

**ORIGINAL ARTICLE**

# Transforming public service delivery in Bangladesh: The impact of G2P approach

Md. Rakibul Islam<sup>1</sup>  and Aditi Sarker<sup>2</sup>

## Affiliation

<sup>1,2</sup>Department of Local Government and Urban Development, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh, Bangladesh, 2224

## Correspondence

rakibul.shawon93@gmail.com

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## Abstract

In the digitized phase of Bangladesh, the government-to-person (G2P) approach represents an innovative shift in public service delivery. This model transforms the traditional "one to many" service approach into a "one to one" interaction, where the government directly engages with individual beneficiaries. This direct connection enhances transparency, accountability, and efficiency in service provision. The G2P approach is implemented across various projects in Bangladesh. This study aims to explore how G2P influences public service delivery perceptions and assess its impacts. A mixed-methods design was employed, and samples were selected from government officials and beneficiaries, totaling 120 participants. Data collection was accomplished through key informant interviews and surveys. The analysis utilized the Statistical Package for Social Science (SPSS) alongside detailed qualitative assessments. Discussions drawn from the analysis indicate notable impacts of G2P on public service delivery. Ultimately, it is suggested that the government and policymakers focus on expanding the scope of G2P services to ensure a structured, transparent, and efficient delivery of public services. While there are challenges to address, overcoming these barriers could facilitate a transformative phase in Bangladesh's governance system.

## Keywords

Government to Person (G2P), Mobile Finance Service (MFS), A2i (aspire to innovate), SSNP (social safety net program), PESP (primary education stipend project), Digital Bangladesh, National Identity (NID).

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## 1 | INTRODUCTION

The use of modern technology and the digitization of services are happening every day nowadays. G2P is a newer approach to governance that directly connects the service provider to the receiver. G2P increases transparency and accountability in service and helps to reduce service leakage due to corruption or other illegal influences. G2P means government-to-person service that connects the persons directly to the government through e-platforms and mobile services. The term is currently being used in underdeveloped African and Asian countries. Bangladesh, India, Kenya, Colombia, Uganda, Brazil, and others adopted G2P to reach the beneficiaries. Bangladesh made a new roadmap for public service delivery by installing the G2P approach.

G2P enhances the accessibility of citizens as individuals to government services and information. The base of G2P is shaped by the introduction of e-governance services and digital services that are electronic media-based and run over the internet. In the last decade, the Bangladesh government brought revolutionary changes in its governance system by delivering services online. A2i was introduced as “access to information” under the PM office, which upgraded the baseline of G2P one step further. A large population, mainly poor, was absent from the e-services because they were not well equipped to use digital services. On the other hand, rapid uptake of mobile phones and smartphones raises concerns about providing mobile-based services to people.

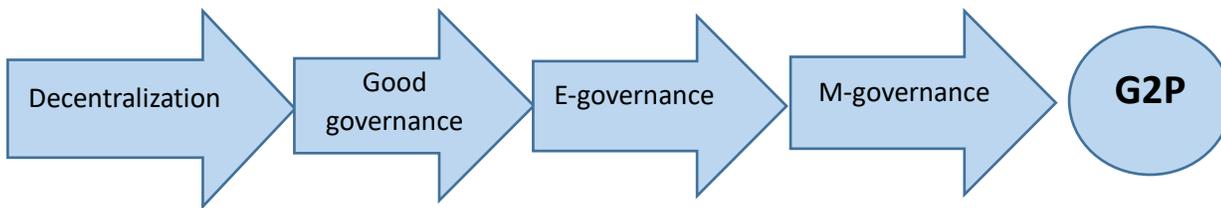
The financial service delivery sectors include social safety net program payments, educational stipend programs, pensions, allowances to freedom fighters, and others. The government directly transferred social safety allowances and other reliefs to mobile banking accounts like Bkash, Nagad, Rocket, etc. Mobile financial service (MFS) is getting very popular. When the government directly delivers services to persons through a one-step process, it becomes more efficient. Several ministries started practicing G2P a few years ago. The coverage of G2P services is comparatively narrow for its new appearance. This is intended to reduce the “financial leakage” of allowances and stipends due to corruption and political influences (Aremu, n.d.). Biometric registration of NID and mobile SIM can help find authentic financial help recipients. Direct connections increase transparency and accountability and reduce misuse of state funds given to people experiencing poverty. So, it is necessary to study the G2P approach in the digital governance system, find its gaps and challenges, and try to overcome them. This study examines the impacts and interlinks between G2P and public service delivery. Does G2P influence it or not? So this study may be a new source of knowledge that can facilitate further work. The study area is narrow but specific to identify relations and cause-and-effect of the variables. This study intends to find out the interrelation between the G2P approach and public service delivery and to describe the impacts of G2P on public service delivery in Bangladesh. It will portray the feedback regarding the effectiveness of the G2P approach from the service receivers' and providers' perspectives and the challenges of G2P in the country. Finally, G2P service is pretty new to study, but it is significant in innovating new scope and making the current use of G2P error-free.

## 2 | LITERATURE REVIEW

### 2.1. Transformation of public service delivery and G2P in Bangladesh

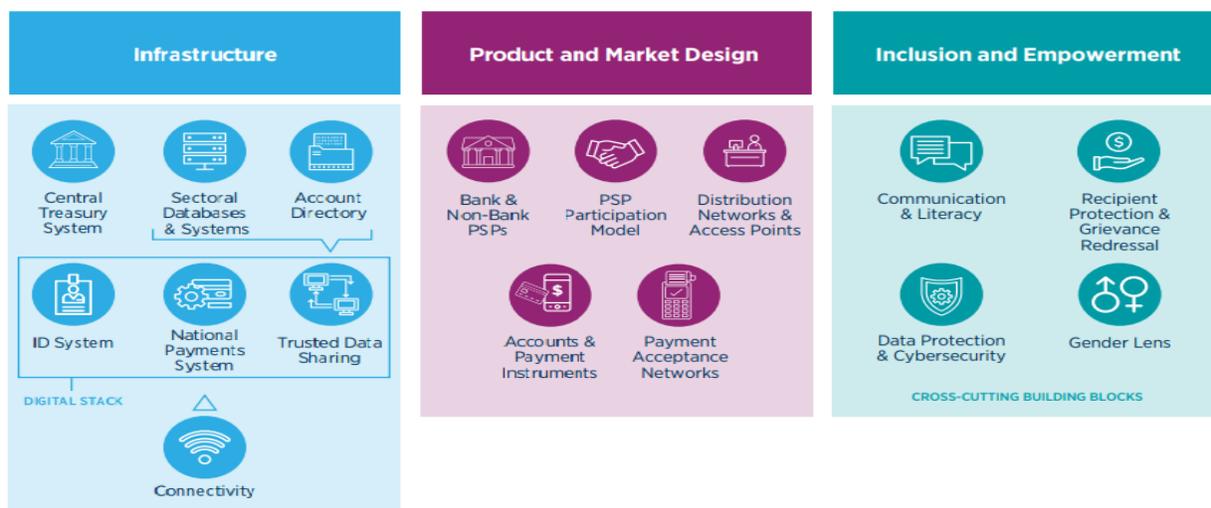
The government is responsible for delivering some services to the citizens. The government, NGOs, and the private sector deliver services to people. Services given by the government or a public agency are usually called public services. In formal words, public service means the activities and services performed by state agents according to the state's capacity for the betterment of citizens. To ensure fundamental rights of citizens, public services are provided in republican states. Public service delivery is the machinery of passing those services to beneficiaries. Bangladesh has undergone several public service delivery system reforms since its independence. The concept of decentralization of services and responsibility among different levels of government. Decentralization of authority and responsibility makes the service delivery system easier. When an underdeveloped country is wrapped up in poverty, illegal power practices, corruption, etc., good governance is considered a counter spell against the poor governing system (Roy, n.d.). Policy makers want to ensure accountability, transparency, and responsibility for

stopping service leakage. The world has entered the modern era, and e-governance has been introduced. Governments try to deliver services through electronic media, e-mail, fax, computer, etc. As the world gets smarter and faster, people have started to use mobile phones that contain all the existing features of computers, which are portable and easy to use. So, the M-governance concept started to grow, and mobile services like help call centers, SMS services of several ministries, emergency national services, etc. Thus, government-to-people (G2P) became popular among service providers and receivers. Initially, G2P is being implemented in Bangladesh through MFS (mobile financial service). Many MFS operators (Bkash, Nagad, Rocket, Cell Fin, Upay, Sure Cash, etc.) operate in the country. Some of the MFS are partnering with the government and delivering financial allocations from the government to the beneficiaries under social safety net programs.



**Figure1.** Transformation In Public Service Delivery (Author Compilation).

The government-to-person approach is a newer concept of governance that ensures more transparency and accountability through reaching citizens individually. G2P was launched in Bangladesh in 2019, with contributions from the Social Welfare Ministry and the Ministry of Education. They started to deliver financial services through digital cash transfer using mobile phones. Now, G2P is considered a way of cash assistance transfer, such as social benefits, stipends to students, allowances, pensions, and others. In many underdeveloped countries, that approach is used as a technological transformation to make services easier and acceptable to beneficiaries. In our country, G2P is the latest form of e-governance and digitalization, as our government was sincere about technological upgradation over the past decade (2010). Although the government reaches people directly through agent banking and passes the amount to the beneficiary's bank account, and he/she will get a confirmation SMS service from the bank to their mobile phone, it is impossible to withdraw money without visiting the bank physically. However, installing digital cash transfer by MFS and mobile banking agents will be easier and more transparent, as well as increase money withdrawal options. *"MFS is gaining immense popularity among government stakeholders and development organizations due to the reduced crowding that is still happening at banks. Experts also believe overall efficiency will increase if beneficiaries are brought under the MFS umbrella"* (Anwar, 2022). G2P is the approach that depends on some important issues. One of these is the beneficiary's database architecture. Still, our population faces a problem because proper data on beneficiaries is not preserved, which causes wrong payments, missed regular payments, and requires a long time for correction. Three things are mandatory for receiving service through G2P: a Biometric registered SIM, an NID, and a Mobile banking account, as well as a smartphone or mobile phone. One of the previous studies on G2P suggested three building blocks of the G2P approach. According to the author, (Madan, 2021) the building blocks are Universal ID, Interconnected socioeconomic database and Digital delivery. Other hand, (Worldbank, 2022) in a document of the world bank, suggested another three building blocks of G2P: Infrastructure, Product and market design, Inclusion and Empowerment. Infrastructure here includes ID system, National payment system, National Data sharing, connectivity, central treasury system, etc. In our country, G2P services are a sophisticated form of digitizing public service delivery. A conference paper on "Digitizing Payments in Bangladesh," led by the Ministry of Finance, World Bank, and A2i program of the ICT division, conceptualized G2P payment as a three-step process. These are: 1) beneficiary determination, 2) fund transfer, and 3) cash withdrawal (Ministry of Finance, 2019). The paper also reviewed the process of G2P payment.



**Figure 2.** Beneficiary Database Architecture. *Source: World Bank Document (Worldbank, 2022)*

The sectoral coverage of G2P is basically narrow in our country; we are in the transactional period of G2P installation. G2P is usually used for financial transfer services in Bangladesh. Though different private sectors installed it, this paper only focused on public sector engagement with the G2P approach (Ikejemba et al., 2017). Four types of service given through G2P payment: 1) unconditional cash transfer (SSNP), 2) conditional cash transfer (MoWCA & MoLGRD), 3) School Stipend program, and 4) Public workfare (MoDMR). These four types of G2P services cover several sectors such as social benefit, education sector, rural development, financial inclusion and empowerment, health protection for mothers and newborn, disaster management and relief, liberation war, and freedom fighters’ protection.

## 2.2. Study on G2P approach and related literature

In the era of technological revolution, the whole world is going through a path driven by ICT and the Internet. The state government also uses a modern approach to deliver its services. In many countries where poverty and corruption are common, these countries need to install a transparent and more accountable governance approach. G2P is the updated version of governance that connects the state to an individual person. Different ministries of the country are practicing the G2P payment for various welfare schemes in Bangladesh (Rotman, 2011). According to (Leora Klapper, 2017) More than 100 million poor people worldwide receive a government-to-person (G2P) payment. This includes government wages, government transfer payments (such as pensions, social benefits, and unemployment benefits), and tax refunds. He also argued, “*Digitizing G2P payments has the potential to dramatically reduce costs, increase efficiency and transparency, and help recipients build familiarity with digital payments*”. Several Scholars have remarked that the G2P **service reduces the cost** of transferring the allowance money. Hoque and Hoq (Hoq, 2022) described in their newspaper article that the digitized G2P payment helps to reduce costs, uncertainties, and also reduces the process delay of service delivery. One term, TCV (Time, Cost, and Visit), is closely related to the digital G2P approach, mainly reducing TVC means the efficiency of a service. G2P reduces the time of service delivery, reduces the cost, and finally, the beneficiary's visit to the bank or the upazila office is reduced.

**The use of mobile financial services (MFS) is another key point of G2P payment, where mobile phones are used to receive financial allowances.** The disadvantaged and poor can easily withdraw money from the nearest cash-out point. That is to ensure the financial inclusion of people with low incomes and to put banking services at people's fingertips. That improves the service efficiency also. Tanzina Azad said in her study that e-

governance transitions to mobile governance through several phases of time (Azad, 2011). There are lots of good sides to G2P. It increases transparency and reduces leakage, lowers the cost for the recipient, improves speed and timely delivery, increases security and lowers crime, and increases financial inclusion. However, G2P is considered an effective approach; previous literature also shows some gaps and drawbacks of the system. Researchers have discussed the proper identification of service recipients by Biometrics SIM and NID card for verification as the receiver of allowance, but a shortage of devices among poor and uneducated people means they cannot memorize their passwords. Moreover, sharing passwords with others can lead to the leakage of money. Hence, Bangladesh lacks an updated, correct, and disaggregated national database to distribute different types of support. For this purpose, an event summary paper (A2i, 2019) presented a quotation of Brig Gen. Md. Saidul Islam, Director General of the NID wing of the Election Commission of Bangladesh, said, *“Elaborated the government's plan regarding NID and its core purpose to contribute to effective service delivery in Bangladesh. Service providers are already connected with the NID system, and in the last 36 months, more than 325 million identity verifications have been completed successfully. Bangladesh has introduced a smart 10-digit NID number to protect data privacy in service delivery with the feature of offline authentication.”*

Digital cash transfers have resulted in **public-private partnerships** in some major areas for the government. The services of BKash, Nagad, Sure-Cash, and Rocket have been used for various government programs (Hoq, 2022). A report of the SSPS program and the Cabinet division stated that the GoB has called out the private sector to contribute toward achieving the Sustainable Development Goals (SDGs). For Bkash and Rocket, strengthening G2P is an area where they can contribute by providing a valuable service. (Cabinet-division, 2019).

**Lack of technological knowledge and insufficient equipment** are other factors that impact the G2P approach (Roest, 2019). Roest said that a G2P-enabling environment in Bangladesh is needed. According to the study, over 80 percent of the G2P population in Bangladesh did not own a mobile phone in 2016. Also argued that Banks are ready to provide MFS, and citizens need to take biometric authentication. A field study of the ICT department of GOB, directed by A2i, shows the availability rate of mobile phones among beneficiaries. This paper claimed that 82% of beneficiaries have no mobile phone, and 18% of people have mobile phone. But 65% have a family mobile phone. The paper also adds, *“Accessibility, usage, and ownership of mobile phones have significantly increased in recent times”* (A2iprogram, 2019).

**Financial inclusion** adds the vulnerable majority to economic empowerment and allows them to choose service options. That system builds their economic capacity, allows them to choose agent points, and determines the time of money withdrawal. As well as monitoring beneficiaries' experience and satisfaction. The event paper (A2i, 2019) also recognizes a huge “gender gap” in financial inclusion in 2017-18. Gazi Md. Mahfuzul Islam, Financial Inclusion Department, Bangladesh Bank, said, *“The introduction of Agent Banking & MFS guidelines by Bangladesh Bank has facilitated the financial inclusion initiative. Bangladesh Bank will continue pushing and instructing commercial banks to reach the unbanked population”* (A2i, 2019).

**Fund leakage** is reduced through the G2P payment method, which involves MFS and agent banking. One policy note of World Bank group (Worldbank G. , 2021) provides information that, *“From 2016 MoSW began piloting digitized payments through the Bangladesh Post Office and agent banking, and in 2020 using mobile financial services (MFS) to reduce fraud and ghost beneficiaries by adopting digitally authenticated secure payments”*. But unfortunately there are some regulation gaps on the issue, it needs to be identified. This policy note mentioned such loopholes in regulations. Among them, one is *“These can sometimes lead beneficiaries to entrust intermediaries such as Union Council members to collect benefits on their behalf, creating the scope for leakages.”*

In Bangladesh, the A2i and Digital Bangladesh concepts draw the baseline of G2P in the country. Several services are provided to people through G2P, such as the social safety net program, primary education stipend program, allowance, pension, government employees' salaries, financial help, emergency relief, etc. To receive the public service through a digitized G2P approach, a **Beneficiary Database** is mandatory. The service will depend on how rich the beneficiary database is! Practically, in Bangladesh, policymakers do not take database-making and data-collection processes seriously. This causes a faulty payment system. In a "Daily Star" newspaper report, different policy makers and high-profile officials shared their opinions. The CEO of Sure-cash said, "All we need now is a reliable beneficiary database. However, data collection, management, and processing are quite different from the payment of benefits. If we look at the architecture of G2P, the disbursements will be made by the relevant ministries, and we understand data collection is a weak point for our country". The deputy managing director of DBBL also thinks that selecting the proper beneficiary is a challenging task (Dailystar, 2020).

### 2.3. Literature gap

Most of the literature on G2P service delivery in Bangladesh is constructed by government divisions or ministries. Particularly, the studies are mostly positive about outcomes. As a new topic, G2P has a poor literature background. Most authors positively explain all of the facts and issues related to G2P. Previous literature is introductory and mainly measures the effectiveness of the G2P approach. Literature is less comparative and analytical. Also, as it is a pilot project, people are always positively biased.

### 2.4. Overall and specific objectives

The overall objective of the research is to identify the linkage between G2P services and public service delivery and to analyze the impact of G2P on public service delivery in Bangladesh. Three specific objectives are determined to fulfil the overall research objective. These are:

- To find out how G2P is perceived as an approach to public service delivery on a large scale in our country.
- To observe the impact and consequences of the G2P approach on public service delivery.
- To recognize the gap and drawbacks of the present G2P structure in Bangladesh.

## 3 | METHODOLOGY

### 3.1. Research questions

- How has G2P been perceived as an approach to public service delivery?
- What are the challenges of G2P in large-scale implications in Bangladesh? How much are the impacts and consequences of using G2P over public service delivery?

### 3.2. Study area

Mymensingh is the eighth administrative division of Bangladesh, located 120 km north of the capital city, Dhaka. Mymensingh is well connected with the capital city and a city with all divisional set-up, though it is still growing. The population density of Mymensingh city is 44,458/km<sup>2</sup>, making it the second most densely populated city in Bangladesh. The study area is three Upazilas of Mymensingh district: Mymensingh Sadar Upazila, Trishal, and Bhaluka. The three Upazila social service offices, the district social service office, and one primary school from each upazila, and any local government bodies from each upazila are the focus of KII data collection. (বাংলাদেশ (Bangladesh) জাতীয় তথ্য বাতায়ন | গণপ্রজাতন্ত্রী বাংলাদেশ সরকার | People's Republic of Bangladesh, 15.03.2023)

### 3.3. Study design

The study is designed as a mixed-method study. Both quantitative and qualitative methods have been used in this study. As the study area is narrow and time was also limited, only qualitative data did not seem adequate. On the

other hand, only quantitative data are more experimental and statistical, which cannot describe the challenges properly. Paying attention to the issues, a mixed method was used in that case.

### 3.4. Sampling

For the textual data, a non-probability purposive sampling technique and a random sampling technique for survey data have been used. The total population of the study is all G2P service receivers and delivery agencies/institutions in Mymensingh. To maintain the proper response from each area, samples are collected through a purposive sampling technique (for KII and In-depth Interviews). Random sampling was done for the quantitative data. The total sample size is 120. Among the samples, 100 were surveyed, 10 were KII (Key Informant Interview) respondents, and 10 were in-depth interviews. Survey and other interview samples were selected from the approximately equal proportion of three Upazilas in the Mymensingh district (Bari et al., 2020).

### 3.5. Data source and collection method

Data has been collected on the basis of data quality, authenticity, and accessibility to respondents (Aithal & Aithal, 2020). This study was conducted based on primary data, which was collected from the field. Primary data were gathered from respondents by using three methods: KII, IN-DEPTH INTERVIEWS and QUESTIONNAIRE SURVEY. Among these, KII and in-depth interviews were used to collect qualitative data through open-ended questions and deep discussion using a checklist on the topic with respondents. The survey questions were closed-ended, and quantitative data was collected to test assumptions through statistical analysis. Secondary data sources are used to review literature and increase the knowledge sphere of researchers so that they can correlate or compare different issues. It also helped to establish the qualitative analysis foundation by developing conceptual and theoretical thinking.

### 3.6. Analytical process

This is an academic study and needs to be more specific in its purpose. The analysis of 100 survey results was done by the Statistical Package for Social Science (SPSS). As the software can cover the desired tests, no other software was used. On the other hand, textual data were analyzed using systematic manual designs based on the feedback and impressions of respondents.

### 3.7. Scope and limitations

Academic addition of knowledge and recommended solutions to service providers can be the scope for this study. On the other hand, this paper was completed in a short time frame. For that reason, only three upazilas were the study area, and data were collected on “Primary Stipend Program” and “Social Safety Net Program” as these two sectors installed the G2P approach successfully. Another limitation of the study is that it is purely academic and non-funded. So, a large study area coverage was skipped due to funding insufficiency (Oughton et al., 2017).

## 4 | FINDINGS AND DISCUSSION

**Table 1.** frequency of demography profile. *Source: Author, modification done by SPSS*

Variable	Factor	Frequency	Percent
Age	Below 20	13	13.0
	21-40	25	25.0
	41-60	31	31.0
	61-80	24	24.0
	80+	7	7.0
	<b>Total</b>		<b>100</b>
Gender	Female	57	57.0
	Male	43	43.0

	<b>Total</b>	100	100.0
<b>Education</b>	Educated	53	53.0
	Uneducated	47	47.0
	<b>Total</b>	100	100.0
<b>Accommodation</b>	Rural	74	74.0
	Urban	10	10.0
	Sub-urban	16	16.0
	<b>Total</b>	100	100.0
<b>Economic status</b>	Lower class	58	58.0
	middle class	39	39.0
	Upper class	3	3.0
	<b>Total</b>	100	100.0

This table is the combination of five frequency tables of variables (Cox, 2017). Here, the first row shows the respondent's age group; maximum number of respondents belongs to the 41-60 age group. They are the population who are not G2P beneficiaries; instead, they are parents of school-going G2P beneficiaries and wives/family members of disabled and elderly persons. The second row shows the gender of respondents, as males are not much available during the daytime in their house because they go to work outside. So, female respondents are a little bit more than 57%, and the rest are male. Though the maximum number of respondents is educated, a huge percentage of respondents are uneducated. The accommodation row gives data about the area they belong to. 74% of samples belong to rural areas, as data has been collected from upazila areas. Lastly, the poor are the beneficiaries of the allowance services. 58% of respondents belong to the lower class, 39% of respondents are from the middle class, and only 3% are from the upper class. Most of them may be primary stipend holders or freedom fighters.

#### 4.1. Usefulness and problems of G2P: Comparison among variables

Comparisons are given here to describe the issues related to public service delivery through the G2P approach and describe the acceptance of the G2P approach as a pioneering mode of public service delivery.

Graph 1 compares the age groups regarding the usefulness of G2P services. The thoughts about usefulness vary for the age group. The below-twenty age group selects 4 options they are not sure about whether the cost is low or not. But the majority of the group selects all "above" options (Liu et al., 2018). The majority of the 21-40 age group thinks that all the options are selectable. 15 persons of the 21-40 group chose the "all above" option shown in blue bars of the following bar chart. 41-60 age groups of respondents select each option, among the 28 persons, 10 people select all of the usefulness of G2P, six people think it is transparent, six said no intermediary needed, and four respondents think it is low cost, only two people said about easy withdrawal. The other two age groups skipped the option of "low cost," but the majority selected the "all above" option.

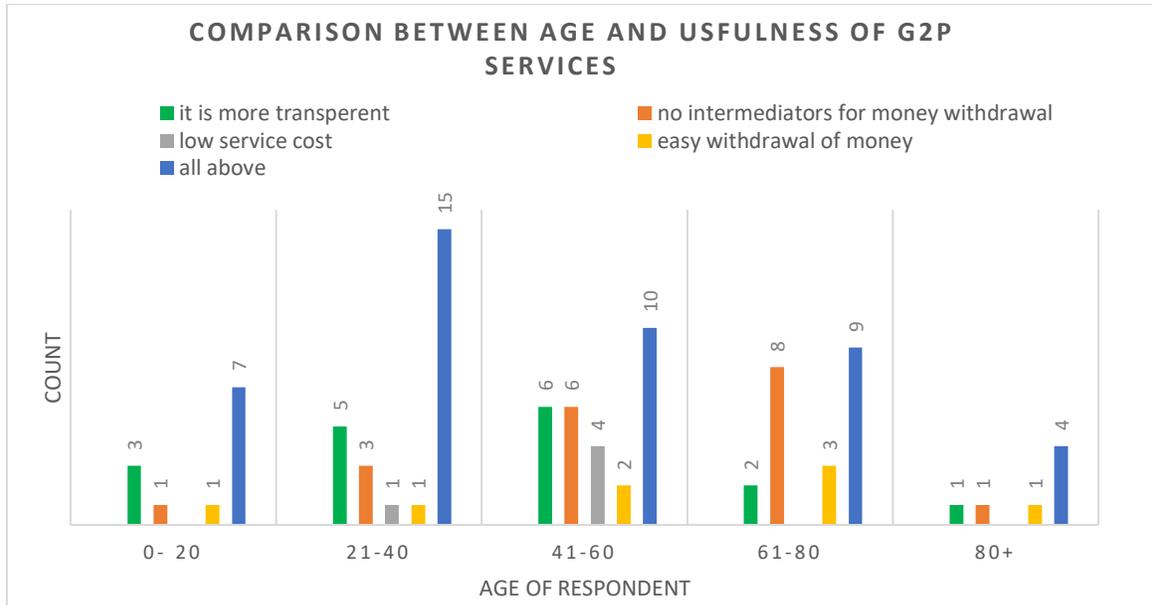


Figure 3. Comparison between Age Groups and the Usefulness of G2P.

The problems of G2P according to age group are included here:

<sup>1</sup>See figure 3: comparison between Age group and Usefulness of G2P.

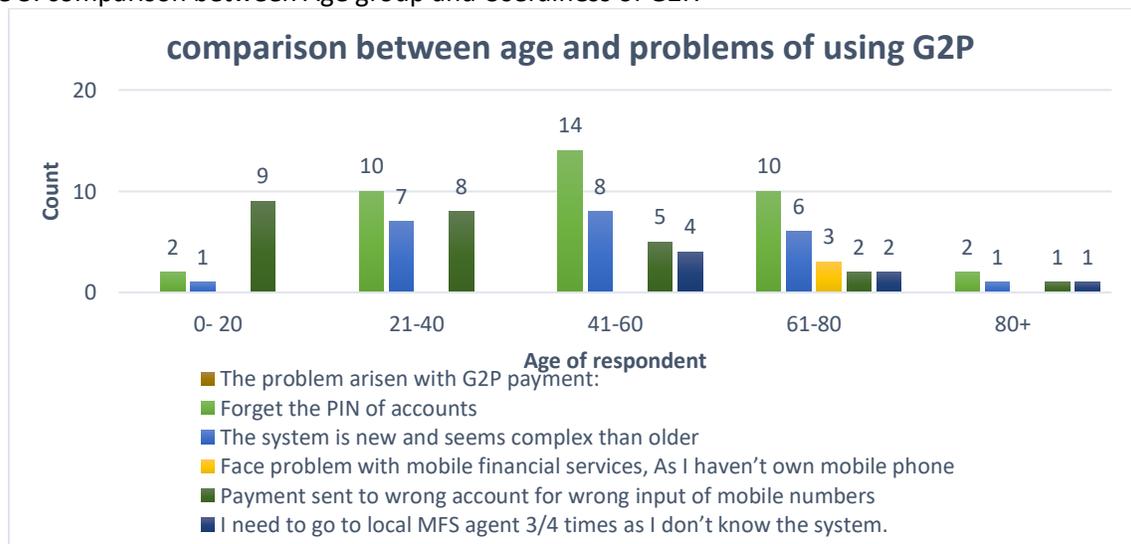
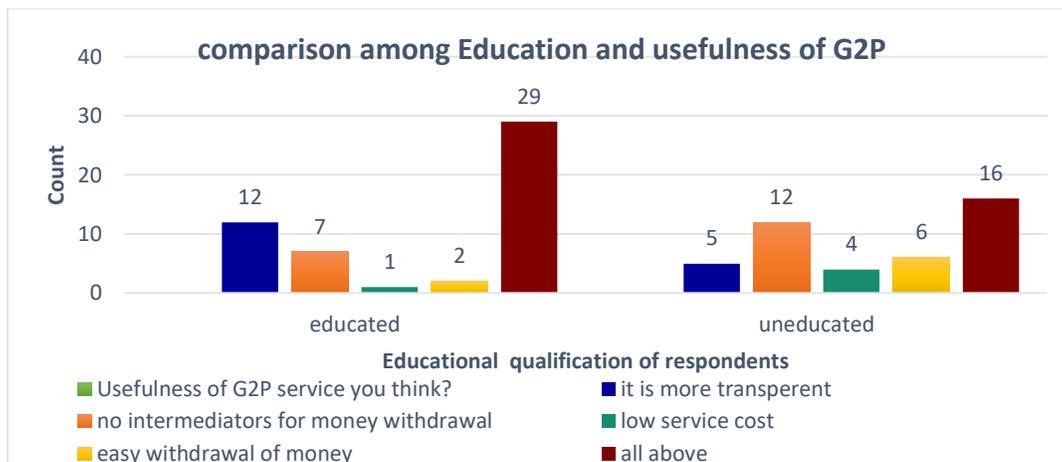


Figure 4. Comparison between Age and Problems of G2P. Source: Author, modification done by SPSS.

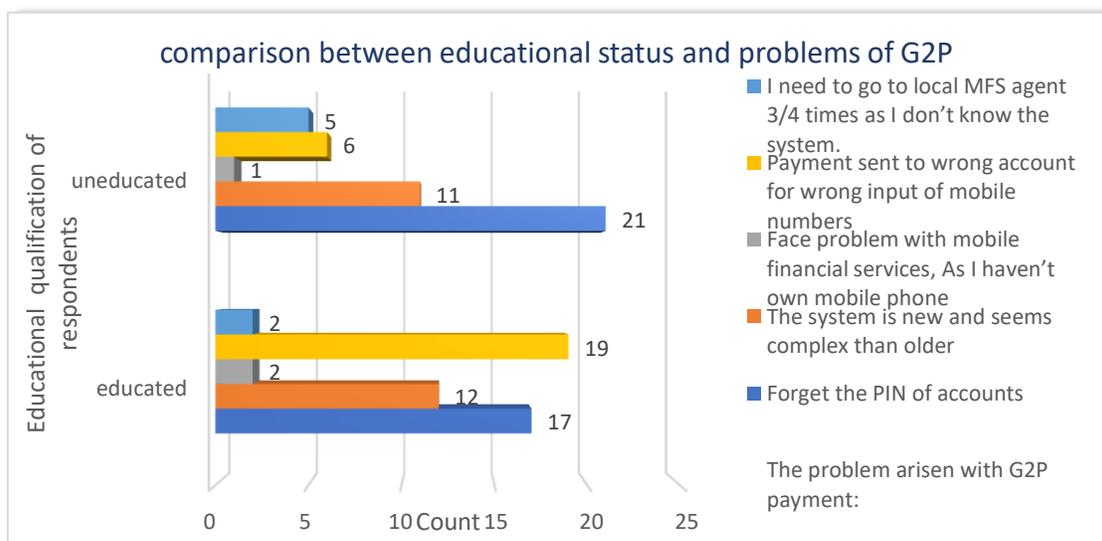
Here, five types of problems were given in the questionnaire. Most respondents argued “forgot the pin” as the main problem of G2P, who are in the 41-60 age group. Among them, 14 respondents think ‘forgetting pin’ is a problem. Another problem with high frequency is “the system is new and seems complex”. One thing is evident: the under-20 age group faces fewer problems than others. The 21-40 age group also has three types of problems among 25 respondents, 10 people said they forget the PIN, 7 see the process as a complex one, and 8 people think “payment sent to wrong account” is another problem. 41-60 age group and 61-80 age group think G2P is problematic. Only the 61-80 group faces each type of problem. 80+ people face four types of problems. These two bar charts compare the Age group with the problems and usefulness of G2P services. Aged people face

several types of problems. 61-80 groups face the maximum type of problem. Essentially, the 21-40 group selects the usefulness of G2P more than the problems and seems fit for G2P tools. The 41-60 age group is at a moderate level, and the 61-80 age group faces more problems than usefulness.



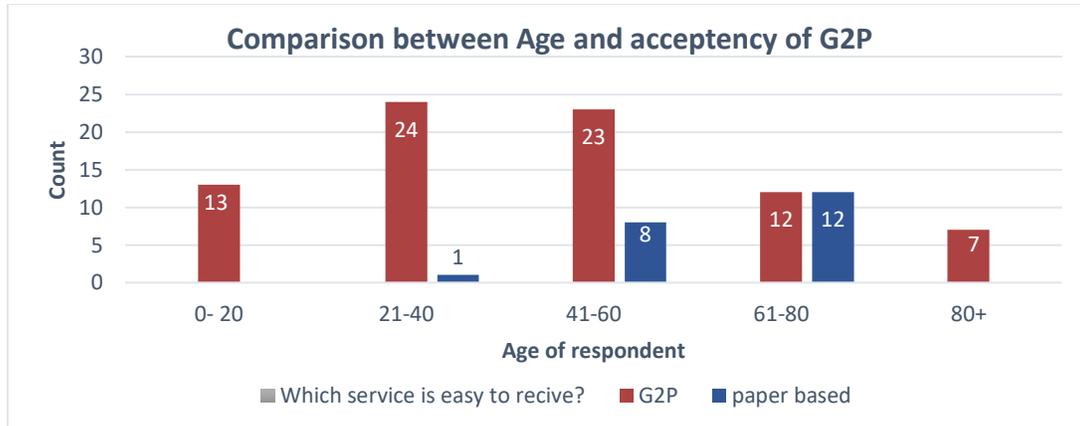
**Figure 5.** Comparison among Education Levels and Usefulness of G2P. *Source: Author, modification done by SPSS*

Education makes a difference in people's perceptions. Educated participants mostly selected the “all above” option when they were asked about the usefulness of the G2P approach (mostly about MFS) (Goldstone et al., 2010). More than half of the educated respondents selected the option. The second most commonly selected option regarding the usefulness of the G2P approach by educated respondents is “transparency”. Uneducated respondents selected “no intermediary needed” as the most common option. Uneducated people also selected “easy money withdrawal” as useful. Other options have a low frequency.



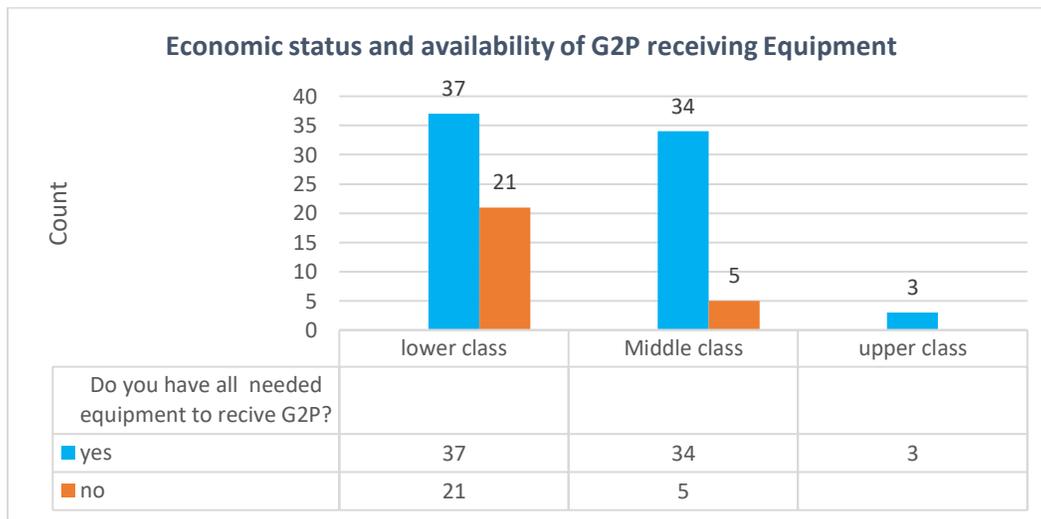
**Figure 6.** Comparison between Education and Problems of G2P. *Source: Author, modification done by SPSS*

Educated respondents mostly select the problem of “payment can go to the wrong account.” Secondly, the problem faced by educated respondents is forgetting the PIN. Very few educated people face problems with mobile phone availability and the operation of MFS accounts. The majority of the uneducated respondents forget their account pin; the second highest selected option is “complex system”.



**Figure 7.** Comparison between Age and Acceptance (easy receiving) of G2P. *Source: Author, modification done by SPSS*

The bar chart easily shows the acceptance of G2P among different age groups (Kurusu et al., 2021). Early aged respondents are more comfortable with G2P services. The age groups below 20 and 21-40 prefer only G2P as the easy way of receiving public services. Only one person in the group selected the paper-based service, whereas 37 respondents in the same group selected G2P. The 41-60 age group is interested in G2P, but one-fourth of the group thinks paper-based services are easy, eight people among 31 selected paper-based services, and the remaining 23 selected G2P. In the fourth age group, half of the people are comfortable with paper-based operations, and the ratio of their responses is exactly equal (12 people).



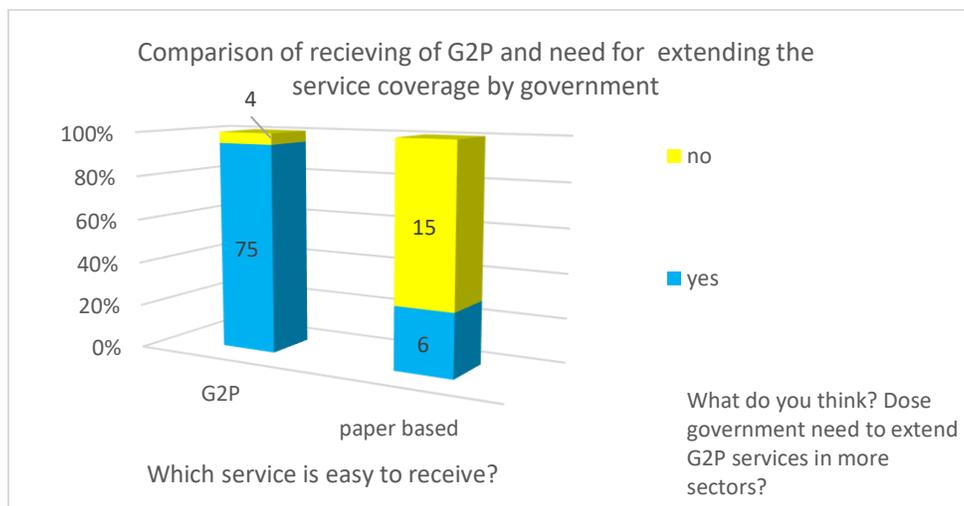
**Figure 8.** Comparing Economic capacity with the availability of receiving equipment. *Source: Author, modification done by SPSS*

Respondents were divided into three broad categories according to income group (Dargin et al., 2021). In the lower class segment, 21 people have no equipment to receive services. But 37 respondents have equipment. In the middle-income group, out of 39 people, only 5 have “no equipment,” but 34 have at least one. Here, the percentage of respondents with no equipment decreases. So among poor people, the rate of equipment ownership for service receiving is lower than that of the middle class. The data set has only 3 data respondents from the upper class, and all of them have service-receiving equipment.

The easy service receiving and acceptance of G2P can make a difference in the “demands of people for extending the G2P services” (Mckay et al., 2020). Here, Graph 2 shows people who like G2P services; they also think G2P needs large-scale implementation in other sectors by the government. Here, 79 people out of 100 feel it

is easier to receive G2P than paper-based, and 75 of them support the large-scale implementation. Only four people do not want the extension and large-scale implementation of G2P. On the other hand, 21 people feel at ease in paper-based operations, and most of them are elderly people. Among them, 15% of respondents said against the expansion of the coverage of G2P, and six people supported the expansion of G2P, though they feel more comfortable with paper-based services.

<sup>2</sup> See figure 8: Comparison of easy receiving of G2P and the need for extending the service coverage of G2P by the government.

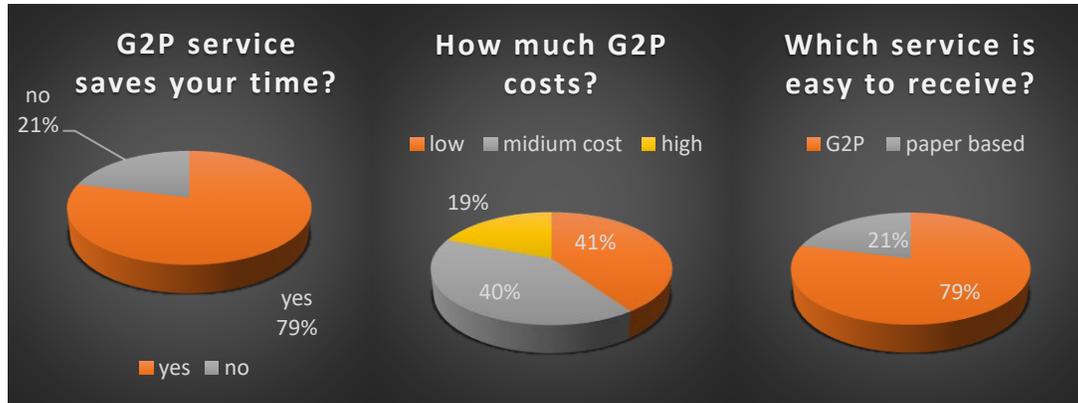


**Figure 9.** Comparison of the easy receiving of G2P and the need for extending the service coverage of G2P by the government

All the comparisons are made to figure out whether older respondents warmly receive G2P or paper-based operations. The older age group (61-80) is not comfortable with G2P, but they do not have too many complaints with it either. They inspire it to expand. And the younger age group is interested in G2P and has the equipment and technological knowledge. They face fewer problems than the elderly. Different income groups have different opinions about the G2P approach. However, educated people like G2P more than paper-based operations compared to uneducated people. Respondents who think G2P is an easy way to receive public services inspire the large-scale implementation of G2P (Suryanto & Utami, n.d.).

#### 4.2. Efficiency of G2P and TCV

The frequency of three closed-ended questions indicates the efficiency of G2P-based services. The efficiency of the service was defined by TCV measurement (Malhotra et al., 2017). T for Time, C for cost, and lastly, V means Visit. In the literature on social safety net programs, TCV is a very common term that explains the efficiency of G2P. In this portion, data from surveys were collected and presented through TCV measurement. G2P reduces time, cost, and visits of the receivers of service, making an efficient approach to public service delivery.



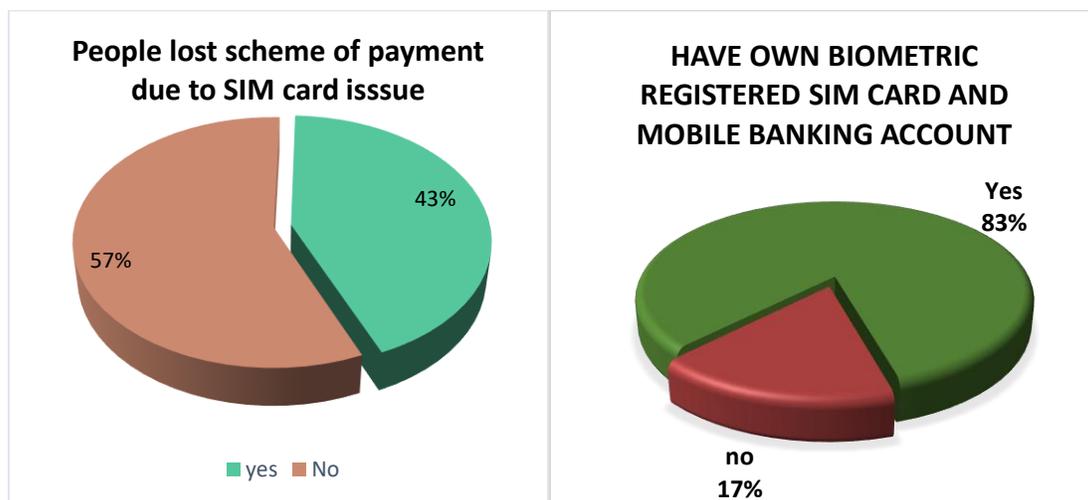
**Figure 10.** Efficiency of G2P services (from field survey). *Source: Author, modification done by SPSS*

The three figures show the responses to three questions about time, cost, and visit regarding G2P-based services. In a matter of time saving, 79% of the respondents are positive about the G2P approach. They think G2P saves time. However, 21% think the opposite. In the second pie chart, the highest percentage (41%) of respondents agreed that G2P is less costly. Only 19% of respondents think it costs too much. So, the result shows that G2P costs very little in the case of receiving public services. The last pie chart shows how easy and convenient it is to receive a payment under the G2P approaches. It requires fewer visits than the paper-based approach to access public services. Here, 79% of the respondents said that through G2P, it is easier to receive any service. Therefore, the study finds the efficiency of G2P, and the result also agrees that the system is really efficient.

### 4.3. User’s technological capacity

Technological knowledge and sufficiency of essential equipment are mandatory to receive G2P-based services. (Rizk, n.d.) Moreover, the receiver’s database is also necessary. The G2P approach prioritizes mobile financial services and authentic information/identification of service receivers. The NID of Bangladeshi people is registered by the EC through biometric verification. Each receiver needs to have their own biometric registered NID and mobile financial service account to receive G2P-based payments. They also need a mobile phone for cash withdrawal. But practically, some people use family members' SIM cards, and they also have no mobile phone. Some of them use a family mobile to receive the services. That creates a problem, and some recipients miss payments. The study shows two frequencies related to the topics, firstly, how many people miss their payment due to SIM card issues, and secondly, how many of them have their own biometric-registered SIM and Mobile banking account. Here, the study results show that 57% of respondents did not face a SIM card issue and did not lose any payment, but 43% of them faced that issue and lost at least one payment scheme. 43% is a large portion, and this amount is not negligible. This is one of the challenges in G2P architecture. Wrong Information and imperfect user databases create these types of issues (Clark & Herman, 2017) . Still, people do not seem sincere about their NID, SIM, MFS account, and PIN.

<sup>3</sup> See Figure 10: Technological capacity of respondents.



**Figure 11.** Technological capacity of respondents. *Source: Author, modification done by SPSS*

In the second pie, the percentage of people who own mobile and banking accounts is 83%. This is a good rate, but in 100 people, 17% have no Biometric registered SIM and MFS account, which is not a negligible amount. So, the output is that the technological knowledge and capacity are good, but there is a need for more care for 43% of people who have lost their payment at least once.

#### 4.4. Frequent points of Klls

Key Informants focused on several points. First of all, the officials and social service officers of Upazila maintain approximately similar psychology regarding the G2P approach in the service delivery of the social safety net program (SSNP). Similarly, the education officers give similar information (Benešová & Tupa, 2017). Some of the common points of their discussions are explained below

##### ☰ Efficiency of G2P service

The officials said that G2P service delivery is the most efficient and reduces the TCV of services. According to one officer, “It is 70% more efficient than the older one. They argue that G2P innovation is in the transactional stage, but we still need to cope with the system. Recently, it has become easier than the older service. Local representatives only select the beneficiary, and they also said G2P is more efficient than a paper-based service. Teachers of primary school do not think it is very efficient (Voogt & McKenney, 2017). They think it remains the same as the previous system. Education officers are very positive about the topic; they think it is much easier.

##### ☰ Technological advancement and equipment availability

In the SSNP case, the majority of people are uneducated and technologically not advanced. The problem with SIM cards and accounts is common, but NID verification is a must for receiving service. In many cases, people have only a SIM card and have opened an account with this SIM card, but have no mobile phone to use the SIM. The SIM remains inactive, and receivers open it only when withdrawing the allowance. One key informer said, “Some aged beneficiaries use their son’s or daughter’s phone and account. Sometimes they (sons and daughters) cheat their mother or father and lie to them”. Education officers are satisfied with the technological advancement of recipients. For a school child, a birth certificate and the mother’s or father’s NID are essential. Sometimes, the allowance gets back or somehow gets missing from the account if it is not withdrawn in time. Generally, due to a lack of technological capacity, hackers take OTPs from the beneficiaries.

##### ☰ G2P being the next Transformation

Each and every respondent is very positive about the G2P payment approach (Dupas et al., 2018). They think that G2P can transform public service delivery, and the officials think that it will be the next innovation in digital

Bangladesh. To use in another public service delivery type, G2P can be one mode of service delivery. The key informers are very positive about G2P as it is a government innovation that will allow the piloting of some of the projects.

### ⚡ Challenges of G2P

A common problem occurs when creating a database for the receivers. The primary school teachers said they had a short time to create the database of students, and that is why the database may be filled with inaccurate data. If the input is wrong, the payment will mess up. The servers have insufficient capacity. With time and practice, the problematic situations will also decrease. Lack of technological knowledge can lead to problems like sharing passwords with an unknown person. Many receivers of SSNP are aged, and so it is tough to teach them about the technology. One key informer said, “Old people think the process is complex and do not easily learn all things.” There are also problems with PIN sharing with others (Wishner et al., 2018). Sometimes family members withdraw and use the money without asking the beneficiary. Another system gap is updating and renewing the list of beneficiaries. “ We identified some incidents where beneficiaries died but allowance was being given to the MFS account registered with the beneficiary’s SIM as the family did not inform that or no update was done by the surveyor,” said the deputy-director of Zila Social Service Complex, Mymensingh.

### ⚡ Usefulness of G2P

The usefulness of G2P is appreciated by all of the key respondents. They talked about transparency, decreasing fund leakages, and the fact that intermediaries are not able to cut some amount. But still, the system has lots of problems. Moreover, G2P-based services increase accountability, and beneficiaries can easily withdraw money. Time, cost, and visit decreased due to the installation of the G2P approach . Corruption also decreased as the system needed sufficient documentation (Casadesús de Mingo & Cerrillo-i-Martínez, 2018). Also, fake NIDs and applications are not valid now.

## Usefulness and Problems of G2P Approach

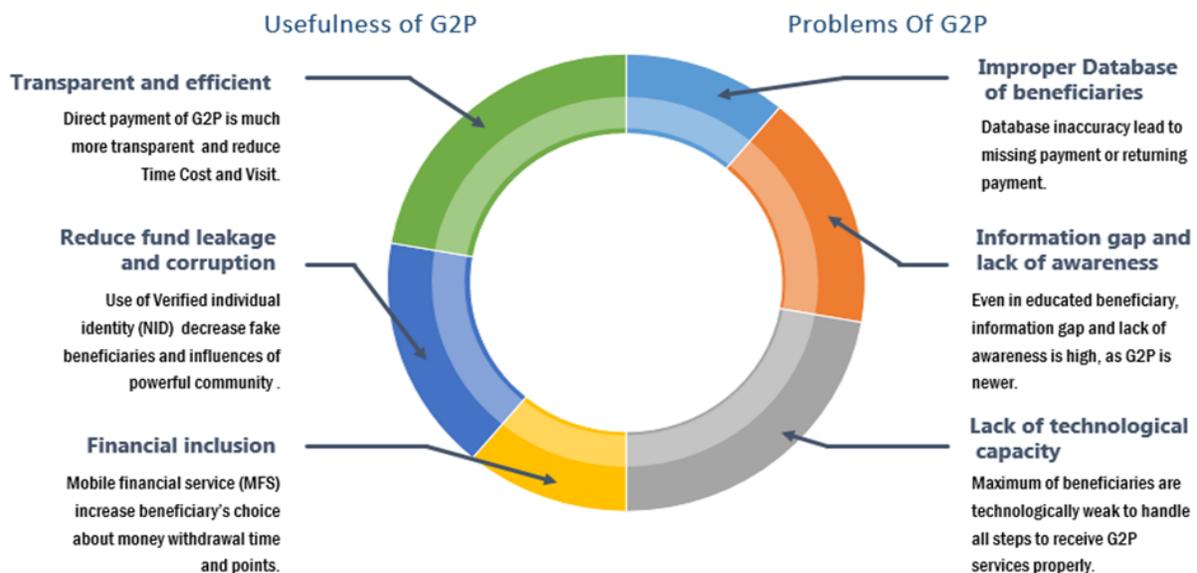


Figure 12. Usefulness and Problems of the G2P Approach. Source: author, modified by Microsoft PowerPoint

#### 4.5. In-depth interviews

Ten in-depth interviews have been conducted with the general public. The respondents are interviewed elaborately. Luckily, some people are really satisfied with the G2P approach. Three special cases were found while interviewing the respondents.

##### Case 1

Al Amin is a disabled person living in Trishal. He gets the allowance under the safety net (SSNP) program. His account is registered by his grandfather's NID, and all of the necessary activities related to service receiving are done by his grandfather. When his grandfather talked, he said that G2P is more comfortable for them. In the previous system, his grandson went with him for a money withdrawal, and a disabled person suffered a lot because of this. For them, the approach is very useful; even the old grandfather said, "The system is easier than before, and I can easily withdraw the money. I don't need to visit banks. I withdraw money at my convenience. The cost is also low".

##### Case 2

Jorina Begum is a housewife; she is uneducated.

She was going to her children's school to learn about their scholarship, but the teacher wanted 500

Thanks for giving scholarships. She did not know about the system, so she gave the money.

"School teacher took taka 500 from me for giving scholarship to my two children. But they did not give scholarship to my children. The system need to be more transparent. If my Childs unable to get scholarship, why they take money from me!"

----- A mother of school child.

##### Case 3

When I was waiting in the Trishal Upazila social service office for an interview, at the same time, several old women came to solve their problem with SIM cards and NID issues. Those females even felt hesitant to say their problems. They applied 3 years ago, but due to SIM card issues, they did not get a single payment. They were carrying a SIM card without a mobile phone; even on the card, the account passwords were written. They talked about lots of problems. One beggar woman came there and said, "How can you get payment without money? My daughter and I bought two allowance cards with 10,000 tk. Each allowance card needed 5,000 tk. You do not get your money without paying". Actually, the beneficiaries of the country are still so innocent, simple, and lack knowledge.

Uneducated and helpless peoples are misguided by some chance seeker people who cheated over them. Relatives or trustworthy peoples also do the thing in many cases. Lack of proper information caused maximum of the problems in the process of G2P based service delivery.

#### 4.6. Discussion

The whole analysis and result part extracts some of the focal points of the study. Firstly, most of the respondents of this study are educated, but being educated does not mean they have proper technological knowledge. Sometimes, the educated but not technologically informed population makes the mistake of sharing a PIN and is cheated (Maurer et al., 2018). After facing a problem once, they become aware of it.

Another tendency is that local MFS like Nagad or Bkash agents know the PIN of allowance receivers (Aumma Hanny CUSTOMER SATISFACTION AND SERVICE QUALITY IN MOBILE FINANCIAL SERVICES A Study Based on a Leading Mobile Financial Services Company BKash Bangladesh, 2023). They do not have any idea that “hiding the PIN is a safety measure”! People just put their SIM card in local stores with MFS agents. PINs are written on the paper/packet of SIM cards. If the agent withdraws some amount from it, beneficiaries are unable to realize this. They blame the government for missing one or two months’ payment (Clark & Herman, 2017). Some benefits of the G2P in the case of SSNP are financial inclusion, increasing the options of the beneficiary’s choice on getting allowance, withdrawal point selection, and withdrawal time selection. But no system is error-free. Though many physical harassments and painful experiences were decreased through G2P, it created new types of problems. The inactivity of SIM cards sometimes creates account problems. Some use the NID of a son, brother, or anybody else to buy a SIM or bring a SIM that is registered in the name of their son or brother. When any problem occurs with an MFS account, the real owner of the SIM card needs to undergo biometric verification. If the person is somehow unavailable at that time or if they live far from home or work abroad, the beneficiary can not solve the problem. Systematic leakage of money due to corruption or interest has decreased nowadays (Alaeddin et al., 2019). Leakage still occurs due to fraud, such as the receiver’s family members or relatives who know the password and steal the amount. Thus, the government fund leaks before reaching the beneficiary. Surveys are conducted at the field level twice or thrice a year, but the human resources of the social welfare office are not capable of frequent monitoring. Another important thing is the database of beneficiaries. Many system losses occur due to wrong information about beneficiaries. Another problem is the multiplication of MFS accounts. If one person has two (like both Nagad and Bkash) accounts on two SIMs, they create confusion between the two. People sometimes do not know the differences between different MFS. Much suffering decreased due to the inception of the G2P approach. Disabled and old people are the vast majority of beneficiaries of the SSNP. This study made it evident that the G2P approach is mostly welcomed by different types of beneficiaries and public service delivery agencies. However, it has several problematic points that need deep government concentration. G2P can be a foolproof governance approach for countries like Bangladesh if the challenges are addressed properly (Luca Mario Comincioli, n.d.).

## 5 | CONCLUSION

In the conclusion of the study, it is evident that G2P is one of the smart approaches to dealing with citizens. There are beneficiary datasets and individual profiles that are quite different from others. Authentic identification numbers are used to separate and identify beneficiaries in this approach. There are several positive sides of the G2P approach over public service delivery. People have already accepted it and are trying to cope with this approach. G2P coverage is still very small. People may remain in practice and can reduce the obstacles related to technology. In sum, the usefulness of governance to a person's approach is comparatively higher than the challenges. Each system has some loopholes. Bangladesh also needs to get faster and upgrade with time for learning and the use of technologies. Mostly, the challenges can also be solved by several government initiatives, and essentially, people’s capacity building is needed. Technological capacity is insufficient among the population of the county. That leads to the majority of problems.

It is important that we are already in the transitional period of the implementation of the G2P approach. Countries like Bangladesh are installing the approach to reach the vulnerable community of society, such as children, the elderly, the disabled, widows, and pregnant mothers. They need to reduce the costs, time, and visits to receive social benefits. Moreover, our elderly population has less interest to learn and are comfortable with old things, which makes the system slower because they make up the majority of the beneficiaries. The results drawn by this research are very significant in understanding the present situation of G2P approach installation and use by stakeholders in any part of the country. More initiatives need to be taken to grow the technological capacity of

beneficiaries. The G2P approach can be a new transformation in the field of governance and service delivery in Bangladesh. That study finds that the officials, beneficiaries, and all other stakeholders are hopeful about the successful large-scale implementation of the G2P approach in other sectors of the country.

### Disclosure Statement

The authors declare that there is no conflict of interest regarding the publication of this research. All data were collected independently through field surveys, interviews, and literature reviews, and every effort was made to ensure accuracy and integrity in the research process. Respondents were informed about the purpose of the study, and participation was voluntary. Confidentiality and anonymity of participants were strictly maintained throughout the research process.

### Data Availability Statement

The data used in this study were collected directly from respondents through surveys, in-depth interviews, and key informant interviews. All data are primary and not publicly available to maintain the confidentiality and privacy of respondents. However, the author may provide summary data or processed results underlying the findings in this study to interested parties upon reasonable request, provided that the request does not violate research ethics and participant confidentiality.

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