, building the capacity of innovators and fashioning Project partnerships.

3. Description of the Intervention

Whilst providing information and services aimed at improving the social and economic welfare of its citizens is a fundamental government responsibility, it is also critical to expand the breadth and width of such simplified services, and improve the service delivery model to counter the impact of widespread outdated manual processes, resistance to change by civil service staff, and a lack of transparency that still frustrates citizens in their attempts to avail of government information and services.

Moreover, experiences around the world have shown that information and communication technologies (ICTs) can be leveraged to improve the efficiency and effectiveness of public service delivery, and reduce corruption. Transparency is enhanced, as processes are re-engineered to be "e-deliverable".

The a2i, therefore, targets the following UNDAF outcome:

- Government institutions at the national and sub-national levels are able to more effectively carry out their mandates, including delivery of public services, in a more accountable, transparent, and inclusive manner
- and the following UNDAF output:
- Authorities from the government and private sector make better use of technology to benefit underserved communities
- with the following output indicator:
- No. of citizens with access to government e-solution services (Baseline 2010: 0.5M; Target 2016: 20M).

a2i is being implemented over four years from 1 April 2012 to 30 March 2016. As described in section 1 above, the Project has four inter-related components: (1) developing and increasing access to e-services, (2) promoting capacity and awareness, (3) creating an enabling environment, and (4) institutionalizing innovations in public information and service delivery.

The evaluation is conceptualized by component in the a2i Project Document as follows:

Component 1: Strengthening existing e-services and launching a second generation of integrated, inter-operable e-government applications (e-Service)	
Result 1	More underserved citizens and MSMEs benefiting from e-services
Purpose	To expand the range of accessible services for the underserved communities
Description	Growing number of citizens able to access growing number of e-services
Quality Criteria	Quality Method
Percentage of population (disaggregated by gender) and MSMEs benefiting from e-services.	Annual survey
Result 2	Sustainable e-service delivery points established to minimum distance from
Purpose	To strengthen and expand the range of accessible service delivery points for the underserved communities
Description	To decrease the minimum distance to service delivery points from the underserved community
Quality Criteria	Quality Method
All Union Parishad, Pourashava,	Annual survey

Upazila and District Headquarters as service delivery points	

Component 2: Sensitizing government officials, training for service providers and expanding digital literacy among the general public (Capacity and Awareness)	
Result 1	Service providers and Implementers are trained/oriented to design, implement and sustain e-services
Purpose	To improve the capability of service providers to develop e-services
Description	Monitor service provider training
Quality Criteria	Quality Method
Number of service providers trained/oriented to design, implement and sustain e-services	Training records

Component 3: Forging strong policy and strategy links to ensure implementation of needed legal and regulatory changes in support of the Project (Enabling Environment)	
Result 1	Relevant laws and regulations in place for full e-service functionality with appropriate safeguards
Purpose	Laws and regulations covering areas such as online transactions and payments and protecting privacy & security are vital for full e-services implementation
Description	Ensuring that necessary laws and regulations are in place
Quality Criteria	Quality Method
% of relevant laws and regulations in force	The programme will identify the key laws and regulations that are necessary for full e-service functionality including user safeguards. The indicator is calculated by the number of such laws/regulations that are in place divided by the total number of such laws/regulations (identified by the programme).

Component 4: Promoting innovation in the delivery of e-services (Innovation)	
Result 1	Nurturing innovation in delivery of public services
Purpose	To nurture development of innovative products and services that can enhance service delivery to underserved communities
Description	Innovation Fund created
Quality Criteria	Quality Method
Number of projects funded through Innovation Fund	Administrative records
Result 2	Programme's institutional arrangements and sustainability strengthened
Purpose	To ensure programme's long term sustainability and impact
Description	Measuring accomplishment towards institutional arrangements
Quality Criteria	Quality Method
Network of e-Gov focal points institutionalized and advisory board established	Programme information

4. Evaluation Scope and Objectives

As agreed during the inception phase, this mid-term evaluation is expected to provide inputs to the following strategic questions:

- How much of what has been expected to be achieved has been achieved?
- What, if anything, has been achieved beyond the original expectations?
- To what extent has a culture of innovation been inculcated in the Nations' civil service?
- What can further be done to sustain the Project's achievements and to institutionalize its objectives within the machinery of government?

The evaluation is therefore concerned mainly with the strategic intents, achievements and future of the a2i initiative. Acknowledging that data relating to quantifiable Project performance already exists, the evaluation will be less concerned with gathering primary data but will pay more attention to the mechanisms that have been placed into effect for collecting data that can be used for continuous monitoring and with its interpretation with regard to the these strategic aspects.

The scope of the mid-term evaluation, as outlined in the terms of reference and agreed during the inception phase, is as follows:

Assess the overall planned outcomes vis-a-vis actual results –

- Assess and score the Project progress against the columns of the Results Framework of the Project
- Review the Project initiatives with the scopes defined in the Project Document
- Document Project risks, challenges and mitigation measures, and overall learning of the Project
- Recommend a set of indicators for the Project and identify necessary amendments to the indicator framework of the Project
- Recommend scopes of changes to the Project Document/Project initiatives such that they keep compliance with each other
- Identify potential intervention areas during the lifetime of the Project and beyond

Identify the continued relevance of the Project components/results with national priorities

- Evaluate the Project's contribution to the achievement of the national ICT priorities
- Assess the Project's contribution in advocating for the formulation of technical and non-technical policies and standards
- Review the Project's contribution to the sector-specific policies e.g., agriculture, health, education etc. and recommend future scopes

Assess the effectiveness of the e-service delivery initiatives launched or catalyzed by the Project –

- Assess major e-service delivery initiatives launched or catalyzed by the Project
- Assess the e-service delivery initiatives taken by different public and private bodies with or without support from the Project
- Document the lesson learnt and ways forward for the e-service related activities of the Project

Evaluate the capacity building milestones achieved by the Project –

- Review the existing capacity development patterns and understand the key milestones of the existing capacity development strategy of the Project

- Assess the impact of the Project's effort to develop the institutional capacity of the government to conceptualize, design, implement and maintain e-service delivery and create new e-services for the citizen
- Evaluate the Project's achievement in nurturing the champions and developing incentive mechanism for the e-service delivery within different tiers of the government (from ministries to upazila) offices
- Identify the strengths and weaknesses of the capacity development activities and their results
- Review the activities of the communications team in terms of media presence to communicate benefits of e-services and create demand among citizens
- Document the lesson learnt and ways forward for the capacity development initiatives of a2i

Assess the approach of partnerships developed by the Project –

- Assess the Project's achievement in developing partnership with different public and private organizations to launch and operate e/m-service delivery initiatives and develop ICT infrastructure
- Evaluate the Project's approach to resource mobilization from development partners
- Identify lessons learnt from the various partnerships and assess the possibility of broadening, deepening and sustaining partnerships for expansion of e-services
- Assess the scope for South-South cooperation of the Project initiatives

Assess the Project's approach to the concept of 'Innovation in Service Delivery' and promoting a culture of innovation among the government offices –

- Asses the process of capacity development for the promotion of a culture of innovation among the government officials
- Evaluate the Project's contribution in advocating for relevant policies required for innovation
- Assess the Project's contribution in terms of recognition and reward for the innovative ideas

Review the existing process of the Service Innovation Fund –

- Review the operations manual of the 'Service Innovation Fund' and identify its strengths and weakness in fostering innovation in public and private entities
- Evaluate the monitoring and evaluation process of Services Innovation Funds disbursed in different organizations
- Document lessons learnt and ways forward for the 'Service Innovation Fund' initiative

Review the indicators and targets and a monitoring framework of the Project –

- Review the existing indicator framework of the Project and identify SMART indicators for the Project
- Assess existing Time-Cost-Visit (TCV) approach of the Project as a monitoring and evaluation tool
- Review the existing monitoring mechanism of the Project

5. Evaluation Approach and Methods

5.1. Evaluation Approach

The mid-term evaluation was commissioned by the UNDP country office in Bangladesh and managed by the Monitoring and Evaluation Analyst of the a2i Project. Through a recruitment process, a group of four independent consultants—two international and two national consultants—were selected and tasked to carry out the evaluation.

The evaluation team comprises the following:

- International Consultant – Team Leader: Dr. Roger W. Harris
- International Consultant – Capacity Development and Innovation: Ms. Christine Apikul
- Senior National Consultant – Partnership and Capacity Development: Mr. Monower Mostafa
- National Consultant – e-Service and Innovation: Prof. K. M. Mahiuddin

The two international consultants were in Bangladesh from 9 to 17 May 2015 for briefing sessions with the a2i teams, interviews and discussions with a2i partners and stakeholders in Dhaka, and field visits outside of Dhaka. The two national consultants conducted further field visits, interviews and focus group discussions (FGDs) during June 2015. A list of people met is given in annex 2.

The mid-term evaluation also involved a desk review of Project documents, strategy papers and reports provided by a2i. It also included a review of the Project outputs such as policy guidelines, innovation briefs, assessment reports, the a2i website and social media sites.

Prior to the international consultants' arrival in Dhaka, a draft inception report was produced outlining key elements of the evaluation approach, framework and methodology, which were agreed with the Monitoring and Evaluation Analyst, and finalized before the national consultants conducted further field visits, meetings and discussions. The a2i teams provided support in arranging interviews, FGDs and field visits, and ensured that the evaluators had access to necessary documents.

In the field mission phase, the evaluators travelled to several districts to gather data from an extensive range of sources, including: division, district, upazila (sub-district) and union (lowest tier of local government) government authorities; entrepreneur-operators at the digital centres; and beneficiary communities.

In view of the centrality of the Project's efforts to inculcate a culture of innovation within government, it was agreed at the inception phase that the evaluation team develop a research concept note to assess the effectiveness and impact of this approach. Based on the concept note (attached in the annex 3), the evaluation team carried out the research through:

- An online questionnaire survey hosted on Survey Monkey for innovation officers and Innovation Team members
- FGDs and interviews with innovation officers and Innovation Team members

During the process of document review, the evaluation team came across a number of research studies relevant to the a2i Project that adds value to the mid-term evaluation, particularly in assessing service users' perspectives and the challenges that need to be addressed. It was agreed with the a2i Project that a review of research literature relevant to digital centres, e-government in Bangladesh and the a2i Project be carried out, and the team leader engaged a postgraduate student for this purpose. The literature review (see annex 6) was limited to academic research papers that were published from 2010 to 2015, of which 34 were identified.

To continue engagement with the a2i teams and other relevant stakeholders throughout the mid-term evaluation process, a Facebook group[2] was set up to ask questions, share information and validate findings.

The draft report was circulated for comments on 15 July 2015 before the report was finalized.

5.2. Evaluation Methodology

The evaluation methodology was based on qualitative and quantitative data gathered through a mixed-method approach. The data collection for this evaluation was done through purposively selected key informant interviews, semi-structured discussions and FGDs, field visits, documents review and desk research, an online questionnaire survey for innovation officers and Innovation Team members, and case study development. The evaluation also reviewed selected data from a2i's database and from various assessments and surveys conducted by the a2i Project teams.

The evaluation assessed the Project's performance against the indicators in the results framework, analysed the external and internal factors that have contributed to or hindered the Project implementation and outcome, and drew lessons from these for future programming. The assessment criteria used by the evaluation were based on OECD/DAC criteria for evaluation of development projects: relevance, effectiveness, efficiency, sustainability and impact.

Relevance concerns the extent to which the a2i Project and its intended outputs or outcomes are consistent with national and local policies and priorities and the needs of intended beneficiaries. Relevance also considers the extent to which the initiative is responsive to UNDP corporate plan and human development priorities of empowerment and gender equality issues. Effectiveness is a measure of the extent to which the a2i Project's intended results (outputs or outcomes) have been achieved or the extent to which progress toward outputs or outcomes has been achieved. Efficiency measures how economically resources or inputs (such as funds, expertise and time) are converted to results. Sustainability measures the extent to which benefits of the a2i are likely to continue after external development assistance has come to an end. Impact measures changes in human development and people's well-being that are brought about by the a2i, directly or indirectly, intended or unintended.

A set of key questions was developed to assess the four components of the Project and the evaluation criteria. These questions provided in the planning matrix for evaluation in the inception report were agreed upon by a2i. The evaluation team used these key questions as a basis for data collection and analysis.

Triangulation is a core principle in mixed-method data collection as it ensures that the results are linked up into a coherent and credible evidence base. This evaluation relied on:

- Source triangulation – Comparing information from different sources, i.e. at various management levels, from different partners and from different stakeholders.
- Method triangulation – Comparing information collected by different methods, e.g. interviews, FGDs and documents review.
- Evaluator triangulation – Comparison and collation of information collected by the four consultants.

As a principle, the evaluation ensured that information, opinions and perspectives offered by each interviewee were tested against information obtained from other interviewees and documents.

---

[2] https://www.facebook.com/groups/110126139318979/.

6. Findings – Assessment against Project Outcomes

6.1. e-Services

Strengthening existing e-services and launching a second generation of integrated, inter-operable e-government applications.

6.2. e-Service Delivery

The a2i Project has facilitated the delivery of more than 400 e-services and over 1,000 downloadable forms that the government provides to its citizens via digital centres spread throughout the country. This is achieved through a partnership approach (see section 6.5 for a discussion on findings related to partnerships).

The Project reports that an average of 6 million e-services is delivered every month through:

- 64 district e-service centres (DESCs)
- 407 city corporation digital centres (CDCs)
- 323 pourashava digital centres (PDCs)
- 4,547 union digital centres (UDCs)

In designing these services the Project adopted two process-oriented tactics that have been demonstrated as being essential for achieving optimal results when digitizing information systems— (i) service process simplification (globally known as business process reengineering) and (ii) innovation. There are many instances under the a2i Project implementations where these approaches have resulted in significant reductions in paperwork and streamlining of transactions. In their absence, earlier attempts elsewhere to computerize government services have fallen short of expectations, an outcome that a2i has avoided.

Alongside the implementation of these e-services, the a2i Project has defined a range of metrics relating to their performance, most notably in the form of Time-Cost-Visit (TCV), which defines the time and cost saved for the users of each service, and the reduction in the number of visits that a citizen has to make to the government facility in order to complete the transaction (see box 1). The Project also has data on the services delivered at each centre, the people who are using them, and the income generated at each centre.

a2i has conducted TCV analyses of on 7 e/m services provided through UDCs, the remaining 14 on other government e/m services, giving a total of 21 TCVs, providing evidence that the efficiency of public service delivery has increased. This is discussed in detail in section on e-Service Savings.

Box 1. TCV

a2i introduced a simple TCV framework for people to think about innovation and develop services from a citizen's perspective in terms of reduction in time, cost and visit as follows:

- Reducing time to receive a service
- Reducing cost, fees and travel cost, lost wages and other opportunity cost
- Reducing number of visits to government offices to complete a service transaction

The TCV is used in service process simplification, in workshops related to innovation, in the application for the Service Innovation Fund, and in a2i's monitoring and evaluation to measure impact.

Without undervaluing the importance of these metrics, for the purpose of the current evaluation, another salient aspect of e-service performance relates to the citizen's overall experience when s/he engages with its provider and the entirety of its context. In order to investigate this aspect of service delivery, the evaluation team visited several UDCs to observe and interview citizens who were transacting with an e-service.

Overall, interviewees reported a strong level of satisfaction with their experience at the UDCs. As the UDCs conduct business mainly during the daytime, when the men are at work, a high proportion of clients were noticed to be female, who generally reported that they were treated with consideration and respect at the UDCs (see box 2). As the entrepreneur-operators of the UDCs are drawn from the community that the UDCs serve, they are often well-known and have established relationships with their clientele. Waiting times are generally less than 30 minutes, but there are times when service levels deteriorate due to equipment malfunctions.

Box 2. Summary of Observations at Uthora UDC and Meduary UDC in Bhaluka Upazila and Dhankhali UDC in Trishal Upazila

- Both women and men go to the UDCs for a variety of services.
- The most popular services are birth registration and paying electricity bill.
- Disabled and senior citizens do not go to the UDCs often. They only go to register their name for old-aged pension and disability benefit, which may be the only service they require.
- There are more female than male customers. Union Parishad members and secretary informed that men are busy with their job and therefore women and girls go to the UDC.
- 16 users were interviewed during the survey. All users reported that they are satisfied with the service of UDC and that the entrepreneur-operators are skillful and well-mannered.
- 12 respondents reported that they first knew about the UDC when they were informed by their representatives (Union Parishad members) that they could register birth at the UDC. The other 4 respondents knew about the UDC through the Union Parishad members and the entrepreneur-operators.
- The respondents reported that they have the mobile number of the UDC entrepreneur-operators and will call him/her for information.

UDC monitoring committees are active in areas where the District administration and upazila parishads displays strong leadership. (source: FGD with Union Parishad Secretaries and field visit data). a2i has rolled out an online Digital Centre Activity Management System for monitoring the daily activities of the UDCs, PDCs and CDCs, and entrepreneur-operators are required to submit daily reports through this system. Most entrepreneur-operators interviewed claim that they are using this online system for reporting. However, so far as was observed in the field, UDCs do not intend to obtain feedback from the citizens or users. The project reports however that initially, 'boxes' were installed in UDCs to collect feedback but the mechanism didn't work due to lack of response. So now studies are being initiated to determine the impact on the citizens and entrepreneurs are being encouraged to post feedback from citizens on the UDC Blog. Moreover, regularly conducted TCV studies are also covering partial feedback from citizens regarding UDC services.

The DESCs are located at the premises of the Deputy Commissioners' Offices at all 64 districts of the country. These offices are using the National e-Service System (NESS) to deliver records, citizens' certificates, citizens' applications and official notices. e-Filing is one of the modules of NESS. The e-Filing system tracks the files submitted (i.e. citizens' applications/requests) on a 'dashboard'.

Each Deputy Commissioner office today features a dashboard tracking all citizens' incoming requests and the decision-making flow until disposal, which has enabled real-time monitoring of the field-level officers. Pending requests can easily be viewed by the Deputy Commissioner and also by the Cabinet Division, which monitors field administration as a whole. These dashboards have been particularly effective in creating a positive sense of urgency and instilling healthy competition amongst public service providers at the field-level offices. a2i's plan is to roll out the e-Filing System to 20,000 offices by 2017.[3]

For a closer examination of e-service delivery and user satisfaction, FGDs were conducted with UDC entrepreneur-operators from Mymensingh and with district-level officials. In addition, a quick survey was conducted in Mymensingh and Rangpur to assess users' satisfaction of the DESCs. A total of 30 citizens and 10 UDC entrepreneur-operators responded to the survey. Details can be found in annex 4.

In summary, 77% of the citizens and 40% of the entrepreneur-operators were satisfied with the service provided at the DESCs in Mymensingh and Rangpur. Insufficient human resources, shortage of space at the front desk and poor customer service were the main causes of citizens' dissatisfaction, while the entrepreneur-operators complained about untimely service and corruption.

Box 3. Summary of Field Visit Observations and Interviews at the District Office in Chittagong

- In Chittagong, the Deputy Commissioner was very proud to announce that a few years back they were ranked 62 (out of 64 districts) on the dashboard, and within a year of reform they are now ranked no. 1.
- The Additional Deputy Commissioner (ICT) previously worked in a2i and has been managing the roll-out of NESS in Chittagong district. The Deputy Commissioner is supportive of his initiatives.
- The DESC has been relocated to a more central location recently, refurbished and staffed by 3 women and 3 men. It has free wifi and CCTVs.
- The staff of the DESC said NESS is easy to use and it took two days to learn the system.
- Upon receipt of a citizen's application, key information is entered into the e-filing system and documents scanned. A team of officers is responsible for forwarding the files to the relevant government offices.
- One of the suggestions that emerged from the visit to Chittagong was to add a discussion/collaboration module in NESS to track discussions on each issue/file.
- As incentive to use NESS, the Deputy Commissioner Office is providing monthly cash awards (BDT 2,000 or USD 26) to select officers who are using NESS to complete transactions.
- The first Digital Innovation Fair in Chittagong district was organized on 26-28 February 2015. The Deputy Commissioner said that it was such a success he plans to make it an annual event.

---

[3] Presentation made by Anir Chowdhury to evaluation team on 10 May 2015.

A further FGD was held on 13 June 2015 at the National Institute of Local Government in Dhaka with 25 Union Parishad secretaries. Details are reported in annex 5. The respondents were asked about the services that the UDCs provide to the citizens. In response to this question most of the respondents answered that online birth registration and applications, computer compose, photography and photocopy are the main services that the UDCs provide, but they could provide some additional services on the basis of peoples' needs. Respondents argued that the entrepreneur-operators need to take more action for advertising about UDC activities. Some of the respondents (7) complained that the entrepreneur-operators do not maintain the office time properly. Respondents were also very critical about the performance of women entrepreneur-operators. They complained that most of the women entrepreneur-operators are not really active. From the discussion it appeared that there is conflict between the entrepreneur-operators and the Union Parishad secretaries. The respondents believe that the entrepreneur-operators are not cooperative. They expect that the entrepreneur-operators would be subordinate to them and they will contribute to the fulfilment of their official work. However, the project reports that these are isolated and infrequent cases.

Box 4. Summary of Field Visit Observations and Interviews on the Mobile Court System at Munshiganj District

- The system was piloted here; it started 3 weeks ago and has been well received by its users
- It is easy to use; has all the relevant laws
- Much training by a2i, including the magistrates
- The common people appreciate it, as evidenced by the feedback that they provide to the administrators.
- There is room for some improvement; e.g. more equipment
- a2i paid for the system; but they need a vehicle for the mobile court
- Makes administration more efficient; haven't measured this as very new
- Needs a better Internet connection
- Citizens can directly inform any crime information
- The system tracks progress of the complaint
- Previously there was manual recording; now by mobile device, so much easier and quicker = QUICK JUSTICE
- Ensures magistrate doesn't fiddle anything; = JUDICIAL TRANSPARENCY
- Makes the system easier to supervise; = MORE EFFICIENT OVERSIGHT

The impression gained was that the Union Parishad secretaries expected to have executive control over the UDCs and they want the entrepreneur-operators to be loyal to them. On the other hand, the evaluation was informed that one objective of digitizing the e-services is to decrease or stop corruption at the level of their delivery to the citizens, which was led by the Union Parishad secretaries.

6.3. Users' Perspectives

Apart from the team's enquiries and observations, other independent researchers have reported on the impact of the e-services and the digital service centres that deliver them. These are summarized in the literature review in annex 6. General they paint a positive picture of improved hassle-free services with desirable benefits in terms of: reduced corruption; increased transparency; health gains; women's empowerment; gains in employment and income; and streamlined bureaucracy; all leading to overall acceptable levels of user satisfaction.

For example, in a research study[4] that examines the perception of UDCs among 100 users of eight UDCs in four districts of Bangladesh—Naraynganj, Gazipur, Munshiganj and Manikganj—the results show that the users can take as many as 11 services from a UDC. Ninety-nine per cent of the respondents said that by and large they were benefited by the services; but a large number of users reported that they face various problems when seeking services, such as; Illiteracy, inefficiency or even ignorance of the entrepreneurs, local politics, lack of attention towards the users, and loose monitoring by the authority. However, the project reports that this is unusual and limited to a few cases. It is also possible that further publicity and promotion would yield returns in terms of increased clientele.

Among government officials, the evaluators heard anecdotal evidence of the existence of a citizen-centric service mentality, such as an SMS apologizing for a late response to a passport application and air-conditioned waiting rooms with comfortable sitting. The occurrence of such instances is difficult to capture in wide-scale surveys, but as they represent key performance targets they should be approached in a way that highlights the extent to which citizen-centric attitudes have been embedded within the culture of service providers. In this regard, it is noteworthy that when questioned during the evaluation, in nearly all cases, senior government officials could not describe any mechanisms that they had implemented to measure user satisfaction with the e-services that their ministries were providing to the public. Responses were mostly in the form of descriptions of the TCV service outcomes that the a2i Project has surveyed. It is possible that this indicates a weakness in internalizing the e-service (e-government) ideal within ministries, and a level of continuing collaboration with the a2i Project for the continuation and advancement of citizen-centric digital delivery of public services to the Nation. All public institutions must develop their independent capacity to ensure access of citizens to the Service Innovation Centre.

---

[4] Shaikh Abdus Salam and Syed Mahfujul Haque Marjan, Union Information Centers in Rural Bangladesh: A Study on Users' Perception, 2014,
http://www.academia.edu/9765419/Union_Information_Centers_in_Rural_Bangladesh_A_Study_on _Users_Perception.

6.4. Beyond e-Services

Although clients have expressed their general level of satisfaction with the delivery of the e-services that they received, they could not be expected to deliver judgment on any services that they did not receive, and in this regard, the evaluators observed some differences between the centres that they visited. The delivery of government e-services provide the basic set of services that the digital centres provide to their clientele. However, UDCs are operated by local entrepreneur-operators from the private sector, who are not government employees and they are free, actually required, to offer additional services that make effective use of the technologies that have been provided to them. Accordingly, the service profile of UDCs varies according to the degree of entrepreneurialism adopted by their operators.

Box 5. Summary of Field Visit Observations and Interviews at UDC in Bairag Union Parishad, Anowara, Karnaphuli, Chittagong

- A husband and wife team (the wife was not present at the time of the visit)
- An initial BDT 70,000 (USD 900) was invested in the UDC
- They opened another UDC at the local market
- The UDC at the government office had one computer
- The UDC at the local market had three computers
- The entrepreneur provides computer training to 15 people per month at the UDC in the local market
- The most popular service requests are passport application and birth registration
- Additional services offered include events management, and design and creation of banners
- The entrepreneur does not use the UDC Blog
- He participated in a2i's Entrepreneur's Conference

Whilst the a2i Project is facilitating the establishment of many such additional services; local operators remain free to implement whatever services they can that will generate revenue for them. This profile of public-private partnership has long been advocated globally by advocates of what has been termed the 'telecentre movement' but in many cases it has not been successfully achieved, for a variety of reasons, and many of the early telecentres closed as a result. a2i is making a success of this.

Accordingly, whilst the early unit of focus for measurement of the a2i Project in terms of UDC performance has correctly been on the quality of the e-services that they provide to the public, the evaluation observes that a more meaningful unit of focus would now be the overall performance of the UDCs in terms of also inducing local development that is based on digital information assets from multiple sources.

The required shift in performance measurement is indicative within the Project's current definition of UDC success, by which a UDC should meet at least 2 of the following 3 criteria:

- Continues to be operational after six months
- Earns at least BDT 6,500 per month (USD 83) in the past six months
- Has a minimum average of 100 clients per month in the past six months

It is notable that each of these criteria is output- or activity-related, placing an emphasis on sustainability but making no reference to outcomes or impacts within the community that the UDC serves. The distinctions are as follows;

- *activities* are the actions associated with delivering project goals, in this case setting up the UDCs;
- *outputs* are the first level results that are achieved immediately after implementing the activity, in this case citizens using the e-services provided by the UDCs;
- *outcomes* are the second level mid-term results arising at the ground level because of the project activity, in this case the results for the citizens who are using the e-services;
- *impact* is the third level of project results and is its long term consequence, in this case the extent to which a2i has contributed to the government's policies for poverty reduction and social equity at the national level.

This is not to say that such measures that have been made have no value, but rather that they should be extended towards an outcome and impact orientation in order to reflect the evolving nature of the UDCs and their entrepreneur-operators in targeting local development.

For example, the evaluation has highlighted measuring the impact of e-services at the household level, as well as questioning how special needs are taken into account; for women, disabled, indigenous minorities, elderly, poor, and the unemployed. Some form of aggregating survey data is required in order to build a convincing picture of the extent to which such impacts are being achieved on a nation-wide basis.

A further observation concerning the operation of UDCs relates to the nature of the relationships that exist between the entrepreneur-operators and the local government administration. The evaluation field survey encountered instances of conflicts of interest between the UDC entrepreneur and the UP chairman and secretary. Such conflict included cases of nepotism, loss of authority and control by the UP Chairman and Secretary. This took on a serious note when it was learned for example, that UP chairmen attempted to appoint relatives or political supporters as the UDC entrepreneur and when they expected to receive financial benefits from the UDC revenue. It emerged that UDC management committees had not been formed in many cases or that they had been formed but were not active. However, such instances are rare and isolated cases and do not reflect on the entire appointment process

6.5. National Portal Framework

a2i led the development of the National Portal Framework that allowed every government office to create websites easily, and at the same time created a harmonized look and feel for government websites. a2i reported that all government websites are now under the National Portal Framework.

Over 25,000 government offices at all tiers have placed information related to the services that they provide online under a common architecture, design and content structure. a2i claims that they have trained over 70,000 government officials (at least one officer in each office) to develop, upload and regularly update content into the National Portal.[5] There are also 132 master trainers that are providing training and re-training.

As many users access the Internet using their mobile phones, a mobile-friendly version of the website was launched in May 2015 using responsive design. This means the website adjusts according to the device screen size (e.g. on a mobile device, images shrink, columns of content stack on top of each other, and a 'menu' button replaces the site navigation). Policies such as the Right to Information (Disclosure and Dissemination) Regulations, 2010; Gazette on Web Portal Management

---

[5] ITU, WSIS Stocktaking: Success Stories 2015 (Draft),
http://groups.itu.int/stocktaking/WSISProjectPrizes.aspx#prize-ceremony.

by the Cabinet Division (December 2013); Proactive Information Disclosure Guidelines, 2014; and Provisions on Secretariat Instructions, 2014 contributed to the success of this initiative.[6]

The National Portal is hosted by a private company called Mango Teleservices Limited. It also provides a 24/7 help desk support on technological and operational issues, and quarterly reports on server logs and uptime. Server uptime has been over 99%. The site is no doubt rich in valuable content, with over 2 million pages,[7] including 175 e-services such as online passport application and electricity bill payments. But this does not mean that it is easy for users to find what they are looking for. The National Portal is currently supply-driven as it is organized by government offices, sectors and services. For example, if a user wishes to register for a training course online should s/he click on 'Admission', 'Education', 'Online Application' or 'Online Registration' in http://bangladesh.gov.bd/site/view/all_eservices? Nevertheless, a mechanism is in place to take feedback from citizens and to incorporate them on the portal.

The following points are also made:

- The National Portal is prepared/used/updated having 3-5 days training as the framework is very much user friendly and dynamic.
- The National Portal having 25000+ websites are managed centrally and thus ensure security and maintenance.
- Data flow from central government to local government i.e. from Ministry/Division and Directorates to all field level offices is possible within shortest possible time using The National Portal due to its centralized management.
- Content Guideline, Training Guideline & Video Guideline of The National Portal has been prepared so that The National Portal is utilized/managed sustainably.
- In order to sustain The National Portal, Best Portal Awards are provided to dedicated managers/administrators annually.
- The National Portal training course guideline is included in the course curriculum of Bangladesh Civil Service Admin Academy (BSCAA) and National Institute of Local Government (NILG)
- Update of portal content is ensured through District & Upazila ICT committee/Innovation Teams;
- The National Portal is included as an agendum for the monthly coordination meeting of Upazila, District, Division, Cabinet Division and other Ministry/Division and Directorates for monitoring purpose.
- More than 10,00,000 officials information are included in the National Portal as e-Directory and Information of more than 30,000 Designated Officers (DO)following the RTI Act, 2009 are included.

The National Portal could be a good platform to introduce a citizen-centric approach, where e-services are organized by lifecycle events and segmented groups. Lifecycle events include birth, schooling, employment, marriage, pregnancy, retirement, death. Segmented groups could be farmers, teachers, businesses, non-governmental organizations (NGOs), government, investors, tourists, etc. UDC could be one of the groups and all the services and information that UDC entrepreneurs need on a regular basis are organized in a way that entrepreneurs can access easily. This shifts the emphasis from the number and type of services that are available on the portal to an emphasis on the ease of use so that users can find what they are looking for and complete tasks on the portal quickly (measured by the number of clicks, the time it takes to complete tasks, the number of errors made, and user satisfaction).

More content and more time spent on the portal may or may not be good signs. They may mean that users are finding it difficult to locate the information they need, or the information is

---

[6] Ibid.
[7] Ibid.

confusing and users are taking more time to understand the content. Conversely, they may be a good indicator of the usefulness of the portal.

Other portals developed by a2i include the following:

- Forms Portal (http://www.forms.gov.bd/) – with 1,000+ forms of 115 government offices
- Service Portal (http://services.portal.gov.bd/) – with 400+ service profiles and process maps
- Teachers Portal (https://www.teachers.gov.bd/) – with over 40,000 lessons being accessed by over 60,000 teachers (this portal will be transferred to the Ministry of Education in October 2015)
- e-Tathyakosh (http://www.infokosh.gov.bd/) – a one-stop information portal for disseminating livelihood-related information with over 110,000 pages developed by 350 different organizations.

6.6. Conclusions

The a2i Project is well on the way to achieving a successful operating model that augments the social need for public services with private sector profit-orientation in a way that is capable of achieving long-term sustainability for the UDCs as well as further progress towards achieving the digital development ambitions of the Nation.

Close examination of sample UDCs revealed:

- They save time both for service receivers and service providers
- Service receivers are getting service without giving any bribes
- They reduced the work load of the service providers and reduce the visits of the services receivers
- Monitoring becomes easier

In moving forward, there needs to be greater emphasis on the role of the UDC entrepreneur-operator. In some cases this will mean a shift from being a passive provider of services that have been provided for him/her to that of an active agent of change in defining and promoting other digital services that their clientele will value. It is recommended that other entrepreneurs emulate the entrepreneurial practices that exist among some of them.

Similarly, the National Portal is currently supply-driven with an emphasis on the amount of content, and the number and type of services available on the portal. The National Portal is a good opportunity to further institutionalize the citizen-centric approach where the emphasis is on user satisfaction and the ease of use so that users can find what they are looking for and complete tasks on the portal quickly.

At the same time, the metrics used for e-services delivery should shift from an output and activity orientation to providing a measurement of the outcomes or impacts within the community, and the extent to which the e-services are contributing to local socio-economic development.

The TCV framework has contributed to the rapid adoption of an innovation culture in government, as they are simple concepts that government officials can easily understand and measure. However, whilst the TCV parameters do not measure outcome or impact by themselves, they measure user satisfaction with e-services, which covers outcome by showing for e.g. if people's faith in public service is improving or not. For example, TCV does not measure whether an innovation or an e-service has increased literacy rate, raised GDP or empowered women.

6.7. Recommendations

1. Implement measurement indicators for e-services that measure their outcomes and impacts.
2. Build the capacity of UDC entrepreneur-operators and provide more opportunities for them to learn from each other.
3. Put in place mechanism to monitor user satisfaction of e-services delivery.
4. Implement measures aimed at improving the relationships between the UDCs and Union Parishads.
5. Assess the National Portal from users' standpoint and make adjustments to the user interface towards a more citizen-centric portal design.
6. All public institutions must develop their independent capacity to ensure access of citizens to the Service Innovation Centre.

7. Capacity and Awareness

Sensitizing government officials, training for service providers and expanding digital literacy among the general public

7.1.   Training on Innovation in Public Services

Much of the focus of the capacity development component has been the inculcation of an innovation culture within the civil service.

In April 2013, the Cabinet Division issued a gazette mandating the creation of Innovation Teams across different tiers of government from national to sub-district (upazila) levels. All the e-Governance/ICT Focal Points were to become Chief Innovation Officers (CIOs – at the ministries and divisions) and Innovation Officers (IOs – at the directorates, districts and upazilas). The CIOs and IOs are expected to lead the 3-5 member Innovation Teams. To date there are 988 Innovation Teams in the different tiers of government, comprising a network of over 5,000 Innovation Team members. a2i has been providing training to these Innovation Team members as part of its strategy to promote a culture of innovation in government, and improve internal work processes and service delivery.

a2i has organized 66 sensitization workshops for 3,326 Innovation Team members[8] to inform them about their terms of reference, about the experiences with Quick Wins,[9] and introduce them to service process simplification and TCV.

To create ideas and start-up the innovations, a2i has been targeting the frontline service providers, often young junior-level field officers at the districts and upazilas for a three-phase (Initiation--> Execution--> Recognition) capacity building framework.

At the 'Initiation' phase is a 5-day workshop that aims to develop participants' empathy for the citizens seeking service. It requires participants to visit an organization (not his/her own) and think about ways to improve service delivery. On the second day the participant visits his/her own organization to identify opportunities to reform delivery process. Over the next 3 days, ideas are refined through consultation and group work. One of the outputs of the workshop is a proposal for a pilot initiative. About 45 workshops have been conducted for 3,000 field officers.

At the 'Execution' phase is a 3-day workshop to develop an implementation plan for their proposed project. Out of these 3,000 field officers, 331 of them have participated in the 3-day workshop. During this phase, a2i has actively helped to facilitate discussions between field officers and senior decision-makers to gain support and mobilize resources for these projects. So far, 311 innovations are being implemented through this process, most of them funded by relevant government offices, and with the intention to scale up (see section 5.2.4 for more details on the innovation projects being implemented through this process).

The 'Recognition' phase is focused on creating political and institutional support for innovation (see section 5.2.2 for discussion on this phase).

---

[8] Capacity Development Team Activity Report: 2012-2015.
[9] Quick Wins are small-scale service delivery improvement projects undertaken by government offices with technical, and sometimes financial support from a2i during its first phase. UDCs, DESCs and multimedia classrooms are few examples that started out as Quick Wins in a few locations and have now been scaled-up nationwide. The learnings from the Quick Wins have been incorporated into the development of a capacity building framework for innovation.

Female participation in the training course (14%) seems to be satisfactory if compared with national data. At the national level, the male-female ratio of cadre officers in public service is 80:20.[10]
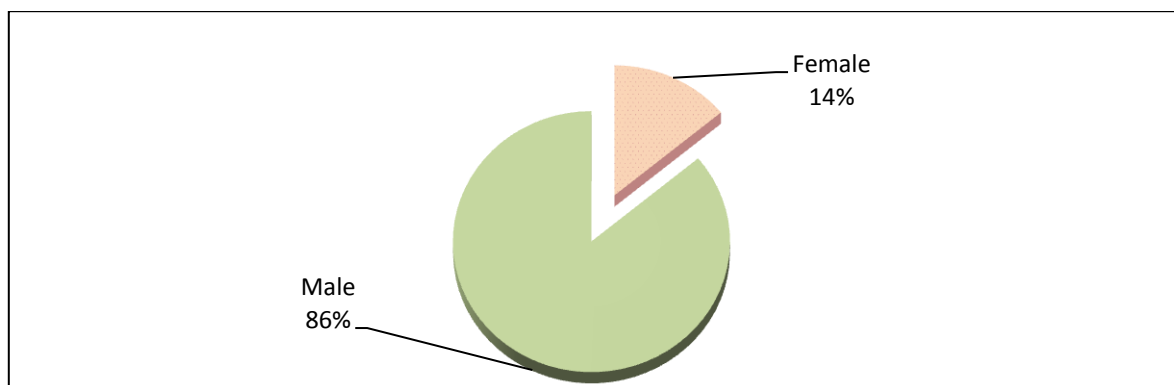
Figure 1. Male-Female Ratio of Training Participants

Division-wise distribution of participants shows an evenly distribution pattern that seems to have a positive impact over the field level officers (see figure 2).
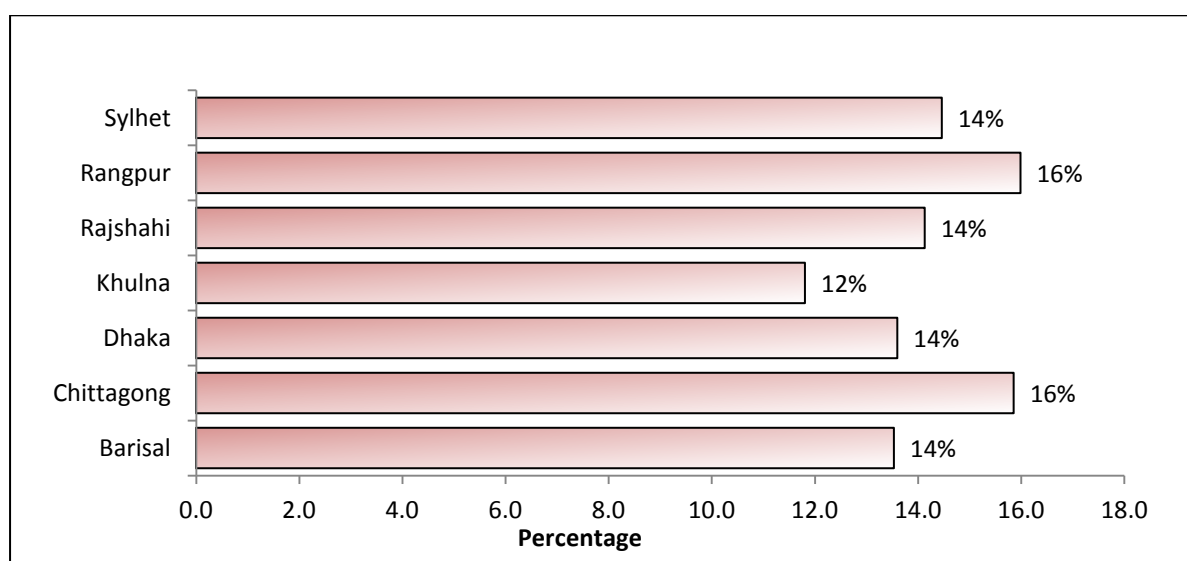
Figure 2. The Distribution of Participants by Division

Figure 3 shows the distribution pattern of various departmental officers in the training course.

---

[10] Bangladesh Bureau of Statistics, Gender Statistics of Bangladesh, 2012.
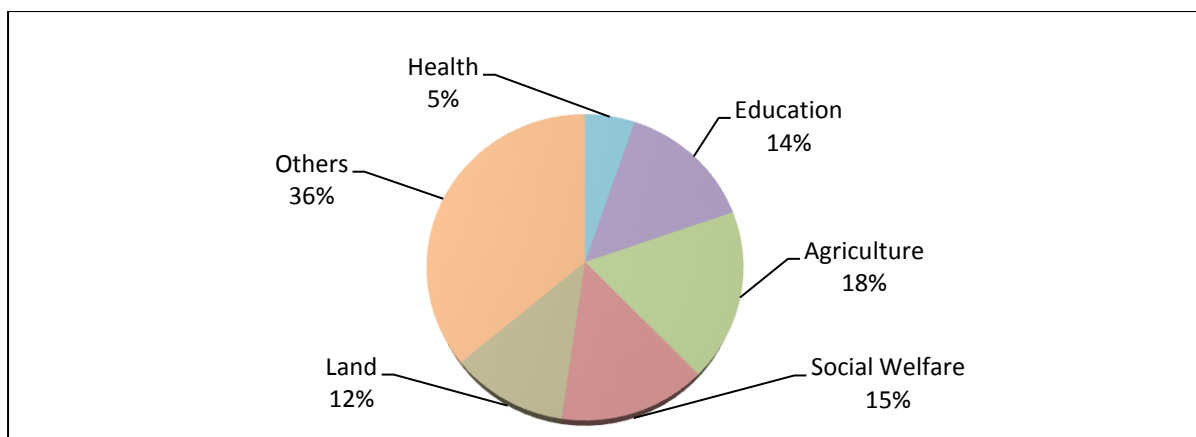
Figure 3. Representation of Departmental Officers

7.2. Institutional and Political Support

In addition to individual capacity development, a2i has also focused on organizational capacity and on creating an enabling environment for innovation.

To ensure buy-in and support from senior-level officials, a2i developed a series of regular seminars as follows:

- **Innovation Forum** (bi-monthly thematic seminar). Based on specific themes, CIOs, IOs and relevant persons from private sector and academia share their experiences and views. Eight innovation forums have been organized for 1,325 officers.
- **Innovation Circle**. This is a public service innovation demonstration and review event organized by the Divisional Commissioner's Office for district and upazila level government officers to share and discuss their innovations. Participants include officers from districts and upazilas, and representatives from the ministries and Prime Minister's Office. A total of 14 circles attended by 1,085 participants have been organized.
- **Leadership Dialogues**. These dialogues on innovations are targeted at senior management including Secretaries, Additional Secretaries, Director Generals, Corporation Chairmen, etc., as well as field-level top executives, such as Deputy Commissioner, Additional Deputy Commissioner, Upazila Nirbahi Officer, etc.

In addition, a2i facilitates meetings between innovators and decision-makers to present and discuss the innovation projects, and mobilize resources. On Facebook, a group – 'Public Service Innovation Bangladesh'[11] was created by a2i, and now includes over 6,700 government officers,[12] from all tiers of government. It is a forum for raising issues, discussing solutions, and sharing ideas and experiences about public sector reform and service delivery innovation. Informants, both junior-level and senior-level officials, value this platform for exchange. Good ideas and good innovations get recognized on this platform. It keeps the momentum going and motivates public officers to innovate. Informants claim that Facebook is flattening the government hierarchical structure as it is making it easier for junior- and senior-level officers, and field- and central-level administration to exchange ideas and discuss solutions.

7.3. Incentives and Rewards

Some of the government officials interviewed have started to introduce awards to innovative officers. In Chittagong, the Divisional Commissioner Office has initiated a process to award innovations, Innovation Teams and innovators at district, upazila and union levels, including

---

[11] https://www.facebook.com/groups/publicserviceinnovationblog/.
[12] As of 20 July 2015.

best UDC entrepreneur. Yet, in interviews with junior-level officers, it was suggested that awards and recognitions should be more widely available.

7.4. Training Resources

A number of tools and course materials have been developed to initiate these training activities, some of which have been adopted by public training institutions. According to the a2i's Capacity Development Team, Memoranda of Understanding (MoUs) have been signed with eight public training institutions to update their ICT/e-government curriculum and incorporate public service innovation in their core courses. To date, 2,717 officers at Bangladesh Public Administration Training Centre (BPATC), Bangladesh Civil Service Administration Academy (BCSAA), National Academy for Planning & Development, Bangladesh Institute of Management (BIM), Police Staff College, Bangladesh Academy for Rural Development and Rural Development Academy have received training on this redesigned curriculum.

At the same time, some informants caution against mainstreaming innovation learning through the public training institutions because of their routine training loads, their traditional bureaucratic culture, and the frequent transfer of chiefs of the institutions.

a2i has a pool of 51 resource persons from public training institutions and government organizations, including the innovators, who are able to facilitate the different innovation workshops and trainings. a2i is also in discussion with universities to deliver innovation workshops and trainings to government officers and NGOs. The few resource persons interviewed suggested the need to enhance the knowledge and skills of this resource pool since the quality of training depends on the facilitation of the resource persons.

7.5. Training Outcomes

The immediate outcomes of the training are the initiatives the participants have taken as a result of their participation in the training workshops. There are 311 such initiatives taken by the participants and that are now in the implementation stage. The highest number of initiatives is taken in three important sectors- Agriculture, Education and Social Services (Figure: 4). People used to frequently visit the government offices of these sectors including Health and Land for various services. If successfully implemented, the initiatives could make progress in delivering services significantly reducing the Time, Cost and Visit (TCV).
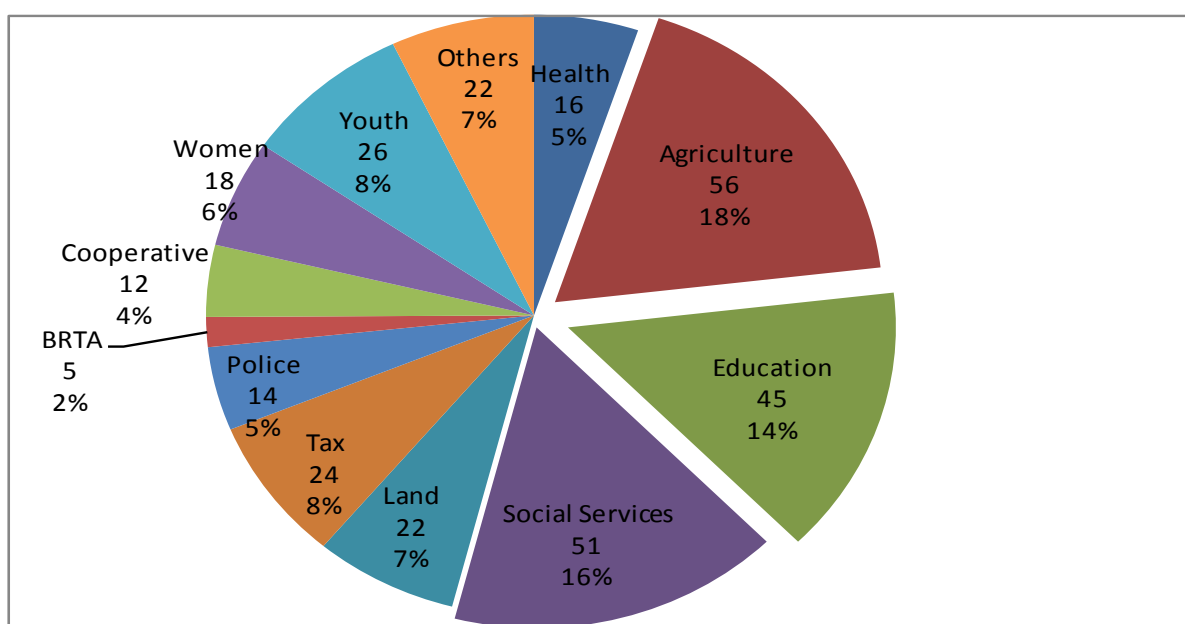
Figure 4. Type of Innovations Initiated by Training Participants

<div style="border:1px solid">

Box 6. Examples of Innovations in Chittagong

- In Chittagong, the Divisional Commissioner Office remarked that there are 173 innovation ideas presented and 68 pilot projects being implemented in the 11 districts and 100 upazilas. The type of innovations span across different sectors including agriculture, education, environment, fishery, health, land, public administration and social welfare.
- In Boalkhali Upazila in Chittagong, 6 pilot innovations have been submitted for budget approval for the 2015/2016 fiscal year. One of the innovations is to develop a one-stop service point as many people arriving at the upazila office do not know where to go to submit their applications.
- There are several land-related innovations focused on the digitization of maps and land records, which are now accessible from a website and a mobile app. The application for mutation of land records online is being piloted. An online land development tax calculator is also being developed.
- a2i is partnering with the Ministry of Land and the Directorate of Land Records and Survey to create a central architecture for these and other bottom-up land services.

</div>

As agreed during the inception phase of the evaluation, the evaluation team would conduct a research study to assess the outcome of a2i's capacity building framework for CIOs, IOs and Innovation Team members, and the extent to which there is a culture of innovation among government offices. More specifically, the research examined:

- The effectiveness of the innovation-related activities, to see whether participants have acquired the knowledge, skills and attitude to innovate
- The role of CIOs, IOs and Innovation Team members, to see if being part of an innovation network has brought about any changes in the way they work.
- The organization that the participants work in, to see if the organization promotes innovation and provides an environment in which 'being innovative' is valued.

See annex 3 for the research concept note.

7.6. Methodology

A number of methods were applied to gather data and information including an online questionnaire survey, FGDs and key informant interviews. FGDs with IOs and Innovation Team members were conducted at the divisional level (1), district level (1) and upazila level (2). Moreover, interviews were conducted with two government officials who are currently implementing 'pilot' initiatives at the field level, two resource persons who have facilitated training sessions, and the a2i Capacity Development Team.

A questionnaire was designed with 36 statements that respondents need to rate on a scale of 1-5. Survey Monkey was used to host the questionnaire online, and requests and reminders were sent out during June 2015 to 1,500 government officials who participated in the 5-day innovation training, which include IOs and Innovation Team members.

Any respondents that answered less than 20% of the questions were not included in the results. There were 77 submissions on Survey Monkey but only results from 72 respondents were used for analysis. Seventy-one of them were Innovation Team members and only 1 was an IO. Moreover, it is important to note that 86% of the respondents were from the upazila level. Thus, the results from this survey are biased towards the perception and opinions of Innovation Team members at the upazila level.

See annexes 7, 8 and 9 for the questionnaire survey, profile of survey respondents and a summary of the results from the survey, respectively.

7.7. Analysis of Survey Results

7.7.1. Effectiveness of training and other innovation-related activities

Almost all the respondents either strongly agree or agree that they have acquired the relevant knowledge, skills and attitude to be innovative. Almost all respondents also believe that they are able to motivate and transfer the knowledge and skills learned to their colleagues. The only area that not all respondents are doing or feel confident doing, is partnering with another organization to develop or coordinate an innovative project.

Seventy-seven per cent of the respondents are highly interested (strongly agrees) to participate in more innovation-related activities and 75% are highly interested (strongly agrees) to participate in e-learning (see figure 5). With this high demand for e-learning, a2i could consider adapting the training materials on innovation for e-learning and running part of the training online. With the training materials online, this could further support and accelerate the transfer of knowledge and skills for innovation.
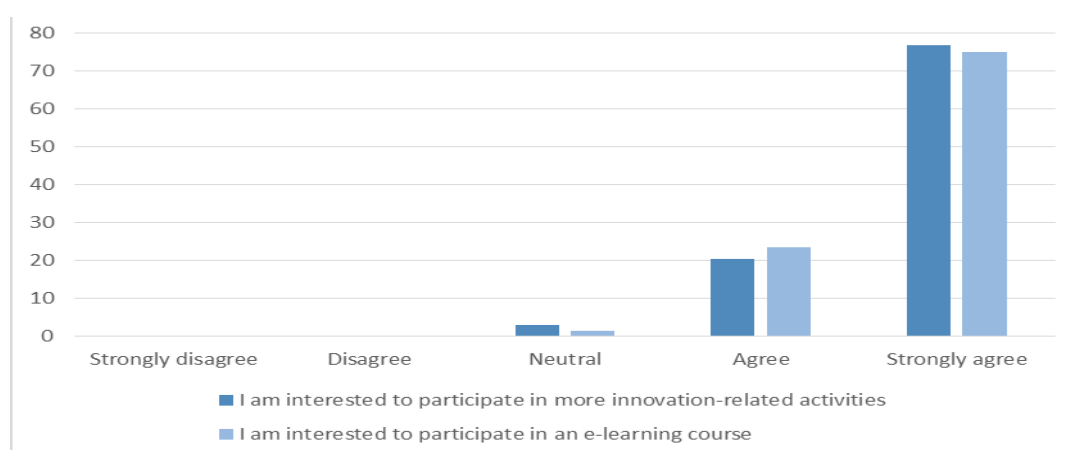
Figure 5. Summary of Respondents' Interest in More Innovation-related Activities and in e-Learning

7.7.2. Motivation to innovate

Over 97% of the respondents[13] believe that they fully understand their role as Innovation Team member and why innovation is needed, and claim that they will continue to innovate even when they transfer to a new post. About 90% of the respondents[14] note that being an Innovation Team member has increased their job satisfaction.

On interacting and collaborating with others to create innovative solutions (see figure 6), about 90% of the respondents[15] say that they do so with their colleagues; about 86% engage with government officials outside their organization, and 87% engage with citizens. But only 60% of the respondents engage with NGOs and even fewer (50%) engage with businesses. As networking and cooperation with a diverse group of stakeholders are important for learning, problem-solving, generating ideas and developing innovative solutions, a2i should consider providing more opportunities for multi-stakeholder interactions and facilitating such cooperations. a2i could also promote more active online engagement on the Facebook group and through the Idea Bank.

---

[13] These respondents either strongly agree or agree to the following answer options.

[14] These respondents either strongly agree or agree that they are more satisfied with their job.

[15] The percentages in this paragraph refer to respondents that either strongly agree or agree to the answer options.
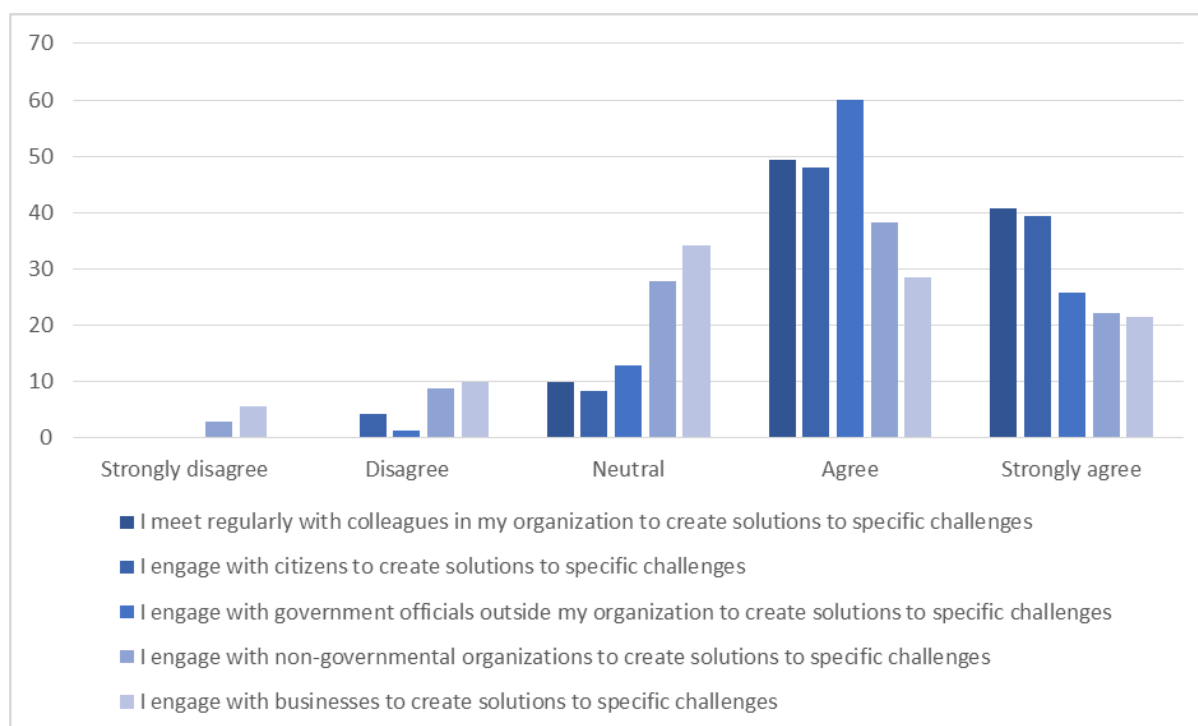
Figure 6. Summary of Respondents' Engagement with Different Stakeholders

7.7.3. Government's organizational capacity and support system for innovation

Eighty-five per cent[16] of the respondents believe that their organization have the capacity to develop ICT-based innovations. However, fewer respondents (69%)[17] feel that they are given adequate time and resources to develop innovative ideas.

It is promising that local government officials are reporting that pilot innovations are being scaled up (see figure 7). Eight-seven per cent of the respondents strongly agree or agree that pilot innovations are being scaled up. There is no disagreement on this statement. It is also worth noting that 82% of the respondents believe that their organization expect and value failure as part of the innovation process and openly discuss failed initiatives to learn from them (see figure 8).

---

[16] These respondents either strongly agree or agree to the statement.
[17] These respondents either strongly agree or agree to the statement.
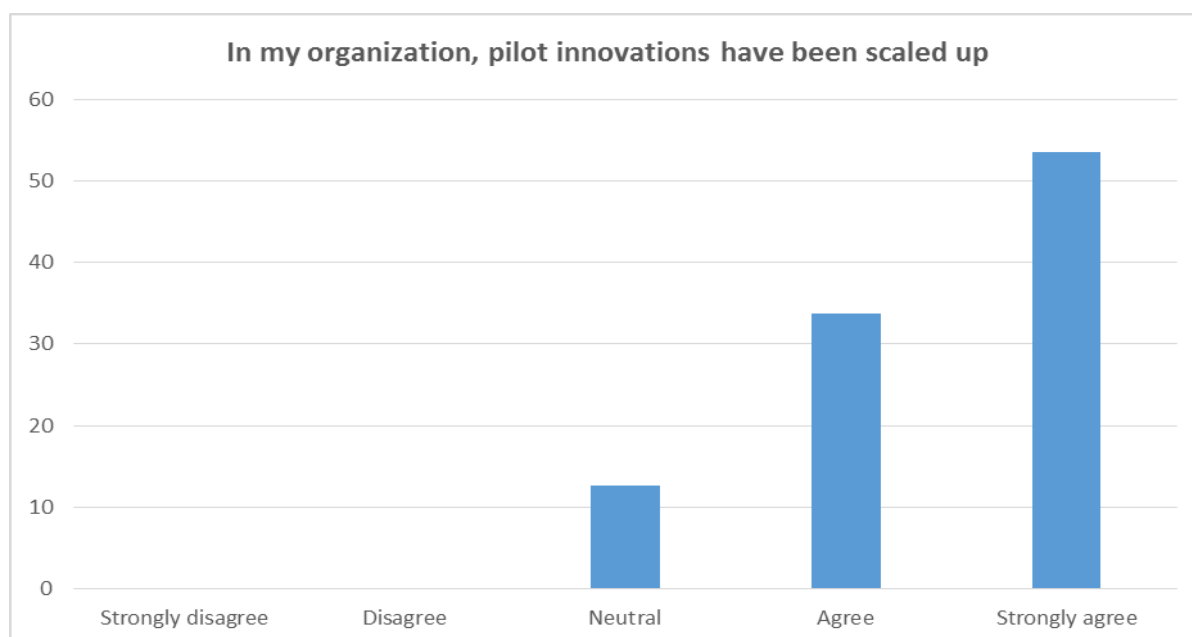
Figure 7. Summary of Responses on Whether Pilot Innovations have been Scaled Up
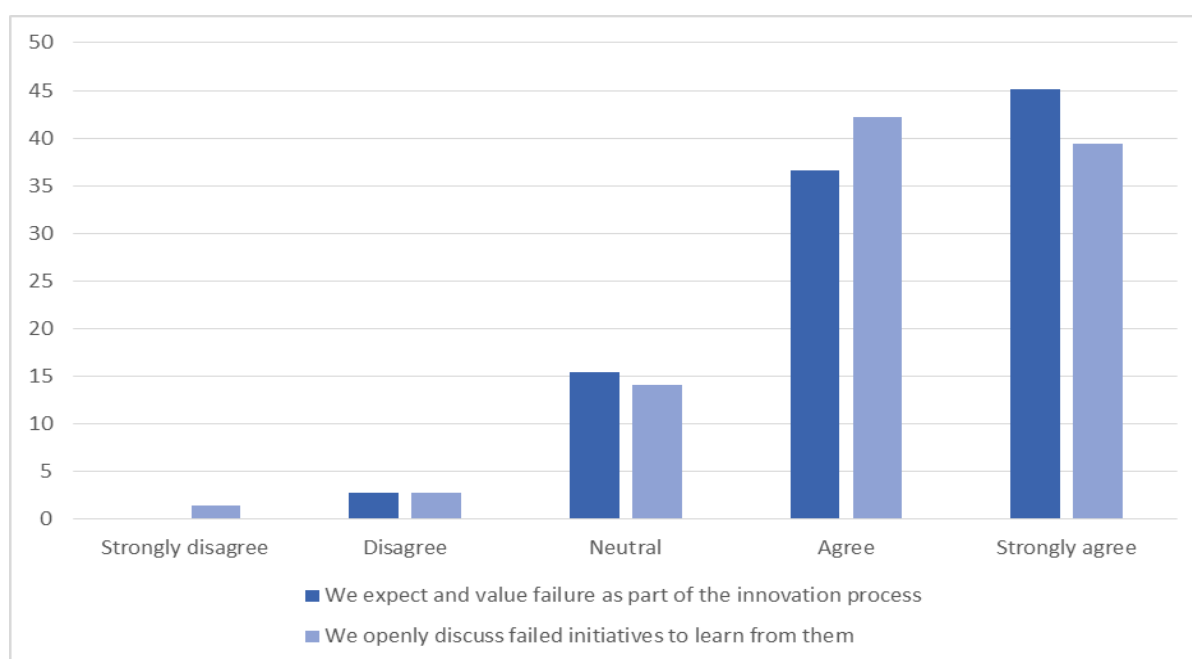
Figure 8. Summary of How Organizations Value and Deal with Failure

Recognition and reward are essential for promoting a culture innovation. Survey respondents generally agree that innovative officials will be publicly recognized. But there is relatively less agreement that being innovative will lead to being promoted quicker, being awarded with a desirable posting or receiving monetary award.

Overall, 68% of the respondents (majority at the upazila level) strongly agree or agree that there is a culture of innovation in their organization; 14% strongly disagree or disagree. The results show that there is room for improvement in developing organizational capacity and providing a support system for innovation.

Supplementing the results from the questionnaire survey, the FGDs and interviews showed that simply training field-level officers at the upazila level is not sufficient as they are required to

work under the political jurisdiction of the upazila parishad, one of the important elected local government bodies. Often, local members of parliament intervene in the day-to-day work of field-level officers. Hence, it is important to orient the members of parliament about the nature and objectives of innovation in public services. The Capacity Development Team recognizes this gap and is working with the National Institute of Local Government, a government training institute that provides training to elected representatives of various local government units, to see how they can address this issue.

The informants account that that many innovative initiatives do not involve additional cost. For example, an Agriculture Officer improved the effectiveness and efficiency of training for farmers by conducting need-based training in the communities instead of asking farmers to attend training in the government department. Other key issues raise by informants are that motivation play a significant role in service innovation, and support from the top is fundamental to move forward.

FGDs at the upazila level reveal that the Innovation Teams meet regularly and discuss about the progress of their initiatives. They prepare a list of initiatives and send it to the district authority. At the district level, the Innovation Teams review the list of upazila initiatives and provide support to them as needed. District offices also have their own initiatives. Both the Divisional Commissioner's Office and the Deputy Commissioner's Office at the districts frequently visit the upazilas to observe the progress and development of the initiatives.

From the FGDs in two upazilas there appears to be significant difference in understanding and motivation between officers who have attended the training and those who have not. IOs and Innovation Team members that have attended the 5-day training workshop are very active in promoting innovation.

In summary, there appears to be a lot of enthusiasm to innovate at all levels of government. It is seen as a top-down agenda from the Prime Minister's Office but many officials seem to be gaining job satisfaction for being able to innovate and also being recognized for their innovations. Other evidence of an innovation culture in government includes the following:

- Ministries are supporting and allocating funds for innovation
- Where innovations are planned or implemented, their progress is on the agenda of the monthly coordination meetings in government offices
- The Cabinet Division has included in its field inspection checklist the review of innovation projects
- Awards and public recognition for innovation are taking place

7.7.4. Innovation Ecosystem

a2i has developed many of the key ingredients to develop an innovation ecosystem:

- Directive from the Prime Minister's Office to establish a formal network of CIOs, IOs and Innovation Team members to motivate and monitor innovations
- Different types of workshops to generate ideas as well as develop ideas into a proposal
- Training methodology and materials
- Growing pool of resource persons to deliver workshops and trainings
- Partnerships with public training institutions and universities to deliver workshops and trainings
- Online and offline mechanisms for sharing and collaboration (Facebook group, Innovation Forum, Innovation Circle and Leaders Dialogue)
- An Idea Bank – an online repository of innovations[18]

---

[18] The Idea Bank combines innovations initiated through training, and innovations awarded by the Service Innovation Fund.

- Organization of regular innovation fairs at national and local levels to showcase innovations
- Government offices starting to issue innovation-related awards
- a2i is proposing an online dashboard to monitor the Innovation Teams' action plans and the implementation of the innovations.

7.8. Capacity Building for Citizen Engagement

a2i has been critical in transforming government mindsets. The increasing number of public service innovations being supported and funded by government itself, the establishment of e-service centres or 'single window for citizen' at district offices, the development of citizens charters, and responses to citizens' grievances and feedback, are all evidence of citizen-centric service delivery. The next step is to build upon this enthusiasm to develop capacity for citizen engagement.

a2i has started by building empathy for the citizens seeking service, and designing services based on what government officials think these citizens seeking service need. To promote citizen engagement a2i could develop the capacity of government to listen to the different groups that they serve, including marginalized groups, to understand what they want and need, and also get feedback on how the service provider is doing and what needs to be improved. For example, there needs to be a shift in focus from monitoring the number and type of e-services and innovations developed, to how often citizens are using the e-services and how satisfied they are with the e-services. The development of guidelines and relevant tools for engaging with citizens, assessing citizen's needs and monitoring in a citizen-centric manner will be useful.

There is evidence that government officials are recognizing the need for developing competencies in citizen engagement in the Training Needs Assessment of CIOs, IOs and Innovation Team members that was recently completed by BPATC. According to the Training Needs Assessment, All respondents CIOs, IOs and Innovation Team members at the ministry, department and in field have ranked "the capacity to identify client's needs and deliver services according to their needs" at the top.

Table 1 shows the top 5 knowledge, skills and attitude gaps for CIOs, IOs and Innovation Team members at all tiers of government. The Training Needs Assessment have found some variations in the skills gap based on their different roles (as CIO, IO, Innovation Team Members), their seniority, and the type of services that they are providing. One of the recommendations from the assessment is to provide separate training courses for these different groups.

To develop the knowledge, skills and attitude to identify and address citizens' needs, a2i could consider partnering with NGOs to involve different groups of 'citizens' in the innovation workshops, including women, disabled, ethnic minorities, etc. to listen and learn about their needs, and even co-design an innovation together.

Table 1. Top 5 Capacity Development Gaps		
Prioritized Knowledge Gap	**Prioritized Skills Gap**	**Prioritized Attitude Gap**
Basic ICT Knowledge (e-filing, LAN, Web portal, e-GIF, ICT project management)	Basic ICT Skills (e-filing, LAN, Web portal, e-GIF, ICT project management)	Building Empathy (listening to the clients with due patience to understand their needs, showing respect to clients, responding to clients' need properly and promptly)

Communication & Coordination (building network, stakeholders participation)	Communication & Coordination (building network, stakeholders participation)	Mutual Respect (paying due respect to the views of colleagues, cooperation, sharing)
Innovation Techniques (transforming manual to e-service, selling new idea, showcasing, scaling-up)	Techniques of HRM (motivation, coordination, rewarding)	Agility (having enthusiasm, adaptability to changed situations, accepting new tech, challenging status quo, recognizing trial & error)
Service Process Simplification (process mapping, efficiency mapping, mapping as-is and to-be process)	ICT Project Management (problem analysis, prepare, implement and monitor ICT project)	Sharing and Developing Others (sharing new ideas with others, developing and mentoring others, leading juniors, promoting team spirit)
Clients' Needs Assessment (problem analysis, citizen charter, prioritizing clients' needs)	Building Networks (clients' needs assessment, involve stakeholders, managing virtual relations)	Think Out-Of-Box (Tolerance to ambiguity, generate creative idea, idea mapping

(Source: extracted from BPATC's Training Needs Assessment, May 2015)

7.9. Other Training Activities

The a2i Project has conducted training in technical and mobilization skills for more than 9,000 UDC entrepreneur-operators. Senior government officials have received training on e-government and computer skills. Additionally, around 1,000 teachers have received training in content development in support of the multimedia classroom initiative.[19]

As highlighted in box 3, the evaluation encountered some variations in the skills and entrepreneurialism of the digital centre operators, which might indicate a need for additional capacity building measures.

---

[19] Minges, R., Raina. (2011). Bangladesh: Access to Information (a2i) Evaluation; and Bhatnagar, S. (2014). eGovernance in Bangladesh: Current Status and Way Forward Improving Service Delivery for e-Inclusion. PhD.

> **Box 7. Summary of Field Visit Findings Related to the Capacity of the Entrepreneur-Operators at Uthora UDC and Meduary UDC in Bhaluka Upazila, and Dhankhali UDC in Trishal Upazila**
>
> - Three main entrepreneurs are college graduates and received training on basic computing (MS Word, Excel, Power Point, Photoshop, Internet browsing).
> - One female entrepreneur of Dhankhali UDC received significantly more training on computer applications and data entry processes than other entrepreneurs. She received training on basic computing from a government organization in 2006, and in 2011 after her appointment at the UDC she received a 10-day basic computer training from the Deputy Commissioner Office. Later, she attended a six-month training programme organized by the Ministry of Social Welfare in her locality in 2012. She also participated in a training for trainers organized by a2i and then she trained 30 employees who are working in the PDC in Mymensingh.
> - On the other hand, the alternative entrepreneurs of Uthora and Meduary UDCs are not proficient in using computers and providing online services.

7.10. e-Learning

Three public training institutions - BPATC, BCSAA and BIM - as well as the Ministry of Public Administration are partnering with a2i to develop e-learning courses. They are still at the pilot stage of testing the e-learning course.

BPATC (interviewed) is positive about e-learning for increasing the number of people that they can trained. Moreover, e-learning has the potential to focus on the learning, not seat time, and a movement toward competency-based pathways. Students complete work at their own pace and seek feedback and instruction as they need, rather than when the teacher decides. Students are immersed in a variety of technology tools and media, allowing for different ways to learn content.

a2i has an MoU with the Ministry of Public Administration to develop four online courses on mobile court (mandatory for magistrates), mutation process (mandatory for land officers), public procurement, and a mandatory course for all Innovation Team members.

a2i is planning to introduce e-learning for teacher training. The evaluation team is supportive of this idea and a2i should consider partnering with teacher training institutions and universities. a2i can learn lessons from other countries, and from UNESCO.[20]

7.11. Conclusions

Through its capacity building activities, the a2i Project has effectively begun the inculcation of an innovation culture within the civil service, which has been a critical prerequisite for transforming government services towards digitized client-centric e-services.

Individual capacity building has generally been successful with most of the respondents feeling confident about their ability to innovate. However, there's room for improvement in developing institutional capacity to innovate; and promoting and facilitating innovation networks for learning, sharing ideas, and solving problems through cooperations and collaborations.

---

[20] See for example UNESCO Bangkok Teacher Training Series,
http://www.unescobkk.org/education/ict/online-resources/databases/ict-in-education-database/item/article/unesco-bangkok-teacher-training-series/.

a2i capacity development efforts are not only focused on developing skills, but also on changing values and attitudes. These efforts have contributed significantly to the building of an innovation culture in all tiers of government. A component of the innovation ecosystem that could be strengthened is in the area of research to assess the outcome and impact of the innovation and guide policy reform.

The Training Needs Assessment that a2i commissioned BPATC to develop is important for refining and tailoring training specifically for CIOs, IOs and Innovation Team members, with greater emphasis on citizen engagement in the planning, implementation and monitoring of innovations and e-services.

a2i should press ahead with e-learning as a strategy for continuous learning not only for training of government officials on their standard courses, but also to accelerate the transfer of knowledge and skills for innovation, and for other audiences such as digital centre entrepreneur-operators, teachers, students and professionals.

The effectiveness of training for UDC entrepreneur-operators seems to be somewhat patchy. The evaluation observed differences between the computer skills of men and women, and differences between the entrepreneurial skills of the operators, whether men or women.

7.12. Recommendations

1. Emphasize cross-organization collaborations and provide government officials with the skills and opportunities to collaborate with other government offices, non-governmental organizations and the private sector.
2. Focus efforts on institutional capacity development and provision of a support system for innovation.
3. Intensify efforts to further sensitize government agencies through partnerships with public training institutions and civil society organizations.
4. Orient elected representatives of local government units and members of parliament on innovation in public services.
5. Continue running the 5-day training workshop on innovation initiation for all IOs and Innovation Team members, particularly those working at the field level. As these officers rise up the ranks with new ideas, knowledge and experiences, and a culture of innovation, this will likely have a significant impact on the whole administration.
6. Enlarge the pool of resource persons and equip them with the competencies to facilitate training workshops on innovation.
7. Commission research to capture the learnings from the pilot initiatives. Case studies and video documentaries on both successful and failed initiatives could be used as effective training materials in order to deepen the understanding of the participants about the prospect and challenges of innovation in public services.
8. Commission research to better understand the outcome and impact of innovation in public services and to guide policy reform that will remove remaining barriers and generate further improvements.
9. Incorporate and further strengthen entrepreneurial skills in training for UDC entrepreneur-operators that will improve their ability to deliver locally-relevant information-based services as well as enhance the sustainably of their centres.
10. Develop a strategy for e-learning that explores the possibilities of using the e-learning platform to meet the training/learning needs of different groups including government officials, digital centre entrepreneur-operators, teachers, students and professionals.

8. Enabling Environment

Forging strong policy and strategy links to ensure implementation of needed legal and regulatory changes in support of the Project

8.1. Bangladesh's Ranking in Global Indices

According to the latest World Economic Forum's Networked Readiness Index,[21] Bangladesh's ranking for its political and regulatory environment is 135 out of 143 countries, which is even lower than countries like Myanmar (ranked 132) and Timor-Leste (ranked 129). The business and innovation environment of Bangladesh is comparably much better. Ranked at 112, it is higher than India (ranked at 115).
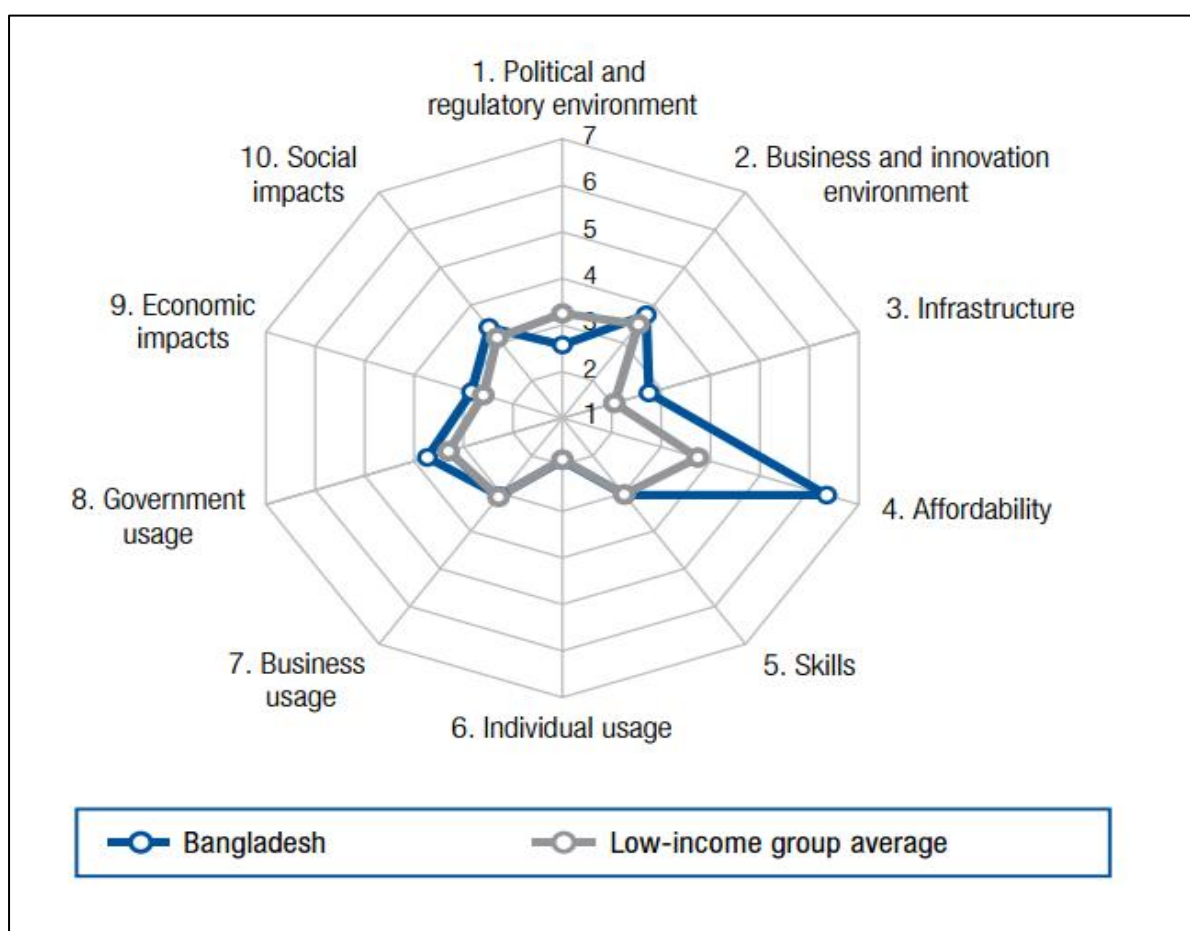
Figure 9. Radar Chart Showing Bangladesh's Score on the 10 Pillars Measured in the Networked Readiness Index.

Source: World Economic Forum, The Global Information Technology Report 2015: ICTs for Inclusive Growth (Geneva, 2015).

Bangladesh scored very high in the affordability of ICTs (ranked at 21), as it has one of the lowest pre-paid mobile cellular prices in the world. Its ICT infrastructure is ranked at 109 (similar to

---

[21] World Economic Forum, The Global Information Technology Report 2015: ICTs for Inclusive Growth (Geneva, 2015).

Cambodia and Lao PDR) and its ICT skills ranked at 125. Related to the usage of ICTs among individuals, business and government, Bangladesh scored highest in government usage and is ranked at 75 for government usage – higher than Cambodia, Lao PDR, Myanmar, Nepal, Thailand and Timor-Leste.

8.2. a2i's Efforts in Improving Bangladesh's Enabling Environment

The creation of a favourable regulatory environment for the introduction of e-services was the earlier priorities of the a2i Project. The Secretarial Instruction 2008 mandated that all official activities of the government can be executed electronically. Additional support from the a2i Project was also instrumental in introducing the public's rights to information as well as the formulating the National ICT Policy for 2015, and constituting the Task Force for the Digital Bangladesh initiative.

Despite these positive developments, Bangladesh remains low in global rankings of e-government. In a 2012 survey, Bangladesh was ranked 150 out of 193 UN Member States.[22] However, the cabinet recently approved the National ICT Policy 2015, which will be "less regulatory but more developmental and promotional," according to the Cabinet Secretary, adding that the policy will be a guideline for the sector to ensure comprehensive and effective use of ICT to materialize the government's vision to make Bangladesh a middle income country by 2021 and a developed one by 2041.[23] Each ministry is to have its own ICT action plans, to be developed with assistance by Bangladesh Computer Council (BCC), but the evaluation was informed that officials at BCC are not satisfied with the progress of ministries to develop their own implementation action plans, citing an inability to institutionalize ICTs. Despite this, the BCC is pressing ahead with the Civil Registration and Vital Statistics (CRVS) system, which is a national database, intended to unify the many databases in which the government maintains data on its citizens. When operational, this will greatly facilitate the growth and integration of public e-services and the Nation's strategies for e-government. However, while the overall levels of automation within ministries remains low, there is little scope for any horizontal integration of e-services, which would require a nationally integrated e-architecture, the absence of will continue to inhibit the potential of a2i and the growth of e-government in Bangladesh.

a2i has been an important player in influencing the country's numerous ICT for development acts, policies and guidelines that are currently in place. Since the start of phase two of the a2i in 2012, the Project has continued to provide advice and support to the formulation of regulations, policies, standards and guidelines, particularly those related to service process simplification, e-services and online transactions, financial inclusion and payment methods, security, and innovation (see table 2).

Table 2. Act, Policies, Guidelines and Standards that a2i has Supported		
No.	Acts, Policies, Guidelines and Standards	Comments
1	ICT Act (Amendment 2013)	Amendment related to cybercrime, electronic transactions and digital signature.
2	Disability Act 2013	The law stipulates that persons with disabilities and special needs must have

---

[22] Dhaka Tribune, E-Govt: Bangladesh ranked 5th in Saarc, 25 August 2014, http://www.dhakatribune.com/bangladesh/2014/aug/25/e-gov-bangladesh-ranks-higher-world.
[23] Bangladesh Awami League, Cabinet Approves 'National ICT Policy-2015', https://www.albd.org/index.php/en/updates/news/2233-cabinet-approves-national-ict-policy-2015.

		access to ICT.
3	e-Service Act 2014 (draft)	Includes provision to establish an e-service authority to oversee the quality of e-service delivery.
4	Cybersecurity Act 2015 (draft)	
5	Stamp Act and Court Fee Act (draft)	
6	ICT Policy (Amendment 2015)	
7	Policy Guidelines for Electronic Financial Inclusion 2013	To promote agent banking, electronic and mobile payments, and insurance and credit delivery and management.
8	Secretariat Instructions 2014 (Amendment)	To create a mandate for e-filing of all government files and records. Included emails and web-based services as an integral part of formal official procedure.
9	Proactive Information Disclosure Guidelines 2014	Deals with information disclosure and dissemination in light of the Right to Information Rules 2009 and Right to Information (Information preservation & Management) Regulation, 2010 and Right to Information (Information disclosure and Dissemination) Regulation, 2010. Right to Information Guidelines 2010
10	Service Process Simplification Book 2014	39 services simplified and published in print and online, and endorsed by all Secretaries.
11	City Corporation Digital Centre Circular 2014	Outlines the role of entrepreneurs, city corporations and a2i.
12	Pourashava Information and Service Centre Circular 2014	Outlines the role of entrepreneurs, pourashavas and a2i.
13	Union Parishad Digital Centre Circular 2013	Outlines the role of entrepreneurs and union parishads.
14	Innovation Team Gazette 2013	Instruction to establish Innovation Teams, and outlines the structure, and the teams' roles and responsibilities.
15	National Portal Guidelines (draft)	Related to developing citizen-centric and user-friendly websites.
16	ICT Infrastructure Guidelines	End-user guidelines drafted. Security guidelines and rural connectivity guidelines in process.
17	Bangladesh Interoperability Guidelines and Standards (BIGS) Portal	A collaboration with Bangladesh Computer Council and the World Bank.

In addition to catalyzing changes in regulations and policies, a2i has also been instrumental in translating policies into action. An example is the use of the Right to Information Act to garner support for the creation of a National Portal.

In the United Nations e-Government Survey of 2012, special recognition was given to Bangladesh alongside other giant economies like Brazil, China, India and the US that have a population of over 100 million, for their significant efforts to provide e-government services to their people, despite the challenges they face. Also, the International Telecommunication Union (ITU) ICT for Development Index acknowledged Bangladesh as one of the three most dynamic countries in

Asia-Pacific, alongside Australia and Mongolia.[24] In a Standard Chartered report on financial inclusion, it found that Bangladesh alongside other countries including Indonesia, Malaysia, Russia and Vietnam, have made strong progress in improving financial inclusion.[25]

In addition to boosting the regulatory and policy environment for ICT for development, a2i could also consider advocating for improved regulatory and policy environment for private sector investments and innovations in the area of ICT for development. This could include forging linkages between businesses and entrepreneurs, academia and research institutions, and civil society.

a2i should also prioritize its advocacy efforts in gender equality, particularly in the collection and analysis of relevant data to understand gender impacts, because despite the emphasis of gender and women's issues in Bangladesh's ICT Policy and in Digital Bangladesh, disaggregated data and information will be crucial to inform interventions.

Through the efforts of a2i, a working group has been formed to boost Bangladesh's ranking in relevant global indices. a2i should support government involvement in the preparatory process of the United Nations e-Government Survey 2016, and ITU and UNCTAD's upcoming indexing.

8.3. Use of Social Media to Promote Government-Citizen Engagement

a2i reports that government officials have embraced social media as one of the tools to use for their work. Interviews with a2i and with government officials reveal that social media tools, particularly Facebook, have been used among government officials for discussions, problem solving and idea sharing. Facebook has also been used for grievance redress and engaging citizens in better service delivery. All divisional commissioner's offices and all deputy commissioner's offices in Bangladesh have official Facebook pages or groups that citizens can post comments on. The Facebook platform is easier for citizens to provide feedback and make complaints. Instead of having to fill up a form (for which one has to be literate to do so), users can upload a photo or video on Facebook. Social networking sites have become a valuable tool for citizen's engagement with government but they are currently informal initiatives. These initiatives, however, are worth assessing to see how they can be formalized within government structures and processes.

8.4. Conclusions

a2i has been instrumental in catalyzing changes in regulations and policies, and in translating policies into action. The impact of a2i's efforts in harnessing ICT for development is being captured in global indices, although a2i should provide advisory support to government in data collection and its proactive engagement in the preparatory processes of upcoming indexing.

The rapid rise of social media in Bangladesh has created an unprecedented opportunity to engage the citizens in decision-making and policy formulation (e-participation). There is now a viable platform for citizens' voices to be heard. The experience and lessons from the UDC blog and the increasing number of government offices hosting public Facebook page taking in citizens' grievances, need to be analysed and formalized within government structures and processes.

8.5. Recommendations

Support government involvement in the preparatory process of the United Nations e-Government Survey 2016, and ITU and UNCTAD's upcoming indexing.

---

[24] ITU, Measuring the Information Society 2013 (Geneva, 2013).
[25] Standard Chartered, Financial Inclusion: Reaching the unbanked, 4 September 2014.

1. Advocate for improved regulatory and policy environment for private sector investments and innovations in the area of ICT for development.
2. Prioritize advocacy for gender equality, particularly in the collection and analysis of relevant data to understand gender impacts.
3. Institutionalize the use of Facebook for e-participation to enable engagement between government and citizen, and achieve a more open, transparent and consultative form of government.
4. Encourage full implementation of the National ICT Policy at ministerial level.

9. Innovation

Promoting innovation in the delivery of e-services

9.1. Flagship Initiatives

The a2i Project has embraced innovation as a cornerstone of its strategy for facilitating the implementation of e-services throughout Bangladesh, typified by the 'Quick Wins', innovation training, bottom-up approaches and service process simplification, willingness to experiment and fail, opportunistic and creative actions, and its 'good is great' and 'ready-fire-aim' attitudes. By eschewing a traditional development information systems life cycle, the Project drew effectively on contemporary thinking in systems design and change management. The resultant flagship initiatives, as detailed in the Project's Annual Report 2014 speak for themselves in terms of the improvements in public services that have been achieved, which, according to one informed interviewee, have unleashed creativity within government. Whilst there are now Innovation Teams in all government units and ministers have an innovation fund, Project members believe there is more to do in order to secure innovation as a permanently component of the civil service culture. In this regard, the evaluation was frequently told that innovation in the workplace was more readily accepted by the younger officers, who are more comfortable with contemporary technology and make use of it than the older generations. Given the growth of mobile devices among the public, plus the target that a2i has for delivering e-services in the ratio of 60% by mobile, 30% by UDCs and 10% by traditional methods, continued innovation in service delivery remains an imperative.

One of the Project's innovations is the Multimedia Classroom, in which a classroom is equipped with a projector and computer, which teachers are trained to use as well as how to develop digitized teaching material. The teaching materials are stored on a teachers' website for sharing. Box 4 indicates some responses to this initiative from pupils and a teacher. Evidently, by design, the system benefits the teachers more than the pupils, with the assumption of a knock-on effect that will improve the learning outcome.

With regard to the observations in Box 8, the following is also offered:

- One classroom observation should not be representative one for whole scenario.
- However, 'taking notes' is one of the technique of learners engagement, it doesn't represent that MMC is teachers' centric.
- "Do they want more multimedia classes? Didn't understand the question" Maybe there was a language related communication problem between evaluator and learners.
- The evaluator did not observe the entire class.

Box 8. A Multimedia Classroom in a School in Munshiganj District

- The teacher is teaching a class on algorithms and flow charts
- He is mostly using PowerPoint slides with text
- The students are not taking notes
- Evaluator's questions to the students; about the multimedia projection:

  - Is it easier to learn? Most agree
  - Is it quicker to learn? Most agree
  - Does it improve understanding? Half agree
  - Does it help you pass the exam? A few agree
  - Do they want more multimedia classes? Didn't understand the question
  - How many use a PC? 75%
  - How many use a mobile phone? 75%
- 4 classrooms out of 35 in the school have the multimedia facility
- Evaluator's questions to the teacher; how does it help him?

  - Before the multimedia system he used books, blackboard and whiteboard; no overhead projector
  - He can create his own teaching material or download existing material from the teachers' portal
  - He received 2 weeks training
  - He uses his own PC
  - The content is better than before
  - The students don't need to take notes (!)
  - The students can't download his presentation
  - He doesn't upload his material and wouldn't know if another teacher is using his material if he did upload it.
  - The system improves student attention; = better performance and more attendance.

9.2. The Service Innovation Fund

The SIF was launched on 28 March 2013. In addition to government organizations; NGOs, private sector organizations, research and academic institutions, and individuals can also apply for grants to improve public service delivery. Box 5 highlights some key facts.

Box 9. Key Facts on the Service Innovation Fund*

- SIF Operation Manual developed, including selection process
- USD10m raised
- Completed 5 rounds of funding
- 2,229 proposals received
- 64 innovation projects awarded (public - 40, private - 10, NGOs - 2, academia - 7, individual -5)
- 10 projects recently completed

  *Presentation made by the Innovation Team on 11 May 2015.

When the SIF was planned, only a few workshops were considered for orientation and handover to relevant government offices, but during implementation, a2i saw the need for more

workshops and technical support to develop the project proposals and budget, present them to ministries for buy-in and scale-up, develop baseline, develop monitoring and evaluation plan, develop terms of reference and requests for proposal for procurement, etc., as many of the awardees have not managed a project before.

Some of the interviewees commented on the length of time it took to get the innovation project approved and underway (30-40 days from selection of the idea to receipt of funds), but they also felt that it was necessary to have all the existing steps in place to ensure proper planning and adequate support from decision-makers.

Some of the interviewees commented that the approval process took so long because it was difficult to bring all the senior-level officers together for decision-making. An online review mechanism may be a solution to this issue.

a2i proactively sought out innovations by organizing student innovation camps in collaboration with universities, idea hunting workshops (by sector), service innovation camps and hackathons.

a2i is using media to promote the SIF, and is in the process of preparing 30 television commercials on the different projects of the SIF. A newsletter on SIF is also published monthly and quarterly.

The innovators interviewed generally found the experience of SIF application a valuable learning opportunity and also a fulfilling experience as they received appreciation from the users/citizens. Some have received public recognition from senior officials.

According to BASIS, private sector organizations are not too clear about what services they can offer. In this case, a2i could define the problem and seek solutions from the private sector.

An assessment of the Quick Win initiatives shows that regular and structured monitoring was one of the main reasons behind success of the Quick Wins that have been implemented successfully and scaled up.[26] a2i continues to play a key and active role in the monitoring of the innovations under the SIF.

---

[26] Monower Mostafa, An Assessment for Capturing Learning from Quick-Win Initiatives, October 2014.

> **Box 10. Innovation Example – Farmer's Window: Digital Plants Problems Identification System, Implemented by Department of Agricultural Extension Department, Fulbaria, Mymensingh**
>
> - "This idea came to me when a farmer approached me about a problem he has with his jackfruit tree, but he could not explain his problem properly, which made it difficult to provide a recommendation. A visit to his farm would be costly and take time.
> - At that time I happened to have a photo of a jackfruit tree, and with that image, he was able to explain exactly what problem he faced. This digital system provides images of 1,000 problems of 150 plants, and solutions to these problems.
> - We now have this system on our mobile device, which we can take with us to the field to diagnose problems and provide recommendations. Previously the less experienced junior officers were afraid to talk to the farmers, but now with this system, they are more confident to have discussions with farmers. This system has been deployed in all UDCs in Mymensingh including training provided to the entrepreneur-operators.
> - The UDCs can now use this system as an income source. This system has also been introduced in farmers' schools and training courses on agriculture, and there is plan to replicate it countrywide. After having gone through this process of planning and implementing this project, I am now one of the resource persons and I get called upon by a2i to share my experience in workshops."
>
> *Md. Abdul Malek, Agriculture Extension Officer, Department of Agricultural Extension, Fulbaria, Mymensingh*

9.3. Service Innovation Centre

Regarding progress towards a Service Innovation Centre under the Prime Minister's Office, a2i has met and discussed this with relevant stakeholders, and a concept note is being drafted in collaboration with the Governance Innovation Unit and the Cabinet Division. The establishment of a new centre is an opportunity to re-envision and re-brand a2i as a facilitator or innovation broker on many fronts, as follows:

- a2i has proactively sought out good ideas and facilitated dialogue between field-level officials and decision-makers to gain support for the innovations proposed by field-level officials
- a2i has proactively sought out strategic partners and facilitated many partnerships, including public-private and public-NGO partnerships
- a2i has facilitated idea exchange and learnings at workshops
- a2i has facilitated exchanges on social media
- a2i is ensuring an enabling environment for innovations by advocating for policy changes, e.g. related to e-payment and m-payment, and e-signature.

These different types of facilitation or innovation brokering are important and they require specific skills, knowledge and attitude that must be present when the a2i Project ends. For example, they could be integrated in a team of government officials' job descriptions, and ideally, this team continues to be in the Prime Minister's Office for more clout.

Learning related to the different types of facilitation should be documented and transferred (e.g. through training and/or e-learning) to make facilitation a competency that is more widely available within the government system. But developing skills in facilitation and innovation brokering requires an iterative learning process that cannot be dealt with through training alone. It also requires learning by doing, and reflection on the process.

The type of skills required in facilitation and innovation brokering include being able to:

- Ensure shared understanding and vision
- Promote sharing and learning
- Stimulate innovation
- Mediate conflict
- Initiate strategic networking
- Advocate for policy change
- Document learning

9.4. Governance Innovation Unit

The evaluation learned of the activities of the Governance Innovation Unit under the Prime Minister's Office, which has a staff of seven people and has been operational for three years, but which has no formal connection to a2i. The Unit's principal role is to administer the government's digitized Performance Management System, under which 48 ministries have submitted agreements that stipulate a set of key performance indicators. Additionally, the Unit takes up innovations that it receives, either from the public or from officials, and follows them through to implementation. Examples include efforts to prevent early marriage, promotion of safer substances in food preservation and an online passport application procedure. The Unit's Director acknowledged some overlap with a2i but pointed to the difference levels of respective resources between the units. CIOs in ministries do not fall under the Governance Innovation Unit, however, the Director suggested that further innovations within government could be achieved if there was more publicity surrounding the innovations that have already been implemented, better rewards for innovators and more training of government officers.

9.5. Conclusions

The approach to innovation with public services along with its consequences constitutes arguably the most significant aspect of the a2i Project. Aside from its impact on the culture of government, the evaluation observed that the consequences of a2i's experiences with innovation as a strategic intent have spilled over into wider realms, such as the realization of Digital Bangladesh, as well as (it was suggested) project conduct in UNDP. The service process simplification scheme and the SIF have now gone beyond ICTs and they have proven themselves to be effective mechanisms for promoting improvements in government performance based on innovation. There seems to be an emerging realization within government circles that innovation is more important than a mechanism for designing e-services. Accordingly, it is likely that a more strategic approach towards innovation in government, as encompassed in the proposal for a Service Innovation Centre, will have relevance beyond both the a2i Project and the Governance Innovation Unit in their current composition. However, at this time, the government has not formulated national policies or strategies for innovation. The opportunity exists, therefore, to spread the culture of innovation beyond government circles into wider society. Elevating innovation as a deliberate government strategy raise many challenges, among which are; measuring its effectiveness, identifying instances, scaling successes, maintaining continuity and reforming relevant policies to promote innovation and remove any barriers that inhibit it.

9.6. Recommendations

1. Intensify efforts to further embed an innovation culture in government through further and regular training, promotion and sharing of experiences.
2. Consolidate government activities that denote significant levels of innovation into a single high-level organization unit with overreaching powers towards formulating a strategy and/or policy for national innovation.

10. Findings – Assessment against Evaluation Framework

10.1. Relevance

10.1.1. Evaluation Questions

The a2i (II) is part of a three-pronged strategy identified in the UNDAF to address the deficits of public administration and public service delivery in Bangladesh. The objectives of the Project include increasing transparency, improving governance, and reducing the time, difficulty and costs of obtaining government services for underserved communities of Bangladesh. The evidence of the evaluation, which is supported by the measurement instruments that the Project has installed, points to positive achievements in each of these objectives, as well as possible areas where more might be achievable. Under the aspect of relevance, the evaluation was tasked with examining the extent to which the Project is contributing to national and international development priorities. The areas where more might be achievable are outlined below, organized under questions that the evaluation set out to address.

Are the activities implemented contributing to the achievement of the national ICT priorities?

National ICT priorities have been promulgated in the National ICT Policy (2015), which has a core objective of ensuring social equity, gender parity, equal opportunity and equitable participation in nation-building through access to ICTs for all. The a2i Project has catalyzed ubiquitous access to ICTs across Bangladesh through the establishment of more than 5,000 digital centres that are open to use by the general public. Acknowledging that access alone is insufficient for inducing social equity, the e-services that a2i has facilitated, as well as other services that the digital centres (UDCs, PDCs and CDCs) have implemented, have made significant strides towards making access to technology relevant to the daily lives of the populace.

However, the evaluation heard that progress by ministries to implement the ICT Policy is patchy and that some are lagging behind their goals and need to be further challenged to meet their targets relating to ICTs. The reforms in government operations that are required in order to realize the goals of the National ICT Policy resonate with those that a2i has already achieved; simplification and innovation, plus a greater focus on outcomes and impacts that the evaluation is promoting. A further observation is that there seems to be an under-lap between a2i and the National ICT Policy whereby the latter makes mention of gender parity, and people with disabilities and special needs. The project reports that a comprehensive disability strategy is being developed.

The National Telecom Policy (1998) was formulated to promote universal telephone services, and is in process of being updated. With six mobile operators in Bangladesh, 124 million mobile phone users and near ubiquitous network coverage, it is clear that mobile devices will drive the Nation towards the vision of Digital Bangladesh. a2i is therefore appropriately targeting 60% of its services to be utilized on mobile devices. As this proportion may increase in reality, the Project is well positioned to respond, especially as amendments to the policy are expected to strengthen further use of mobile devices by taking account of stated concerns relating to: broadband penetration, safe Internet, healthy competition, unified license, infrastructure sharing, foreign investment, tax policy and other related issues.

Is the Project contributing to advocacy for the formulation of technical and non-technical policies and standards?

The Project's approach to designing e-services, which require simplification before digitisation, amount to a non-technical standard for re-engineering the government's public services. Without this, the danger is that services will be improved only sub-optimally, whereby existing manual inefficiencies would be carried forward into computerized inefficiencies. The project's standard for designing public services for digitisation is therefore crucial for optimal benefits to emerge. Process simplification and a focus on innovation avoid these traps that can lead to disappointing results from the deployment of ICTs. They are also effective mechanisms for combating the vested interests that might be invested in the status quo.

Is the Project contributing to sector-specific policies and priorities?

The e-services that a2i has implemented cut across all government ministries and, as a result, are relevant to each one's implementation of the National ICT Policy. a2i is therefore contributing to the implementation of the National ICT Policy at ministerial levels.

How can the Project contribute more effectively to sector-specific priorities?

It was suggested to the evaluation that a2i could adopt cluster teams, for example, e-education, e-agriculture, e-health, etc., which would significantly broaden the scope of the Project more into that of Digital Bangladesh. In this regard, the Project is pushing at its own boundaries insofar as the multimedia classroom is not an e-service for citizens but an initial move towards e-learning.

Are the capacity building and awareness activities relevant to the targeted groups?

Training for digital centre entrepreneur-operators has been relevant for developing computer skills, although the results are varied in terms of the observed skills of the individuals. Entrepreneurial training seems to have been less successful in that the evaluation evidence points to considerable variability among digital centres in respect of their entrepreneurial approach to citizen engagement and the provision of non-government services. Moreover, one observer points to a high rate of drop-outs by entrepreneurs from the role of UDC operator owing to a variety of reasons (Faroqi, 2015). Additionally, use of social networking and blogging by digital centre entrepreneur-operators is not uniform, although training in these was provided, so this indicates that although skills can be readily transferred, the motivation to use them is another matter.

Teachers involved in the multimedia classroom initiative have been trained in the use of the technology as well as content development. They have also been mobilized to populate the teachers' portal with over 40,000 lessons being accessed by over 60,000 teachers. a2i is planning to introduce e-learning for teacher training and it is understood that the portal will be transferred to the Ministry of Education in October 2015.

The capacity of government officials for designing and implementing administrative processes has been enhanced towards simplifying and innovating with process design. As a bottom-up approach, this has placed the appropriate capacity where it can be of most use.

Senior government officials have been sensitized towards process reform, an essential element for gaining essential buy-in for further improvements.

10.1.2. Conclusions

The a2i Project is highly relevant to the UNDAF, to the National ICT Policy and to the vision of Digital Bangladesh. A greater focus on outcomes and impacts will make all these initiatives more relevant to national development.

10.1.3. Recommendations

1. Implement sector-specific strategies for ICT for development.
2. Forge closer links with the implementation of the National ICT Policy so that its implementers can benefit from using the a2i methodologies.
3. Formulate policy advisories towards increased broadband penetration and mobile government services.
4. Improve digital centre entrepreneur-operator performance towards better services for their communities that target local development.

10.2. Effectiveness

10.2.1. Evaluation Questions

a2i e-services are transacted by 4.5 million citizens each month, comprising 400 different services from 60 ministries through four national web portals. Data relating to the volume of transactions is gathered regularly and organized into 'dashboards' for each ministry. Evaluating the effectiveness of these transactions involves an assessment of cause and effect—that is, attributing observed changes among service users to a2i activities and outputs. In order to achieve this, the Project has investigated a range of indicators as well as made use of the 2014 census on the UDCs by the Bangladesh Bureau of Statistics (BBS). Both these sets of indicators have proven to be problematic, as they are deemed to be too difficult and/or costly to monitor and they are not accurately measurable in the short term but are measureable in the long-term. Moreover, in most cases they are made up of output measures of the physical activity surrounding the delivery of e-services rather than qualitative impact measures of the results of using the services. The indicator framework contains both outcome and output level indicators. However, the project intends to review the indicator framework in light of this report. Whilst output measures are necessary to track Project progress and service usage, they are insufficient for assessing the effectiveness of services in terms of achieving the policy objective of social equity. However, other independent sources provide an insight into such outcomes. For example, Hoque and Sorwar (2014) point to UDCs helping to solve health-related problems and making employment opportunities available, while Bhatnagar (2014) highlights improvements in agriculture as well as those emanating from more efficient management of land records.

The evaluation has therefore been tasked with addressing the following:

Are the outcome and output indicators defined in the results framework being met and tracked?

The target output for the Project's effectiveness in the Results Framework requires access of underserved communities to public administrative services to be enhanced and simplified through electronic means, and these are indicated by the number of e-services, the accessibility of access points and the operation of national information portals. Targets are being met and are regularly tracked, where appropriate.

Are the Project outcomes and outputs integrated and linked to complement each other and create synergy?

Whilst much is known about output activity, little is understood about outcomes and impact. Any linkages that exist between activity and impact are unclear. There is little understanding for instance of the relationships between action and outcome, especially from the perspective of the citizen service-user; what initiatives have generated the most impact in terms of socio-economic benefit for the citizen? The evaluation understands that a2i acknowledges this and plans to undertake initiatives to address this gap based on the recommendation from this report.

Have linkages been established with other projects of UNDP or with other organizations?

The Project has nurtured extensive and diverse linkages with government ministries and departments and with private sector organizations. Linkages with UNDP Bangladesh exist through its membership of the steering committee as well as regular coordination meetings and spot checks.

Are the administrative, management and oversight structures for the Project effective and efficient?

The Project is closely monitored by UNDP. The Project Steering Committee, which meets at least twice a year, consists of high level stakeholder representatives from the Prime Minister's Office and other government ministries and departments as well as leading industry representative organizations.

How were the partner organizations selected and their work monitored?

Industry representative organizations attend steering committee meetings and have advised on partner selection.

Is the Project team composition and structure of working with national partners optimal and effective?

The national partners who were interviewed during the evaluation had close working relationships with the Project counterparts.

What monitoring and evaluation system and quality assurance system have been put in place and how effective are these?

UNDP is responsible for quality assurance. The Project produces detailed annual progress reports.

To what extent were the Project stakeholders participating in the planning and design of Project strategies, activities and outputs?

All major stakeholders are members of the Project Steering Committee.

Does the Project have an exit strategy? What will happen at the end of the Project?

The Project's exit strategy is as yet uncertain. Having been targeted for completion at the end of 2016, the evaluation heard during its deliberations that an extension for the Project until 2018 had been secured. Plans for continuation of the initiative beyond that date are represented by the proposal in the Project Document to establish a Service Innovation Centre. This will be designed to continue the work of the a2i Project under a permanent organization structure, although this is uncertain at the time of the evaluation as the concept is still under formulation. This topic is explored further in section 6.11 Sustainability.

What are the key challenges and risks the Project face, and what are the mitigation measures?

In terms of its effectiveness and efficiency, the key challenges and risks are seen as i) underestimation of its achievements and ii) continuity. For the first challenge, mitigation measures relate to increased attention being paid to the Project's impact, which is discussed in other sections, and for the second risk, there needs to be an agreed consensus within government on the details for establishing the Service Innovation Centre.

What have been the key achievements of the Project, and is the Project on course to achieve its overall objectives and outcomes by the end of the Project?

The Project's key achievements are in establishing UDCs in every union of the Nation and in inculcating a culture of innovation in government that has given rise to the e-services that the centres provide. The expected UNDAF output, that authorities from the government and private sector make better use of technology to benefit underserved communities, has been achieved to a substantial degree. The digital centres represent an effective public-private partnership for achieving this output. Independent research provides evidence that incomes have improved as a result of e-services (Faroqi, 2014 and 2015, Hoque & Sorwar, 2014) and the Project could further exploit this knowledge by specifically targeting the nature of benefit that underserved communities could enjoy from digital centre operations. Regarding the UNDAF output indicator of the number of citizens with access to government e-solution services (Baseline 2010: 0.5M; target 2016: 20M), this has been achieved.

Are any changes required to the Project outputs or Project activities so that the Project can effectively achieve its overall objectives and outcomes by the end of the Project?

Arising from the above comments, and as proposed in other sections of the evaluation report, the Project could benefit from a stronger outcome and impact orientation within its planning processes. Many activities seem to be implemented against assumptions that desirable benefits will emerge, which may occur, but also, they may not, so there needs to be more verification. Additionally, unexpected outcomes are always possible and they can complicate matters when it is unclear if they are benefits or not. One small example is the multimedia classroom initiative which targeted benefits for teachers with the assumption that these would translate into benefits for students. Based on an admittedly brief and anecdotal encounter (see box 8 in section 5.4.1) and notwithstanding the results of Project's own evaluation, the benefits for the students may not be as great, or the same as was expected (assumed).

What changes are required to the indicators framework for more effective monitoring and evaluation?

Firstly, the indicators that have been proposed need to be trimmed and consolidated so that they are concise – without overlaps – and cost-effective to measure. Secondly, they need to be expanded to encompass the outcome and impact dimensions of digital centre operations as well as the innovation projects. Whilst the TCV parameters do not measure outcome or impact by themselves, the TCV studies measure user satisfaction with e-services, which covers outcome by showing for e.g. if people's faith in public service is improving or not.

10.2.2. Conclusions

The a2i Project has effectively achieved its objectives, but further measures are necessary in order to consolidate and sustain the gains that have accrued into proven and tangible socio-economic benefits for underserved and other targeted communities.

10.2.3. Recommendations

1. As the TCV parameters do not measure outcome or impact by themselves, generate outcome and impact oriented indicators that highlight socio-economic benefits of government e-services.
2. Clarify the Project's exit strategy, targeting continuity and extension of the gains achieved so far.
3. Implement measures for digital centres to evolve into local development change agents; using ICTs to foster socio-economic improvements in community life.

10.3. Efficiency

10.3.1. Expenditure

Table 3 shows the budget and expenditure for each component or output of the a2i Project. It also shows the percentage spent for each component.

Table 3 Budget and Expenditure			
Component/ Output	Budget (as per Project Document) USD	Expenditure (as of April 2015) USD	Percentage spent (%)
e-Services	3,209,530	2,453,188	76.43
Capacity & Awareness	5,055,891	3,290,211	65.08
Enabling Environment	1,216,136	1,467,453	120.67
Innovation	11,244,122	1,863,037	16.57
Operations	3,077,044	1,414,164	45.96
Total	$23,802,723	$10,488,053	44.06%

Figure 10. a2i Budget Against Expenditure (USD)
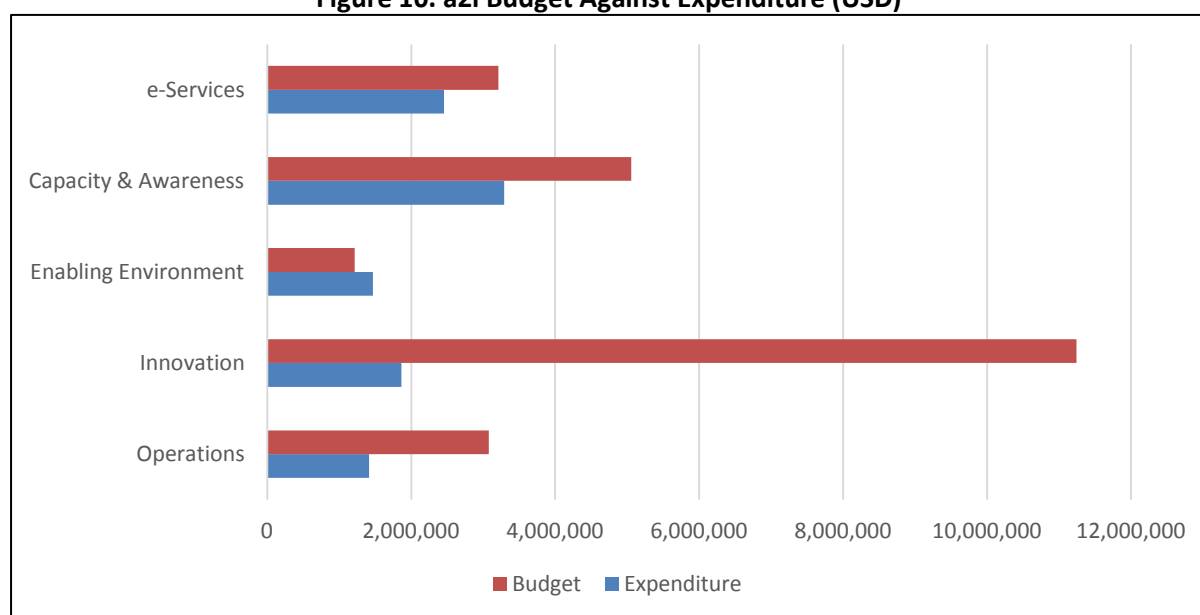
Expenditure for the e-Services and Capacity & Awareness components appears on track. There is an overspend of about USD 250,000 in the Enabling Environment component, and a significant underspend in Innovation.

The largest proportion of the budget has been allocated to the Innovation component with USD9.9 million specifically for the SIF – that is 88% of the budget for the Innovation component. The low expenditure of the Innovation component is because of low expenditure on the SIF. According to a2i, awards have been granted to 62 projects with roughly additional BDT 52,181,555.

A reason for the underspend is that less than 3% of the 2,229 proposals received have been awarded a grant. The a2i Project has spent significant time selecting quality projects with government and the Technical Experts Panel based on the criteria set in the SIF Operation Manual, and also working with the teams managing each project to prepare detailed implementation and

monitoring plans and budgets. As many of the applicants were novice in project management, a2i invested substantial time and effort to provide guidance to ensure good project management practices, as well as encourage the upscaling of the pilots by linking the awardees with relevant senior-level government officials. The awardees interviewed expressed that the SIF application process has been a valuable learning experience for them and has developed their capacity in project management.

A combination of strategies to promote the SIF, identify champions and ideas at strategic forums, and build capacity in project management could increase the number of awarded projects.
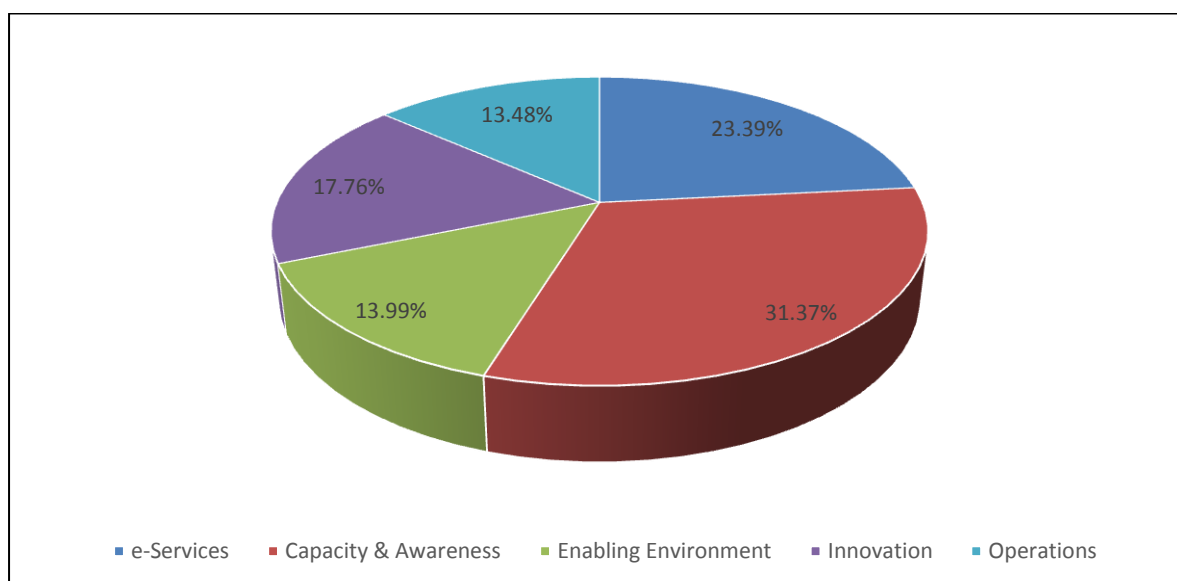
Figure 11. Expenditure by Component Expressed in Percentage

As illustrated in figure 11, the Capacity and Awareness component accounted for the largest proportion of expenditure (31%), amounting to almost a third of total expenditure. The budget for this component is targeted at: 1) sensitizing the Innovation Teams, 2) developing an innovation ecosystem through training, dialogue and knowledge exchange workshops, and 3) developing an e-learning platform in collaboration with public training institutions. a2i reports that around 14,726 participants have been trained or sensitized (some of them attending multiple events). Against the expenditure categorized as capacity and awareness, this equates to a costing of roughly USD 223 per person. Based on experience of other projects, this appears reasonable.

With the training materials already produced, the e-learning platform established and the pool of resource persons getting larger, the average cost of training per person is likely to decrease. Through the various capacity and awareness activities to promote innovation, a2i reports that 314 pilot projects have been initiated that were funded by various government organizations themselves. These projects are in addition to the SIF-funded projects.

Table 4. Training and Awareness Workshops	No. of participants
Innovation Teams activation	3,326
Five-day innovation workshop for field level officers	3,000
Three-day execution workshop	331
Training for public training institutions	2,717
Innovation forums	1,325
Innovation circles	1,083

Leadership dialogue	2,067
e-Government leadership training	72
e-Learning courses	289
Other training sessions	516
Total	14,726
Source: a2i Capacity Development Team, Team Activities Report, 2012-2015	

Overall, the quality of Project inputs and services were as planned and timely. The administrative, management and coordination mechanisms of the Project were largely efficient and effective. As evidenced only by a cursory review of Project financing, the evaluation can conclude that the Project adopted adequate measures to ensure the resources and funds were efficiently applied, and that financial and procurement systems were efficient. The amount budgeted and spent under the Operations component are both at about 13% of the total budget and expenditure.

10.3.2. e-Service Savings

a2i conducted TCV analyses for about 20 e- and m-services. Several TCV comparisons are depicted in Figure 12. The TCV analysis is a rapid assessment to provide evidence of any measurable reduction in time, cost or visit in accessing the electronically transformed public services compared to their manual counterparts. The analysis also aims to measure citizens' perception about the advantages and disadvantages of both the electronic as well as manual systems, and capture their recommendations to further improve the service. About 90% of the data from the respondents has been collected through telephone surveys while 10% has been collected through face-to-face interviews or FGDs. This ensures triangulation and validation of the collected data.

Figure 12. Pre- and Post- TCV Analyses

The key informant interviews have been conducted during the design phase to test the questionnaire survey, and in the middle of data collection to cross-check the validity of the data being received. The methodology for the analysis and the sample population varies for each service as some e-services are received by the entire population of the country while others are implemented as pilots in particular geographical areas. The findings for the analysis have been presented as written reports and as PowerPoint presentations.

Table 5 shows the estimated amount of savings for each service in order of highest to lowest savings.

No	Service	Source	Served beneficiaries	Unit cost saved (USD)*	Total savings (USD)
Table 5. e-Service Cost Savings based on TCV Analysis				
1	Internet Browsing	UDC	2,257,558	106.7	240,881,439
2	SMS-based Registration for College Admission	Teletalk	4,284,285	32.3	138,382,406
3	Birth Registration	UDC	40,000,000	0.8	32,000,000
4	e-Purjee	Innovation incubation	2,700,000	8.9	24,030,000
5	Online Application for Machine Readable Passport	DIP	510,500	12.53	6,396,825
6	Photography	UDC	3,063,829	1.3	3,982,978
7	Job Search Service	UDC	1,343,784	1.9	2,553,190
8	Online Application for BCS Preliminary Exam	BPSC	658,741	3.34	2,203,423
9	Electronic Student Information Form	BaNBEIS	71,565	26.39	1,888,322
10	Bangladesh Railway e-Ticketing	Teletalk	2,039,224	0.8	1,631,379
11	Electronic Form Fill-up for SSC Candidates	BANBEIS	71,565	17.61	1,260,416
12	Electricity Bill Payment	UDC	1,720,044	0.7	1,204,031
13	Citizen Certificate	UDC	3,870,100	0.2	774,020
14	Titas Prepaid Meters	Titas	585,000	0.14	82,786
15	Desco Prepaid Meters	DESCO	1,205,100	0.06	77,518
16	Mobile Banking Service	UDC	78,000	0.8	62,400
17	Specialized Telemedicine Service	DGHS	15,244	2.34	35,693
18	Krishi Call Centre	AIS	35,296	0.45	15,893
19	Mobile Salary Disbursement of UP Personnel	DBBL	9,984	0.81	8,092
	Total				457,470,811

* Used exchange rate of BDT 1.00 = USD 0.0128650
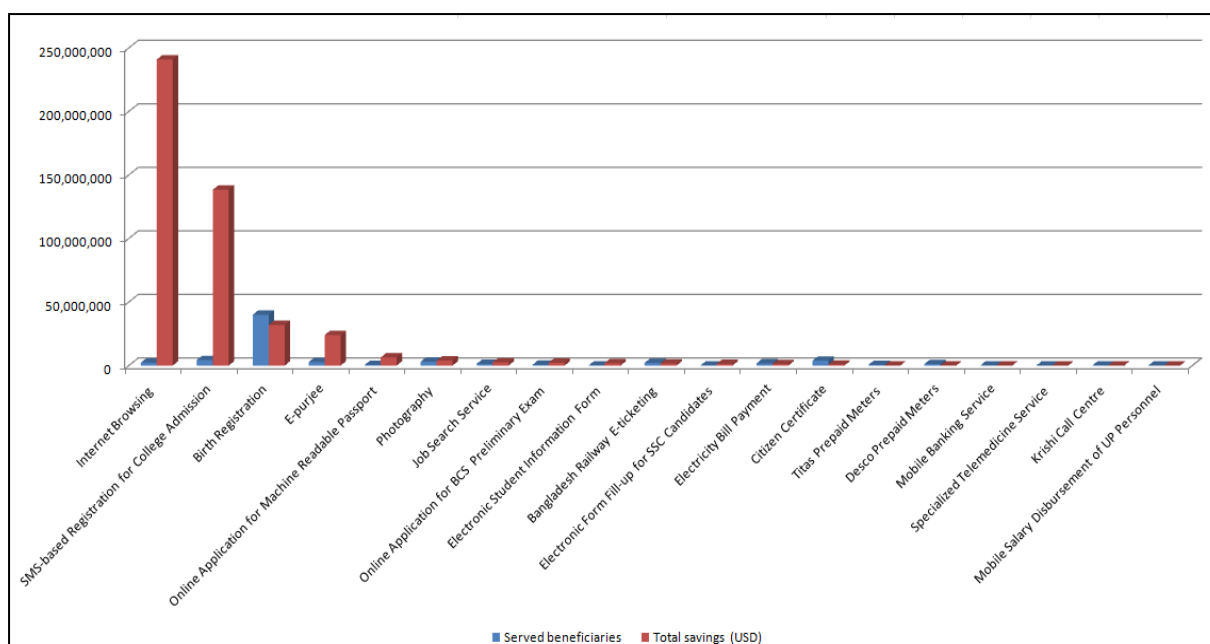
Figure 13. e-Service Cost Savings based on TCV Analysis

Significant savings are noted for Internet browsing at the UDC, which shows the importance of UDCs as Internet access points.[27] Providing access to the Internet at UDCs has increased the users' average time on the Internet by 60 times, from 30 minutes to 31.6 hours.

The a2i Project has a great deal of data on the TCV savings from the e-services provided by the UDCs, depicting substantial reductions in all three dimensions for most services. There is less data on the extent to which TCV savings have resulted in social or economic impact. For example, investigation into birth registration in Bangladesh seems to show that online registration has increased the number of birth registrations. According to WHO's World Health Statistics 2015, birth registration coverage from 2007-2013 was 31% in Bangladesh.[28] Based on a UNICEF Factsheet for Bangladesh,[29] the Birth Registration Information System, which the UDCs are connected to, has captured more than 101 million birth records, which is over 60% birth registration coverage. The figure is a combination of birth records migrated from manual registration books and new registration entries. Without discounting the value of the e-service of birth registrations to the individual families, it is this type of wider finding that situates a2i more favourably within national planning circles.

Another significant saving is noted for the SMS-based registration for college admission where the entire registration process can be done via SMS with no visits to colleges required, while previously an average of three visits were required, which led to high transportation and accommodation costs for the applicants. The introduction of this m-service has also increased the number of women applicants to colleges, which has important implications for gender equality on a national scale (see section 6.9 Gender).

---

[27] Although in a focus group discussion with 9 UDC entrepreneurs-operators in Mymensingh, they reported that the demand for Internet browsing at their UDCs has reduced due to the increase in smartphone ownership.

[28] WHO, World Health Statistics 2015,
http://www.who.int/gho/publications/world_health_statistics/EN_WHS2015_Part2.pdf.

[29] UNICEF, Fact Sheet: Birth Registration, May 2014,
http://www.unicef.org/bangladesh/Birth_Registration%282%29.pdf.

10.3.3. Conclusions

The SIF has not yet achieved its full potential. Per capita costs incurred for capacity building and innovation sensitizing are reasonable. Administrative, management and coordination mechanisms are efficient and effective. Cost savings based on TCV analyses are considerable and they far outstrip the amount spent on the Project.

10.3.4. Recommendations

1. Further promote the SIF, building capacity in project management.

10.4. Impact

10.4.1. Impact on the General Public

The a2i Project has facilitated the establishment of more than 5,000 digital centres that are used by 4.5 million people per month with one in every union of the Nation. Additionally, 27,331 schools now have multimedia classrooms that are equipped with computers and projectors. These numbers provide a measure of the Project's outputs, whereas an assessment of its outcomes explains what kind of change has occurred in the lives of the recipients of those receiving the services that are being delivered. An impact evaluation however describes how the Project might have affected participants' lives on a broader scale. It could also take into account the effect that the Project has had on people who have not used the services but who are nevertheless affected by them. A long-term assessment of such impact is beyond the scope of the present evaluation, but it remains highly relevant to the Project if its full effects are to be understood. Accordingly, the Project will benefit from carrying out long-term research that will identify its impact by moving beyond the current self-reporting that has been adequate for measuring outputs and for estimating outcomes.

At this stage though, it is possible to imply the scope and potential of some impacts. For example, the evaluation heard that 2,200 Braille presses and 840 talking appliances for the hard-of-hearing have been deployed. Whilst the impact of these devices can easily be imagined, the evaluation did not hear about any research to demonstrate their impact on the lives of the users and to relate that to national development policies for social equity.

In addition to the general questioning that took place in the various Ministries, the evaluation asked each ministry that was approached for information on the same question; "how do the poor benefit from a2i?" At each occasion, the answers were anecdotal, with descriptions of this and that e-service and how much time or cost can be saved by using each one. That is not to say that such information is not useful, but it fails to reflect the true scale of the Project's benefits that citizens are enjoying at a national level of analysis—something that would help planners better understand the wider ramifications of improved services and their potential impacts on government's policies for poverty reduction and social equity. This reinforces the recommendation for further understanding of the impact of a2i.

Box 11. Examples of the Impact of a2i

- With the introduction of SMS-based registration for university admissions, the applications from women rose from 25% to 33% of the total.
- The e-Purjee initiative benefited 200,000 sugarcane farmers. The system not only eliminated the need for middlemen for the distribution of 'Purjee' (purchase orders), but also helped increase sugar mills productivity by about 15% through improving sugar collection cycle.
- Online registration for more than 1.4 million potential migrant workers seeking foreign employment in 2013 through UDCs saved them from extortion by intermediaries that ranged from USD1,230 to USD2,460 per worker.
- Over 78,000 'unbanked' citizens (70% women) gained financial access as a result of mobile banking services, through the UDCs.
- Investigation into birth registration in Bangladesh seems to show that online birth registration has increased the number of birth registrations. According to WHO's World Health Statistics 2015, birth registration coverage from 2007-2013 was 31% in Bangladesh. Based on a UNICEF Factsheet for Bangladesh, the Birth Registration Information System, which the UDCs are connected to, has captured more than 101 million birth records, that is over 60% birth registration coverage. The figure is a combination of birth records migrated from manual registration books and new registration entries. Birth registration is central to promoting children's rights. It paves the way towards a child's official identity, and constitutes a right to be ensured by national governments.
- Primary school attendance rate increased from 84%-86% to 91%-95% after the introduction of the multimedia classroom for three consecutive months. Similarly, secondary school attendance rate increased from 72%-79% to 78%-81%, and madrasha school attendance rate increased from 67%-73% to 81-88%.

10.4.2. Impact on Government

The Project's impact on government is easier to approach. Probably the most profound is the appointment of innovation officers and Innovation Teams at all levels of government. The impact of this initiative is apparent in at least the beginnings of the targeted innovation culture in the government's administration and the evidence of its effect is at times dramatic within the results of the service process simplification, implemented across 40 ministries.

Whilst the evaluation heard that the inculcation is not yet complete and that some resistance still exists, there can be no doubt that the promotion and tolerance of innovative approaches to the delivery of e-services has been instrumental in bringing the Project to the point at which it now sits. Examples such as the increased transparency of the migrant workers system, the reduction of paperwork in the teachers' pension scheme, and streamlining of land record applications and freedom fighters' funeral allowances all speak to a more efficient and responsive civil service, as well as suggest the potential for similar improvements in the future.

By focusing on citizen-centric services, a2i has elevated the citizen's position in their relationship with government, and this holds implications for other aspects of that relationship that are outside the immediate processing of e-services. These relate for example to the Government's National Integrity Strategy, to citizens' rights of access to information, and to the government performance management system and Citizens' Charter. a2i has helped establish the citizen as a valued customer who has rights, as opposed to a supplicant seeking favours. The balance of power in their relationship with government officials has shifted in their direction, which adds meaning and validity to these other initiatives.

Box 12. A Tale of Two UDCs

1. Munshiganj District UDC

- Averages 10-12 customers per day, mostly women.
- Birth and death registrations are the most popular e-services, also training, photocopy, web browsing, and exam results.
- Users are treated with respect and face no barriers coming to the UDC.
- There's enough income divided equally for the operators.
- Operators are not proactive in promoting UDC services in the community.

2. Rampal Union UDC

- There are 2 entrepreneur-operators plus 2 alternates.
- They provide computer training, registrations, photocopying, laminating, email, Skype, online marriage, land records, livestock information, exam results, banking, bill payments.
- Averages 80-85 customers per day.
- Take BDT40,000+ per month.
- Do not conduct demand assessments, but attend monthly ward meetings.
- Promote the UDC and get feedback on needs; e.g. birth certificate for visa applications by overseas residents.
- They are planning training for school pupils.

---

a2i has also influenced the concept of performance measurement in government through the introduction of the ministerial and departmental dashboards that monitor the uptake of e-services. The concept has been extended into the Performance Management System administered by the Governance Innovation Unit. The focus on measurable outcome indicators of government performance can be expected to add to the impetus towards further digitization of government. However, the evaluation heard from several respondents that there is still resistance to reform, more so at ministerial level than at district level, so that continued efforts will be necessary to change attitudes and to further promote policy initiatives for innovation-led performance improvement.

Each senior official interviewed for the evaluation was questioned about whether they had initiated or encountered any systematic assessment of a2i's impact. In all cases, no such assessment was made available. They all expressed satisfaction with the delivery of the e-services as well as the non-government services that are available at digital centres.

Whilst the BBS conducted the 2014 census on the UDCs, which, it was stated, is planned to be repeated every two years, the evaluation heard that: i) the census data is not impact oriented, ii) it was an expensive exercise and may not be repeated because of this, and iii) some of the data is of questionable quality. In any case, there were suggestions that there is little regard for research among policy decision-makers in Bangladesh, in spite of the research capacity that clearly exists in the country.[30] Consequently, if new research is to be conducted, or if existing research is to be taken notice of, in order to answer some important questions regarding the impact of a2i and e-government at the national level, policy-makers may need to be further sensitized towards the efficacy of research and research-based evidence for informing policy decisions.

---

[30] See for example, annex 6 on the review of the research literature on a2i and e-government in this report.

10.4.3. Impact on Education

The multimedia classrooms involving more than 27,000 classrooms and 80,000 teachers and which continue to be rolled out have been touted as an educational transformation generating qualitative changes. It is reported that teachers are regularly exchanging thousands of multimedia content to transform the teaching-learning environment in classrooms through the teacher's content sharing portal.[31] A 2013 study reported that average examination pass rates improved from 89% to 96% in schools that had multimedia classrooms.[32] A further study concluded that the teachers' portal is an essential tool that is facilitating effective integration of ICTs into the educational system by ensuring greater access to high quality pedagogical content by teachers and improving teachers' skills in the process.[33]

Without wishing to understate the value of these achievements, it may be argued that the claim of transforming education, whilst clearly underway, is not yet fully accomplished. Within education circles, it is probable that a more complete process of transformation would be recognized once it has shifted from a teacher and classroom orientation to a learner-centric mode of operation, where the learner has access to online materials, which under the multimedia classroom initiative they do not have.

e-Learning is generally regarded as learning that makes use of ICTs to access educational material outside of a traditional classroom. In most cases, it refers to a course, programme or degree delivered completely online. Education specialists argue that technologies are often championed over-optimistically with regard to their transformative power to improve education, whereas technology, in and of itself, does not necessarily result in fundamental improvements to educational practice. The most notable examples are television and video, neither of which have had much impact on mainstream education. The focus, they say, needs to be on the learner's interaction with the technology, not on technology itself. Although much has been achieved with the multimedia classrooms, they should be regarded as the start of a process towards full e-learning rather than a point to which it is considered that this has already been reached.

The evaluation was informed that a2i is working with the Ministry of Public Administration and government training institutions on an e-learning programme for public officials. The lessons from this experience should be capable of contributing to a wider deployment of e-learning within the Nation's education system.

a2i's impact on education has another dimension, relating to the administrative processes of applying for places in education institutions and receiving examination results. In both these cases, the processes have been greatly streamlined resulting in significant benefits for the applicants/students, especially for women.

10.4.4. Impact on Development

There was a common thread throughout the evaluation relating to the observation by several respondents that the conduct of the a2i Project has caused them to revise some of their views regarding the conduct of development processes. The role and importance of innovation featured strongly within these conversations, including a greater willingness to experiment as well as increased tolerance of failure and the value of the learning that can arise from it. To quote one official, "a2i is changing the way we do business." Such observations resonate with experiences from elsewhere in which the synergies that emerge when ICTs are applied to innovative—and disruptive—processes have been encountered.

---

[31] a2i Report 2014.
[32] a2i, Report on Assessment of 'Multimedia Classrooms (MMC) and Teacher-Led Content Development', 2013.
[33] a2i, Study on Teachers' Portal as Peer Learning and Online Training Tool for Teachers, 2015.

In such instances, orthodox approaches, such as for instance those that are embedded within systematic logical frameworks, may be less appropriate, as the targeted outcome represented by the empowerment of individuals or communities may not be as tangible or quantifiable at the outset as is normally expected. When development processes are disengaged from an imperative for highly-detailed and pre-defined outcomes, ICT-enabled innovation and entrepreneurialism can be fostered towards more flexible approaches that allow for continuous learning and adaptation that can lead to equally desirable outcomes.

In such instances, development evaluation also needs to be sensitized to the likelihood, and desirability, of unexpected results, which often indicate the appropriation of technology by its users towards the achievement of results that they choose and prioritize for themselves.

As the a2i Project proceeds towards the achievement of community-based outcomes from digital centres that are less a result of government e-services and more the result of local entrepreneurialism at the digital centres, then such considerations become increasingly relevant. In such a scenario, it can be expected that impacts will vary widely, in line with variations in community characteristics, such as leadership and organizational capacity, and especially the entrepreneurial verve of digital centre operators, factors that are all known to influence the outcomes of ICT-based development in communities. When these factors are integrated into the theory of change that drives the achievement of local impact with digital centres, there will be greater likelihood of success.

10.4.5. Conclusions

a2i's impact is arguably broad and deep but it is possible that its true nature is only partially understood. Although outcomes are well documented, they have not been as well expressed in terms of government's policies for poverty reduction and social equity, either in terms of existing impact or further potential impact, of which there is a great deal.

10.4.6. Recommendations

1. Implement impact assessment as an extension to the present focus on outcome measurement.
2. Impose e-service impact assessment processes within ministries.
3. Intensify the inculcation of an innovation culture in government; building on existing achievements but extending beyond the implementation of e-services for the public.
4. Increase the visibility and usefulness of impact-oriented research among policy-makers.
5. Promote e-learning towards a non-classroom online interactive mode of national education.
6. Further strengthen ICT-enabled innovation and entrepreneurialism within digital centres in support of government's policies for poverty reduction and social equity.

10.5. Partnerships

10.5.1. The Partnership Strategy of a2i

The concept and practice of partnerships that leverage the multiple strengths of a variety of organizations towards a common goal occupies a central position in the a2i Project. An MoU is signed with each partner that clearly delineates the scope and responsibilities of each organization. As of May 2015, 116 formal partnership agreements are in place, including: 58 (50%) partnerships with government ministries/agencies, 33 (28%) with private sector organizations, 20 (17%) with NGOs, and 5 (4%) with international organizations.

The number of partnerships increased over time as needs and opportunities around the needs of citizens that could be delivered through the digital centres arose. Whilst different partnerships are managed by each of the seven a2i teams depending on the goal and nature of their

activities, the majority (63 partnerships) are managed by the Partnership and Communication team. Figure 13 shows the distribution of partnerships that are managed by the Project teams.
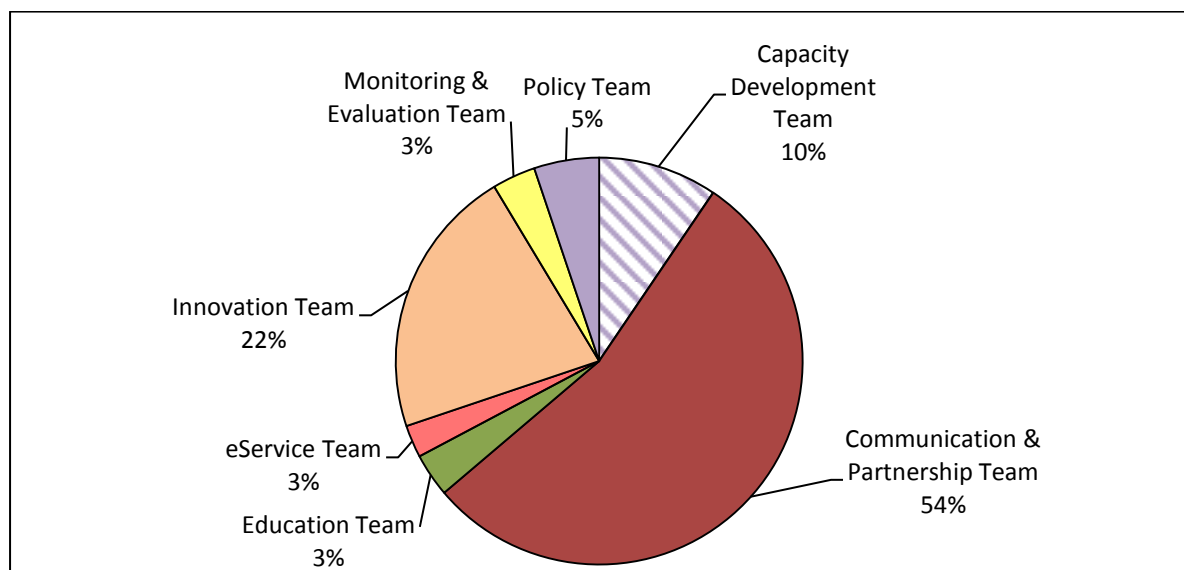
Figure 14. Distribution of Partnerships Managed by a2i Project Teams

10.5.2. Government Partnerships

The e-services with which a2i is associated have been implemented through partnerships with government agencies. All government agencies included in the evaluation interviews highly praised the actions, conduct and outcomes of the Project with regard to the e-services that they implemented. Close partnerships with government also enabled the successful implementation of appropriate capacity building for government officials and the associated process simplifications and innovations that led to the e-service implementations and the establishment of digital centres for their delivery. As one Government Secretary put it, "UDC is our dream." UDC services to government, such as bills payment, for which a charge is made, also contribute to sustainability.

Whilst being part of the government structure, but simultaneously set aside from it in its position within the Prime Minister's Office, the Project was well-placed to be able to cultivate partnerships with other government agencies. It has been possible for example, for a2i to leverage government partner resources towards common goals in a way that serves to supplement the Project budget. As a project, however, a2i needs to ensure its approaches and objectives are properly internalized within its government partners so as to remove any continued dependency by them on resources that may not be available in the future. This gives emphasis to the need for a suitable exit strategy for a2i.

10.5.3. Private Sector Partnerships

The principal partnership arrangement with the private sector is that with the entrepreneur-operators of the digital centres. These are characterized as public-private-peoples' partnerships, which has been a critical success factor in delivering e-services to the nation. However, it has previously been noted that further development of the centres towards more locally-induced impacts will require additional efforts to ensure they achieve their full potential.

In this regard, some observers note that the a2i digital centres have taken up where the Bangladesh Telecentre Network left off after its donor funds dried up. Whilst it is beyond the scope of the current evaluation to comment on the outcome of the Bangladesh Telecentre Network, it is

relevant to suggest that the a2i partnership arrangements under which the digital centres were set up represent something close to overcoming the sustainability challenges faced by the Bangladesh Telecentre Network. The effectiveness of this arrangement is further addressed under the sections on e-services and sustainability.

The private sector's involvement in a2i processes has made significant progress in other areas, especially with banks for the delivery of financial services to previously unreached segments of the population. A number of commercial banks now operate at the union level through agent banking arrangements, which can potentially contribute towards the sustainability of UDCs.

Partnerships with the private sector came later in the a2i portfolio, but are emerging as the fastest growing category, after a tentative beginning, given that a different approach is necessary for their formulation. The a2i Project acknowledged in its 2014 report that digital centres still need support to be completely sustainable, with: i) further partnership development with central public and private service provider organizations (such as government agencies, banks, telcos, etc.), and ii) capacity development of the entrepreneur-operators as refreshers' courses. The evaluation was provided with ample additional evidence that supports further implementation of partnership development with central public and private service provider organizations (see boxes for examples).

Box 13. Summary of Bankers Meeting. Md. Arfan Ali Bank Asia, Quazi Mortuza Ali Bank Asia, M. Sharif Ibne Rahman Trust Bank, Zahid Mansur Dutch-Bangla Bank

- There is a high level of banking exclusion among Bangladesh citizens.
- There are 26 million mobile bank accounts.
- UDCs have Financial Service Access Points.
- UDCs are relevant for providing rural and Internet banking.
- UDCs can offer micro-bank services to grass-root customers; EFT, bill payments, passport fees, school banking, remittances, cash transfers, fingerprint authorization, and loans to small and medium-sized enterprises.
- Asian Bank has done a pilot with 10 booths, and now has 70 booths with 70,000 accounts. They are developing mobile banks and have online facilities with 40,000 villages.
- Dutch Bangla has fingerprint authorization, ATM cards; 3,000 ATMs, remittances to rural banking points.
- Dutch Bangla is initially targeting 2,500 mobile banking agents at UDCs, and will then expand to all UDCs.
- The group proposes UDCs as an agent bank; a local financial centre with customer confidence, security and control.

> **Box 14. Summary of Interview with Mathew Guilford, Head of Health, Telenor Digital and Ishtiak Chowdhury, Grameenphone**
>
> - Telenor is a major Norwegian Telco, in 6 markets in Asia.
> - It partners with Grameen in Bangladesh – 56% owned by Telenor.
> - Does video-conferencing, image storing, payments and health with SMS, voice and Internet, e.g. Uberlance, a kind of Uber App for ambulances. Also looking at agriculture.
> - Has recently signed an MoU with a2i.
> - Initiatives in 3 areas – health (insurance), education and agriculture.
> - It is empowering better choices for citizens, enabling service providers, supporting policy-makers and other decision-makers e.g. using big data for 50 million users.
> - a2i relationship with the government brings them into the regulatory landscape; with access to content and the expertise to leverage off distribution of services by the government.
> - There is market potential; 97% households have mobile; 99.4% mobile population coverage; 93.6 geographic coverage. But the majority not smartphone.

10.5.4. Civil Society Partnerships

Partnerships with civil society bodies represent around 20% of all partnerships. Important examples of civil society partnerships through the SIF are shown in box 16.

In Bangladesh, there are more than 2,300 registered NGOs[34] and the Bangladesh NGO Federation lists more than 1,000 members.[35] Most notably, BRAC is the largest non-governmental development organization in the world, measured by the number of employees and the number of people it has helped, as of June 2015.[36] Additionally, the Grameen Bank is one of the most well-known development success stories in Bangladesh. There are now more than two dozen organizations within the Grameen family of enterprises, from relief and rehabilitation, microcredit loan programmes, and education to strategies of water treatment.

According to the Asian Development Bank, NGOs have found a niche for themselves in the gap between society and state, seeking to promote the people's welfare through grassroots initiatives and development programmes. In a country with large numbers underemployed and unemployed, NGOs also provide much-needed job opportunities, stimulating small enterprise development, and inspiring and equipping people from a traditionally agricultural society to pursue non-farm livelihoods. In short, NGO s play an indispensable role in partnering with international development partners to bring precious resources to the country during times of devastation, and implementing health education and literacy programmes.[37] According to one observer, "In some activities, society may gain by providing a larger space to the NGOs substituting for the old agents, while in others; a new form of partnership between the old agents (both government agencies and the NGOs) may be envisaged."[38]

---

[34] NGO News, NGO's list of Bangladesh, http://ngonewsbd.com/ngo-list-of-bangladesh/.

[35] Bangladesh NGO Foundation, List of Partner Organisations, http://www.ngofoundation.org.bd/index.php?page=members_list.

[36] Wikipedia, BRAC (NGO), https://en.wikipedia.org/wiki/BRAC_(NGO).

[37] ADB, Overview of NGOs and Civil Society: Bangladesh, http://www.adb.org/publications/overview-ngos-and-civil-society-bangladesh.

[38] Sajjad Zohir, NGO Sector in Bangladesh An Overview, http://sajjadz.net/document_library/.../epw%20ngo-20140206-131909.pdf.

In view of this brief overview of NGO activity in Bangladesh it would appear that considerable potential exists for further partnerships between a2i and civil society as the digital centres venture further into utilizing their resources for local development that is not directly tied to government e-services.

Box 15. Summary of Interview with M. Rashidul Hasan, Vice President and Sami Ahmed, Executive Director of the Bangladesh Association of Software and Information Services (BASIS)

- BASIS is an industry association with 850 member companies.
- It is working with a2i; some members (15-20) are providing software services; e.g. for the National Portal Framework. BASIS helped a2i find a vendor; and evaluated and briefed their members on the requirements.
- Also assisted with administration on the SIF by evaluating projects.
- The projects under the SIF are small funding so their members are less interested; there's no further involvement after installation. The younger companies do it, not the bigger ones.
- Challenge to get the more experienced companies involved in a2i initiatives, which would improve the quality and reliability of the software products. The small companies are less experienced, implying lower quality. Need a different strategy to attract bigger firms.
- UNDP procurement procedures are rigid; they couldn't visit prospective vendor sites; could be a problem for selecting the most suitable.
- Ministries are not yet automated so there is room for more and improved e-services. There is no horizontal integration yet. Needs a national e-architecture. Government has been working on it since 2007, but not there yet.

10.5.5. Other Partnerships

a2i also has partnerships with academia and training institutions, largely for a2i's capacity development efforts and conduct of assessments; as well as with media organizations (including 14 community radio stations) for its communication activities.

The Results Management Team has recently developed a partnership with 4 universities/research organizations, through which the activities and impacts of a2i could be more closely examined. The need for this is discussed further in section 6.7 on knowledge management.

Additionally, a2i has developed South-South partnerships including with the Government of Maldives, which has shown interest in developing their own model of innovation in public services. The Government of Myanmar has also showed similar interest recently. Other South-South collaborations are mostly foreign universities and a2i is using their research materials and training tools to enhance the understanding and capacities related to innovation in ICT and development.

Box 16. Summary of Interview with T I M Nurul Kabir, Association of Mobile Telecom Operators of Bangladesh (AMTOB)

- There are 6 mobile operators in AMTOB, plus 3 associate members.
- AMTOB is in the ICT Policy and roadmap and advises a2i on e-governance.
- He was involved with the Bangladesh Telecentre Network, which lost momentum when funding from Telecentre.org dried up.
- There's a social obligation fund, with a 5% levy on telcos.
- a2i initiatives should link to Digital Bangladesh.
- Mobile finance is a big potential area for mobile operators for a2i.

10.5.6. Conclusions

The concept and practice of partnership has become an integral part of the a2i process. The Project has made considerable progress in partnering with government agencies for delivering e-services, building capacity and promoting innovation. Good progress is underway in the formulation of partnerships with the private sector that carry the potential for the delivery of further useful services to the citizenry. Further considerable potential exists for partnerships with civil society organizations for the same purpose. The Project fully understands the critical role of partnerships in achieving government policies for poverty reduction and social equity, as exemplified by the public-private-peoples' partnerships with digital centres. Further development of its partnerships towards such policy objectives is likely to yield desirable results and will be capable of providing practical lessons for others.

10.5.7. Recommendations

1. Put in place a comprehensive plan to make UDCs sustainable through partnerships with the private sector, including with commercial banks, with the central bank of Bangladesh playing a supervisory role.
2. Accelerate the formation of partnerships with civil society organizations towards the promotion of e-services in line with objectives.

Box 17. Examples of NGO Partnerships

- Young Power in Social Action was awarded funding by the SIF for the production of reading materials for students with sight disability. They have produced over 400 digital talking books and developed a Bangla language pack to play them back.
- The Centre for the Rehabilitation of the Paralyzed was awarded a SIF to establish eight Community Digital Information and Service Booths for the Disabled People Development Council to deliver information and services.

Box 18. Summary of Interview with Md. Abdul Karim. Ex a2i Director, Managing Director Foundation for Rural Employment Generation (PKSF)

- PKSF is a federation with 10.8 million members through NGOs working with micro-credit, technical services, and practical training. It has 6,700 NGO branches. PKSF works for impact at the grass-roots. The Quick Wins stand out; they could be continued further.
- They held Digital Innovation Fairs, 2010 was the first; with good reception from citizens.
- There is a need for more computer training for the rural young, also for English, which is a good skill for the outscourcing business.
- There's a need to continue taking fibre optic to rural areas.
- Important areas for further development are e-tendering, e-health and e-agriculture.
- a2i has the scope to cooperate more with PKSF.

10.6. Communication

10.6.1. Communication Strategy and Plan

The a2i Project Initiation Document of 2006 noted that the underlying principle behind the communication strategy for the Project is to "keep all the stakeholders well informed with regard to programme activities, lesson learned as well as programme targets and achievements". Furthermore, the strategy states that to "facilitate effective participation, the programme will maintain continuous communication with the stakeholders by way of providing status reports, minutes of the meetings/consultation held, progress reports, lesson learned, and other event-based reports and management products."

The evaluation was provided with a document laying out the Project's communication strategy that specifies communication activities in support of each of the Project's sub-components.[39] It also identifies key stakeholders, audiences, communication channels and messages as well as a communication plan. It does not include a component for assessing the effectiveness of these communication activities in relation to the Project objectives that they support.

10.6.2. Communication Activities

The a2i website carries the following communication products:

- 21 news media articles
- 6 booklets
- 2 newsletters
- 13 videos
- 12 policy documents
- 2 project documents
- 12 reports
- 6 strategic documents
- 36 training documents

There is no information on the website about the number of times any of these have been accessed or downloaded. Most are in English. The project notes that the website caters to a different clientele- primarily donors and potential international researchers. Use of 'English' language on the website is deliberate. There are also 66 videos on an a2i channel on YouTube that has 527 subscribers. The videos have been viewed on average 562 times each, but it is not known by whom. The Project is also active with social media, with a verified Facebook page that has a reported 13 million users. Most posts are in the Bangla script. a2i has mounted social media campaigns in support of specific Project initiatives.

The Project is also involved in the development of a government initiative for Human Development Television, involving the broadcasting of programmes on development topics such as education, livelihoods, human development, training and awareness raising.

10.6.3. Review of Communication Materials

All materials viewed by the evaluation are produced to a high professional standard. In terms of the requirements of the evaluation though, the following observations are made:

The evaluation notes that huge nationwide campaigns are conducted on every communication mediums (TV radio, social media. Local mediums, etc) whenever new public services are introduced through UDCs. DC, ward members advertise through meetings. Entrepreneurs campaign at union level regularly for important services and branding happens, and creates

---

[39] Communication Strategy Access to Information (II) – e-Service delivery for transparency and responsiveness (Support to Digital Bangladesh), March 2013.

awareness. However, the impact or effect that these communication activities have had is unclear, both to the evaluation and to the Project. Moreover, the evaluation heard from more than one source that much of the Nation's citizenry is unaware of the e-services that are available to them via the digital centres that a2i has facilitated. This places a question mark over the effectiveness of the Project's (and government's) communication activities and underscores the imperative for understanding their effectiveness.

There is the potential from the communication activities for improving the Project's management of its knowledge through sharing:

- within the Project team,
- between the team and its partners, and,
- between the Project and other similar initiatives internationally.
- However, this potential is somewhat obscured by the above factors.

Despite the foregoing, it is acknowledged that communication is a constant process involving everyone and that the formal output products listed above do not represent the full sum of the Project's communication activities. In this regard, it is clear that through its partnerships, and especially its relationships with government, a2i has achieved considerable impact in several areas, not the least on account of how it communicates. Although these areas are expanded on in section 6.4, it is worth emphasizing here that the Project has made effective use of its persuasive abilities to facilitate considerable changes in the operation of government and that this has occurred without executive authority and largely through the effects of its communicative abilities. Apart from the implementation of e-services nationwide, a2i, true to its ideals, has also facilitated the introduction of e-learning for the training of government officials and this has potential as a foundation for the wider introduction of e-learning throughout the Nation.

10.6.4. Conclusions

The formal information-sharing communications activities of a2i have served well for the purposes of public relations and but they lack the strategic direction and focus that will be necessary to foster the wider achievements for which the Project has potential. The impact that existing communications have had in contributing to the Project's achievement is unclear. If this were better understood, and communication activities were more sharply focused on specific outcome objectives, accompanied by evaluations of their impact, then it is likely that they would achieve greater contribution to Project goals.

10.6.5. Recommendations

1. Strengthen the communication strategy to monitor progress and impact in both quantifiable and anecdotal ways in order to measure its effectiveness.
2. Refresh the communication strategy to reflect current and future Project priorities, including Project transition (exit strategy), policy influence, sustainability, private sector and civil society partnerships, and innovation.
3. Commission research into the impact of the communication activities.

10.7. Knowledge Management

10.7.1. Preamble

Knowledge management is regarded as the process of capturing, distributing, and effectively using knowledge. Typical activities focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement. Apart from competitive advantage, each of these objectives has relevance for a2i. By treating the previous, current and future knowledge that the Project generates as a

strategic resource, gains can be expected to emerge in terms of greater innovation and improved performance.

10.7.2.Social Media for Knowledge Management

Social media, in the form of Facebook, Twitter and blogs, can be regarded as tools for managing knowledge, insofar as they help to capture and distribute knowledge. In sharing their knowledge, government officials have embraced the use of social media, particularly Facebook. Instead of creating new knowledge sharing platforms and tools, a2i has gone to where the people are. Many government officials are already on Facebook. They did not have to learn a new tool in order to connect and share, which have increased the ease of knowledge sharing. Table 6 depicts the number of members in some social media platforms that a2i has been involved in establishing.

Table 6. a2i-initiated Social Media Sites (as of June 2015)	
Social Media Platform	Number of Members
a2i Facebook page	146,945
a2i YouTube	511
Union Digital Centre Blog	14,500
Public Service Innovation in Bangladesh Facebook group	5,500
Secretary's Facebook	16
e-Filing Facebook	800
National Portal Facebook	5768
Multimedia Classroom Facebook	1,800
Teachers' Portal Blog	40,000

The use of Facebook, as promoted by a2i, effectively flattens government hierarchies by linking junior and senior officers and field and central administrations. It has also been used by citizens for grievance redress and for engaging them in debates surrounding the quality of service delivery. All Divisional Commissioner's offices and all Deputy Commissioner's offices have Facebook pages or groups, as do more than 16 ministries, 46 directories and 31 Upazila offices.

Many of the interviewees who contributed to the evaluation's enquiries, including senior officials, admitted to using Facebook, though for a variety of purposes, with one commenting that it helps break the silos in which government agencies are typically characterized to exist. District Commissioners, the team was told, will take action based on a Facebook post instead of waiting for an official form. The Facebook group 'Public Service Innovation Bangladesh' that a2i created includes over 6,700 government officers as of 20 July 2015. a2i is also working with the Cabinet Division to develop a guideline for public offices to run their social media sites more effectively.

However, there are some challenges for knowledge management on social media sites. The sheer volume and unstructured nature of knowledge exchange through social media channels can make it very hard to find what you want, and relevant conversations can easily be missed due to the volume of messages, the number of diverse channels and the speed of exchange and without an effective system for archiving, taxonomy or search.

One thing that will still be needed is community facilitation and curation, in order to: help stimulate and moderate discussions; reach out to potential resources; and aggregate, summarize, highlight, categorize and store the distilled ideas and learning for future use. The facilitator/curator role could also help pull together diverse strands of conversations (on- and off-line) and connect them and the people involved in them. Facilitators should gather inputs from different sources (social media, face-to-face meetings with different groups of people, research findings, feedback forms, web logs and data collected from different dashboards) to identify priority needs, good ideas, and good people to bring the ideas to fruition.

Features such as effective searching, grouping of content based on keywords, and ranking of relevance (based on the number of likes and shares) should be automated so that the human effort is dedicated to analyzing all the new knowledge that is being created through these social interactions.

10.7.3. Research

Within the a2i Project, many important questions have arisen relating to its performance, impact and potential; including those that this evaluation is addressing. Research—the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions—is an effective tool for providing the answers that Project proponents require in order to steer it in the desired direction. On occasion, a2i has commissioned research by external parties to examine specific issues, as well as previous evaluations by specialist consultants. The report has already touched upon the value of research in section 5.2, under capacity and awareness, for assessing the outcome and impact of innovation in government and for guiding policy reform, but here the evaluation proposes to elevate research for consideration as a strategic concern.

As a2i proceeds towards wider impacts in terms of: i) achieving government policies for poverty reduction and social equity through public digital centres, and ii) further promotion of innovation within government and wider society towards the goals of Digital Bangladesh, then research becomes a key enabler for the decision-making and policy reforms that will be required for such initiatives to achieve optimum results. Accordingly, the Project will benefit from more concerted and systematic efforts for conducting research and for integrating the findings of research into its Project.

A further aspect of research relevant to the a2i Project relates to research that has already been carried out by independent researchers, mostly in academic institutions. The evaluation conducted a review of the research literature relevant to public digital centres, e-government in Bangladesh and the a2i Project and this is summarized in annex 6. The review was restricted to research papers that were published from 2010 to 2015, of which 34 were identified.[40] The 7 dominant themes that were distilled from the review are:

1. Capacity Building
2. Service improvement
3. Users' perspectives
4. Institutional impact
5. Challenges
6. Policy impact
7. Financial Sustainability

Each of these themes and the research findings they represent has relevance for the current evaluation and for the wider conduct of the a2i Project, yet little evidence was found that any of the underlying studies had been taken account of in previous Project planning or reviews. There will be many reasons for this.[41] Nevertheless, research of this nature represents a knowledge resource that could be tapped by a2i with useful results. The evaluation heard that whilst politicians and top bureaucrats have low regard for research, the younger ones who come back from overseas with

---

[40] All of which have provided to the Project.

[41] Research uptake in international development (and in other disciplines) is a serious concern worldwide and a2i, UNDP and the Government of Bangladesh are not alone in this; see for instance:

Harris R.W., The Impact of Research on Development Policy and Practice: This Much We Know. In Chib, A., May, J., and Barrantes, R. (eds.), *Impact of Information Society Research in the Global South*, Springer Science+Business Media, Singapore, 2015; and

Harris R.W., How ICT4D Research Fails the Poor. Information Technology for Development, April, 2015.

PhDs are more amenable to it. There seems to be an absence of any culture for policy research despite there being considerable potential for it. However, the evaluation is informed that an impact study is planned for 2015 that will cover policy research.

Recognizing the value of research, the evaluation notes that a 2013 report suggests an exit strategy for a2i in which "the creation of the Service Innovation Centre will … facilitate research."[42] The evaluation noted the Project's stated need for research that would be capable of attributing specific outcomes to specified actions, as well as for indicating the impact of a2i on national-level measures such as GDP. There is also the need to prioritize and leverage on Project activities that deliver the strongest returns. Systematic research is acknowledged as a key tool for enabling such actions. Underscoring this perspective is the comment from an earlier a2i evaluation that a critical function for the second phase of the Project is monitoring, evaluation and research.[43]

10.7.4. Knowledge Products

a2i has generated a considerable volume of knowledge products, including reports, brochures, videos, and other forms of media. There is also a body of research literature that has been generated by independent bodies that relates to the Project specifically as well as to the topic of e-government in Bangladesh. In addition, there is available a large body of openly available material representing global knowledge in the area of e-government and ICT for development around the world. Together, these materials represent a substantial knowledge resource that could be leveraged by Project members and others towards further successes. In order to fulfil its potential, these works need to be assembled (ideally in digital format) into a categorized, catalogued and annotated in a Project library for easy and efficient access.

10.7.5. Conclusions

a2i has created opportunities for generating knowledge that can be used to guide its progress towards further desirable outcomes, and a great deal of knowledge has already been generated and shared. However, this has not been the result of a formal or structured approach to knowledge management, and further opportunities exist to leverage the knowledge that has already been created as well as giving rise to new knowledge that can usefully contribute towards the Project's strategic goals.

Box 19. Summary of Interview with Dr. Wahid Abdallah, Department of Economics and Social Science, BRAC University

- Carried out research on the 2014 BBS census data on the UDCs. Examined:
  - Income for sustainability
  - Public-private trade-off
  - Number of people using services
  - Cooperation with local bodies
- Concluded the UDCs need a business model.
- Correlated public and private services to location; found that better public services were delivered from government premises, but private services generated more revenue when they were located outside government premises, e.g. next to a public market.
- Not aware of any research on the impact of a2i.
- There's little regard for research among policy decision-makers. Policies are not really evidence-based except a few where the UK Department for International Development or the World Bank is involved.
- There are some think-tanks that are policy-focused, but not many.
- In all cases promotion is important, and investment in equipment.
- He thought the quality of the BBS data was questionable. He is still working on it with another survey; to send students on his research methods course to a2i to conduct field data collection. Intends to examine impact aspects.
- The BBS census is not impact oriented.

10.7.6. Recommendations

1. Create a network of researchers; fund their research and publish their findings in academic journals.
2. Design research to generate evidence for policy reform.
3. Create a virtual think tank to formalize the network of existing researchers in support of policy reform where required.
4. Communicate research effectively to appropriate audiences in order to achieve improved professional practice and policy reform where needed.
5. Tap the interest of international universities and research institutions, but also partner with local universities to develop national capacity in ICT for development and e-governance research.
6. Establish a Project library.

10.8. Project Management

10.8.1. Management Structure

The effectiveness and efficiency of project management have already been discussed under sections 6.2 and 6.3, respectively. This section looks at the Project's management structure and team composition, as well as the monitoring and evaluation mechanism.

The a2i Project is being implemented under the under the National Execution/ Implementation Modality whereby the primary ownership of the Project and responsibility for implementation lies with the Government of Bangladesh. The Prime Minister's Office is the Executing Agency of the Government, and a Project Management Office has been established to manage the Project. The Project Management Office is led by the National Project Director, Kabir Bin Anwar, who is also the Director General (Administration) in the Prime Minister's Office. The National Project Director together with the Programme Advisor provides overall leadership and direction to the teams.

The Project's management structure reflects key responsibilities and objectives. At the time of evaluation, the Project Management Office has 54 staff members, 26 consultants, 12 attached government officials and 3 interns. The a2i Project Management Office is divided into 7 teams:

- e-Services
- Capacity and Awareness
- Enabling Environment
- Educational Transformation
- Innovation
- Digital Centres, Partnership and Communication
- Results Management

Project oversight is comprehensive. There is a multi-stakeholder Project Steering Committee chaired by the Principal Secretary of the Prime Minister's Office, and comprised of representatives from various government offices, UNDP and NGOs as follows:

- Principal Secretary, Prime Minister's Office (Chair)
- Additional Secretary, Cabinet Division
- Representative from Ministry of Public Administration
- Representative from Local Government Division
- Representative from Finance Division, Ministry of Finance
- Representative from Economic Relations Division
- Representative from Socio-Economic Infrastructure Division of Planning Commission
- Representative from Ministry of Post and Telecommunication
- Representative from Law and Justice Division

- Representative from Ministry of Information and Communication Technology
- Executive Director, Bangladesh Computer Council
- Representative from Bangladesh Telecommunication Regulatory Commission
- President, Bangladesh Association of Software and Information Services
- President, Association of Mobile Telephone Operators of Bangladesh
- President, Federation of Bangladesh Chambers of Commerce and Industry
- Representative from UNDP Bangladesh
- Programme Advisor, a2i
- National Project Director, a2i (Member-Secretary)

UNDP's role includes the provision of technical inputs, administration of the resources allocated by development partners, and project assurance. UNDP also supports large-scale procurement and the recruitment process.

All the teams in the Project Management Office are responsible for identifying and establishing strategic partnerships to achieve the Project goals. Over 100 MoUs have been signed with government and non-governmental organizations, academic and training institutions, businesses (both local and international), and media organizations (including 14 community radio stations).

All the teams are also responsible for the Enabling Environment component of the Project to advocate for and provide advisory support to regulatory and policy changes.

The team leaders meet regularly to update each other on progress and discuss next steps. But because a2i is a large project, some staff members who spoke with the evaluation team expressed that it is not possible to keep track of the Project's initiatives, achievements and impact.

10.8.2. Project Operation and Monitoring

There is unanimous agreement among the key informants that a2i's strength and its ability to achieve significant results within a short time is a result of the project management structure and composition. Its management and execution from the Prime Minister's Office have been critical to the cooperation and commitment from government offices at all levels (from national to union level) to implement a2i activities. In addition, the recruitment of staff from the government, non-government and business sectors resulted in the establishment of strategic and effective partnerships, due to the staff's deep understanding of the culture, politics and motivation in the different sectors and organizations that a2i engage in partnerships with. Moreover, the fact that former staff from a2i phases 1 and 2 have taken on senior and/or strategic positions in government offices have also contributed to rapid implementation and replication of a2i initiatives.

The a2i teams have been active and strong on implementation, particularly in facilitating innovative solutions and devising strategies to implement these solutions in partnership with other organizations. The a2i partners that the evaluation team interviewed are satisfied with the regular follow-up and support provided by a2i team members.

For some activities, such as the digital centres, the roll-out of NESS and projects under the SIF, there are clear monitoring plans and mechanisms in place. However, the process of planning overall for what the Project will monitor, and the ways in which learning can be captured, disseminated and used to improve interventions, can be further improved. For instance, it has not been possible to collect all the data required in the Results/Indicators Framework. a2i team members recognize this, and the Results Management Team has been strengthened with additional staff and it supports other teams in their monitoring and evaluation efforts. In addition, a dashboard for project monitoring is recommended.

10.8.3. Conclusions

There is unanimous agreement among the key informants that a2i's strength and its ability to achieve significant results within a short time is a result of the project management structure and composition. The a2i teams have been active and strong on implementation, but the process for planning overall what the Project will monitor, and the ways in which learning can be captured, disseminated and used to improve interventions, can be further improved.

10.8.4. Recommendations

1. Review and revise the Results/Indicators Framework to ensure that a2i results, outcomes and impact are captured, and that the data is available or can be made available to assess progress towards achieving the agreed upon results, outcome and impact.
2. Create a dashboard for monitoring and evaluation.

10.9. Gender

10.9.1. Gender Strategy

The a2i gender strategy is laid out in a March 2015 document that lists key indicators and priority actions for 2015-2016. The strategy is predicated on the Strategic Priorities of Digital Bangladesh which state that special emphasis must be put on ensuring that women have equitable access to shared access points by ensuring a gender-sensitive environment. The a2i strategy outlines four pillars:

- Internalization of the gender strategy among a2i staff
- Integration of gender considerations in programmatic interventions
- Development of gender-responsive government institutions
- Promotion of gender-sensitive partnerships

The SIF also claims a special focus on gender empowerment, and gender issues were addressed in the training needs analysis of innovation officers in which gender data as disaggregated. Additionally, with the introduction of SMS-based registration for university admissions, the applications from women rose from 25% to 33% of the total.[44] This has been one of the unintended gender impacts of a2i. Also, although not explicitly included in the strategy document, the most visible aspect of a2i's gender sensitivity has been the appointment of women from the outset as partner entrepreneur-operators in all UDCs, although this has achieved less impact than hoped for.

Despite these developments, gender did not feature as a strategic intent until the Project's 2014 Annual Report, in which it was reported that, "female e-service recipients are 30% at UDCs, and 10-15% at Deputy Commissionner offices, however female entrepreneurs are missing in over 50% of UDCs. This brings in the need for more gender focused services at UDCs. As part of the Project, a draft gender strategy has been developed, and the Project recommends a national level study before policy formulation." a2i has established a 21-member Gender Task Force Team comprised of 14 female staff and 7 male staff (1 from each team).

Currently, there are only a few gender-related initiatives. Three of the 35 SIFs are targeted at women. It includes a rural e-commerce initiative for women entrepreneurs, and two mobile apps—one for providing information to pregnant women, and another for increasing women's security. Together with Bangladesh Women in Technology and SME Foundation, a2i is planning to train 3,000 women technopreneurs from all over Bangladesh. UDC entrepreneurs will be entrusted with the responsibility to provide training to the beginners for freelancing and building entrepreneurial skills

---

[44] Presentation made by Anir Chowdhury to evaluation team on 10 May 2015.

as well as to equip the marginalized young women with technical skills for working in several outsourcing industries.[45]

The a2i has already resulted in a number of unintended gender impacts and has the potential to significantly empower women. Dedicated resources for strategizing, capacity building, data collection, review of policies and interventions, building partnerships and managing gender-related initiatives are imperative. The evaluation team recommends the implementation of the a2i Gender Strategy as one of the priorities, and a revision of budget allocation to dedicate funds specifically for this purpose. It is also recommends that a2i introduces a new staff position for a Gender Specialist (preferably senior-level) dedicated to implementing the gender strategy.

Box 20. Women in UDCs

The 2014 Census Report on Union Information and Service Centres reveals the following data about the number of days that women entrepreneurs work at the UDCs per week:

- In 933 UDCs there were no female entrepreneurs
- In 1,355 UDCs female entrepreneurs worked 1-2 days per week
- In 710 UDCs female entrepreneurs worked 3-4 days per week
- In 494 UDCs female entrepreneurs worked all 5 working days
- In 783 UDCs female entrepreneurs worked 6 days per week
- In 217 UDCs female entrepreneurs worked 7 days per week
- Serving Women through UDCs:*
- Over 58,000 women have gained financial access as a result of mobile banking services through 3,700 UDCs
- About 25,000 women have used the telemedicine services from UDCs
- Over 31,000 female students and young women have received computer literacy training
- 42,000 women have registered as skilled migrants through UDCs for overseas recruitment
- 10,000 female teachers have been trained for Multimedia Classrooms
- Health services have been provided to 400,000 women

Source: a2i Innovation Brief on Gender (Draft)

10.9.2. Women Entrepreneurs and Mobile Technology

In a survey conducted across low and middle-income countries, four in ten women have increased income and professional opportunities due to owning a mobile phone.[46] The Cherie Blair Foundation's Mobile Technology Programme leverages mobile technology to support women entrepreneurs in becoming successful business owners.[47] The programme works with a wide range of partners in the mobile ecosystem to provide women entrepreneurs with access to training, technology, networks and capital. It includes:

- Delivering customized mobile applications to address the unique challenges facing women entrepreneurs in developing economies
- Increasing the participation and capacity of women in mobile and banking agent networks

---

[45] a2i Innovation Brief on Gender (Draft)

[46] Cherie Blair Foundation for Women, *Women & Mobile: A Global Opportunity - A study on the mobile phone gender gap in low and middle-income countries* (GSMA, London, 2010), http://www.cherieblairfoundation.org/uploads/pdf/women_and_mobile_a_global_opportunity.pdf.

[47] Cherie Blair Foundation for Women, Mobile Technology Programme, http://www.cherieblairfoundation.org/mobile/.

▪ Ensuring financial inclusion by providing mobile financial services to women entrepreneurs

a2i can consider adapting this model to the Bangladesh context, especially since a2i is currently working with different partners to: i) develop the capacity of women entrepreneurs, and ii) introduce agent banking in UDCs.

Another consideration is involving the female entrepreneur at UDCs to set up women-only social enterprises (in collaboration with NGOs with experience in social entrepreneurship, and with banks to offer loans). A possible social enterprise to explore is promoting the outsourcing of IT and IT enabled services (ITES) to these women's social enterprises—learning from the experiences in Kerala and other countries.[48] In 2010, Gartner listed Bangladesh as among the first 30 most attractive destinations for IT/ITES outsourcing. In 2014, A T Kearney ranked Bangladesh as the 26th most preferred destination of IT/ITES outsourcing (out of 51). According to BASIS, the IT industry has consistently grown in recent years at 20% to 30% per annum.

10.9.3. Conclusions

Although a2i adopted a gender-sensitive approach to digital centre operation from the outset, there are indications that this is not achieving the full potential of its original conception. The Project came rather late to gender as a strategic intent, but has acknowledged this with a gender strategy that increases gender-responsiveness in the Project structure, leadership and interventions. There are opportunities for further empowerment of women through their use of mobile phones, which a2i could facilitate.

10.9.4. Recommendations

1. Fully Implement the a2i Gender Strategy as a priority.
2. Create a new senior staff position for a Gender Specialist.
3. Identify and overcome the obstacles to women digital centre entrepreneur-operators achieving their full potential.
4. Implement a Mobile Technology Programme for women in Bangladesh.
5. Facilitate the female entrepreneurs at digital centres to set up women-only social enterprises.

10.10. Challenges

10.10.1. Project Challenges

The evaluation has been tasked to document the Project risks, challenges and mitigation measures, and to provide an overview of the strengths, weaknesses, challenges and gaps in Project implementation, and to make recommendations for addressing the weaknesses and challenges. The 2014 a2i report stated that the Project started its operations with identifying the challenges to increasing the efficiency and effectiveness of the service delivery process of the government though using ICTs. The obstacles to the effective delivery of public services in the country that the Project identified included widespread manual processes, resistance to change by the civil service, and a lack of transparency in the provision of government information and services. Notwithstanding the fact that opaqueness in service delivery increases the scope for rent seeking behaviour, the Project recognized that the government services rendered weakness in addressing the needs of underserved communities due to the poor state of accountability and responsiveness, inadequate capacity of service providers, and lack of incentives and motivation. Frequent power outages, equipment in

---

[48] Richard Heeks and Shoba Arun, "Social Outsourcing as a Development Tool: The Impact of Outsourcing IT Services to Women's Social Enterprises in Kerala," *Journal of International Development*, Vol. 22 (2010), pp. 441-454.

disrepair, and slow Internet speeds were also highlighted as some of the bottlenecks that are hampering work at the digital centres. Three major challenge areas were outlined:

- Limited access of underserved citizens to e-services, especially in remote areas
- Frequent posting/ transfer of staff within the government department
- Lack of innovative ideas for project advancement

Independent observers have also pointed out a number of challenges to bringing about the improvements in government services that a2i targets. For example, Hassan (2013) noted that challenges arise from changes in government policy, lack of sufficient skilled and well-trained human resource, and insufficient supplies of funding for implementing a capital intensive project. Others have highlighted infrastructural deficiencies, for example in electricity, the telephone network, computers and high-speed Internet connectivity (Rahman, 2012). The same observer noted resistance to change among public sector staff, lack of digital literacy among an overwhelming majority of the population and the absence of a single coordination point in the government for developing a roadmap for e-government. A further challenge was noted by Faroqi (2015) in involving disadvantaged people such as women, the poor and illiterate, given the difficulty in making them aware of the e-services available at digital centres. The evaluation's review of the literature revealed a number of other challenges (see box 20).

Notwithstanding these observations, it has been reported that Bangladesh has advanced 10 places to 109th position from 119th on the most recent Global Networked Readiness Index prepared by the World Economic Forum, showing slight improvements in information and communication for social and economic gains.[49]

The evaluation has raised some other challenges to the a2i Project. The issue of project continuity emerged in several interviews with senior officials. As a project, it is generally acknowledged among stakeholders that a2i will come to an end at some stage. Although during the evaluation it was announced that it had been extended to 2018, the issue of an appropriate exit strategy that will ensure continuity and extension of the gains already made still exists. Accordingly, the prospects for scaling up a2i's success to a comprehensive and coordinated programme for e-government in Bangladesh remain a challenge. This topic is expanded further upon in the next section. Related to this is the issue of funding and the fact that the current donor agencies will not be in a position to support the Project indefinitely so that further mobilization of resources from other sources emerges as a serious challenge.

A still further challenge has been recognized in the varying performances of the digital centres; in terms of the services they offer, the income they generate for their operators, and the effectiveness of the tactic of having women as entrepreneur-operators. These topics have been addressed in more detail in other sections of the report.

Similarly, the issue of assessing the impact of the a2i Project emerged as a challenge, and this is also addressed in more detail elsewhere in the report.

10.10.2. Project Strengths and Weaknesses

Some of the Project's strengths that emerged during the evaluation include:

Partnerships

The partnerships that a2i has cultivated with government agencies, private sector and civil society organizations have leveraged the resources and impact of the Project.

---

[49] New Age, Bangladesh advances to 109th place in Global Networked Readiness Index, 15 April 2015, http://newagebd.net/112072/bangladesh-advances-to-109th-place-in-global-networked-readiness-index/#sthash.lWppg01s.dpbs.

Reputation

a2i has an extensive reputation as an effective agent of change such that the Project now evinces the potential for further achievements beyond the delivery of e-services, particularly where innovation with technologies is implied.

Secondments from government

The practice of seconding government officials into the a2i team strengthened the Project in its dealings with government, and strengthened the individuals' administrative and managerial capacities on their return to their duties.

Political Support

Being organizationally situated in the Prime Minister's Office provided the authority and political support necessary to wield influence and induce change at ministerial levels.

Staff

a2i benefits from a qualified, capable and motivated Project workforce with strong moral and team spirit.

Learning

As a relatively late starter in e-government and ICT for development regionally, a2i was able to learn from the experiences of other countries, and it did so effectively.

10.10.3. Conclusions

The a2i Project was well-aware of the challenges it would confront in working towards its objectives, and it faced them squarely and effectively. In spite of facing substantial challenges at the national level that were beyond its executive control, such as inadequate infrastructure, low levels of ICT literacy, and modest capacities and resistance from the civil service, the Project was able to bring about solutions to them that mitigated their effect. Some challenges remain, but it can be foreseen that, given the Project's strengths, these are readily surmountable.

10.10.4. Recommendations

1. Gain consensus in government on an exit strategy.
2. Mobilize the digital centres towards the delivery of further ICT-based community development activities through increased proactive entrepreneurialism among the operators—for bottom-up initiatives—as well as through further partnerships with private sector and civil society organizations for top-down initiatives.
3. Formulate a programme that prioritizes benefits for marginalized groups; the less-literate, disabled, elderly, and ethnic minorities, as envisaged in the Strategic Priorities of Digital Bangladesh.
4. Instigate research that identifies the Project's impact on a national level.

Box 21. Challenges to a2i Highlighted in the Literature Review

- No special services to help illiterate people (Mahiuddin and Safiul Hoque, 2013: Faroqi, 2014)
- Lack of services such as land copy, electricity bill pay, mobile banking (Faroqi, 2014)
- No fixed office hours maintained at digital centres (Mahiuddin and Safiul Hoque, 2013)
- Cost of Internet & printing services are higher at digital centres (Mahiuddin and Safiul Hoque, 2013)
- Lack of resources (computers, space, technical people) (Faroqi, 2015; Alam, 2014; Habib, Chowdhury, et al, 2013; Rahman & Khan, 2012; Salam, 2013)
- Lack of operator skills (Faroqi, 2015)
- Lack of availability of adequate government information and services (Mahiuddin and Safiul Hoque, 2013; Faroqi, 2014;Salam, 2013)
- Lack of awareness of the Project services and its potential benefits (Alam, 2014; Rahman, 2014; Salam, 2013)
- Lack of accessibility and usability features of public websites (Bhuiyan, 2010)
- Lack of consistency in websites update and maintenance (Ahmad, 2013; Salam, 2013)
- Lack of human capital and frequent load shedding (Ahmad, 2013; Rahman, & Khan, 2012; Rahman, 2014; Salam, 2013)
- Lack of infrastructure and logistics (Ahmad, 2013)
- Regulatory framework needs improvement (Rahman & Khan, 2012)
- Insufficient policy and regulatory framework (Ahmad, 2013)
- Absence of collaboration among the agencies (Salam, 2013)
- Delay in service delivery system (Salam, 2013)
- Inclusion of traditional payment system (Salam, 2013)
- Lack of political commitment (Salam, 2013)
- Lack of transparency in service delivery (Salam, 2013)
- Manual application for getting service (Salam, 2013)
- No feedback system for the users (Salam, 2013)
- No scope of SMS alert system for users (Salam, 2013)
- Poor accessibility of common people (Salam, 2013)
- Slow connectivity of network/Internet (Salam, 2013)
- Unwillingness of service providers (Salam, 2013)

10.11. Sustainability

10.11.1. Sustaining Results

For the evaluation, sustainability measures the extent to which benefits of the a2i are likely to continue after external development assistance has come to an end. Assessing sustainability involves evaluating the extent to which relevant social, economic, political, institutional and other conditions are present and, based on that assessment, making projections about the national capacity to maintain, manage and ensure the development results in the future.

Specifically, the evaluation has been asked what can further be done to sustain the Project's achievements and to institutionalize its objectives within the machinery of government, and to identify lessons learnt from the various partnerships and assess the possibility of broadening, deepening and sustaining partnerships for the expansion of e-services.

Overall, it is argued that a2i's sustainability in this context boils down to two questions that reflect the 'bi-polar' nature of its relationships; the institutional relationship with government and other organizational partners on the one hand, and the social and economic relationships with

communities on the other. The first question is "what is the Project's exit strategy?" and the second question is "how can digital centres maintain financial independence?"

10.11.2. a2i's Exit Strategy

The evaluation included several discussions around the topic of how the Project would continue after the expiry of its present funding period, which was extended to 2018 during the deliberations. Discussions focused on the proposal in the 2012 a2i (II) Project Document to create a Service Innovation Centre, which is intended to institutionalize the results that the Project has produced. Recognizing that the benefits so far derived are significantly dependent on the maintenance of a project under the Prime Minister's Office, the proposal is for institutional strengthening that will gradually take over the strategic function of the a2i Project and eliminate the need for its continuation.[50] At the time of the evaluation, this unit has not been established, but a related proposal that was given priority in the Project Document was for establishment of the Innovation Fund, which would overcome the "acute absence of financing mechanisms to support innovation from proof-of-concept to a stage where the product or service will be able to make a difference in the lives of its citizens." This fund has been set up and its operation is discussed in section 5.4.

Various opinions were received from senior officials during the evaluation interviews as to how the proposed Service Innovation Centre might be organized. Whilst views differed somewhat, the consensus supported the retention of the organizational anchor within the Prime Minister's Office. Although some other ministries were considered as a possible home for the new Centre, it was generally acknowledged that the need for continued innovation within government could best (only) be satisfied with the political backing and authority that would come from the Prime Minister's Office. This would enable the unit to operate, it was said, much the same as the private sector does, without the hindrances implied by adherence to standard government processes. The Project's links to the vision for Digital Bangladesh would support this approach. Once again, a2i is able to benefit from the experiences of other countries with similar requirements, and these also suggest the establishment of such a unit in close relationship with the head of the government, as the best position for overseeing and coordinating the activities of line ministries.

While instances of institutionalization were cited as spelling the death of creativity, another viewpoint was that a project structure could be allowed to continue indefinitely if desired, on the basis of not disturbing an already effective arrangement. Conversely, it was suggested that there is a risk of vulnerability from a possible change in government, with a new incoming administration de-emphasizing what the previous one had achieved. Organizing under the Cabinet Division, it was said, could provide some protection against this eventuality without degrading the advantages of being under the Prime Minister's Office.

10.11.3. Financial Independence for Digital Centres

Generating revenue at the digital centres is critical for sustaining their operations; the entrepreneur-operators depend on it for their livelihoods. Entrepreneurs' monthly income is a crucial indicator of financial viability, which is associated with a number of variables (Faroqi, 2015). Lessons from the earlier experiences with the Bangladesh Telecentre Network reinforce this reality. The evaluation has noted the variability in digital centre performance, which includes variations in their ability to generate revenues. According to an evaluation of the first phase of a2i, the average UDC earned BDT 2,665 (USD 40) in revenues in July 2011, which, compared to the average monthly per capita income in Bangladesh of USD 53, suggest that the average centre is financially sustainable.[51] According to a2i's 2014 report, UDCs, PDCs and CDCs are sustainable since they

---

[50] See the a2i (II) Project Document for more details.
[51] Bangladesh Access to Information Programme (a2i) Evaluation Report, 2011.

generate income for the entrepreneur-operators who run them, but the report is not specific with the details of income levels.

The 2014 Census Report on Union Information and Service Centres by the BBS reported that broadly UDCs are making a profit, with each earning about BDT 5,410.26 (USD 69.67) per month. The census estimated that "3,859 UDCs[52] (86%) are making a profit, which indicates their sustainability levels; on the other hand, 633 UDCs are reported to have higher expenditure vis-à-vis their earnings." By comparison, in the garment industry the minimum wage is BDT 5,300 (USD 68) per month[53] and the average monthly disposable salary (after tax) in the country is BDT 24,179.46 (USD 311).[54] Assuming the income of the UDCs is shared equally between the two entrepreneur-operators, their income therefore amounts to about half that of the garment industry's minimum wage and around one tenth of the average salary. Although these figures provide an overall perspective, the situation on the ground is almost certainly highly variable. For example, the BBS census points out that out of the 4,506 UDCs, 3,511 UDCs (78%) are run by two entrepreneur-operators while 991 are run by 1 entrepreneur-operator.

From this data, the evaluation suggests that financial sustainability at the digital centres is somewhat precarious. The BBS census concludes that the overall scenario that it provides is the key to move ahead with further strengthening of the position and functions of UDCs as last mile service delivery agents. Although regular revenues stem from the delivery of government e-services, additional revenues from private sector services, such as agent banking and other financial services, as well as local initiatives stemming from the creativity and entrepreneurialism at the centres themselves, will be crucial in generating a more robust financial model for them. Continuing cultivation of appropriate partnerships by a2i can be expected to achieve this, as well as further capacity building, motivation and awareness raising among the entrepreneurs.

Finally, from the FGD conducted in Mymensingh (as detailed in annex 4) the following recommendations came from the UDC entrepreneur-operators themselves (which does not mean that they are endorsed by the evaluation):

- UDC entrepreneurs should be government employees.
- Loans without interest or minimum interest should be granted to UDC entrepreneur-operators so that they can expand their business.
- Capacity building training should be provided.
- The Upazila Nirbahi Officer and Deputy Commissioner should be mandated to intervene when conflict arises between the Union Parishad chairman and the UDC entrepreneur-operators.

10.11.4. Conclusions

a2i's exit strategy will determine the institutional sustainability of its achievements, and this is currently embedded in the proposal for a Service Innovation Centre. Detailed planning for its establishment needs to proceed as a priority as a2i approaches its sunset orientation. Financial sustainability at the digital centres is somewhat precarious and needs to be strengthened to ensure continued satisfactory performance.

10.11.5. Recommendations

1. Finalize the plans for implementing the Service Innovation Centre and agree them with relevant stakeholders.

---

[52] Union Information Service Centre or UISC has been renamed UDC.
[53] Wikipedia, List of minimum wages by country,
https://en.wikipedia.org/wiki/List_of_minimum_wages_by_country.
[54] Numbeo, Cost of Living in Bangladesh,
http://www.numbeo.com/cost-of-living/country_result.jsp?country=Bangladesh.

2.   Implement measures to strengthen financial sustainability at digital centres, including developing further private sector-related services and intensifying their entrepreneurialism.

10.12. Lessons Learned

10.12.1. Previous Lessons from a2i

In each of its annual reports for 2012, 2013 and 2014, a2i makes note of the lessons learned during the reporting period, which include those from the numerous Project evaluations and external reviews that have been conducted over the life of the Project. These are summarized in box 21. This evaluation is tasked with documenting and drawing key lessons learned during the Project implementation that relate to:

- Ways forward for the e-service related activities
- Ways forward for the capacity development initiatives
- Ways forward for the SIF
- The partnerships for assessing the possibility of broadening, deepening and sustaining partnerships for the expansion of e-services

Consequently, the evaluation focuses on lessons that arise from this evaluation that have not been noted in the earlier reports.

10.12.2. New Lessons from a2i

For the e-services, the team have noted that the existing measurement of outcomes provides useful indicators as to their effects but it falls short of capturing a full picture of the wider impact they are having on national life. This lesson implies a challenge for the measurement and evaluation approaches of the Project in terms of isolating the relevant indicators that would likely include important but less approachable factors such as user satisfaction. However, given the citizen-centric approach that government has adopted, the difficulties of capturing this dimension should not deter efforts towards doing so.

An assessment of the Quick Win initiatives shows that regular and structured monitoring was one of the main reasons behind success of the Quick Wins that have been implemented successfully and scaled up.

For the capacity development initiatives, there is the potential for learning from the evaluation's observations of the performance of the UDCs, which seems to be rather patchy. The learning opportunity relates to the extent to which entrepreneurialism can be taught and the methods for teaching it. Some observers claim that classroom methods should be augmented with other modes of learning such as working with mentors. Entrepreneurship training often mixes formal education with experiential learning and mentorship. a2i could apply this concept by nurturing a network of mentors and advisers for UDC entrepreneur-operators. There is the danger that the existing UDC entrepreneur-operators feel unsupported after being initially inducted. Moreover, new replacements may not receive the same support that the original ones received if capacity building and regular support is not regarded as a continuous process. However, the evaluation is informed that as entrepreneurs they would have to be independent and find ways to improve his skills beyond what a2i or the local government might provide otherwise it may create a sense of dependency. However, a2i has already undertaken e-learning initiative and would provide some necessary training for entrepreneurs there where they can be accessed by entrepreneurs anytime.

Box 22. Previous Lessons Learned by a2i

a2i Reports 2012 and 2013

- Involvement of departmental officers from the directorate, district and upazila levels were vital to the service process simplification exercise, ongoing capacity development of the officers, and, ultimately, organizational ownership.
- The hallmark partnership approach of the Project is still essential for success—it allows optimal use of resources provided by government departments and donors.
- Too high dependence on key Project personnel may get in the way of institutionalization. So, a proper and conscious balance has to be struck between short-term 'success' driven by persons and long-term 'success' driven by institutional processes.

a2i Report 2014

- Careful scrutiny of the innovation projects leads to successful project completion.
- Partnership with offices rather than individual results in better ownership, hence ensure sustainability of the initiatives.
- Continued influence and persuasion of the top-brass of government bureaucracy helps boost the Project activities.
- Increased investment of the women entrepreneur reduces dropout rates.
- A contextualized strategy for UDC implementation can reduce the drop-out rates of women entrepreneurs.
- Shifting remotely located UDCs to commercial places (e.g., local markets) provide more services to increase the number of citizens.
- Involvement of education administrators and head teachers ensured active and functioning multimedia classrooms at schools.
- Involvement of departmental officers was vital to the service process simplification exercise.
- The hallmark partnership approach of the Project was essential for success, and allowed for optimal use of resources provided by government departments and donors.
- Active coordination with large donors needed, even if through parallel funding.

For the SIF, the evaluation has noted that a2i saw the need for more workshops and technical support to develop the project proposals and budget, present them to ministries for buy-in and scale-up, develop baselines, develop monitoring and evaluation plan, develop TORs and RFP for procurement, etc., as many of the awardees have not managed a project before.

With regard to assessing the possibility of broadening, deepening and sustaining partnerships for the expansion of e-services, a2i understands very well the crucial role of its partnership arrangements in delivering value to the Nation's citizenry through the digital centres that it has facilitated. No single institution possesses the entire capacity that is required to achieve the impact that has already transpired and which exists as further potential. For that reason, accomplishing the objectives of the a2i Project, both present and future is best regarded as primarily a partnership-based initiative; involving government, the private sector, and civil society and it is therefore a strategic imperative to nurture further partnerships for the expansion of e-services. The Project's current approach to partnerships, which generally begins with the MoU, has served well, recognizing as it does that each arrangement has its own unique characteristics that have to be accounted for on an individual basis in order to fashion a mutually beneficial agreement. Accordingly, standardized approaches may serve to assist in the general outline of the Project's approaches to partnerships, but in detail, they should be fashioned on a tailor-made basis that creates the most appropriate arrangement for their situation and context.

11. Annexes

11.1. Annex 1. a2i Project Documents

- a2i Annual Report 2012

- a2i Annual Report 2013

- a2i Annual Report 2014

- a2i Phase-1 End-line Evaluation Report

- a2i Project Document 2007

- a2i Project Document 2012

- Communication Strategy for a2i 2013

- Gender Strategy 2015

- Indicator Based Report to USAID 2015

- Indicator Framework Sept 2013

- Innovation Officers and Innovation Teams

- Introducing e-Learning in Bangladesh Civil Service

- National Portal Guideline 2015

- Quick Win Initiatives Report 2015

- Results Monitoring Analysis and Recommendations for the Results Framework and M&E

- Scaling-Up Access to Information in Bangladesh 2013

- Social Media and Participatory Governance

- Training Needs Analysis of Innovation Officers

- Union Information and Service Centre: Connecting the Bottom Million

11.2. Annex 2. List of People Met

a2i

- Kabir Bin Anwar, National Project Director and Director General (Administration), Prime Minister's Office
- Anir Chowdhury, Policy Advisor
- Md. Abdul Mannan, Director (Enabling Environment) and Deputy Secretary, Prime Minister's Office
- Capacity Development Team
- Communication and Partnership Team
- e-Services Team
- Innovation Team
- Results Management Team

UNDP

- Pauline Tamesis, Country Director
- Nick Beresford, Deputy Country Director
- K. A. M. Morshed, Assistant Country Director – Policy, Innovation and Communication
- Khurshid Alam, Assistant Country Director – Climate Change
- Shaila Khan, Assistant Country Director – Local Governance
- Palash Kanti Das, Assistant Country Director – Poverty Reduction
- Miyuki Fuji, Monitoring and Evaluation Analyst

USAID

- Jason Smith
- Sherina Tabassum

Government of Bangladesh

- Tawfiq-e-Elahi Chowdhury, the Prime Minister's Energy Adviser
- Nasima Begum, Former Secretary, Ministry of Social Welfare
- Arch. Yeafesh Osman, State Minister, Ministry of Science and Technology
- S. M. Ashraful Islam, Executive Director, Bangladesh Computer Council
- Md. Nazrul Islam, Secretary, Coordination and Reforms Wing, Cabinet Division
- Md. Nazrul Islam Khan, Secretary, Ministry of Education
- Subir Kishore Choudhury, Additional Secretary, Ministry of Public Administration
- Mohammed Farooq, Chief Information Commissioner, Information Commission
- Sadaruddin Ahmed, Secretary, Information Commission
- Md. Abdul Hakim, Deputy Director (Administration), Information Commission
- Punyabrata Choudhury, Additional Secretary, Ministry of Land
- Abul Kalam Azad, Additional Director General (Planning and Development), Directorate General of Health Services
- Md. Ferdous Alam, Consultant, Directorate General of Health Services
- Md. Abdul Malek, Agriculture Extension Officer, Department of Agriculture Extension, Fulbaria, Mymensingh
- Mr. Abdul Malek, Secretary, Local Government Division
- Ashoke Madhab Roy, Local Government Division
- Quamrun Nahar Siddiqua, Director, Governance Innovation Unit, Prime Minister's Office

Dhaka

- Mathew Guilford, Head of Health, Telenor Digital.

- Ishtiak Chowdhury, Grameenphone
- Dr. Salahuddin M. Aminuzzaman, Faculty of Social Science, Dhaka University
- Md. Arfan Ali, Bank Asia
- Quazi Mortuza Ali, Bank Asia
- M. Sharif Ibne Rahman, Trust Bank
- Zahid Mansur, Dutch-Bangla Bank
- Md. Abdul Karim, Ex a2i Director, Managing Director, Foundation for Rural Employment Generation
- Dr. Wahid Abdallah, Department of Economics and Social Science, BRAC University
- M. Rashidul Hasan, Vice President, Bangladesh Association of Software and Information Services
- Sami Ahmed, Executive Director, Bangladesh Association of Software and Information Services
- T. I. M. Nurul Kabir, Secretary General, Association of Mobile Telecom Operators of Bangladesh
- Hasan T. Emdad Rumi, Head of Technical Solution, Mango Teleservices Limited
- Debabrata Sarkar, Software and Application Developer, Mango Teleservices Limited
- Vashkar Bhattacharjee, Country Representative, Global Alliance on Accessible Technologies and Environments
- A.K.M. Abdul Awal Mazumder, Rector, Bangladesh Public Administration Training Centre

Chittagong

- Mohammad Abdullah, Divisional Commissioner
- Sarwar Jahan, Additional Divisional Commissioner, Divisional Commissioner Office
- A.Z.M Shorif, PS to Divisional Commissioner
- A.K.M. Rezaur Rahman, Senior Assistant Commissioner, Divisional Commissioner Office
- Mesbah Uddin, Deputy Commissioner
- Doulutuzzaman Khan, Additional Deputy Commissioner (ICT), Deputy Commissioner Office
- Razib Ul Ahsan, Assistant Commissioner (ICT), Deputy Commissioner Office
- Tahmilur Rahman, Assistant Commissioner and Executive Magistrate, Deputy Commissioner Office
- Niva Haque, Women's Affairs Officer, Innovation Team Member
- Hosre Ava Begum, District Education Officer, Innovation Team Member
- Rumi Mollik, District e-Service Centre
- Shapla Rani Daj, District e-Service Centre
- Saiful Islam, Assistant Commissioner (Land), Sadar Circle
- Mohd. Abdus Samad, Headmaster (In-Charge), Government School for the Blind, Social Services Department
- Md. Mahabubur Rahman, Director (Social Development Program), Young Power in Social Action, and his team

Boalkhali Upazila Innovation Team

- Khandaker Nurul Hoq, Upazila Chairman
- Dewan Muhammad Tajul Islam, Commissioner (Land)
- Alamgari Hossain, Upazila Livestock Officer
- Abu Zafor Muhammad, Upazila Agriculture Officer
- Md. Zaiul Islam, Upazila Education Officer
- Muhammad Yunus, Upazila Secondary Education Officer
- S.M. Zinnat Sultana, Upazila Women's Affairs Officer
- Humayun Kabir Patwary, Upazila Rural Development Officer

Saroatali Union Parishad, Boalkhali

- Nur Mohammad, Union Parishad Chairman
- Anwara Begum, Union Parishad Member
- Rokeya Begum, Union Parishad Member
- Priti Das, Union Parishad Member
- Abu Alom, Union Parishad Member
- Musa Ameeri, Union Parishad Member
- Momtaz Mia, Union Parishad Member
- Mozammel Hossain, Union Parishad Member
- Abdul Manan, Union Parishad Member
- Sohidul Alom, Union Parishad Member
- Somor Mollik, Union Parishad Member
- Basudeb Chowdhury, Union Parishad Member
- Jasim Uddin, Union Parishad Member
- Fauzul Azad Chowdhury, Entrepreneur, UDC in Bairag Union Parishad, Anowara, Karnaphuli
- Md. Sohidul Hoque Shimul, Entrepreneur, UDC in Saroatali Union Parishad, Boalkhali
- Biswajit Barua, Headmaster, Kadhurkhil High School, Boalkhali
- Feroz Ahmed, Assistant Headmaster, Kadhurkhil High School, Boalkhali

Munshiganj District

- Nazmul Hassan and Sonya Akter, UDC entrepreneur-operators
- Habibur Rahman, Union Chairman

Khulna

FGD 1

- Md. Shafiqul Islam, Additional Deputy Commissioner (ADC), Education and ICT, Bagerhat
- Ashok Kumar Basu, Lecturer, Department of Mathematics, Government PC College, Bagerhat
- Hazra Siddiqur Rahman, Deputy Manager, BS, Bagerhat
- A H Imran Uddin Ahmed, Assistant Commissioner, ICT DC Office, Bagerhat
- Rokaya Tanzila, Assistant Programmer, DC Office, Bagerhat
- Zazi Oaliul Haque, Instructor (Computer Science), Primary Training Institute, Bagerhat

FGD 2

- Md. Abdus Samad, Divisional Commissioner, Khulna
- Mohammad Faruq Hossain, Additional Divisional Commissioner (General), Khulna
- Khondoker Mostafizur Rahman, Additional Divisional Commissioner (Revenue), Khulna
- Nichinta Kumar Poddar, Director, Local Government, Khulna
- Suvash Chandra Shaha, Additional Divisional Commissioner (Development), Khulna
- Nahid Ul Mostaq, Senior Assistant Commissioner, Divisional Commissioner Office, Khulna
- Ms. Mohshina Akter Banu, Senior Assistant Commissioner, Divisional Commissioner Office, Khulna
- Nabi Newaz, Personal Secretary, Divisional Commissioner, Khulna
- Md. Rajibul Alam, Assistant Commissioner, Divisional Commissioner Office, Khulna
- Sarker Ashim Kumar, Assistant Commissioner, Divisional Commissioner Office, Khulna

FGD 3

- Kamrul Hasan, Upazila Nirbahi Officer, Digholia, Khulna

- Shaleha Parvin, Upazila Women Affairs Officer, Digholia, Khulna
- Zakia Islam Zonas, Rural Development Officer, Digholia, Khulna
- Md. Emdadul Haque Khan, Youth Development Officer, Digholia, Khulna
- Tuhin Roptan, Upazila Coordinator
- Ekti Bari Ekti Khamar Project
- Julia Sukayna, Assistant Commissioner (Land), Digholia, Khulna

FGD 4

- Md. Muzibar Rahman, Upazila Nirbahi Officer, Kachua, Bagerhat
- Sanjida Jesmin, Assistant Commissioner (Land), Kachua, Bagerhat
- Shashoti Ethbor, Upazila Agriculture Officer, Kachua, Bagerhat
- Md. Kabir Hossain, Senior Upazila Fishery Officer, Kachua, Bagerhat
- Md. Jahangir Alam, Upazila Engneer, Kachua, Bagerhat
- Jakir Hossain Hawlader, Upazila Social Welfare Officer, Kachua, Bagerhat
- Md. Kamrul Alam, Upazila Education Officer, Kachua, Bagerhat

Interviews

- Md. Rafiqul Hasan, Assistant Commissioner (Land), Dumiria Upazila, Khulna
- Nahid Ul Mostaq, Senior Assistant Commissioner, Divisional Commissioner Office, Khulna
- Ms. Zakia Sultana, Metropolitan Agriculture Officer, Khulna Horticulture Centre
- Md. Abul Kashem, Upazila Family Planning Officer
- Narail Sadar, Narail

Discussion Meetings with UP Chairman, Members, Secretary and UDC Entrepreneurs Uthara UDC, Union: Uthara, Upazila: Bhaluka District: Mymensingh

- Md. Eshak Ali, Chairman, Uthara Union Parishad
- Hasna Khatun, Women Member, Uthara Union Parishad
- Md. Jahangir Alom, Secretary, Uthara Union Parishad
- Golam Bari, UDC Entrepreneur Uthara Union Parishad
- Sheuli Akhter, UDC Entrepreneur (Female)
- Kolpona Akhter, User
- Labnno Dutta, User
- Pansi Akhter, User
- Morium Akhter, User
- Shibli Begum, User
- Shukhi Akhter, User
- Shain Mia, User
- Md. Mojibur Rahman, Secretary, Meduary Union Parishad
- Md. Riajuddin Khan, UDC Entrepreneur, Meduary UDC
- Yesmin Akhter, User, Meduary UDC
- Shirina Akhter, User
- Billal Hossain, User
- Md. Sirajul Islam, Member, Dhanikhola Union Parishad
- Md. Abdur Roshid, Member, Dhanikhola Union Parishad
- Md. Mozammel Hoque, Member, Dhanikhola Union Parishad
- Md. Shamsuddin Dulal, Member, Dhanikhola Union Parishad
- Md. Ibrahim, Member, Dhanikhola Union Parishad
- Mrs. Laily, Women Member, Dhanikhola Union Parishad
- Mrs. Monoara, Women Member, Dhanikhola Union Parishad
- Md. Abul Kalam, Secretary, Dhanikhola Union Parishad

- Mrs. Khalada Begum, UDC Entrepreneur (main), Dhanikhola UDC
- Md. Moniruzzaman, UDC Entrepreneur, Dhanikhola UDC
- Md. Rofiq, User
- Rabeya, User
- Roni, User
- Md. Shohel Rana, Chairman, Sadyapushkarini Union Parishad
- Md. Saifur Rahman, Member, Sadyapushkarini Union Parishad
- Md. Jamal Hossain, Member, Sadyapushkarini Union Parishad
- Md. Gulzar Hossain, member, Sadyapushkarini Union Parishad
- Md. Saifur Rahman, Secretary, Sadyapushkarini Union Parishad
- Md. Arizuzzaman Mun, UDC Entrepreneur (main)
- Sabina Yeasmin, Female UDC Entrepreneur
- Naznin Nahar, User
- Md. Liton Ahmed, User
- Abdur Rouf, User
- Md. Alomgir Hossain, User
- Md. Abu Bakar Siddique, Secretary, Horidebpur Union Parishad
- Lovely Rani, Female UDC Entrepreneur (main)
- Rogonath Mahanto, UDC Entrepreneur
- Md. Harun Ur Rashid, User
- Razia Begum, User
- Rofiq Mia, User
- Md. Abdul Bari, UDC Entrepreneur
- Rois Uddin, User
- Salam Mia, User
- Bilkis Begum, User

FGD with UDC Entrepreneurs

- Md. Fazlul Hoque, Kachina UDC, Upazila: Bhaluka, Mymensingh
- Golam Mahmud Farid, Sahanati UDC, Upazila: Gouripur, Mymensingh
- Kamrul Islam, Mathbaria UDC, Upazila: Trishal, Mymensingh
- Kahaleda Begum, Dhanikhola UDC, Upazila: Trishal, Mymensingh
- Sajjadul Islam, Moaha UDC, Upazila: Gouripur, Mymensingh
- Ashraful Islam Choudhury, Rangamatia UDC, Upazila: Fulbaria, Mymensingh
- Md. Zuel Mia , Bailar UDC, Upazila: Trishal, Mymensingh
- Nasirul Islam, Dewkhola UDC, Upazila: Fulbaria, Mymensingh
- Golam Bari, Uthara UDC, Upazila: Bhaluka, Mymensingh

FGD with UP Secretaries

- Md. Zakir Hossain, Sundarpur-Durgapur Union Parishand, Upazila: Kaliganj, Dist: Jhenaidah
- Prosenjid Kumar Sorker, Bogura Union Parishad, Upazila: Shailkupa, Dist: Jhenaidah
- Md. Sahinur Rahman, Barobazar Union Parishad, Upazila: Kaliganj, Dist: Jhenaidah
- Shoin Chandra Sorker, Dhobaura Union Parishad, Upazila: Dhobaura, Dist: Mymensingh
- Md. Selim Talukdar, Porajandulia Union Parishad, Upazila: Dhobaura, Dist: Mymensingh
- Sawkot Hossain, Baghaba Union Parishad, Upazila: Sibpur, Dist: Norshingdhi
- Md. Sohel Mia, Shukundi Union Parishand, Upazila: Monohardi, Dist: Norshingdhi
- Md. Abu Raihan, Bhabkhali Union Parishad, Upazila: Mymensingh Sadar, Dist: Mymensingh
- Habibur Rahman, Jugli Union Parishad, Upazila: Haluaghat, Dist: Mymensingh
- Salma Akhter, Boyera Union Parishad, Upazila: Mymensingh Sadar, Dist: Mymensingh

- Mokbul Hossain, Musapur Union Parishad, Upazila: Raipura, Dist: Norshingdhi
- Robiullah Sorker, Paratali Union Parishad, Upazila: Raipura, Dist: Norshingdhi
- Delowar Hossain, Bhatgaon Union Parishad, Upazila: Chatak, Dist: Sunamgonj
- Ismotara, Kaladaha Union Parishad, Upazila: Fulbaria, Dist: Mymensingh
- Hemonto Biswas, Banglabazar Union Parishad, Upazila: Dowarabazar, Dist: Sunamgonj
- Mahmud Ameen, Chacher Union Parishad, Upazila: Kachua, Dist: Chandpur
- Fozlul Hoaque , Sakhua Union Parishad, Upazila: Trishal, Dist: Mymensingh
- Md. Masum Kamal, Jumarbari Union Parishad, Upazila: Saghata, Dist: Gibandha
- Dipok Rani Das, Rajanogor Union Parishad, Upazila: Dhirai, Dist: Sunamgonj
- Sowpon Talukdar, Kulonjo Union Parishad, Upazila: Dhirai, Dist: Sunamgonj
- Polok Talukder, Sripur (South) Union Parishad, Upazila: Tahirpur, Dist: Sunamgonj
- Md. Rakib Nazir, Dowkarchar Union Parishad, Upazila: Raipura, Dist: Norshingdhi
- Md. Mizanur Rahman Akond, Fazlupur Union Parishad, Upazila: Fulchari , Dist: Gibandha
- Md. Anwarul Islam , Barishal Union Parishad, Upazila: Palashbari Dist: Gibandha
- Md. Mainul Islam, Meher (South) Union Parishad, Upazila: Shahrasti Dist: Chandpur

Innovation Team, District Administration and e-Service Providers

- Mustakim Billah Faruqui, DC, Mymensingh
- Mrs. Mallika Khatun, ADM, Mymensingh
- Mst. Rasheda Akhter, Asst. Commissioner, Mymensingh
- Md. Mahbub Hasan Sahin, Upazila Nirbahi Officer, Upazila: Trishal, Mymensingh
- Md. Didarul Kadir, Asst. Programmer
- Md. Abul Kalam Azad, Record Keeper, Dist. Collectorate
- Abdul Goni, Computer Operator
- Jamal Uddin, Computer Operator
- Mrs. Rina Tani Saha, Computer Operator, Front Desk
- Mrs. Umme Kulsom, Computer Operator, Front Desk
- Mrs. Helena Khatun, Computer Operator, Front Desk
- Farid Ahmed, DC, Rangpur
- Mustain Billah, ADC (Revenue)
- Md. Shahidul Islam, ADC (Education & ICT), Rangpur
- Mrs. Sonda Paul, Asst. Commissioner & Member, Innovation Team
- Mrs. Roksana Begum, District Education Officer & Member, Innovation Team
- M. Khalilur Rahman, District Primary Education Officer & Member, Innovation Team
- Md. Abdul baten Mollah, Asst. Programmer, DC
- Md. Raju Mia, Office Asst., Front Desk, DC Office, Rangpur
- Md. Shafizzaman, Office Asst., Front Desk, DC Office, Rangpur
- Mr. Dinesh, Office Asst., Front Desk, DC Office, Rangpur

11.3. Annex 3. Research Concept Note

Background

One of the major aspects of the Access to Information (a2i) Project is establishing a network of "reform champions" or a "guiding coalition" in order to make e-government related reforms successful and sustainable. Strategically, a2i works closely with key ministries and directorates including field-level offices to promote service delivery innovation practice under a whole-of-government approach. The Government of Bangladesh mandated the creation of Chief Innovation Officers (CIOs) to lead Innovation Teams representing officers covering all tiers – from the ministry to the sub-district, i.e., Upazila level. Former e-Governance/ICT Focal Points were replaced by Chief Innovation Officer (CIO) as team leaders. Nearly 1,000 Innovation Teams have been formed comprising of 5,000+ officers and they are working to:

- Bring changes for improvement of internal work processes and service delivery; and,
- Diffuse and embed a culture of innovation practice in public administration.

Innovation Teams are mandated to undertake service process simplification, which is aimed at reforming public service delivery processes through the reduction of time, costs and visits (TCV). Innovation Teams are prototyping their ideas for further replication, scaling up and nationwide implementation. It is therefore important to motivate senior level officers so that they allow, encourage, support and monitor Innovation Teams' activities in tandem with national plans of action (such as the ICT Policy, Seventh Five Year Plan, ten-year Perspective Plan, etc). Continuous awareness, sensitization and motivational efforts are the key for successful institutionalization of an entrepreneurial culture across the government. At the same time, it is imperative to explore the necessary adjustments in the relevant policies and official guidelines to enable change-minded public officials escape from the business-as-usual status quo.[55]

In view of the centrality of the work of the Innovation Teams in inculcating a culture of innovation within government, the mid-term evaluation is tasked with the following actions;

- Assess the Projects' approach to the concept of 'Innovation in Service Delivery' and promoting a culture of innovation among the government offices, and;
- Evaluate the Project's contribution in advocating for relevant policies required for innovation.

Accordingly, it is proposed that the evaluation conducts a focused research project that will generate the knowledge necessary to address these tasks.

Method

The unit of analysis is the Government Innovation Officer. The research will seek answers to the following questions:

- To what extent do they understand the role expected of them?
- To what extent have they been able to fulfill the role expected of them?
- To what extent was the training they received adequate to fulfill the role expected of them?
- What additional training or support would they welcome?
- To what extent have they been able to develop ideas for innovative approaches to the delivery of government services?
- To what extent have they been able to implement innovative approaches to the delivery of government services?

---

[55] Innovation Officers and Innovation Teams: Innovation Management by the Government, a2i Project Document.

- To what extent have they experienced resistance to the concept of innovation in government service delivery? Where did it come from? Did they overcome it? How?
- To what extent do they believe the concept of innovation has been instilled in government?
- What else might be done to further instill the concept of innovation in government?

The research will be conducted through multiple methods:

- An online survey to ask quantitative questions with answers on a Likert-type scale of 1-5.
- Two or three focus group discussions facilitated around the qualitative questions.
- Two or three case studies that will illustrate experiences of interest.

Results of the research will be summarized and presented to a workshop with representative innovation officers that will be facilitated towards a consensus on further actions for problem rectification and intensification of innovation towards programmatic goals.

11.4. Annex 4. UDC Field Survey in Mymensingh and Rangpur

By K. M. Mahiuddin

UDC: Uthora UDC and Meduary UDC, Bhaluka UPZ and Dhankhali UDC, Trishal UPZ

UPZ: Bhaluka and Trishal

Date of Establishment: 11/11/2011

Short Background about Survey Area

Mymensingh is a district of Dhaka Division located about 120 km north of Dhaka. This district has also very good transportation system with links to all the districts of the country. The distance from Dhaka to Mymensingh is about 120. Two UDCs from Bhaluka Upazila and one from Trishal Upazila were purposively selected for field survey.

Field survey started on 01/0/2015 at 9.30am with visiting UDC. Entrepreneur first made brief presentation about UDC activities and concluded with some challenges which make him vulnerable as well as fall into frustration. Among the service receivers both male and female were shortly interviewed. A meeting was held with UP chairman, three members and four local peoples. Another meeting was held with the UP Secretary for discussing about the prospect and challenges of UDC. The next visit was to Meduary UDC, about 5 KM away from Uthora UP. Meduary UDC entrepreneur and UP secretary were present at the UDC. The next visit was to Dhanikhali UDC of Trishal Upazila. This UDC is mainly run by a female entrepreneur named Khaleda Begum (25 years old) and her junior partner Moniruzzaman (20years old) assists her. Both of them are student. Khaleda Begum has been working in this UDC since the beginning (November 2011). The visit included meetings with all UP members, Chairman and secretary.

An FGD was conducted with nine UDC entrepreneurs for understanding their present activities, challenges and their future plan. The participants spontaneously discuss about their performances, local demand and also pointed out their challenges.

UDC Office Management

Office and financial management of Uthora UDC is not satisfactory. During the field survey UDC could not show any users' registrar. The entrepreneur informed that all computers (3) had been stolen on January 12, 2015 night and during this incident other equipment along with users' registrar, cash registrar had been thrown out. Since then the UDC do not maintain any users' and cash registrar.

Record keeping, cashbook writing and maintenance visitors' book were found available at Meduary and Dhankhali UDCs. Both UDCs are open from 9 am to 4pm (some time 5pm) and offered both government and commercial services.

Is there any information or list hanging in the notice board about the services and cost?

In front of all the UDCs, information boards were found hanging listing information about government services which are supposed to be provided by the UDC and in separate small flyers highlighting the commercial services.

Meduary and Dhankhali UDCs however provided both government and commercial services the Uthora UDC provided only commercial services include photocopy service, paying electricity bills.

Only Uthora UDC offers training course (6 months/360 hrs) on computer office application for the students who attend long distance 'Certificate in National Skill Standard Basic Course Examination' under Bangladesh Technical Education Board, Dhaka. Uthora UDC has signed a MoU with the education for providing such training course in 2012. After signing the MoU the

entrepreneur informed the UP for their formal approval and he has got permission on 4/09/2012. It is worth mentioning that only two UDCs from Mymensingh have got such opportunity.

Do they have stock registrar (What resources or devices they have)?

Do not have a stock registrar but the UP has a resource book where UDC resources (provided by the government) are recorded.

Do they have cash registrar?

UDC do not have cash registrar; they prepare their daily report and send it to the authority. Meduary and Dhankhali UDCs send their daily online report regularly, but the Uthora UDC does not send daily statement since January 2015. The entrepreneur was asked why he did not send report; he replied that he is facing huge pressure from the UP to leave this UDC, he is now thinking about the sustainability of his centre.

Do they have visitors book?

UP has a visitor book; same book is used for UDC and UP visitors. Only important political and administrative visitors are requested to make their comments and suggestions.

Opening - closing hour and entrepreneurs' presence at UDC?

The UDC usually opens at 9 am and closes about at 5pm.

Reporting (monthly report submission to UP)

No UDC prepares any monthly report for the UP about their services. UDC activities rarely discuss in the UP monthly meetings.

Maintenance of UDC

The entrepreneurs himself/herself maintain UDC. A night guard is assigned for the security of UDC and UP complex only in Dhankhali.

UDC Management Committee

However, the Local Government Division instructed all UPs to set up an UDC management committee headed by the UP chairman but no such committee is formed yet in the survey area. Even UP chairmen and secretaries do not know about this instruction.

Relation with UP and its Impact on Functioning of UDC

Relationship between UDC and UP depends upon the personal contact of UDC entrepreneurs with UP representatives, local dynamics and mostly loyalty to UP chairman and secretary. Meduary and Dhankhali UDCs have a good relationship with their UP and therefore they are working in a free environment while the Uthora UDC faces hard time.

Since January 2015, Uthora UDC is not providing any government services because UP chairman appointed another person and set up alternative UDC for providing government services include birth registration, inheritance certificate and others. Entrepreneur reported that the UP chairman personally dislikes him and trying to get him out. The conflict began in December 2014 when he claimed his due bill about BDT 20000 (photocopy and computer compose bill, fee for birth registration) to the UP and shared his problem with the administration.

Business strategy

Table Annex 4.1 Services provided by the UDC (according to use)		
Uthora UDC	Dhankhali UDC	Meduary UDC
Computer training	Birth Registration	Birth Registration
Electricity bill Pay fee	Photography and Print	Photocopy
Photocopy	Computer compose, Print and Photocopy	Computer compose and Print
Computer compose and print	Email, Internet browsing	Electricity bill Pay fee
Email and Internet	Data entry	-
Online registration	Online registration	-
Exam result	-	-

Table Annex 4.2 What linkage or partnership they have?		
Uthora UDC	Dhankhali UDC	Meduary UDC
Rural electric cooperatives called Palli Bidyuit Samity (PBS); through this partnership UDC provides service about 350 customers and earns BDT 5 from each customer.	Dutch –Bangla Bank (currently is not in operation)	Dutch –Bangla Bank (currently is not in operation)
Dutch–Bangla Bank (currently is not in operation)		

Besides e-services other new services initiated by the entrepreneurs

Only Uthorra UDC offered Computer training course while Photocopy, Photography and printing services are provided by all UDC.

Advertising or communication tools used by the entrepreneurs (distributing leaflets, publishing newsletters, holding open days, meeting with community, personal contact)

After launching the UDC in November 2011, the entrepreneurs had made huge publicity through miking, distributing leaflets and social gathering. Apart from these entrepreneurs publicizes about online overseas job application and university admission application.

Last year entrepreneur of Uthora came to know from computer kiosk (located at Upazila town) that freedom fighters often come to the kiosk from different area for online registration for being enlisted in the gazette as freedom fighters. Then he personally contacted with local freedom fighters' association and requested them to use UDC for online registration.

Similarly entrepreneur of Dhankhali UDC personally visited 17 government primary schools as well as requested Upazila education officer helping her getting some work order from the schools for preparing student list, documents, taking and printing pictures of students for their registration purpose. With the help of education officer she has got this job. Now she visits every student's house with her laptop and camera for photography. This job is helping her extra money as well as publicizing UDC.

Gender Aspects : Female Entrepreneur's Involvement and Capacity

The female Entrepreneur was not present during visits to Uthora and Meduary UDCs. Later women entrepreneur of Uthora UDC was informed and later came to meet me. She is engaged with her teaching job. She was asked how much time she spent for UDC. She answered that UDC is not profitable for her, that's why she preferred to work in the school but she did not clear how much

time she spent for UDC. From observation and discussion with service receivers it is assumed that she does not come to the UDC once a week. In terms of capacity she is not as capable as her male colleague and she is not interested to develop her capacity in this area. She knows basic computing but she does not use computer in the UDC. Actually her name is used as a partner of this UDC only and for this reason she is offered BDT 500 -600 monthly.

While in Meduary UDC, women entrepreneur who is also a student of a local college do not come to the UDC; in fact, her name is used she did not used to sit in the UDC. But the Dhankhali UDC is actually run by female entrepreneur from the very beginning. She said that her two other sisters are school teacher and she also got appointment for primary school but she decided to work with UDC. She argued that UDC is a good place to work independently; people respect her and she can earn money. Currently a student is working with her as male entrepreneur named Moniruzzaman. She ensured that UDC as working place is very nice no body disturb her or make trouble. UP chairman and members reported that lady entrepreneur is working well and they proud with her.

Use of blog and UMAS

Among the three entrepreneurs two use blog but not regularly; once or twice a week they post their comments. Entrepreneur of Meduary UDC does not use bolg.

Entrepreneurs of Meduary and Uthora UDC use UMAS for sending daily report but the entrepreneur of Uthora is not currently sending daily report through UMAS as the UP chairman brought alternative entrepreneur for providing government services and putting pressure to leave the UDC.

Users and their Satisfaction

Both female and male come to the UDC for getting different services especially for birth registration, paying electricity bill. Disabled and senior citizens do not come often. They only come to register their name for Old aged Pension and Disability benefit. There were more women and girls customer than the male. UP members and secretary informed that men are busy with their other job and therefore women and girls come to UDC for birth registration, paying electricity bills, and online registration, checking exam result.

Altogether 16 users were interviewed during the survey. All users reported that they are satisfied with the service of UDC. They were asked how they know about UDC. Most of the respondents (12) reported that they first know from their representatives (UP members) about birth registration process and UDC service while remaining respondents (4) reported that they informed by both UP members and entrepreneurs.

All respondents reported that they are satisfied with service, skill and behavior of the entrepreneurs. They reported that online application submission for job, birth registration and paying electricity bills reduce their time and cost. Even they can be informed about distributing old aged pension, widow allowance and other government services through telephone. They have the cell number of UDC entrepreneurs, so whenever they need they call him for information. They also reported that the entrepreneurs treated them with good manner.

Geographical variation impact

All three UDCs are located at the centre of the union and surrounded by market. The users come from maximum 8 KM distance. Service receivers especially those need birth certificate, heritance certificate, online registration for oversees job have to come to the UDC from longer distance.

Capacity of the entrepreneurs and alternative entrepreneurs

Three main entrepreneurs are graduated from college and received training on basic computing (MS word, Excel, Power Point, Photoshop, Internet browsing). Male entrepreneurs received basic computer training from their locality.

Compared to other male colleagues the female entrepreneur has received more training on computer application and data entry process. Khaleda Begum, entrepreneur of Dhankhali UDC, had received first training on basic computing from a government organization in 2006 and again in 2011 she received 10 days basic computer training from DC office after getting appointment in the UDC. She also attended a six months training programme organized by the Ministry of Social Welfare in their localities in 2012; she received training for trainer from a2i and then trained 30 employees who are working in the Pourasabha (municipality) e-service centre in Mymensingh.

The alternative entrepreneur of Uthora and Meduary UDCs are not capable enough for using computer and providing on line services. One of them is school teacher and another women entrepreneur is a college student. They occasionally come to the UDC. On the other hand, alternative entrepreneur of Dhankhali UDC (male) is also a student but he works in the UDC almost every day and has a good command on computer application.

Number of users/customers

Table Annex 4.3 Services provided by the UDC (according to use)			
	Uthora UDC	Dhanikhola UDC	Meduary UDC
Government services	200-300	150-200	150-200
Commercial services	300-350	200-250	50-100

Table Annex 4.4 Services provided by the UDC		
Uthora UDC	Dhanikhola UDC	Meduary UDC
Computer training	Birth Registration	Birth Registration
Electricity bill Pay fee	Photography and Print	Photocopy
Photocopy	Computer compose, Print and Photocopy	Computer compose and Print
Computer compose and print	Email, Internet browsing	Electricity bill Pay fee
Email and Internet	Data entry (already has worked for economic census, Voter ID and Manpower Bureau)	-
Online registration	Online registration	-
Exam result	-	-

N.B. Uthora UDC every month receives electricity bill from 300-350 users and Meduary UDC provides similar service to 50 to 100 users; Dhankhali UDC does not provide this service because there is a commercial bank very close to the UDC where user can pay electricity bill without any extra charge.

Table Annex 4.5 Monthly Turnover of the UDC			
Year	Uthora UDC	Dhanikhola UDC	Meduary UDC
2011	6000	4000	1500

2012	10000	5000	3000
2013	15000	7000	5000
2014	18 000	10000	5000
2015	11000	15000	5000

Entrepreneurs' satisfaction about monthly turnover, UP support, partnership

Dhankhali UDC entrepreneur is happy with her present income and she is hopeful to get other opportunities to expand her UDC. Especially she is trying to get data entry job if she will get such opportunity then she will appoint another assistant for this purpose.

Meduary UDC entrepreneur is a farmer by profession. He spent his leisure time to the UDC and therefore he is not unhappy with the present income.

Two years back Uthora UDC entrepreneur was satisfied with the UDC income and had a plan to expand its activities but now he is unhappy due to non-cooperation from the UP chairman and secretary. He has a fear about the sustainability of UDC. He suspects that the UP chairman might replace him with another person because chairman does not like him.

How closely the entrepreneurs are involved with the community?

From observation and discussion with customers it is found that all three entrepreneurs are closely linked with the people; people know them well and call them whenever need any information specially exam result, online application and paying electricity bill.

Community Awareness about UDC

Community people already know about the activities of the UDC, especially when online birth registration started.

Resources (ICT and other equipment), Space and location

Among three UDCs, Dhankhali UDC has very small space where entrepreneurs cannot move easily while other two UDCs have larger space. Entrepreneurs argued that they sometime cannot provide more time to the service receivers due to space shortage.

Table Annex 4.6 ICT Equipment Used by the UDC			
Equipment	UDC Uthora	UDC Dhanikhola	UDC Meduary
Desktop Computer	5	1	1
Laptop	-	1	1
Printer	2	3	1
Scanner	1	1	1
Digital Camera	-	1	-
Webcam	1	1	1
Photocopier	1	1	1
Laminating Machine	1	1	1
Multimedia Projector with screen	1	1	1
Mobile Phone	2	3	2
IPS	-	-	-
Solar Panels	1	1	1
Internet Modem	1	1	1
Space	Single room	Small Single Room	Single room

N.B: 1. Figure indicates the number of equipment; **Space**: single room space approximately 10 feet X 10 feet and small single room approximately 7 feet X 6 feet

Internet connectivity and Power supply

All entrepreneurs use Grameen Phone (2G) modem for Internet connectivity; they reported that slow Internet connectivity and repeated power cut embarrass them during service providing. Some time they cannot deliver urgent services due to slow network and power cut.

Paying utility charges

However, there is a government notification that the UDC will pay their utility charges but they are not paying their utility charges; UP pay electricity bill and in return they do not pay any bill for photocopy, compose and email-Internet use.

Cooperation from the UP

In the survey area two UDCs were found who received full cooperation from the UP regarding security, providing logistics support and publicizing UDC activities. But Uthora UDC is facing trouble in this regard. As mentioned earlier the Uthora UP chairman without discussing with his fellow colleagues he appointed another person as alternative entrepreneur and getting indirect pressure main entrepreneur to vacate the UDC.

Role of UNO in expediting UDC

From discussion with UDC entrepreneurs and UNO (Trishal Upazila) it is assumed that UNO can play important role for improving the services of UDC. Almost every month UNO calls UDC entrepreneurs at his office for sharing their problems and opportunities. He encourages the entrepreneurs and sometimes helps them solving software related problems personally. Present UNO has received his masters in computer science from USA. Uthora UDC entrepreneur do not get such support from his upazila; no such meetings held in Bhaluka Upazila, reported the entrepreneur.

Future Plan

Table Annex 4.6. Future Plans		
Uthora UDC	Dhanikhola UDC	Meduary UDC
Expansion of Training Centre	Create a computer training centre	Create a computer training centre
Make some new links with commercial organization like *Bikash*, courier service	Getting data entry job and create a separate data entry centre	-

Challenges

Table Annex 4.6 Challenges			
Challenges	UDC Uthora	UDC Dhanikhola	UDC Meduary
Slow Internet	√	√	√
Power Cut	√	√	√
Non-cooperation from UP	√	X	X
Space Shortage	√	√	√

FGD with UDC Entrepreneurs

Venue: Conference Room, DC office Mymensingh

Date: 02 June, 2015

Experiences and Reality

- UDCs are dependent on government services rather than commercial services because several computer/Internet kiosks are operated by local businessmen nearby the UDC.
- Relationship between UDC and UP is not clearly mentioned; however, government issued a notice clarifying the role of UDC and UP, but nobody has seen this notice.
- The government services provided by the UDC are very limited and not so much profitable. They prepare and print birth and other certificate but do not get money from the UP; they only receive BDT 20 for laminating the certificate only.
- UDC has to do some job for the UP without any payment.
- The beneficiaries are not enough aware of the services available for them at the UDC.
- Use of Skype and Internet browsing became reduced due to use of smartphone.
- Surprisingly, all entrepreneurs reported that the most of the service receivers are women.

Achievement

- Can provide services to the local people;
- People get the opportunity to avail services with minimum cost and without any hassle
- People know UDC entrepreneur personally and respect them
- Have some opportunity to earn money living in a local area
- Have a personal identity and
- Computer operating capacity has been improved

Challenges

Despite other problems like power cut, slow Internet connectivity the major challenge of the UDC is to maintain a good relationship with the UP chairman and the secretary. They always make them under pressure and some UP chairman also demand share of profit.

What is important for making UDC Sustainable?

Recommendations from the Entrepreneurs

- Government should adopt UDC entrepreneurs with UP as a permanent staff
- Grant loan without interest or minimum interest so that they can expand their business
- Capacity building training should be provided
- UNO and DC should intervene where UP chairman does not cooperate with the UDC

Table Annex 4.7 Basic Facts of the UDC					
	Main Entrepreneur	No of Users	Monthly Return	Partnership	2nd Entrepreneur
Kachina UDC	Male	250	6000	None	Female- NR
Rangamatia UDC	Male	150-200	8000	DB, Bkash, Robi, Airtel	Female- NR
Mouha UDC	Male	400-500	1500	None	Female- NR
Boailor UDC	Male	200-300	5000	None	Female- NR
Deoukula UDC, Fulbaria	male	200	5000-7000	GP, Robi and Airtel	Female- NR
Mathbaria UDC, Trishal UPZ	Male	100-150	3000	Rural	Female- NR

				Electrification Board	
Sahanati UDC, Bhaluka UPZ	Male	400-450	6000	none	Female- NR
Uthora UDC, Bhaluka	Male	200-450	11000	Rural Electrification Board	Female- NR
Dhanikhola UDC	Female	200-350	15000	None	Male-R

Table Annex 4.8. Services Provided by the UDC

Services	UDC-1	UDC-2	UDC-3	UDC-4	UDC-5	UDC-6	UDC-7	UDC-8	UDC-9
Birth Registration and other government certificate	√	X	√	√	√	√	√	√	√
Computer training	X	√	√	X	√	X	X	X	√
Electricity bill Pay fee	X	√	X	X	X	X	X	X	X
Photocopy	√	√	√	√	√	√	√	√	√
Photography	√	√	√	√	√	√	√	√	√
Computer compose and print	√	√	√	√	√	√	√	√	√
E-mail and internet browsing	√	√	√	√	√	√	√	√	√
Data entry	√	X	X	X	X	X	X	X	X
Online registration (job/education)	√	√	√	√	√	√	√	√	√
Exam result	√	√	√	√	√	√	√	√	√
Top-up	X	X	X	X	X	X	√	X	√
Selling Sim cards	X	X	X	X	X	X	√	X	√

NB: UDC-1 Dhankhola,   UDC-2 Uthora   UDC-3 Kachina
         UDC-4 Sahanati   UDC-5 Mothbaria   UDC-6 Mouha
         UDC-7 Rangamatia   UDC-8 Boailor   UDC -9 Deoukula

Table Annex 4.9 Blog Use

Use of Blog	UDC-1	UDC-2	UDC-3	UDC-4	UDC-5	UDC-6	UDC-7	UDC-8	UDC-9
Everyday	-	-					√	√	
Almost every day	√	√							√
Once a week			√						
Twice a week					√				
Occasionally									
Not use				√		√			
Writing Post									
Everyday									
Almost every day									
Once a week							√	√	
Twice a week		√							
Occasionally	√		√		√				√
Not Post				√		√			

N.B. Two entrepreneurs do not have ID for Blog.

Table Annex 4.10. List of FGD Participants		
Name	Address	Phone Number
Md. Fazlul Hoque	Kachina UDC, Bhaluka UPZ	01715066696
Golam Mahmud Farid	Sahanati UDC, Bhaluka UPZ	01736851706
Khalida BEgum	Dhankhali UDC, Trishal UPZ	01723536079
Kamrul Islam	Mathbaria UDC, Trishal UPZ	01721573715
Sajjatul Islam	Mouha UDC	01744477073
Ashraful Islam Chowdhury	Rangamatia UDC, Fulbaria UPZ	01711190911
Zuel Mia	Boailor UDC	01733161594
Md. Nasirul Islam	Deokhlu UDC, Fulbaria	01718725637
Md. Golam Bari	Uthora UDC, Bhaluka	01918871075

Field Survey Findings: UDC Rangpur

Study Area

Rangpur is a district in Northern Bangladesh and a part of Rangpur Division. The distance from Dhaka to Rangpur is about 316 KM. Rangpur used to be the headquarter of Division. According to government statistics Rangpur division has the highest poverty rate (42%) despite a lot of natural resources. Rangpur Division was formed on 25 January 2010 to accelerate the development of the region. Like other cities of the country several broadband Internet connection providers and 3G mobile network (from May 2014) are available for users mainly in Rangpur city but the UDCs truly depend upon 2G network.

Two UDCs from Rangpur sadar and one from Gongachora Upazila were purposively selected for field survey. Field survey started on 7 June 2015. The first day was spent for data collection from the UDCs through checklist. During the survey service receivers and providers both were

interviewed. Some service receivers were instantly chosen from the spot to know their perception about UDC. UP chairmen, members and secretaries were also respondents. The next day survey started 9.0 am from District e-Service Centre and then ADC (revenue) ADC (education and ICT), DC and other officials were interviewed.

Survey Area: Survey covered three UDC namely Horidevpur UDC, Sadyapushkarini UDC and Betgari UDC. First two UDCs were selected from of Sadar UPZ and remaining Betgari UDC from Gangachara Upazila. All of these UDCs were set up June 2010.

UDC Office Management

Three UDCs have their cashbook, stock registrar and visitors' book. Information board with a list of services and cost of each item were found hanging inside the UDC office. The UDC usually opens at 9.30 am and closes about at 4.30pm. Sometimes they work until 8/9pm if they did not complete their work in day time due to power cut or network connectivity problem.

All three UDCs send their daily activity report through UMAS programme. Regarding the simplicity of the UMAS software all respondents consider it easy to use. Besides online reporting they also compile all daily reports at the end of month. The UP chairman first check and sign the monthly report and thereafter reports are submitted to the UNO office.

The entrepreneurs himself/herself maintain UDC. They are seen capable for solving both software and hardware problem. If they fail to solve the problem then they go to the district town for repairing/solving hardware problem.

UDC Management Committee

Respondents especially UP chairman, secretary and entrepreneurs were asked about UDC management committee. They replied that they do not know about this instruction. One committee formed in Horidebpur Union but it is not functioning.

Relation with UP and its Impact on Functioning of UDC

Entrepreneurs, UP chairmen and secretaries were asked about the relationship between UP and UDC and its impact on service delivery. They answered that they did not face any pressure or bossing from the UP side. They have a good relationship with UP chairmen, members and secretaries. UP chairman and secretaries do not put any pressure. All entrepreneurs of this survey also reported that they attend UP monthly meeting for writing resolution and provide information.

Business strategy

Table Annex 4.11 Services provided by the UDC (according to use)		
Horidevpur UDC	Betgari UDC	Sadyapushkarini UDC
Birth death Registration,	Computer training	Birth Registration
Photography and Print	Photography and Print	Photography and Print
Computer compose and print	Online registration and application	Photocopy
Online registration and application	Photocopy	Data entry
Photocopy	Passport port application	Computer compose and Print
Computer training	Computer compose and Print	Passport port application
inheritance certificate, citizen, marital status certificate	inheritance certificate, citizen, marital status certificate	Money transfer (Bcash, DB)
Passport port application	Email, Internet browsing	Online registration
Email and Internet	Birth Registration	Exam result
Online registration for job in home and abroad, university admission.	Money transfer (bcash)	Agriculture Information and advice
Exam result	Online registration in home and abroad, university admission.	Renting multimedia
Renting multimedia	Electricity bill pay	inheritance certificate, citizen, marital status certificate
Skype	Documentary presentation in the schools and public places	Skype
ELRS (per day 2-3 applications)	Renting multimedia	
-	Mobile phone servicing	
-	Skype	
-	ELRS (currently stopped)	ELRS(currently stopped)

Table Annex 4.12 What linkage or partnership they have?			
	Betgari UDC	Horidevpur UDC	Sadyapushkarini UDC
Rural electric cooperatives called Palli Bidyuit Samity (PBS)	√	√	√
Bkash for money transfer	√	√	√
Trust Bank Passport for Passport	-	-	√
Q cash for Passport	√	-	√
Eastern Bank for Passport	√	-	√
Dutch–Bangla Bank	√	√	√

Besides e-services other new services initiated by the entrepreneurs

Besides e-services, all UDCs offer training courses for students and young people who intend to join a job; they were also appointed for data entry for BBS. Another source of income is multimedia projector renting.

Advertising or communication tools used by the entrepreneurs (distributing leaflets, publishing newsletters, holding open days, meeting with community, personal contact)

UDC entrepreneur made campaign for making awareness about UDC and its services. They went door to door, distributed leaflet, conduct Uthan (yard) and even go to the mosque for making awareness among the people. Apart from these entrepreneurs publicize their activities through public gathering and miking.

The UDCs offer discount price for online job application, application for admission to the higher educational institute. Cost for photography is also lower in the UDC compared to private shop. Surprisingly Sadyapushkarini UDC installed free wifi zone in the UP complex area. Their argument is that most of the young peoples are using smartphone; if wifi Internet connectivity is provided young people will be benefited and publicizing UDC activities.

Gender Aspects: Female Entrepreneur's Involvement and Capacity

During the survey female entrepreneurs were found in the UDCs. Among the 3 UDC one is mainly run by a female entrepreneur while other two UDCs are by male entrepreneurs from the beginning and they trained their female colleagues. Surprisingly all female entrepreneurs were found active and have interest to work in the UDC.

From observation and discussion with service receivers it is assumed that women entrepreneurs are well habituated with the UDC activities. She used to come and open the UDC every day about at 10 am and closes about 4.00 or 4.30 pm depends upon the work load, Internet connectivity and power. From the beginning she has been working with this UDC. She

Use of blog

Half of the survey respondents reported that they use blog and post their comments. Among them 2 respondents use blog almost every day and another respondent said that he use blog once or twice a week. The other respondents do not use blog because they do not blog ID yet.

Users and their Satisfaction

To know the users' perception about UDC services 9 women and 12 men were interviewed. The respondents are happy with behavior and skill of the entrepreneurs but they are not happy when they have to wait for several hours for a birth certificate or on line registration for job or examination. Entrepreneurs argue that they are helpless when server became down for several hours or even for a day.

Different types of users come to the UDC but no disabled or ethnic minority people were observed coming to the UDC. Sometime senior citizens come to the UDC for collecting birth certificate or photography for old aged pension. Most of the service receivers had to travel about half an hour to reach the UDC while small group travelled more than an hour on foot.

Among the 21 respondents 16 reported that normally they had to wait in a queue for submission of application for birth registration or online service 10 minutes to 30 minutes depends upon Internet connectivity and power supply. Solar panel that they have got cannot use for printer or desktop PC; it is only used for charging laptop or light. Among the three UDCs two have got generators from a national NGO while remaining one UDC depends upon the electricity.

All respondents (users) reported that they are satisfied with the service of UDC. They were asked how they know about UDC. Most of the respondents (17) reported that they first know from their representatives (UP members) about birth registration process and UDC service while remaining respondents (4) reported that they first informed by both UP members and entrepreneurs.

Geographical variation impact

All three UDCs are located at the centre of the union and surrounded by market and school. The users come from maximum 10 KM distance for government services, computer training and transfer money. People do not come to the UDC for commercial service like photo copy, Internet browsing, photography from longer distance because computer shop or Internet café are now available at door step.

Sustainability

Capacity of the entrepreneurs

Respondents were asked whether they received general computer training or they learnt personally. All main entrepreneurs (03) claimed that they had learnt general computer applications from private training centres before working with UDC. Remaining entrepreneurs reported that they received training on general computer application from the main entrepreneurs and improve their capacity.

Table Annex 4.12. Training Received by the entrepreneurs		
Training	Basic Computer Application	Online registration, data entry and others
Self-Learning	-	-
Peer learning	03	03
Training from a2i	03	03

Three main entrepreneurs had received 10 days training in 2010 from a2i on MS word, Excel, Power Point, Photoshop, Internet browsing and birth registration system. They again received training from the DC office on aforesaid programme. Alternative entrepreneurs learnt from the main entrepreneurs. During field survey it was assessed whether the entrepreneurs had the knowledge and skill to train their alternative entrepreneurs. It is observed that the main entrepreneurs are quite capable to train their colleagues. Respondents were also asked if they need more training on computer application and data entry process. Main entrepreneurs answered that they need training on hardware servicing while alternative entrepreneurs need training basic commuter application and Photoshop.

Number of users/customers (monthly average)

Table Annex 4.13. Number of users/customers (monthly average)			
	Betgari UDC	Horidevpur UDC	Sadyapushkarini UDC
Male	479	530	448
Female	235	450	313

N.B. Based on information of 2014

Table Annex 4.14. Average Monthly Turnover of the UDC			
Year	Betgari UDC	Horidevpur UDC	Sadyapushkarini UDC
2011	5000	8500	7000
2012	12000	7000	23000
2013	15000	14500	30000
2014	16000	24452	60000
2015	14000	21500	57000

N.B. Horidevpur UDC is mainly operated by a women entrepreneur.

Entrepreneurs' satisfaction about monthly turnover, UP support, partnership

Entrepreneurs are happy with their present turnover. Because their income gradually getting higher. Respondents were asked about their future plan. All answered that they need bank loan for opening a training centre as well as data entry shop.

How closely the entrepreneurs are involved with the community?

Entrepreneurs are well known in their community as *Uddokta* (in English Entrepreneurs). They distributed their cell phone number and make them available to response public need any time. Sometime service receiver did not come to the UDC; they call the entrepreneurs for necessary information and entrepreneurs answered their questions.

Community Awareness about UDC

Community people already know about the activities of the UDC as well as entrepreneur. For following reasons people know the UDC:

- Birth registration, death certificate and other certificates are prepared by the UDC;
- Government services and forms are available at the UDC;
- Door to door campaigning.

Resources (ICT and other equipment), Space and location

Two UDCs have two rooms at the UP complex, one for e-services and another for computer training while Sadyapushkarini UDC has one room in the complex. Due to space shortage in the complex he opened a shop in the market (very close to the UDC) for providing some commercial services.

Table Annex 4.14 ICT Equipment Used by the UDC			
Equipment	Sadyapushkarini UDC	Horidevpur UDC	Betgari UDC
Desktop Computer	07	05	05
Laptop	02	02	01
Printer	03	03	03
Scanner	01	01	01
Digital Camera	01	01	01
Video camera	01	-	-
Webcam	01	01	01
Photocopier	01	01	01
Laminating Machine	01	01	01

Multimedia Projector with screen	02	01	01
Mobile Phone	01	01	01
IPS	01	-	01
Solar Panels	01	01	01
generator	01	01	-
Internet Modem	03	01	01
Space	Single room	2 Rooms	2 rooms

N.B: Figures indicate the number of equipment; Space: single room space approximately 10 feet X 10 feet.

Internet connectivity and Power supply

All entrepreneurs use Grameen Phone (2G) modem for Internet connectivity while the entrepreneur of Sadyapushkarini UDC have several modems. Due to slow Internet connectivity and repeated Power cut they cannot provide services properly.

Paying utility charges

However, there is a government notification that the UDC will pay their utility charges but they are not paying their utility charges; UP pay electricity bill and in return they do not pay any bill for photocopy, compose and email-Internet use.

Cooperation from the UP

In the survey area all three UDCs have a good relation with the UP chairmen and secretaries. UP provides them necessary logistic support and publicize UDC activities on the other hand UDCs help the UP secretary.

Role of UNO in expediting UDC

- Almost every month UNO call the entrepreneurs at his/her office to know their problems as well as scope of new service;
- UNO encourages the entrepreneurs for expanding their services and follow up their activities;
- UNO also calls the UP chairmen separately and instructs them for providing necessary support to UDC.

Future Plan

Table Annex 4.14. Future Plans		
Sadyapushkarini UDC	Horidevpur UDC	Betgari UDC
Extended Training Centre	Set up a new computer training centre	Extend the computer training centre
Continue partnership and search new partner	-	Continue exist partnership and search new partner

Challenges

Table Annex 4.15. Challenges			
Challenges	Betgari UDC	Horidevpur UDC	Sadyapushkarini UDC
Slow Internet	√	√	√
Power Cut	√	√	√
Non-cooperation from UP	X	X	X
Space Shortage	X	X	X

Table Annex 4.16. Sadyapushkarini UDC, Rongpur Sadar					
2014	Male	Female	Institution	Total	Income (BDT)
Jan	80	100	5	185	71581
Feb	90	73	10	173	20075
March	200	108	2	310	54221
April	210	100	10	320	50920
May	300	300	8	608	90879
June	600	600	14	1214	65174
July	700	721	21	1442	96682
August	600	639	39	1278	80491
September	560	420	21	1001	68492
October	520	252	30	802	65552
November	920	600	35	1555	72466
December	600	600	14	1214	56502
Total	5380	4513	204	10097	721454

| Table Annex 4.17. Sadyapushkarini UDC, Rongpur Sadar					
2011	Male	Female	Institution	Total	Income (BDT)
Jan	20	20	1	41	860
Feb	10	60	2	72	1780
March	10	6	2	18	500
April	6	10	2	18	500
May	20	30	2	52	900
June	20	25	4	49	1500
July	20	25	1	46	2100
August	50	40	10	100	9220
September	25	20	2	47	600
October	30	20	2	52	9000
November	98	85	35	218	36234
December	105	97	29	231	17156
Total	414	438	92	944	80350

Data-2014 (Person)
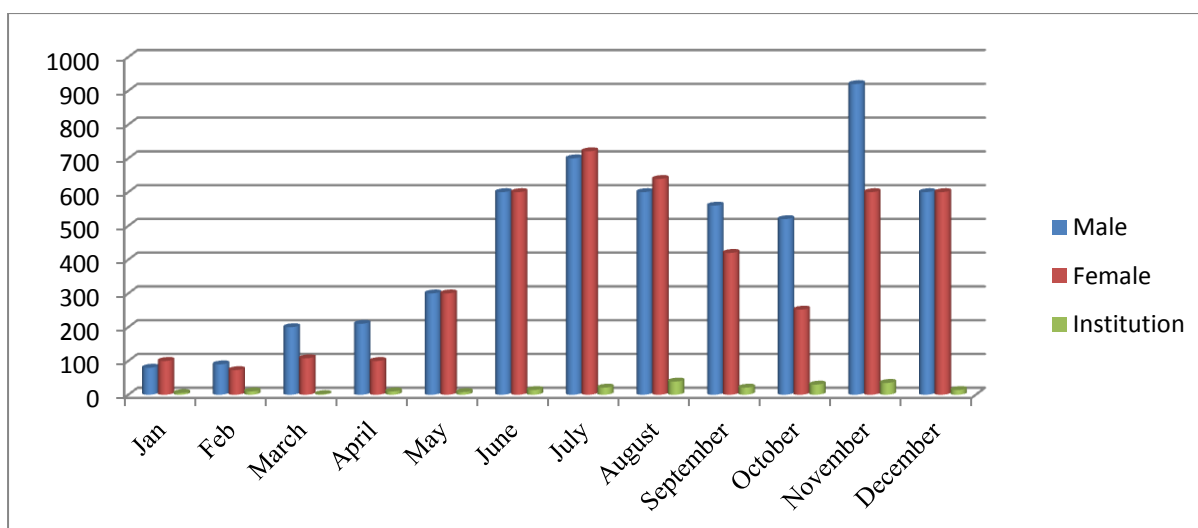
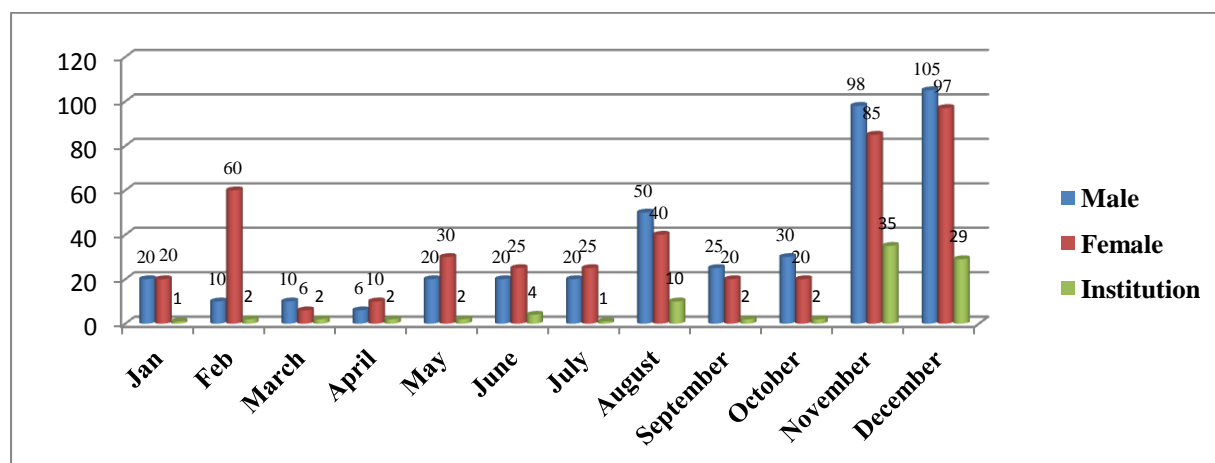**Figure Annex 4. 1**
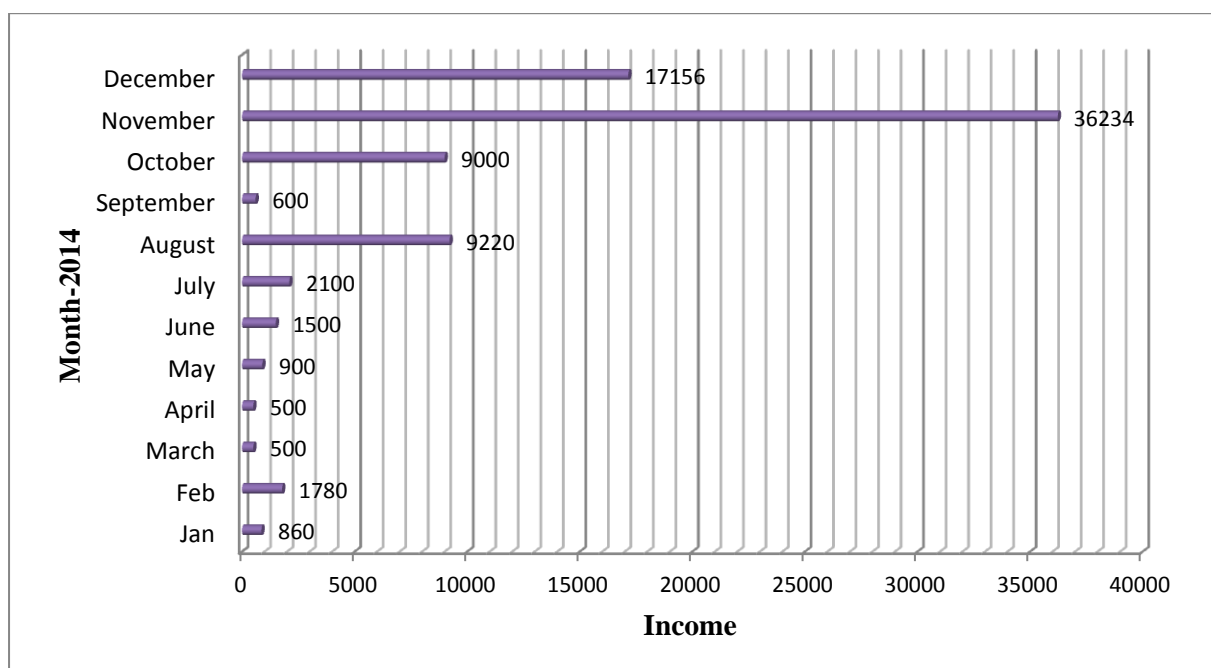
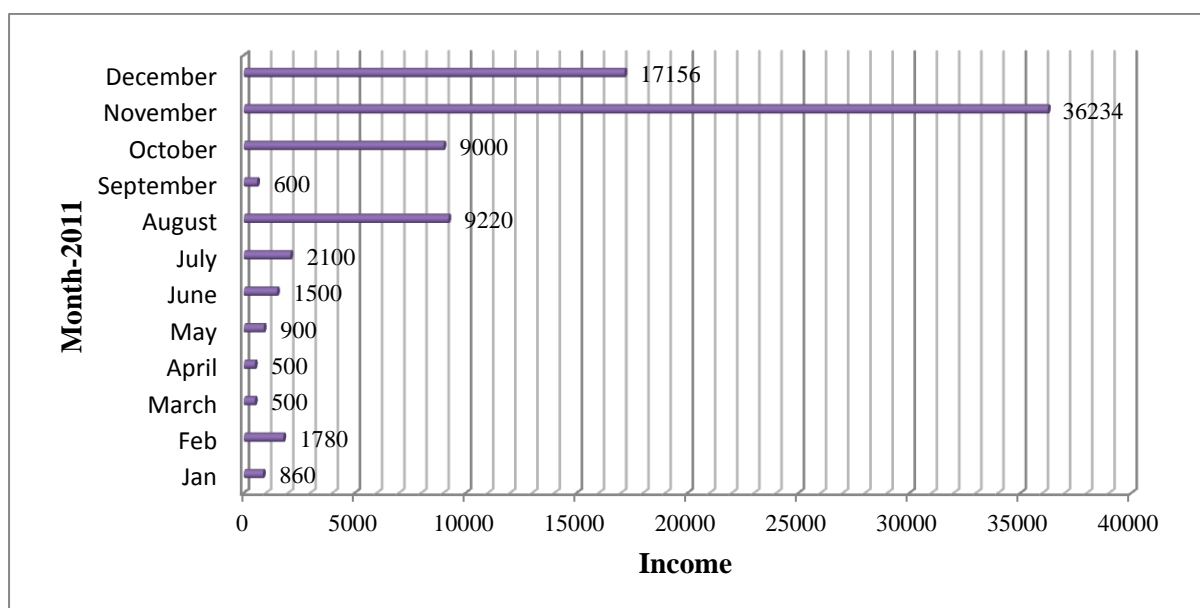

Figure Annex 4. 2

Figure Annex 4. 3

Figure Annex 4. 4

Individual (Male, Female and Institution) Comparisons:

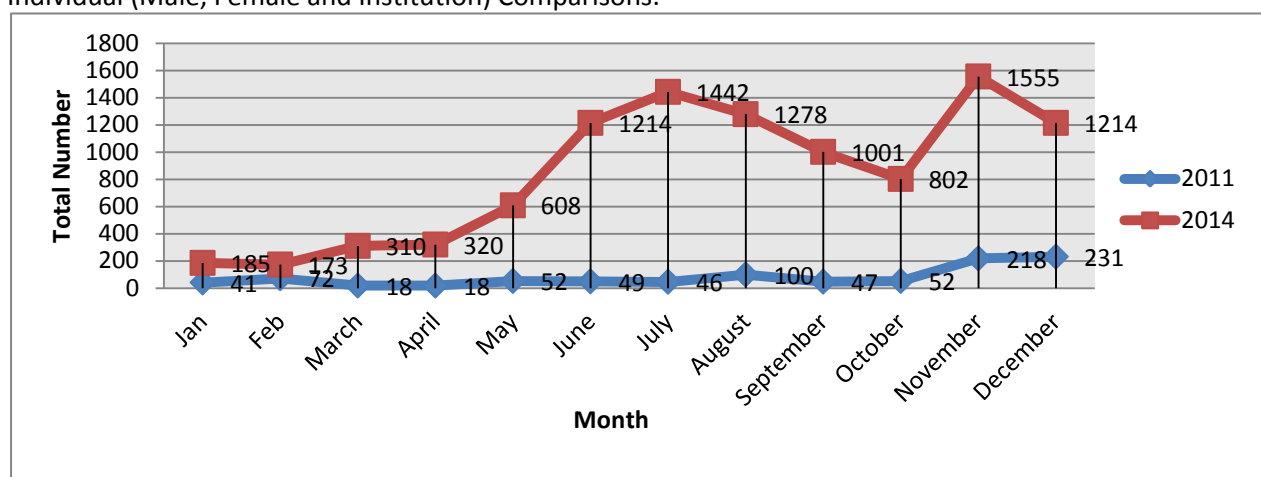**Figure Annex 4. 5**
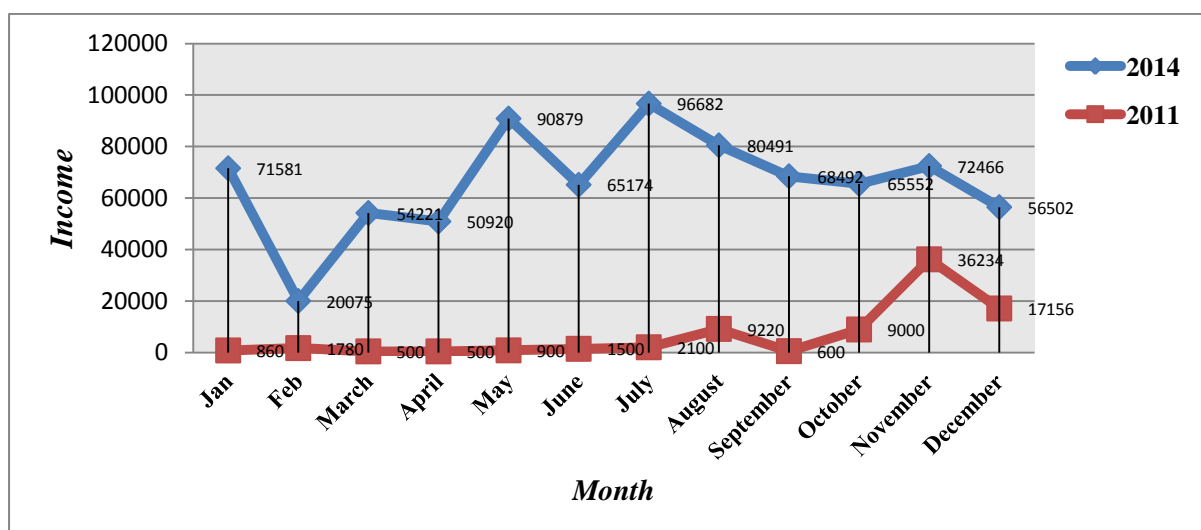
Income (Male, Female and Institution) Comparisons:

Figure Annex 4. 6

Field Survey Findings: DISTRICT E-SERVICE CENTRES

District e-Service Centres

Survey Area: Mymensingh and Rongpur Districts

District e-Service Centres have been established in every district of the country as one-stop government service delivery points to prompt the service delivery. All 64 DC offices also host the e-Filing system.

Location and Working Hours

District e-Service Centres of Rongpur is located at the front of DC office while in Mymensingh District e-Service Centres is set up at the corner of DC office. Rongpur District e-Service Centres is operated from a bigger room compared to Mymensingh District e-Service Centres.

District e-Service Centres starts its activity about 9.30 am and continued until 5.00 pm. Citizens submit their applications at the morning time from 9.30 am to 12 pm and copies of land records are delivered from 2.00pm to 3.00 pm.

Manpower and Equipment

Altogether five employees are working at Rongpur District e-Service Centres while in Mymensingh 6 employees (3rd and 4th Class) are deployed to the District e-Service Centres for receiving applications and delivery services mainly land records. Both in Rongpur and Mymensingh, two desktop computers, two receipt printers and a scanner are using for receiving application and service delivery.

Applications Types and procedure

District e-Service Centres receives all types of official letters, citizen's applications and request/demand for land records copy. People can submit their application personally at the service centre or they can submit their applications online from UDC or even from their home. After submission they receive a receipt letter from the service point. Once the service is ready applicants are notified through SMS. The applicant can receive the service in person and there is also a provision for receiving land records copy by post.

Impact of District e-Service Centres in Public Service Delivery

Available data shows (Results Report 2014, a2i) that the District e-Service Centres are delivering 40,000 land records on average per month. Besides, more than 0.8 million citizens' applications have been addressed online since 2011. Study also shows that the District e-Service Centres are now able to deliver services 40% more efficiently.

It takes about 2-5 days for processing copy of land records while it used to take 4-12 weeks in traditional process. It is observed that Front Desk takes 50 -80 seconds for receiving citizen's application and delivery service. It is worth mentioning that ELRS software has been using in Rongpur District e-Service Centres since May 2014 while Mymensingh is using e-service system.

Table Annex 4.18. Rongpur District e-Service Centres Service (May 2014 - 4 June 2015)		
	Application Received	Service Delivered
In person	3404	2483
UDC	577	254
Web/post	256	0
Total	4237	2737

N.B. Remaining 1500 citizens' applications are under process.

A quick survey was conducted in Mymensingh and Rongpur to know the satisfaction of the service receivers about the performance of District e-Service Centres. A total 30 citizens and 10 UDC entrepreneurs were selected for this quick survey. Survey result is shown in the table below:

Table Annex 4.19. Satisfaction of the Service Receivers		
Citizen	Number	Per cent
Yes	23	76.67%
No	07	23.33%
UDC		
Yes	4	40%
No	6	60%

The above table shows that 23.33% citizens and 60% entrepreneurs are not satisfied with the service of District e-Service Centres but 76.67% citizens and 40% entrepreneurs are happy with the service. Insufficient manpower, short space of Front Desk and does not treat service receiver with good manner are the main causes of dissatisfaction of the citizens while the entrepreneurs complained that they do not get the service in time. Majority of the respondents are happy with the District e-Service Centres service because they got service in time, the cost of service was affordable, easy to submit application and information was provided them accurately.

Impact and Challenges of using ELRS: FGD Findings

Two FGD were conducted during the field survey in Mymensingh and Rongpur with record room and District e-Service Centres front desk employees. Assistant programmers were also present during the FGD. Finds are given below:

Impact

- Save time both for service receivers and service providers;
- Service receivers are getting service without giving any bribe;
- Reduced work load of the service providers and reduced visit of the services receivers
- Monitoring becomes easier
- DC or any other officer can oversee the record room service
- Officer in charge of record room prepare and present monthly activity report to the monthly staff meeting headed by the DC

Challenges

- Short space of Front desk
- Default to understand handwriting of the old records
- Power cut and Internet connectivity
- Record room needs to be air conditioned for accelerating service delivery
- Insufficient computers and skilled manpower
- Newly appointed employees need capacity building training for data entry

11.5. Annex 5. Focus Group Discussion with Union Parishad Secretaries

By K. M.Mahiuddin

Venue: National Institute Local Government (NILG)

Date: 13/06/2015, Time: 3.30-5.00 pm

Number of Respondents: 25

A focus group discussion was held on 13 June 2015 from 3.30pm to 5.00pm at National Institute Local Government (NILG) in Dhaka with 25 UP secretaries. Participants came to NILG for attending a foundation training course. A research officer from NILG helped moderating the FGD as well as recording the discussion. Necessary information was collected in two ways: group discussion and written response.

Main objective of this FGD was to understand the thoughts of the UP secretaries about UDC activities and its future. In doing so following issues were thrown out for discussion: the impact of UDCs on the community and on the local government operations; what makes the UDC successful and how can they be made better? The respondents were also requested to identify the barriers to improvement of UDC. Finally FGD was concluded with the discussion of UDC future.

The session started with a brief introduction about a2i and objectives of FGD. After introductory presentation respondents were requested to talk about their experience with the UDC. Unfortunately they started to speak complaining UDC entrepreneurs. Justifying the comments of other colleagues Md. Sohel Mia Secretary of Sokondi UP of Narsingdi District argues that the impact of UDCs on the community and on the local government operations is not satisfactory. There is a conflict between the UP and UDC. Because UP cannot control the UDC, entrepreneurs are busy with their business they do not care UP secretary or even chairman in the name of a2i. Supporting his arguments Salma Akter of Boyra UP (Mymensingh) expressed her observation. She said that appointment procedure was not transparent, entrepreneurs were mostly appointed on the basis of personal choice and political consideration and therefore they did not care UP secretary. Similarly other respondents also expressed their deep dissatisfaction about the UDC entrepreneurs and they also argued that their opinion must be considered while some one going to examine the impact of UDC on community or UP. At the end of this part of discussion all of them agreed that the UDC can contribute to their community as well as to the UP as a local hub for information if government provided some mechanism to monitor the activities of the UDC. At this point, moderator informed them about an official notice which defines the role and the relationship between UDC and UP as well as instructs the UP to form an UDC Management Committee. Unfortunately none of them know about this official order.

The respondents were asked about the services that the UDC provided to the citizens. In response to this question most of the respondents answered that on line birth registration and applications, computer compose, photography and photocopy are the main services that the UDC provided but they could provide some additional services on the basis of peoples' need. They argued that the entrepreneurs need to take more action for advertising about UDC activities. Some of the respondents (seven respondents) complained that the entrepreneurs do not maintain the office time properly. The respondents were asked whether they thought the UP needs to take action to ensure UDC service. All respondents demanded that the UDC must submit a monthly report to the UP and this report should be discussed in the monthly meeting.

The respondents were very much critical about the performance of women entrepreneurs. They complained that most of the women entrepreneurs are not really active; their names have been using to comply with government requirement. Low income, get marriage and lack of capacity are the main causes of drop out of women entrepreneurs from the UDC.

FGD sought respondents' views about the factors which may make the UDC successful. Respondents located the factors and provided a number of useful suggestions for improving the functioning of UDC. Ensuring transparency and accountability of the UDC activities, high-speed Internet connectivity, uninterrupted power supply, logistic supports, proper selection and capacity building of the entrepreneurs' are the major factors for making the UDC successful. Apart from these factors one respondent named Hemonto Biswas from Sunamgonj district suggested to appoint one entrepreneur rather than two while three respondents made emphasis on the cooperation of UP chairmen and one respondent (Sawpon Talukder) suggested that entrepreneur must follow the official time for opening and closing the UDC as well as he or she cannot absent without informing the UP.

The respondents were asked to talk about their impression about UDC future. In response to this question surprisingly all respondents said that the UDCs still dependent on earning money from government services mainly from on line registration and application. They should include new services on local needs and demand and government should ensure UP's control over UDC.

Personal Observation

FGD took about two and half an hour. During the discussion it was observed that the respondents were very much critical about behaviour and performance of UDC entrepreneurs. From their discussion it was appeared that there is a physiological conflict between the entrepreneurs and the UP secretaries. The respondents believe that the entrepreneurs neither properly behave with them nor cooperating them. They expect that the entrepreneurs would be subordinate to them and they will contribute to the fulfilment of their official work.

Expressions and impression of the UP secretaries about the UDC are summarized in the following tables:

Table Annex 5.1. What barriers to improvement of UDCs?		
Main Barriers	**Multiple Responses**	
	Number	**Percent**
Inadequate logistics in the UDC	18	72%
Repeated Power Cut	18	72%
Lack of skilled and trained entrepreneurs	17	68%
Internet Connectivity problem	16	64%
Entrepreneur are somehow nearest or relatives of the UP Chairman	10	40%
Lack of practical and technical training	10	40%
Don't have Entrepreneur Recruitment Policy	07	28%
Less transparency and accountability	07	28%
Lack of awareness of the citizen about UDC activities	05	20%
Lack of opportunities for the entrepreneurs	05	20%
Lack of monitoring from the UP	04	16%
Entrepreneur are somehow nearest or relatives of the UP chairman	03	12%
Less coordination and cooperation between the entrepreneurs and the local representatives	03	12%
%Instability for the entrepreneur	02	8%
Lack of sufficient advertisement	01	4%
Total Response	**126**	
Number of Respondents (N=25) N.B: Percentages are based on the Respondents not Response		

Table Annex 5.2. Possible remedial measures for making UDC sustainable		
Remedial Measures	**Responses**	
	Number	**Percent**
Proper and impartial recruitment policy	23	92%
Providing sufficient logistics for UDC activities	16	64%
Entrepreneur must be accountable to the UP	10	40%
Capacity building training for the entrepreneurs	10	40%
Peoples' awareness building through sufficient advertisement	09	36%
Ensuring high speed Internet connectivity	08	32%
Providing advanced technological tools	07	28%
An accountant should be recruited and the UDC income must be kept in govt. treasury	06	24%
Adequate electricity supply	05	20%
UDC management committee should be formed and active for monitoring	05	20%
Increasing income of UDC	03	12%
UDC should be open on time	03	12%
Service should be provided as per citizen's need	02	8%
Total Response	**107**	
Number of Respondents (N=25) N.B: Percentages are based on the Respondents not Response		

Table Annex 5.3. How can UDCs be made better?		
Making UDC activities better	**Responses**	
	Number	**Percent**
Ensuring transparency and accountability of the UDC activities	19	76%
Alternative and women entrepreneur should attend advanced computer training	18	72%
Entrepreneur should be recruited based on merit	17	68%
Coordination between UP and UDC should be confirmed	09	36%
Making aware of the people about UDC activities	08	32%
UDC activities should be monitored properly	04	16%
UDC entrepreneurs should be treated as the UP Staff	04	16%
Service charge should be followed by the UDC	03	12%
Taking measures for all time electricity and high speed Internet connectivity	03	12%
Establishment of UDC should be the in the suitable place for the people	03	12%
Need to explore more profitable scheme	02	8%
Total Response	**90**	
Number of Respondents (N=25) N.B: Percentages are based on the Respondents not Response		

Table Annex 5.4. Impact of UDCs on the local government operations		
Impact of UDCs	**Frequency**	**Percent**
1-10%	02	8.0 %
10-20%	05	20.0 %
20-30%	06	24.0 %
30-40%	02	8.0 %
40-50%	05	20.0 %
50-60%	01	4.0 %
60-70%	02	8.0 %
70-80%	01	4.0 %
90-100%	01	4.0 %
Total	**25**	**100.0** %

Case Study: Khaleda Akhter, UDC Entrepreneur, Dhanikhola UP, Upazila: Trishal, District Mymensingh

Dhanikhola UDC was launched in 2010 with two entrepreneurs. Khaleda Akhter is one of them who run this UDC since its inception. Her dream was to become a successful women entrepreneur and she achieved this through her dedication and capacity. Over the years she improved her capacity through attending several training courses. Last year she had achieved Best Entrepreneur Award from her district. Khaleda said she was not surprised when her name was announced as best entrepreneur because last few years she had spent a lot of times for making this UDC functional and useful to our community. She had visited door to door for publicity and awareness building. All the local people have her cell number; whenever they fell they call her for information and services. She never misbehave with them, they are happy with her service. She was inspired when she felt that people like her and respected her.

Khaleda didn't want to join any job and so decided to work in the UDC. She is so dedicated to this centre that she said "I will not leave this centre even I get married". She said with confidence that she is contributing to her local community as well as to the Union Parishad also. Khaleda is proud that she has been able to establish herself as a successful entrepreneur. She feels honor when she see that government officers including DC and UNO know her as a successful entrepreneur.

At the starting first several months only few people (6-10 persons) had come to this centre for service, people were not aware about the services of this centre. Initially they earned about 500-700 Taka per month. In this situation her male colleague left the centre getting a good job in a garment factory, then another man was appointed but again he left the centre due to low income from this centre. By this time she took the leadership and started to popularize the centre. Now the UDC is well known to her community. Along with her new partner Moniruzzaman (who was appointed to this UDC with her recommendation and has trained him personally) they are providing services to about 40-50 customers and earning about 15000-20000 Taka monthly. At present Khaleda has no partnership with any other commercial or non-commercial organization but often get some orders for data-entry. She plans to offer more services from this UDC in near future. She knew how to become successful but her major challenge is her own health, she had an open heart surgery few years back.

11.6. Annex 6. Literature Review

Theme 1. Capacity Building

Capacity development of the e-Governance cell and Government officers who are the strongest bridge among the service provider and service receiver is the prime concern of the project to strengthen the skills and competencies to execute the projects (Khan, Anttiroiko, et al, 2014). a2i continued intensive training workshops across the civil administration with the aim of sensitization and capacity building on ICT that focuses on service delivery and efficiency improvement. The training was conducted for all Divisional Commissioners, all the DCs, all the ADCs (General), all Deputy Directors of Local Government (DDLG), all the UNOs, all the Upazila Chairmen, District Information Officers, UISC entrepreneurs, two staff members from each of the DC offices, Prime Minister's Office staff, two System Analysts and programmers from 6 ministries, trainers at BCC and trainers of 44 ministries (a2i, 2010).

Capacity building initiatives were not limited to workshops and training; they were also closely connected with hands-on design and delivery of e-services. In addition, a2i made use of experience sharing tools such as study tours and blogs. Capacity building had three main goals: sensitizing government officials, peoples' representatives, teachers and entrepreneurs so that they can take leadership in the process of providing e-services to peoples' doorsteps; facilitating the development of e-services with relevant technical know-how; and building confidence among key stakeholders (a2i, 2010).

Findings

- UISC helped students to acquire new knowledge and skills (Bhuiyan, M., 2010)
- e-Services for education improved publishing examination results in the web (Mahiuddin and Safiul Hoque, 2013)
- a2i conducted training of trainers on technical issues, business planning, content and mobilization for UISC entrepreneurs and developed a UISC manual for them (a2i, 2010) (a2i, 2009)
- 5,000 government officials were directly trained by the project (Minge, Raina., 2011)
- 1,000 teachers were given training (Minge, Raina., 2011)
- Technical and mobilization skills of over 9,000 entrepreneurs was enhanced to run and manage over 4,500 UISC (Minge, Raina, 2011)
- a2i Project trained about 5000 government officials (Minge, Raina., 2011)
- Students interest in lessons increased 50% (Minge, Raina., 2011)
- Over 200,000 sugar cane farmers benefitting from more transparent system of e-purjee
- Teachers received training in content development (Bhatnagar, (2014)
- 300 textbooks for madrasas are available online (Bhatnagar, (2014)
- Government officials at the divisional level were trained (Bhatnagar, (2014)
- 9,000 schools (out of 18,770) and 3,500 madrassas (out of 9,736) continue to offer computer education
- 56 districts deputy commissioners were trained (a2i,2007)
- Trainings were also arranged for the CAO personnel responsible for website maintenance (a2i, 2008: a2i, 2009)
- A workshop on training needs for civil servants in e-government capabilities was organized at the chief adviser's office (a2i, 2008)
- a2i provided technical assistance to develop the web portal in 64 districts (a2i, 2009)
- a2i organized workshop on e-governance to government officials i.e. deputy commissioners, divisional commissioners, cabinet officials, district admin (a2i, 2009)
- Training on ICT was given to Fisheries Information and Communication Center (a2i, 2009)

- Over 45000 students and youth (70% women) receieved computer literacy training (a2i, 2014)
- 23,661 primary and secondary schoolteachers create and share MMC through a teacher portal (a2i, 2014)
- a2i provided intensive computer skills development training for 30 officials of the Prime Minister's Office (a2i, 2009)

Theme 2. Service improvement

Key Point

Effective and efficient uses of ICT can bring the potential to make the rural communities in Bangladesh prosperous and empowered when crucial livelihood information like education, agriculture, health, land, law, etc. are available on time near doorsteps of all citizens. Evidences suggest that UISCs have also potentials to make non-government and commercial services, such as mobile payment, online banking, life insurance, ICT literacy training, English language learning, photocopy, documents scanning, digital photography etc. These services are ensured to reach citizens doorsteps as well as to development entrepreneurships. (Mahiuddin and Safiul Hoque, 2013).

Findings

- Build-up of efficient and knowledgeable farmer (Hoque & Sorwar, 2014)
- Build-up of efficient and knowledgeable student (Hoque & Sorwar, 2014)
- Human capital formation (Bhuiyan, M., 2010)
- Raised per capita income and contributed to economic growth (Hoque & Sorwar, 2014)
- UISC solved health related problems (Hoque & Sorwar, 2014)
- A gadget to upgrade human development index (Hoque & Sorwar, 2014)
- Empowerment of women (Hoque & Sorwar, 2014)
- Reduced corruption, assured transparency and increased access to livelihood information (Faroqi, 2014)
- Hassle free service delivery (Faroqi, 2015; Habib, Chowdhury, et al, 2013; Faroqi, 2014)
- UISC reduced the distance and time barrier of rural farmers (Hoque & Sorwar, 2014)
- Service delivery reduced people's time, distance and cost (Faroqi, 2015; Faroqi, 2014)
- UDC has a contribution to BDD in lines of gender, education and income (Faroqi, 2015; Faroqi, 2014)
- The influence of intermediaries removed (Faroqi, 2015; Faroqi, 2014)
- Number of documents reduced (Faroqi, 2015; Faroqi, 2014)
- UDC achieved some gains in BDD in dimensions such as gender, education, occupations and income (Faroqi, 2015; Faroqi, 2014)
- UISC improved easy access to information and services such as agriculture and market creation in business sector (Habib, Chowdhury, et al, 2013)
- Creating a digital education sector (Habib, Chowdhury, et al, 2013)
- a2i is building capacity and changing status quo (Minge, Raina., 2011; a2i, 2011; a2i, 2009)
- ICT infrastructure at the ministry/division level has significantly improved (Minge, Raina, 2011)
- Agriculture/health/law consultancy services were accessed (Bhatnagar, (2014)
- 300+ e-books for primary and secondary levels have been created so far (Zambrano & Seward, 2013)
- Computerized system for land record (Bhatnagar, 2014)
- Transparency & accountability enhanced (Salam, 2013)

- Effectiveness has enhanced which indicated a fair level of enhancement towards good governance (Salam, 2013)
- a2i introduced SMS-based purchase orders for sugarcane growers or 'purjee (a2i, 2010)
- Encourage coordination and teamwork (a2i, 2010)
- Promote ICT enabling environment (a2i, 2010)
- a2i's training effort were reflected in the better performance of entrepreneurs in managing UISCS (a2i, 2010)
- Provided support to the emergency flood cell at the chief adviser's office (a2i,2007)
- 3.19 million citizens visiting UISCs per month (UISC, 2014)
- Over 78 thousand unbanked citizens (70% women) gained financial access as a result of mobile bank services, through 3,700 UISCs (UISC, 2014)
- 2,768 UISCs life insurance opportunities with 30,200 citizens recording a premium of BDT 4.2 million (UISC, 2014)
- Over 35000 citizens (70% women) availed of telemedicine services (UISC, 2014)
- Health services provided to 0.75 million citizens (UISC, 2014)
- Over 1.4 million overseas workers registered electronically (UISC, 2014)
- 23 million utility bill payments were made over mobile phone saving citizen time, money and hassle (a2i, 2014)
- 3.2 million Underserved beneficiaries receiving livelihood and financial inclusion services like birth registration land records, mobile banking, life insurance vital information on agriculture, health, education, human rights and employments (a2i, 2014)

Theme 3. Users' perspectives
Key Point

The level of citizen satisfaction was measured through attenuation of corruption, intensity of clarity, efficiency of service, level of convenience, extent of accessibility and altitude of interaction. Good governance is assessed by accountability, transparency, responsiveness, rule of law, effectiveness and participation.

Information in e-governance services, the extent of accessibility in citizen satisfaction and effectiveness in good governance showed high level of advancement (Salam, 2013).

Findings

- People were satisfied with the performance of the services provided by UISC (Habib, Chowdhury, et al, 2013; Rahman, 2014; Salam, 2013)
- People were satisfied with the performance of UISCs (Bhatnagar, (2014)
- People value UDC more compared to other delivery points (a2i, 2010)
- Users' considered the UDC as hassle free as compared to other delivery system (a2i, 2010)
- Women participation is more in UDC as compared to points (Faroqi, 2015)
- People were satisfied with the error free and consistency of the information and services of the UISC in contrast to traditional government services (Faroqi, 2014)
- People were not satisfied with the e-service delivery system, they want it to be improved (Ahmad, 2013; Rahman, 2014)
- UISCs had a direct impact on employment: 9,002 young people received self-employment opportunities (Hoque & Sorwar ,2014)
- People gained information about health, education, agriculture (Rahman, 2014)
- Students perceived the Multimedia Classrooms (MMC) approach quite positively and pointed out that it helped them to: (Zambrano & Seward, 2013)
- flood cell at the chief adviser's office [(a2i,2007)

Theme 4. Institutional impact

Key Point

Capacity development both at institutional and personal level for better delivery of public services (a2i, 2008). a2i conducted Training of Trainers (TOT) on technical issues, business planning, content and mobilization for UISC entrepreneur trainers in collaboration with NILG and BCC, developing training manuals and UISC guidebook and distributing them among entrepreneurs and most importantly, drafting a business plan on the basis of internal survey with an aim to provide directives on economic sustainability of the UISCs. To ensure long-term training and advisory support to UISCs, a2i has assisted BCC in developing its own training capacity so that it can carry out further training (a2i, 2010). a2i has followed 3-pronged approaches in its efforts to remodel education system of the country: (i) establishing Multimedia Classrooms (MMC) in schools, (ii) training teachers on making Teacher-led multimedia content (TLCD) and (iii) make electronic versions of text books available in primary and secondary levels including technical, vocational and madrasha institutions (Zambrano & Seward, 2013)

Findings

- A workshop was arranged on ICT in Education Master Plan on May 20, jointly by Ministry of Education, UNESCO and WordForge Foundation (Spain) and a2i (a2i, 2010)
- In 2010, a2i continued intensive training workshops across the civil administration (a2i, 2010)
- Training of Trainers (TOT) and Teacher Training on 'Digital Content Development and use in Classroom (a2i, 2010)
- Conducted training for teacher educators from all TTCs
- Teacher educators conducted training secondary school teachers to develop digital contents and use in classroom effectively
- Teachers were given training on Computer and Head Teachers on ICT (a2i, 2011)
- Change in officials' attitude towards ICT use (a2i, 2011)
- a2i sensitized the government policy-makers and telecentre practitioners on the possible role the union Parishads can play (a2i, 2008)
- a2i helped the secretaries to identify over 53 e-Citizen Services, termed as Quick Win activities (a2i, 2009)
- Agricultural Information and Communication Centre organized training to IPM/ICM clubs of 10 districts including 20 club members and 10 agriculture extension agents (a2i, 2009)
- Provided technical assistance to e-tuition fee payment system in educational institutions (a2i, 2009)
- Provided technical assistance for the electronic bill payment and the complain system (a2i, 2009)
- 800 master trainers were trained and they trained 20,500 teachers (Zambrano & Seward, 2013)
- The MMC approach enabled teachers of primary (98%) and secondary (83%) schools and also of Madrasahas (92%) to conduct classes using MMC approach after receiving TLCD training (Zambrano & Seward, 2013)

Theme 5. Challenges

Key Point

e-Service centres are facing various challenges in their efforts to catch up with the rest of the world in terms of applying e-Governance in remote areas.

Findings

- No special services to help illiterate people (Mahiuddin and Safiul Hoque, 2013: Faroqi, 2014)
- Lack of services such as land copy, electricity bill pay, mobile banking (Faroqi, 2014)
- No fixed office hours maintained (Mahiuddin and Safiul Hoque, 2013)
- Cost of Internet & printing services are higher (Mahiuddin and Safiul Hoque, 2013)
- Lack of resources (computers, space, technical people) (Faroqi, 2015; Alam, 2014; Habib, Chowdhury, et al, 2013; Rahman & Khan, 2012; Salam, 2013)
- Lack of regulatory, and lack of operator skills (Faroqi, 2015)
- Lack of availability of adequate government information and services (Mahiuddin and Safiul Hoque, 2013; Faroqi, 2014;Salam, 2013)
- Lack of awareness of the program services and its potential benefits (Alam, 2014; Rahman, 2014)
- Lack of accessibility and usability features of public websites (Bhuiyan, 2010)
- Lack of consistency in websites update and maintenance (Ahmad, 2013; Salam, 2013)
- Lack of human capital and frequent load shedding (Ahmad, 2013; Rahman, & Khan, 2012; Rahman, 2014; Salam, 2013)
- Lack of infrastructure and logistics (Ahmad, 2013)
- Regulatory framework needs improvement (Rahman & Khan, 2012)
- Insufficient policy and regulatory framework (Ahmad, 2013)
- lack of awareness to use program services and its potential benefits (Rahman, 2014;Salam, 2013)
- Absence of collaboration among the agencies (Salam, 2013)
- Delay in service delivery system (Salam, 2013)
- Inclusion of traditional payment system (Salam, 2013)
- Lack of political commitment (Salam, 2013)
- Lack of transparency in service delivery (Salam, 2013)
- Manual application for getting service (Salam, 2013)
- No feedback system for the users (Salam, 2013)
- No scope of SMS alert system for users (Salam, 2013)
- Poor accessibility of common people (Salam, 2013)
- Slow connectivity of network/Internet (Salam, 2013)
- Unwillingness of service providers (Salam, 2013)

Theme 6. Policy impact

Key Point

a2i facilitated Bangladesh Computer Council (BCC) in updating and activating the National ICT Policy 2009, which provides ICT related development goals to be achieved by all ministries/divisions within specified timeframe. With the help of the line ministries, 125 action items were identified out of 306 as quickly implementable; and 38 actions were identified as high priority following a2i's proposal. The ICT Policy was also made aligned with the "Strategic Priorities of Digital Bangladesh" through inclusion of feedback coming from the national consultations of the latter. Among other major policy initiatives, a2i was instrumental in the formulation process of National Strategy Paper on m-Governance, M-banking Policy Guideline and National Telecom Policy 2010 and drafted Cyber Security Policy Guideline (a2i, 2010).

Findings

- Assisted Ministry in re-prioritizing the ICT Policy action items (a2i, 2010)
- a2i provided technical and financial support to the service delivery innovation through 56 Quick Win initiatives (a2i, 2010)
- a2i has contributed in the following policy areas (a2i, 2010)

- Finalization of the Telecom Policy 2010 and Rural Connectivity Policy 2010
- Facilitating National e-Governance Architecture group and Cyber Security Committee
- a2i assisted BCC in developing its own training capacity (a2i, 2010)
- a2i provided technical support in developing district web portals for all 64 districts (a2i, 2010)
- Strategic Priorities of Digital Bangladesh" (a2i, 2010)
- Influence in ICT Policy 2009 (Minges, Raina, 2011)
- Conducted training sessions with e-Governance focal points and Deputy Commissioners on building capacity of the government policy-makers and implementers (a2i, 2008)
- a2i Project provided assistance guidance and policy support to UNDP assisted projects and various ministries (a2i, 2009)
- a2i facilitated BCC in updating and activating the National ICT Policy 2009 (a2i, 2010)
- a2i facilitated BCC in updating and activating the National ICT Policy 2009 (a2i, 2010)

Theme 7. Financial Sustainability

Key Point

Entrepreneurs' monthly income is a crucial indicator of financial viability, which is associated with a number of variables: (Faroqi, 2015)

Partnership components such as infrastructure and service inputs, entrepreneurial capacity along with people's participation all have a significant part in explaining the monthly-sustained income. Under PPP the relevant stakeholders' effective involvement is considered as the driver of financial sustainability.

Findings

- Study results suggests that this project suffers from a very high rate of drop-outs of entrepreneurs from a variety of reasons (Faroqi, 2015):
- Low levels of income
- Conflict with the UP and mobility for marriage and higher jobs
- Lack of government services and operator's incapacity
- Financial sustainability in terms of operator's income

References

a2i. (2007). Annual Report 2007 Access to Information Programme (pp. 34). Dhaka, Bangaldesh.

a2i. (2008). Annual Report 2008 Access to Information Programme (pp. 40).

a2i. (2009). Annual Report Access to Information (a2i) Programme. Prime Minister's Office, Tejgaon, Dhaka (pp. 57).

a2i. (2010). Annual Report Access to Information (a2i) programme (pp. 27).

a2i. (2011). Strategic Priorities of Digital Bangladesh.

a2i. (2013). Access to Information (II): E-Service delivery for transparency and responsiveness (pp. 33).

Ahmad, S. (2013). E-governance readiness of upazila administration: a case of two selected upazila of Comilla district (Doctoral dissertation, BRAC University).

AI2 (2014). Innovation in service Delivery.

Alam, M. (2014). Efficiency and Effectiveness of Union Information Service Center: A Study on Sylhet Sadar Upazila (July 17, 2014).

Bhatnagar, S. (2014). eGovernance in Bangladesh: Current Status and Way Forward Improving Service Delivery for e-Inclusion. PhD.

Bhuiyan, M. (2010). E-government applications in Bangladesh: status and challenges. In Proceedings of the 4th International Conference on Theory and Practice of Electronic Governance (pp. 255-260). ACM.

Faroqi, M. G. (2015). An assessment of e-government: case study on union digital centres (UDC) in Bangladesh. Australian Journal of Sustainable Business and Society, 1(1).

Faroqi, M. G. (2015). Financial sustainability of union digital centres in Bangladesh. Proceedings of the Australasian Conference on Business and Social Sciences 2015, Sydney (in partnership with The Journal of Developing Areas) ISBN 978-0-9925622-1-2.

Faroqi, M. G. (2014). Reaching the unreached?: An assessment of union information and service centres (UISC) in Bangladesh from beneficiary perspective.

Habib, A., Chowdhury, D., & Bhattacharjee, M. K. (2013, October). ICT for development and UISC: a step to alleviate poverty in rural areas of Bangladesh. In Proceedings of the 7th International Conference on Theory and Practice of Electronic Governance (pp. 342-343). ACM.

Hoque, M., & Sorwar, G. (2014, June). E-governance for rural development: A case study on Union Information and Service Centre (UISC) of Bangladesh. In18th Pacific Asia Conference on Information Systems (PACIS), Chengdu (pp. 24-26).

Khan & Anttiroiko, (2014). Democratizing digital bangladesh: designing national web portal to facilitate government–citizen interaction. In Government e-Strategic Planning and Management (pp. 245-261). Springer New York.

Khanam, Monem, et al, (2014). Assessment of Multimedia classrooms (MMC) And Teacher-Led Content Development (pp.66).

Mahiuddin and Safiul Hoque (2013). Enabling e-services for rural community through union information and service centers (UISCS). Asian Studies, Journal of the Department of Government and Politics, JU, No. 32, June 2013 pp 49-571.

Minges, R., Raina. (2011). Bangladesh: Access to Information (a2i) Evaluation (pp. 51).

R. Zambrano, Seward. (2013). From Connectivity to Service Delivery: Case studies in e-governance (pp.66).

Rahman, M. (2014). An institutional assessment of UISC (Union Information and Services Center): a case study of two selected Union Parishad of Bangladesh (Doctoral dissertation, BRAC University).

Rahman, T., & Khan, N. A. (2012). Reckoning Electronic Government Progress in Bangladesh. International Journal of Public Administration, 35(2), 112-121.

Salam, M. A. (2013). E-governance for good governance through public service delivery: an assessment of district e-service centres in Bangladesh (Doctoral dissertation, BRAC University).

Sobhan, F. (2010). Realizing the Vision of Digital Bangladesh Through e-Government: Bangladesh Enterprise Institute (BEI).

UISC (2014). Union Information (UISC): Connecting the Bottom Millions

Zaman, H. (2015). Service delivery process innovation: insights from Digital Bangladesh. Innovation and Development, 5(1), 165-168.

11.7. Annex 7. Survey Questionnaire

a2i Mid-Term Evaluation Questionnaire for
Chief Innovation Officers, Innovation Officers and Innovation Team Members

What is your age?	<20	21-30	31-40	41-50	51-60	>60
What is your gender?	Male			Female		
At what administrative level are you working in? (√ one)						
Ministry						
Directorate						
Division						
District						
Upazila						
What is your job title and organization?						
Have you worked in a2i programme before?	Yes			No		
What innovation-related activities have you attended? (√ one or more)						
5-day Innovation Initiation Training Workshop						
3-day Innovation Execution Training Workshop						
Innovation Forum						
Innovation Circle						
Digital Innovation Fair						
Dialogue Workshop						
Others (please indicate)						

Please indicate your answer with a √ on a scale of 1-5 to the following questions:

As a result of attending the innovation-related activities:	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
I have acquired relevant knowledge and skills to fulfil my role as an innovation officer/team member					
My attitude has changed					
I am interested to participate in more innovation-related activities					
I am confident when presenting my ideas to my supervisor					
I can develop an innovative project proposal					
I can manage and implement an innovative project					
I have partnered with another organization to develop/coordinate an innovative project					
I am able to motivate my colleagues to work on an innovative project					
I am transferring the skills and knowledge learned to my colleagues					
I am interested to participate in an e-learning course					

As an innovation officer or a member of the innovation team:	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
I fully understand the role expected of me					
I know what my organization's visions are					
I fully understand the meaning of innovation and why innovation is needed					
We have an action plan					

	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
I am more satisfied with my job					
I meet regularly with colleagues in my organization to create solutions to specific challenges					
I engage with government officials outside my organization to create solutions to specific challenges					
I engage with non-governmental organizations to create solutions to specific challenges					
I engage with businesses to create solutions to specific challenges					
I engage with citizens to create solutions to specific challenges					
I regularly share my ideas and thoughts on the Facebook group - Public Service Innovation					
I have visited the Idea Bank					
I have advocated for policy change required for innovation					
When I transfer to a new post, I will continue to innovate even if I am no longer an innovation officer or part of the innovation team					
In my organization:	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
There is a strong culture of innovation					
Staff members are given the time and resources to develop innovative ideas					
Innovations are focused on improving service delivery for citizens					
Innovations are focused on improving internal government systems					
We have the capacity to develop ICT-based innovations					
Pilot innovations have been scaled up					
Innovative officials will be publicly recognized					
Innovative officials will receive monetary reward					
Innovative officials will be awarded with a desirable posting					
Innovative officials will be promoted quicker					
We expect and value failure as part of the innovation process					
We openly discuss failed initiatives to learn from them					

11.8. Annex 8. Profile of Survey Respondents

Thirty per cent of the respondents are female and 70% male. Among the female respondents, all the respondents are working at the upazila level. Among the male respondents, 80% are also from the upazila level. Six of the 49 male respondents are from the district level, 1 from a division, 2 from a directorate and 1 from a ministry.

Regarding age, 46% of the respondents are in the age group of 31-40 years, and 37% in the age group of 41-50. The rest are aged 21-30 years or 51-60 years. None of the female respondents are aged 51-60 years.

Most of the female respondents are either working in the Department of Women's Affairs (43% of women) or the Department of Youth Development (24% of women). The remaining few female respondents are working in the Department of Agriculture Extension, Department of Cooperatives, Registration Directorate and Upazila Land Office. The male respondents are more diverse. They are working on issues related to agriculture, cooperatives, education, finance, health, land, livestock, local government engineering, public administration, registration, rural development, social services, women's affairs and youth development.

All of the respondents participated in at least one of the training/awareness events related to innovation—the 5-day Innovation Initiation Training Workshop, 3-day Innovation Execution Training Workshop, Innovation Circle or Digital Innovation Fair.

11.9. Annex 9. Summary of Survey Results

Overview of results on the effectiveness of training and other innovation-related activities

As a result of attending the innovation-related activities... (1=strongly disagree and 5=strongly agree)							
Answer Options	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Rating Average	Response Count
1. I have acquired relevant knowledge and skills to fulfil my role as an innovation officer/team member	0	0	0	23	47	4.67	70
2. My attitude has changed	0	0	0	21	49	4.70	70
3. I am interested to participate in more innovation-related activities	0	0	2	14	53	4.74	69
4. I am confident when presenting my ideas to my supervisor	0	0	0	27	44	4.62	71
5. I can develop an innovative project proposal	0	0	4	21	46	4.59	71
6. I can manage and implement an innovative project	0	0	3	21	46	4.61	70
7. I have partnered with another organization to develop/coordinate an innovative project	2	6	20	25	18	3.72	71
8. I am able to motivate my colleagues to work on an innovative project	0	0	3	24	44	4.58	71
9. I am transferring the skills and knowledge learned to my colleagues	0	0	2	30	39	4.52	71
10. I am interested to participate in an e-learning course	0	0	1	17	54	4.74	72
answered question							72
skipped question							5

144

Overview of results on individual's motivation to innovate through collaboration, and development of a learning and sharing network

As an innovation officer or a member of the innovation team… (1=strongly disagree and 5=strongly agree)							
Answer Options	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Rating Average	Response Count
1. I fully understand the role expected of me	0	0	2	24	45	4.61	71
2. I know what my organization's visions are	1	0	1	19	50	4.65	71
3. I fully understand the meaning of innovation and why innovation is needed	0	0	1	19	50	4.70	70
4. We have an action plan	0	0	2	26	42	4.57	70
5. I am more satisfied with my job	0	1	6	26	38	4.42	71
6. I meet regularly with colleagues in my organization to create solutions to specific challenges	0	0	7	35	29	4.31	71
7. I engage with government officials outside my organization to create solutions to specific challenges	0	1	9	42	18	4.10	70
8. I engage with non-governmental organizations to create solutions to specific challenges	2	6	19	26	15	3.68	68
9. I engage with businesses to create solutions to specific challenges	4	7	24	20	15	3.50	70
10. I engage with citizens to create solutions to specific challenges	0	3	6	34	28	4.23	71
11. I regularly share my ideas and thoughts on the Facebook group - Public Service Innovation	0	2	20	30	18	3.91	70
12. I have visited the Idea Bank	5	13	25	17	11	3.23	71
13. I have advocated for policy change required	5	7	21	23	15	3.51	71

for innovation							
14. When I transfer to a new post, I will continue to innovate even if I am no longer an innovation officer or part of the innovation team	2	0	1	23	45	4.54	71
answered question							72
skipped question							5

Overview of results on government's organizational capacity and support system for innovation

In my organization… (1=strongly disagree and 5=strongly agree)							
Answer Options	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Rating Average	Response Count
1. There is a strong culture of innovation	1	9	13	24	25	3.88	72
2. Staff members are given the time and resources to develop innovative ideas	1	6	15	31	19	3.85	72
3. Innovations are focused on improving service delivery for citizens	0	0	4	23	45	4.57	72
4. Innovations are focused on improving internal government systems	0	0	3	31	36	4.47	70
5. We have the capacity to develop ICT-based innovations	1	1	9	29	32	4.25	72
6. Pilot innovations have been scaled up	0	0	9	24	38	4.41	71
7. Innovative officials will be publicly recognized	0	3	8	26	35	4.29	72
8. Innovative officials will receive monetary reward	3	10	24	17	18	3.51	72
9. Innovative officials will be awarded with a desirable posting	2	11	15	19	25	3.75	72
10. Innovative officials will be promoted quicker	2	9	14	21	26	3.83	72
11. We expect and value failure as part of the innovation process	0	2	11	26	32	4.24	71
12. We openly discuss failed initiatives to learn from them	1	2	10	30	28	4.15	71
answered question							72
skipped question							5

147