ROLE OF ONE STOP SHOP FOR E-SERVICE DELIVERY: CASE STUDY ON UNION DIGITAL CENTER IN BANGLADESH

Arifur Rahman Bhuiyan¹ Mahir Abrar²

Abstract

The One Stop Shop (OSS) is a global concept that accelerates public and private service at the doorstep of citizens. Developed and developing countries have followed this approach to make public service citizencantered, inclusive and participatory. The government of Bangladesh has launched the one-stop-shop approach in the name of the Union Information and Service Center (UISC) as part of a partnership program. Over time, the number of one-stop shops has grown at Union, Paurashava and City Corporation level in Bangladesh. The objective of the study is to understand the existing one-stop-shop status in Bangladesh by analysing the role of One Stop Shop in promoting the provision of electronic services at the urban and rural levels. However, the study followed a qualitative design to achieve the goal of the study. Secondary data is collected through content analysis of relevant literature, books, journals and articles, etc. The study finds that there is a manpower (entrepreneurs) shortage and a lack of innovation in services in UDCs, PDCs and CDCs. Bangladesh has not been able to make significant progress and innovations to deliver dynamic public service at urban and rural level through the UDC, PDC and CDC. The study recommends initiating the provision of application-based public and private services through the UDCs, PDCs and CDCs.

Keywords: UDC, One stops service and E-service

¹ **Arifur Rahman Bhuiyan,** Assistant Professor, Department of Public Administration, University of Dhaka, Dhaka-1000, Bangladesh. Email: arbhuiyan@du.ac.bd.

² **Mahir Abrar,** Lecturer, Faculty of Business Administration, American International University-Bangladesh, Dhaka, Bangladesh. Email: mahir13abrar@gmail.com

Introduction

E-service is the short form of electronic service, which refers to providing services through the use of ICT (information communication technology). It is much more than just order fulfilment and responsiveness to requests over emails or messages (Rust & Lemon, 2001). Wilson et al. (1998) defined e-service as the series of activities taking place between the service provider and the customer while they interact using an electronic channel. So basically, it consists of three main components - the channel of service delivery, the service provider and the service receiver (Wilson, et al. 1998). In Bangladesh, the digital era started through the use of personal computers in the early 1990s and the use of mobile phones in the late 1990s (Siddiquee, 2016). To keep pace this trend in Bangladesh, Awami League Government introduced the term "Digital Bangladesh" in the election manifesto in 2008 in their election. Now the country has the vision of establishing a Digital Bangladesh by the year 2021. It was declared back in 2009. But before that, the Access to Information (a2i) programme was established in 2006 with the goal of providing inexpensive, and trouble-free access to government services to the citizens (Mazumdar & Alharahsheh, 2020).

One Stop Shop or in short known as OSS which operates to bring all the available public services under one roof by providing both information and services to the citizens. The project of a2i took the initiative of establishing the Union Information Service Centre (UISC). Later in 2014, this UISC was renamed to Union Digital Center (UDC) (Rahman, 2016). There are also digital centres at the Paurashava and city corporation ward councillors' offices. These are all operated by two entrepreneurs each, both male and female, who are selected jointly by UNOs, Paurashava chairman, city corporation ward councillors. Available e-services in Bangladesh include online bill payments, online banking, birth registration, registration for jobs, university admission form fill-ups, result publications, e-passports etc. Apart from all these, telemedicine services, video conferencing and instant communication with anyone working abroad and so on are some of the special examples of e-services popular in the rural area. All of these services mentioned above fall under these three types: government, information and commercial (Rahman, 2016; Islam & Raman, 2020)

Having recognized the importance of e-service delivery in Bangladesh, this paper will specifically focus on developing an understanding of how different forms of OSS function in Bangladesh and deliver services. This paper will also compare these service deliveries of Bangladesh with that of other developing countries and draw a conclusion as lessons learned for Bangladesh.

Objective of the Study

The main objective of this study is to identify the role of one stop shop for e-service delivery in Bangladesh and analyse the lessons learned from other developing countries. Under this broad objective there are some specific objectives as well, which are -

- a. To describe existing status of One Stop Shop in Bangladesh
- b. To analyse the role of One Stop Shop for e-service delivery in Bangladesh
- c. To identify lesson learning from other countries' experience of One Stop Shop

Methodology of the Study

The scientific study in the field of social sciences follows qualitative and quantitative design. Based on the objective of this study, the paper has conducted qualitative research. Qualitative research is significantly important as it works as the primary means to construct the theoretical foundations of social science (Gill et al. 2008).

Again, there can be many methods followed in a qualitative study (e.g., interview, case study, observation, textual and visual analysis and so on).

At the same time qualitative research use to emphasis on different situation bases rather than quantify number.

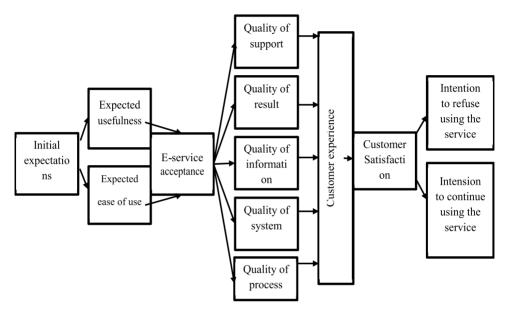
The methodology followed in this research is completely based on secondary data which mainly include content analysis which is widely applied quantitative qualitative research technique (Parveen & Showkat, 2017, Stemler, 2000). Content analysis is such a research tool which is used within some given qualitative data.

As this study was conducted on the secondary sources and had to analysed content, I have to dependent on academic journal, articles, books, Bangladesh government website including Access to information, e governance related report, daily newspaper and seminar paper. Around 50 journal articles have been studies and among them only 23 paper was identified related for these studies.

Conceptual framework

Both technology acceptance models and service quality models influence e-service quality modelling in recent times. Quality attributes like customer expectations, customer satisfaction and outcome variables like repurchase intentions etc. are conceptualized by service quality models. On the other hand, quality attributes as

well as other factors influencing customer behaviour like adopting and continuing to use e-service are conceptualized by technology acceptance models (Vatolkina et al, 2020).



Source: Vatolkina et al, 2020

This model reflects how the quality of e-service influences the experience of the consumers, and this experience later on affects consumer satisfaction which ultimately leads them to continue using this. If satisfied enough one consumer may encourage others to turn to e-service as well. But low satisfaction results reversely. Low satisfaction leads to refusal to further use this service in future and giving bad reviews to others as well (Vatolkina et al, 2020).

In his model he at first distinguished the characteristics of e-services from traditional services and then mentioned factors that impact the e-service quality. While interaction between customers and service providers are common in both cases but only distinction is that in case of e-service, this interaction is done via the internet. Various factors such as Ease of use, website appearance, responsiveness, communication, security, personalization and so on affect the e-service delivery. Here 'ease of use' basically means how conveniently functional, accessible the service is. The design of the website and its appearance has to be lucrative enough to the customers as well. The colour, graphics, used pictures – everything being

pleasing to the eye adds value to the service quality. 'Personalization' is entirely based on each user individually and thus should be relevant to their past purchase, needs and interests. Quality of information and responsiveness are also two vital factors impacting the quality of e-service. Layout of factual information, quick feedback are the considering aspects for these points. The point 'communication' refers to the interaction between the website user and the website provider. 'Security' is another significant point. The privacy and security of the information provided by the customers must be ensured. Finally, reliability referring to the fulfilment of promised services accurately, timely and consistently is something that significantly impacts the service quality. If all these are ensured properly and the expectation of the customers matches with the experience the quality of e-service is considered to be good. (Ojasalo, 2010)

There are diversified models available for one stop shops based on the concept of integrated service. 3 broad dimensions of OSS models which are structural, administrative and social. (Hasan et al. 2019). The first dimension is the structural dimension, and it is closely connected with the issues of design, geographical distribution, variety of services offered by the government and its departments etc. Both the vertical and the horizontal integration of government structures are included in the structural dimension. The vertical integration means combining all the services of the government at different levels whereas the horizontal integration means integrating all the services of only one level of government that is spread across that level. The second one, which is the administrative dimension, is related to the bureaucratic arrangements. This is mainly about catering the demands of the citizens. The third and final dimension is the issue of social justice providing the background for the foundation of an OSS.

Wattenhall and Kimber (1996) had also given arguments in favour of establishing OSS as a means of providing public service delivery. They pointed out two main reasons: the first one falls under the social commitment argument and is seen as an efficient mechanism of services. It is said to be efficient because it integrates the scattered government services of different government departments. The second reason is that it promotes coordination between different government departments and avoids the need for separate projects at one time (Wattenhall & Kimber, 1996).

One Stop Shop for E-service delivery in Bangladesh

To accelerate the government activities and reduce corruption by offering citizen friendly and simplified public service delivery, more than 80 countries have

already introduced one stop shops. This centre located all over the country has been working to ensure the good governance and make the public and private service to doorsteps of the remote people. Bangladesh has also adopted this and introduced Union Digital Centres (UDCs), City Corporation Digital Centres and Paurashava Digital Centres. UDCs are mainly one-stop shops serving at the rural level. Recent research from Copenhagen Consensus and BRAC Institute of Governance and Development (BIGD) indicated that through offering three key services – online birth registration, exam registration and the social safety net program (SSNP) – UDC's are generating a double return to the society. The UDCs in Bangladesh are run under a public-private partnership (PPP) modality using a micro-enterprise model and incorporate private services along with the public ones (Faroqi, 2019). The union digital centres are accelerating service delivery through saving time, cost and time.

TCV Analysis of vari-	Before UDC			After UDC		
ous Services	Time (Hrs)	Cost (USD)	Visit	Time (Hrs)	Cost (USD)	Visit
Birth Registration	211.52	1.6	2.19	7.58	0.9	1.23
Citizen Certificate	24.9	0.7	1.71	2.97	0.5	1.07
Exam Registration	6.27	1.2	1.07	2.3	0.2	1.03
Death Registration	39.39	1.9		4.52	0.6	1.09
Photocopy	5.55	0.9	1.14	0.49	0.2	1.01
Computer Compose	16.84	1.5	1.44	0.63	0.5	1.02
Photography	39.7	1.6	1.82	1.36	0.4	1.04
Internet Browsing	3.02	1.7	1.28	0.53	0.4	1.02
Electricity Bill Payment	4.31	0.9	1.21	0.343	.2	1
Job Search	12.47	2.6	1.5	0.75	0.7	1

Source: Adopted from A2I, 2018 organized by the author.

This table demonstrate three aspects of the UDC that has bring benefit include time, cost and number of visits for the local community. On the bases of A2I field survey, 10 very common service have been taken to justify the before and after effect of the UDC.

Saving time:

First of all, regaining the birth certificate, it has been considered as one of the very common services and very necessary document that has to have for every citizen. But citizen has to send more time to receive these services. On an average they used to spend around 222 hours to complete their birth registration. After the establishing the UDC this number of times become plummeted from 222 to only 7.58 hours. At the same time, for getting citizen certificate, it used to take around 25 hours which has fallen 25 hours to only 2.3 hours. This scenario is very common from all of the mentioned services like exam registration Death Registration, Photocopy, Computer Compose, Photography, Internet Browsing and electricity Bill Payment etc.

Save cost:

In terms of cost saving, the different between before and after establishment of Union Digital Centre reduce the gap of cost. The average cost for completing birth registration was 1.6\$ (138 BDT) before establishing the UDC. But now it required less than 1\$. This reduction of cost is applicable for all of the services.

Save visit:

In terms of visit saving, the gap before and after establishment of Union Digital Centre is quite high. For getting service like birth registration, citizen certificate death certificate and electricity bill, the service recipient had to visit 2.19, 1.71, 1.9, and 1.21 respectively. However, after the establishment of UDC the visit has been fall down dramatically. Number of visits required to get these services 1.23,1.07,1.09 and 1 respectively. Now a day's local people do not need to go to the Upazila to access their most of the service. One of the best examples is, Just 15 years back student had to go to the school and college physically to see their public examination result, but now they can see their result in pressing a single bittern using their mobile phone. At the same, it is very easy to apply for school. College, university admission and job application through online.

Partner	Example		
1. Bank (Public and Private)	Dutch Bangla, Mercantile, Trust, etc.		
2. Life insurance companies	State-owned Jibon Bima		
3. Telecommunication companies	Robi, Banglalink		
4. NGOs	British Council, Ankur, Practical Action		

5. government agencies	Cabinet Division, Bangladesh Computer Council
6. solar energy	Infrastructure Development Company Limited
7. Cyber Cafe Owner's Association	Cyber cafés around the country

Source: UNPSA, 2020

All the countries around the world face various forms of challenges while trying to establish good governance as it requires many things like- citizen participation in government decision making, accountability of the government officials, transparency, and so on to reduce corruption overall (Alryalat et al., 2015). This is even more challenging for the developing countries for their unstable social, political and economic conditions. Now in the era of technological development, many countries are reaping the potential of ICTs to adopt e-governance. The government of Bangladesh is no exception. The vision 2020 had the establishment of UDC in it as a part of this goal. (Mamun et al., 2018). The rural people who were before deprived of major resources can now have proper accessible and easy government services through UDCs. (Biback, 2019) UDCs are contributing substantially in the journey of achieving the goal destination of digital Bangladesh. As these UDCs provide the backward rural people with rapid and effective access to information in the most cost-effective way possible, they significantly contribute in bridging the digital gap existing at the grassroot. (Das, 2019).

But there is still a need for improving robustness because there exist many unskilled or semi-skilled personnel in many government departments. (Das, 2019). Apart from this there are some other shortcomings in the OSS of Bangladesh, for example, limited relevant e-content. (Sarker, 2013). The lack of consistency in the services of these centres also adds up to ineffective use.

OSS in Developing Countries: Lesson Learning

OSS in Sri Lanka is known as Nenasalas which are set up in both rural and semiurban areas. They not only offer services but also work for skill development. Some people getting skilled in computer operation from these Nenasalas, and the other ones using the internet facilities from here later end up finding jobs. (Karunasena & Deng and Singh 2011). These Nenasalas in Sri Lanka are implemented through 4 different models which are - Entrepreneurial/ commercial model, Community model, Distance and E-Learning Centres, and Tsunami camp Nenasalas. (Nenasala 2016). In selecting the location of these Nenasalas, four key criteria are taken under consideration- population, market presence, availability of electricity and presence of a school. After the selection of the location a survey is also conducted to decide which type of model will be appropriate for this. There are various models of OSS in India and each of its states display one of those existing models. In Andhra Pradesh & Telangana they are known as 'Mee Seva', in Karnataka 'Nemmadi Kendra', in Madhya Pradesh 'Lok Sewa Kendras' and so on. A total of 100,000 Common Service Centres (CSCs) have been established under the National e-Governance Plan (NeGP). These CSCs offer various services like, rural banking and insurance, e-Aadhaar card, digital life certificate for pensioners etc. OSS in Pakistan is known as E-khidmat centres. These centres allow citizens to enjoy many public services through simply applying and then tracking their application progress through an app called 'Asani Markez' (PK Politics 2015). A total of 72 OSS was set up across Myanmar in 2012-2013 (UNDP 2012). The OSS in Myanmar have desks set up in there relevant to different government departments like Electricity Supply Services, Land Management and Statistics, Police, Immigration, Public Health, Social Welfare and so on. (Nissar 2014).

These are just a few examples of OSS in some of the South Asian countries. While analysing these examples and looking back at Bangladesh's scenario, it can be noticed that Bangladesh can adopt some significant strategies from them. For example, there is no tracking facility available for the Bangladeshi citizens through any app. This can be adopted. If practically adopted and used accordingly it will significantly reduce the TVC further. Bangladesh can also use these UDCs to train people and develop their skills. There are also some differences between UDCs in Bangladesh and other OSSs in the above-mentioned other countries. For instance, there aren't any separate desks available for separate departments rather the two entrepreneurs themselves look after every inquiry. Moreover, unlike India, people across the whole nation of Bangladesh call the digital centres by the same name. There aren't any separate names for the UDCs of separate districts. Also, the UDCs here in Bangladesh only provide services, and do not offer any skill development opportunities.

Findings and discussion

This paper has discussed the existing status of One Stop Shop in Bangladesh and the role of One Stop Shop for e-service delivery in Bangladesh. This one stop shops are offering public service, commercial service and information service as well. The OSS in Bangladesh, popularly known as the UDCs, PDCs and CDCs contribute significantly to the ease of service delivery of the government and has reduced the troubles of the general people by large. But these centres are dependent

on two entrepreneurs only. The model for these digital centres varies from the other OSSs in other South Asian nations. Bangladesh has yet to develop its digital centres. If these centres can offer skill development opportunities, training and other development programs for the locals then their service aspect would have expanded, and more and more people would have been benefited by them. Also, if these centres require to introduce app-based application, tracking and answer to queries then the swiftness would have further accelerated. In the context of Bangladesh, most of time citizens visit digital centres for only birth and death registration service and entrepreneurs assist in data input of various types of registration, application of government services and so on. But these services are now available in the local market and citizens can easily access these services. Sometimes, the location of digital centres is too much that discourage citizens to visit UDC, PDC & CDC to avail services. The private service offered by digital centres are also accessible in the local market. In the case of information service, citizens can easily get information of job, agriculture, education, health through government websites, apps and various information centres. So, citizens need not need to visit these digital centres to get services. So, it is an important matter to rethink and take lessons from other developing countries to make UDC, PDC and CDS functional resulting in promoting peoples' participation and engagement in public service delivery. Even, skills of the entrepreneurs need to be taken into consideration so that they can contribute to bring innovativeness in public service delivery.

Conclusion

Digitalization of public services through One Stop Shops are now very much popular across the world. The digital service allows the citizens to enjoy different services under one roof whereas before introducing them they had to visit different government offices. It is mainly a business type style of service delivery under one root in a modern physical format (Fredriksson, 2020). Bangladesh has also come a long way in this field with its more than 4500 Union Digital Centres. The purpose of this article was to identify the role of one stop shop for e-service delivery in Bangladesh and analyse the lessons learned from other developing countries. The research evidence shows that in delivering the e-service in Bangladesh, the OSS model under the names of UDC, CDC and PDC have been quite successful. The time, cost, and number of visits have significantly reduced for the services provided by these centres both at rural, suburban and urban level of the country. The more swiftly these centres will be offering their services, the more convenient the life

of the citizens will become. Being located at the community level, these shops are just at a doorstep distance and therefore have close exposure to the general people. This paper has analysed the OSS models of other South Asian nations and provided lessons for Bangladesh from those models. Compared to other south Asian nations Bangladesh can still add more features to their OSS models. If improvements are initiated, then the services will undoubtedly help the citizens advance more and significantly help Bangladesh in reaching its goal of becoming a digital Bangladesh.

Reference

- A2I. 2018. Innovation Brief. Union Digital Centres. https://a2i.gov.bd/wp-content/uploads/2019/10/IB UDC Feb-2018-.pdf
- Alryalat, M. A. A., Rana, N. P., & Dwivedi, Y. K. (2020). Citizen's adoption of an E-Government system: Validating the extended theory of reasoned action (TRA). In *Open government:* Concepts, methodologies, tools, and applications (pp. 651-674). IGI Global
- Biback, D. (2019). The Role of Union Digital Centre to Ensure People's Participation at Sylhet Sadar, Bangladesh. *Review of Public Administration and Management*. Doi:10.24105/2315-7844.7.262
- Faroqi, M. G. (2019, April). The Role of Telecentre in Developing Entrepreneurship: a Case Study on Union Digital Centres in Bangladesh. In *Proceedings of the 12th International Conference on Theory and Practice of Electronic Governance* (pp. 446-456).
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British dental journal*, 204(6), 291-295
- Hasan, I. R., Agustang, A., Kahar, F., & Tahir, H. (2019). Super Service Delivery": an advanced conceptual model of one-stop service for wide administrative region. *Problems and perspectives in management*, (17, Iss. 1), 189-201.
- Islam, M. R., & Rahman, A. (2019). Prospects of PPP Project in Bangladesh: A Study on Power Sector. *Journal of Governance and Innovation*, 5(1).
- Islam, M. R., & Rahman, A. (2020). Prospects of One-Stop Service in Rural Bangladesh: The Experience of Union Digital Centers. *Journal of Society & Change*, 14(4).
- Karunasena, K., Deng, H., & Singh, M. (2011). Measuring the public value of e-government: a case study from Sri Lanka. *Transforming Government: People, Process and Policy*.
- Mamun, M. A. (2018). Dynamics of service delivery of union digital centre in Bangladesh: An assessment on institutional sustainability. *International Journal of Development and Sustainability*, 7(11), 2758-2777.
- Mazumdar, A., & Alharahsheh, H. H. (2020). Digital Bangladesh-vision 2021: what is the digital Bangladesh concept? *South Asian Research Journal of Engineering and Technology*, 2(1), 6-9.

- Nissar, P., & Yakoob, C. (2014). A Study on Awareness of e-Governance Services Provided through Akshaya Centres in Kerala with Special Reference to Mallapuram District. *Abhinav Journal of Commerce and Management*, 3(8), 2277-1166.
- Ojasalo, J. (2010). E-service quality: a conceptual model. International journal of arts and sciences. Published.
- Parveen, H., & Showkat, N. (2017). Content analysis. Media & Communication Studies.
- Rahman A. (2019) E-Governance in Bangladesh. Global Encyclopedia of Public Administration, Public Policy, and Governance. Springer, Cham. https://doi.org/10.1007/978-3-319-31816-5 3227-1
- Rahman, A. (2016). E-governance: Present Scenario and Future Implementation Challenges for Government.
- Rahman, S. M. A. (2016). Prospects of PPP in expanding ICT services in rural Bangladesh: A case of union digital center. *International Journal of Economics and Finance*, 8(2), 163-170.
- Rust, R. T., & Lemon, K. N. (2001). E-service and the consumer. *International journal of electronic commerce*, 5(3), 85-101.
- Sarker, A. K. (2013). Digital Bangladesh: Swapna puroner ovijatra (a journey to fulfil dreams). *Lalmatia, Dhaka: Tothyoseba Barta Songstha Publisher*.
- Siddiquee, N. A. (2016). E-government and transformation of service delivery in developing countries: The Bangladesh experience and lessons. *Transforming Government: People, Process and Policy*.
- Stemler, S. (2000). An overview of content analysis. *Practical assessment, research, and evaluation*, 7(1), 17.
- UNPSA. (2020). Evaluation Report "An assessment of the Socio-Economic Impacts of Union Digital Centre in Bangladesh: Exploring Narratives from the Frontline".
- Vatolkina, N., Gorbashko, E., Kamynina, N., & Fedotkina, O. (2020). E-service quality from attributes to outcomes: The similarity and difference between digital and hybrid services. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 143.
- Wettenhall, R., & Kimber, M. (1996). One-stop shopping: some notes on the concept and some Australian initiatives.
- Wilson, M., de Zafra, D. E., Pitcher, S. I., Tressler, J. D., & Ippolito, J. B. (1998). *Information technology security training requirements: A role-and performance-based model*. national inst of standards and technology Gaithersburg md computer security div.