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E-SERVICES & E-PAYMENT IN THE PUBLIC SECTOR

Recommendations for Change Management

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Abbreviations	
AML/CFT	Anti-Money Laundering/Countering the Financing of Terrorism
API	Application Programming Interface
BMZ	Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)
CFAD	Training Center and Support for Decentralization (Centre de Formation et d'Appui à la Décentralisation)
-e	electronic
ELIS	Electronic Immigration System
ENA	National Administration School (École Nationale d'Administration)
ERP	Enterprise Resource Processing
HCD	Human Capacity Development
IT/ICT	Information Technology/Information and Communication Technology
IVR	Interactive Voice Response
KYC	Know Your Customer
MCIT	Egyptian Ministry of Communications and Information Technology
Mol	Ministry of Interior (Ministère de l'Intérieur)
MTC	Ministry of Communication Technologies (Ministère des Technologies de Communication)
P2G/G2P	Person-to-Government/Government-to-Person
PFID	Radio-Frequency Identification
POS	Point-of-Sale
SDG	Sustainable Development Goal
SWIFT	Society for the Worldwide Interbank Financial Telecommunication
UPI	Unified Payments Interface
USSD	Unstructured Supplementary Service Data
UX	User Experience



INTRODUCTION AND RESEARCH CONTEXT

1

INTRODUCTION AND RESEARCH CONTEXT

The Tunisian government has set itself the goal of digitalising public services, including the development of digital payment options. This is highlighted in its E-Governance strategy (SmartGov2020), the current and planned national digital strategy, the strategy for digital finance of the Ministry of Finance as well as in the E-Governance action plan of the Ministry of Interior (MoI). The Tunisian population, as well as Tunisian businesses, demand an easily accessible, efficient, and citizen-oriented service provision. Despite the strategic prioritisation, the availability of digital payment options for administrative services remains the exception, although it is estimated that about 70 percent of public services provided by the state to citizens require payment. Digital payment systems for public services are not yet user friendly. Despite the existence of a strategic reference framework and the interest of various public institutions, opportunities for the mainstreaming of digital payment options are also not being systematically pursued.

The Tunisian Ministry of Communication Technologies (MTC) is in charge of supporting the digitalisation of public services and the Ministry of Interior (MoI) is responsible for the implementation of digitalisation measures at the local/municipal level. Both ministries, together with additional public and private stakeholders are currently working on the development of a one-stop-shop e-service platform/gateway that will provide citizens with access to the selected/most important municipal services. Besides the ongoing digitalisation of municipal service processes, digital payment options are also planned to be integrated in the platform. Tunisia ranks 91 out of 193 countries in the United Nation's e-Government Index, and 73 in the e-Participation Index.¹

The GIZ Digital Transformation Program in Tunisia supports both lead ministries in the implementation of digital services and payment options at municipal level. It is pursuing a user-centred approach with both partners as well as the users (citizens and municipal staff). The program's newly formed component dedicated to e-payment aims at introducing new e-services and/or e-payment solutions on the local, regional or national level while ensuring their sustainable and inclusive uptake among target groups.



METHODOLOGY AND APPROACH

2

METHODOLOGY AND APPROACH

In models of organizational change, change in organizations can involve (a) changing the individuals who work in the organisation, (b) changing organisational structures and systems, and (c) directly changing the organisational climate where possible. GIZ has its own management framework for changes within complex cooperation systems, Capacity WORKS, which looks at the actor landscape of a broader sector (the “permanent cooperation system”), within which one or more GIZ projects work jointly with selected actors (the “temporary cooperation system”). In this setting, development projects work through interventions at different levels:²

The personal level (interventions at the level of the individual, such as competence development);

The organizational level (interventions such as organizational development);

The cooperation system level (interventions such as cooperation management between actors);

The framework level (interventions such as changing the legal framework affecting the interaction of actors).

A GIZ project that focuses on digitalising processes and payment options at municipal level operates in a complex temporary cooperation system that requires significant adjustment to change and learning from local stakeholders, especially municipal leaders and local public servants working in both front and back end of municipalities. It is embedded within a complex permanent cooperation system that is in the intersection between two areas of state policy – digitalisation and e-government on the one hand, and decentralization and municipal administration on the other. From this context, a number of challenges emerge, both organizational (how to align objectives and, strategies and processes) and technical (how to identify and implement solutions that will be functional, maintainable, and sustainable within a broader national system).

This report aims at providing a basis of expertise for GIZ and its implementing partners MTC and Mol (local affairs) to best navigate the required change management and communication in the public sector in the context of the introduction of new processes and administrative procedures related to e-services and e-payment solutions. The target group of this report are the management staff of the GIZ programme, as well as the management staff of the partners within the cooperation system. It focuses on topics of integration at the municipal level, which also means that it does not address the payment gateway integration at the national level. Furthermore, the focus is on civil servants as users. Crucially, this implies that the main users (the citizens) are not covered in this report, as they are the subject of a separate consultancy workstream.

The report consists of three main parts: challenges and best practices identified for change management, challenges and best practices identified for technical implementation, and a section of recommendations for the programme. For the two main chapters on challenges and best practices, the report identifies a set of challenges, a set of existing ways this challenge has been addressed in other contexts, and a set of takeaways for the GIZ project.

For reasons of better readability and easier comprehension, the authors used the generic masculine in this text. We hereby explicitly address all gender identities without any judgmental distinction.

2 GIZ GmbH (2015), Cooperation Management for Practicioners. Managing Social Change with Capacity Works. Springer-Gabler.



BEST PRACTICE AND COMMON CHALLENGES:

Change management and communication in introducing aspects of digitalisation within decentralisation reforms

3 BEST PRACTICE AND COMMON CHALLENGES: Change management and communication in introducing aspects of digitalisation within decentralisation reforms

To achieve changes in organizations, GIZ has a range of instruments at its disposal such as leadership, communication, training, planning, and incentive systems. Models of change management situate these instruments within variants of the classical 3-step model by Kurt Lewin that also informs the systemic change approach that underlies Capacity WORKS, where change takes place in three steps:

01 “Unfreeze” the system - i.e., identify champions of change, set up a change process that involves the necessary players, generate ownership;

02 “Change” the system - i.e., jointly introduce the desired changes at the personal, organizational and cooperation system levels;

03 “Refreeze” the system - i.e., anchor the changes in the broader context at the framework and cooperation system level in order to achieve sustainability.

In the concrete context of the GIZ projects on digitalisation and e-payment in municipal contexts, the cooperation systems have the following internal complexities, defined here as hypotheses:

Hypothesis 1

The cooperation system has a matrix structure. The matrix “vertically” includes actors at different hierarchical levels (e.g., national bodies and municipalities). It also “horizontally” includes actors that work on different thematic fields, which in the national system come with their own institutional interdependencies around topics such as fiscal administration, decentralization, digitalisation, and e-economy development.

Hypothesis 2

The change takes place within the broader strategic framework of a national digitalisation strategy that is focused on a strongly vertical reform process centred around high-level actors.

CHANGE PROCESS AND OWNERSHIP

CHALLENGE

In order to be successful, change needs to be more than a set of individual development interventions. The process needs to be flexible and owned and adaptively managed by actors within the national system. The **potential** is that ownership in the partner system becomes a driving force in moving change forward, informing the change agenda through local perspectives and knowledge, and enabling the participants to adapt the process to changing needs. The **risk** is that the central and local actors are mainly driven by short-term goals and the project has no significant long-lasting positive impact.

CASE EXAMPLES

Successful change processes in the field of digitalisation of state services are often those with a highly visible buy-in from the government.

A well-known example is **Rwanda**, which put digitalisation at the center of its national development strategy since 2000. In 2015 it launched a single window for access to state services (Irembo, meaning “gate” in Kinyarwanda), initially with a portfolio of 20 services that was quickly expanded to 98 within the first three years. Key success factors of the Irembo introduction were (a) the high-level buy-in of the state, and (b) giving attention to the organizational and social environments where the systems will operate³ (as opposed to centering on information technology as the central element).⁴ At the same time, Irembo also shows obstacles to overcome: out of the initial 20 services, only five were offered by the municipal level where buy-in is harder to generate, and user satisfaction was initially quite low in rural areas where users had to go through agents because of difficulties accessing the system directly (for reasons of infrastructure and ICT skills).⁵

A similar success story is **Kazakhstan**, which pursued its digitalisation strategy in the same timeframe as **Rwanda**. It introduced a single window for government services (egov.kz) in 2015 and fundamentally transitioned government services to the system. Kazakhstan is a unitary state, making it easier to integrate municipal services into central systems. Since then it has moved to an e-government approach that is also positioned as a platform for citizen

3 Bakunzibake, P. et al. (2019), „E-Government Implementation Process in Rwanda: Exploring Changes in a Socio-technical Perspective“, *Business Systems Research* 10:1.

4 Khan, G. et al. (2011), “A socio-technical perspective on e-government issues in developing countries: a scientometrics approach”, *Scientometrics*, 87:2.

5 Mukusonga, S./Védaste, H/Nduwingoma, M. (2019), Assessment of Success of Irembo Information System by using DeLone and Mclean Information System Success Model for User and Managers Perspective. A Case of Gasabo District (2015-2017). Christian University of Rwanda.

involvement.⁶ On the other hand, while the e-payment platform that is part of the system was initially envisaged to offer a general national payment platform, it could ultimately not be implemented as planned and the function has now been taken over by banks, such as the proprietary payment system offered by Kazakh fintech Kaspi;⁷ the state has reacted by interfacing it with the egov.kz platform and offering Kaspi as a person-to-government (P2G) payment platform since 2020. In addition, while citizens regularly use the platform to access state services, its broader goal of using it as a platform for citizen involvement has not been achieved, partly because Kazakh citizens do not feel the need or benefit of it.⁸

A counterexample where this process is not going as smoothly is shown in neighbouring **Kyrgyzstan**, where the national gateway for interagency communication (Tündük, based on the Estonian X-Road model) includes only information systems by central government bodies, but no municipalities, even though they provide substantial citizen services;⁹ lack of IT knowledge plays a substantial role in hampering uptake.

TAKEAWAYS

In order to achieve sustainable change, the payment systems need to be established (a) in a process-oriented manner and (b) situated in the context of a broader change process that has high-level buy-in from government actors and fits into their strategies.

- At the “Unfreezing” stage, there should be clear way in which these actors are involved. Where these actors are not drivers of the process itself, they should be involved in the process in a Consulted role (in the RACI model).
- At the “Unfreezing” and “Change” stages, a clear process map is imperative to get a clear idea of the actual amount of ownership that the various parties have in the process as a whole.
- At all stages, facilitation of these processes in the cooperation system needs to ensure equity and participation of all relevant actors, in order to avoid crowding out of less ICT-oriented actors as a result of ICT penetration differentials.

6 Kassen, M. (2016). E-government in Kazakhstan: A Case Study of Multidimensional Phenomena.

7 Picolinie Capital (2021), “Kaspi” - Central Asian Super App in the Making”, <https://www.picoliniecapital.com/post/kaspi-central-asian-super-app-in-the-making> (accessed 21 February 2022).

8 Amanbek, Y. et al. (2020), “Adoption of e-Government in the Republic of Kazakhstan”, *Journal of Open Innovation: Technology, Market, Complexity* 6:3.

9 State Enterprise “Electronic Interoperability Center” (2019), *Electronic Interoperability System ‘Tunduk’*;

SITUATING DIGITALISATION WITHIN OTHER CHANGE PROCESSES THAT AFFECT MUNICIPALITIES

CHALLENGE

There are several change processes going on that affect municipalities (e.g., budget reform processes, citizen participation, municipal service delivery). The introduction of e-payment services needs to slot into this broader reform agenda. The **potential** is that digitalisation can be a transversal topic that leads to better integration and broader stakeholder engagement; the **risk** is that existing stakeholders become overburdened with pursuing several change processes at once, lowering the impact of all of them.

CASE EXAMPLES

Egypt has been pursuing an increasingly aggressive digitalisation strategy, based initially on digitalising the workflows and citizen services of different government bodies under their own platform in the early 2010s. This process initially generated mixed assessments; it faced technical and organizational challenges, such as the initial lack of a stable e-signature and e-payment platform or the fragmentation between the multiple web sites, platforms and ERP systems of different bodies.¹⁰ Since 2020, the mandate for the digital transformation has been concentrated under the Egyptian Ministry of Communications and Information Technology (MCIT), where these platforms are now increasingly integrated and centralised. As the MCIT has a broad mandate to change and standardise processes and disable legacy systems, state bodies at all levels are forced to plan further digitalisation efforts with a perspective on future centralisation and standardisation, and some of the platforms that were created earlier will eventually be disabled, their content moved, and their business processes remodelled under a central platform. There is an ownership challenge that results from the fact that in the transition from digital communication towards digital governance, some intermediate steps may become redundant later. While state actors often have no choice, the ownership for the process depends on an honest picture communication of the broader context. This especially affects municipal actors. In the Egyptian case, a GIZ program addressed this using participatory process modelling at the institutional level, using a well-moderated process with large-scale maps of the institution's service processes on paper, and maintaining a high level of citizen and process orientation throughout the cooperation. GIZ intends to address this in the future through a new public administration accelerator project.

¹⁰ Gebba, T./Zakaria, M. (2015), „E-Government in Egypt: An Analysis of Practices and Challenges“, International Journal of Business Research and Development 4:2; Zaied, A./Hanafy, A./El-Ghareeb, H. (2017), „E-government Adoption in Egypt: Analysis, Challenges and Prospects“, International Journal of Engineering Trends and Technology 52:2.

In **Tunisia** the Ministry of Interior developed with the support of the GIZ a digitalization strategy and corresponding action plans. These action plans are composed of several actions focused on e-services, open government, e-municipalities, and e-payment. The Ministry with the support of GIZ, in certain pilot municipalities, has already implemented a number of actions that have proven to be successful.

TAKEAWAYS

Partners are engaged in many change processes at once, and digitalisation in particular presents a complex set of long-term challenges. In order to ensure the partners' ownership, it is crucial that the GIZ project clearly communicates what role the respective project plays in the overall context of the digital transformation process of the partner institution.

- At all stages, but particularly when starting the engagement, the project needs to be honest in its partner communication.
- At all stages, but particularly when starting the engagement, the project needs to maintain a clear distinction between the change and service provided by the project (during its duration) and the broader digital transformation within which it is situated.
- At the “unfreeze” and change stages in particular, maintain a clear process map; if working according to Capacity WORKS, maintain a clear distinction between transformation processes in the temporary cooperation system (of the project) and the permanent cooperation system (of the sectors and institutions), and the interdependencies between them.
- At all stages, when cooperating with municipal actors, focus communication on citizen orientation as a long-term value, and on processes as a long-term methodology. Maintain well-facilitated communication processes (through facilitated events) and make sure that high-level and municipal stakeholders maintain an ongoing dialogue throughout the process.

ESTABLISHING PRACTICES OF CONTINUOUS MULTI-STAKEHOLDER INVOLVEMENT

CHALLENGE

Across various case examples in different countries, it can be observed that the stakeholders in the partner system do not necessarily talk to each other, while the change process needs to be cross-cutting and integrative in order to be successful. Joint participation in the change processes is hampered by stakeholders' different levels of competence and power, their vertical organisational cultures, and the lack of a culture of communication beyond the immediate sectorial agendas. The **potential** is that the change process brings changes also to the culture and practices of dialogue between actors and institutions, thereby catalysing the change process as a whole. The **risk** is that dialogue is not driven by the actor's personal conviction and that some actors are crowded out by institutions with high technical competence or narrow, but strong institutional mandates.

CASE EXAMPLES

The introduction of P2G payments in the state of **Karnataka, India**; based on an e-governance platform launched in 2008, it introduced a mobile-based integrated digital delivery platform (MobileOne) in 2015.¹¹ It is based on the concept of a single window for government departments to plug in services, many of which had been already developed since the state endorsed its e-governance program in 2006. As a result, it was faced with the issue of having to integrate services from a large number of different departments that were at different levels of quality regarding their existing legacy systems. The state solved this by giving the Centre for e-Governance of the state government the role of main driver of the process, identifying key champions across different government departments that took the role of change agents, and including the development of connectors for legacy systems in the mandate of the contractor. As a result of this centralised process, it was possible to include a large number of services (around 650 services within the first three years); on the other hand, the initial evaluation in 2017 noted user complaints that were attributable to the centralised nature of the process, such as the lack of inclusion of municipal services.¹²

11 Dalberg / Karandaaz Pakistan (2016), Global Landscape Study on Digitising P2G Payments, <https://dalberg.com/wp-content/uploads/2016/11/Digitizing-P2G-Payments.pdf>, pp. 74-79.

12 Karnataka Evaluation Authority / Hyderabad Karnataka Centre for Advanced Learning (2017), Evaluation of the Performance, Effectiveness and Impact of Mobile Governance in Karnataka, <https://kmea.karnataka.gov.in/storage/pdf-files/Reports%20and%20other%20docs/Mobile%20Governance%20English%20final%20report.pdf>.

At a much lower level in the context of digitalisation in rural municipalities, interesting insights can be drawn from the comparison between analogue rural digitalisation projects in **Germany** (project Smart Countryside) and **Sweden** (project Digital Västerbotten).¹³ Within the framework of the different governance systems and administrative cultures of both countries, the projects involved roughly analogue goals of enabling rural municipalities to provide electronic services (however, in both cases without a payment component). The German project involved building strong horizontal relationships between civil society and administrative representatives in the municipality but neglected vertical integration with higher-level policy structures. It therefore depended on the involvement of civic organizations, lost opportunities to integrate processes of multi-level governance and in particular to address issues of broadband supply. The Swedish project, on the other hand, was more strongly top-down and administratively integrated, based on the approach to obtain information and put infrastructure in place before involving citizens. As a result, the project initially had a harder time gaining traction and citizen acceptance and eventually generated resistance towards digital solutions in the future. The comparison therefore showcases the limits of stakeholder dialogue when it overly focuses either horizontal or vertical integration.

TAKEAWAYS

Based on a process model for the change process within the temporary cooperation system of the project, the project needs to identify existing communication gaps (where key actors are un- or underinvolved) and areas of rigidity in the process map.

- Address communication gaps by establishing informal exchange formats. Anchor these exchange formats in the cooperation system, with the perspective of moving them from the temporary to the permanent cooperation system in order to avoid them becoming donor driven.

13 Lövving, L. et al. (2021), „Can digitalization be a tool to overcome spatial injustice in sparsely populated regions?“, European Planning Studies, <https://doi.org/10.1080/09654313.2021.1928053>.

COMMUNICATING CHANGE WITH CITIZENS

CHALLENGE

Change process often overemphasize the supply side (e.g., donors and state institutions), while the citizens as clients and consumers of state services are not adequately involved. The change process should include user-centric co-design aspects and should include citizens in the dialogue platforms and steering structures of the change process, e.g. for testing prototypes of products. The **potential** is that the change process generates buy-in, creates new platforms for citizen participation and increase the quality of the process as a whole by representing citizen needs; the **risk** is that citizens are left out, weakening overall support for municipal reform agendas, and that the main motivation for the uptake of the final product becomes the lack of alternatives.

CASE EXAMPLES

Even in a state with an advanced state of adoption of digital services, such as **Kenya** with its near-universal adoption of mobile money, awareness and adoption of e-governance platforms can be low: 94% of the population use digital payments, but 51% are unaware of e-governance platforms and of the rest, only 55% use them. User satisfaction with their services is low due to frequent downtimes and the persistent necessity of manual steps. This is despite of the government trying to make these services more accessible by opening 40 digital service centers (“Huduma centers”) across the country, and to encourage the adoption of e-payment by abolishing cash as a payment method for those services offered through the e-citizen platform. Researchers note that it is so far difficult to establish whether this is due to the deficits of the UX of these services, or the process of their introduction, or a lack of user awareness about their benefits, and recommend human-centered design approaches to address this.¹⁴ GIZ Kenya is currently active in this field on a commission by BMZ and EU implemented together with the Kenyan ICT administration.

14 Dalberg (2021), Kenya’s Digital Economy: A People’s Perspective, https://www.digitaleconomy.ke/assets/download/Kenyas_Digital_Economy_Full_report_Aug_2021.pdf.

IDENTIFYING AND BUILDING LEADERSHIP: CHANGE AGENTS AND LOCAL CHAMPIONS

CHALLENGE

Digitalisation processes need leadership, especially at the local level. If there is room for improvement in terms of leadership capacity of stakeholders, their leadership capacity should be built and valorised within the existing system of cooperation and multi-stakeholder involvement. The **potential** is that leaders will take a strong role in organising the ongoing multi-stakeholder dialogue that underlies the change process, and that they will become a driving force in the long term for the subsequent outscaling.¹⁵ The **risk** is that leaders are identified not on the basis of maximising potential and impact for the process, but within the existing hierarchies (“leaders by default”, or making gatekeepers into leaders for fear of alienating them), providing no added benefits over the existing hierarchical powers and competences that the institutions and individuals already possess.

CASE EXAMPLES

Leadership has two dimensions: (a) leadership as an institutional mandate, and (b) leadership as a function of management or steering. The institutional mandate has been identified as a success factor for the introduction of digital P2G payments e.g., in **Kenya**, where the leadership of the government’s ICT Authority for the integration of digital services underneath the umbrella of the national digital policy was instrumental;¹⁶ similar institutional champions from the examples discussed previously are **Rwanda’s** Information Society Authority, **Egypt’s** Ministry of Communication and IT or the Indian state of **Karnataka’s** Centre for e-Governance.

At a level lower than these institutions with their general mandate for digitalisation of governance, an example is **Jordan**, where the Central Bank has been the driver behind the development of mobile wallets for any-to-any payments, with the mobile operators as wallet providers and the Central Bank as provider of a central electronic bill presentment and payment platform.¹⁷ The leadership role may also be taken by an actor in the service chain; successful examples identified by strategy and policy consultancy Dalberg include:

¹⁵ We use the term “outscaling” (rather than “upscaling”) to emphasize that scaling the experience from local pilots into broad applications is not only a quantitative transformation, but also entails qualitative and organizational challenges; as a result, the term implies that it requires not only financial resources, but a separate transformational effort with its own processes and partner systems.

¹⁶ GSM Association (2017), Person-to-government (P2G) Payment Digitization: Lessons from Kenya, https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf.

¹⁷ For this and the following examples, see Dalberg / Karandaaz Pakistan (2016), Global Landscape Study on Digitizing P2G Payments, <https://dalberg.com/wp-content/uploads/2016/11/Digitizing-P2G-Payments.pdf>, there: Jordan: pp. 86-91, Tanzania pp. 122-128, Ghana pp. 68-73.

- In **Tanzania** the Dar es Salaam Water and Sewerage Authority (DAWASA, formerly DAWASCO) has been the driver for digital P2G payment for municipal water services, as a means of improving collection efficiency and mitigating the impact of petty corruption;
- In **Ghana** the mobile provider MTN has been the driver of digital P2G payment for school fees. MTN is also the payment provider for the mobile payments and used the service to generate added value and combat account dormancy; schools and consumers benefited from added transparency, predictability, and flexibility.

TAKEAWAYS

The change process needs actors who strongly identify with it and are mandated to take the role of leader (formal or informal) and change agent. Without such an actor, it often happens that the donor “slips” into this role, and that the change impacts are therefore jeopardized by the end of the project.

INCENTIVES TO CHANGE

CHALLENGE

International case examples reveal that many participating institutions work within their existing mandates and while there is an overarching strategic vision, the participating institutions, and the personnel in them do not reflect the need for change in their existing incentive systems. Institutional pressures (e.g., hierarchical, or budgetary pressure) or individual initiative are insufficient. Incentivizing the adoption of digitalisation at the municipal level through institutional incentive mechanisms is a major challenge, as there are both positive (e.g., qualification, efficiency, success, pay) and negative (e.g., pressure, fear, suspicion) incentives at play. The **potential** is a major reduction in transaction costs and an increase in sustainability, especially with the outscaling perspective; the **risk** is that uptake of change remains low at the local level, limiting impact and weakening the institutions vis-à-vis the central level.

CASE EXAMPLES

Moldova introduced the MPay payment system for state services starting in 2013. It was one of the first parts of a package of digitalisation-centered administration reforms, as a means of combating corruption in the state administration at all levels. The package also involved a national backbone (MConnect, introduced in 2014), digital signature and identity systems (MSign, MPass) and was financed initially by the World Bank, then by USAID and the EU. Upon introduction the payment system MPay was incentivized at the institutional level using arguments centred on lowering transaction costs:

1. State bodies:

- Faster, more efficient tracking tool and collection of incomes/revenues.
- No “holding or delay” of funds in bank accounts until “clarification”.
- Reduced corruption at frontline, where cash collection for the national budgets is historically made.
- Reduced costs for the government payment collection process.

2. Businesses and payment service providers:

- Increased process efficiency within the service provider systems:
- Encouraging transition to low-cost paperless invoicing and settlement technology.

These incentives addressed pain points that were much stronger felt at the state bodies. At the level of private enterprises and payment service providers, however, key pain points - such as high service charges by service providers - were not addressed. In addition, the incentives focused on the organization’s internal pain points, while failing to address existing digital gaps such as the urban-rural divide and access to payment transaction services by rural populations.¹⁸ As a result, the rate of adoption differed significantly - in centralized state bodies it was strong from the beginning,¹⁹ while at the broader level it was initially weaker and took several years to begin generating significant co-benefits for stimulating the e-economy as a whole.

In a GIZ project in **Tunisia**, the COVID-19 pandemic acted as a powerful argument to modernize the national public servant training academy’s (CFAD) e-learning platform. Just one week after the improved platform was released, registrations of 400 people were noted. Also, the incentives for users of the platform have been enhanced. It was found that users were more motivated to follow hybrid trainings, as the certificates of hybrid trainings received greater reward from employers compared to e-learning-only courses.

TAKEAWAYS

Organizational incentive systems are a major driver for change.

- At the Unfreeze stage, identify pain points within the institutions where the need for change is most strongly felt.
- At the Change stage, situate them within the institutions’ existing incentive systems (both formal and informal, positive, and negative), identify those with a high **potential** for change and jointly address them. When it is impossible to touch the incentive system of the organization itself (e.g. because incentive systems in public administration are managed by other administrative bodies that the project is not in

¹⁸ Luecke, M./Pintea, D./Giucci, R. (2016), The limited use of non-cash payments in Moldova: Diagnosis and policy options. German Economic Team Moldova.

¹⁹ Lazo, E./Casu, O. (2017), Towards a new transformation of e-payments paradigm: a case study on Moldovan public services. Master’s Thesis, KTH Stockholm.

the position to influence), it is possible instead to identify “soft” other incentives, such as additional training or participation in exchanges, that provide knowledge, skills and/or symbolic capital and can therefore complement the state’s incentive system to provide incentives for change.

- Work with positively competitive incentive schemes, rewarding innovative public servants.

CAPACITY BUILDING DEVELOPMENT AND ESTABLISHING CAPACITY SYSTEMS

CHALLENGE

Digitalisation reforms require technical capacity at the level of knowledge, skills, and attitudes. Developing the capacity of local institutions is a key success criterion for the change process. Apart from the capacity of the immediate participants, the capacity development agenda needs to become institutionalised in order to provide the basis for outscaling. The **potential** is that actors will possess the capacity they need, and that capacity development becomes a major integrative force that generates ownership for the change process; the **risk** is that actors will not possess the capacity they need, or that they will possess it too late; and/or that this capacity development is not institutionalised and unavailable for outscaling.

CASE EXAMPLES

Competences, especially of local actors, are a common topic in projects involving municipal digitalisation. The focus is typically on technical knowledge and training, where it is also often among the first deficits mentioned by actors themselves: e.g., a study of e-governance adoption in **Romania** mentions as key obstacles the lack of financing, competitive salaries, and trained ICT staff,²⁰ an assessment that probably translates to the majority of projects worldwide. At the municipal level, the initial lack of ICT skills is often the first entry point towards getting municipal staff involved in a project and also has a strong motivational component, e.g., as described by GIZ in **Benin**.

However, competences do not only include knowledge and are not only technical. In the GIZ framework for strategic competence development, with its distinction between knowledge, skills and attitudes, some of the lacking competences are also at the level of skills (e.g., effective communication, leadership) and of attitudes (e.g., error tolerance, service orientation). This is also observed in developed countries, e.g., in comparison between municipalities **Germany** and **Estonia**.²¹

20 Urs, N. (2017), A self-reflection of municipal IT professionals in small Romanian city administrations,

21 Mattes, S./Bertermann, T. (2019), „The Digital Transformation in Municipal Administrations: Problems and Strategies“, <https://www.polver.uni-konstanz.de/en/mergel/open-public-administration-scholarship/publications/finished-research-projects/digitalization/the-digital-transformation-in-municipal-administrations-problems-and-strategies/>.

GIZ **Tunisia** implemented capacity-building activities at both the municipal and national level to encourage multi-stakeholder cooperation. While municipal staff developed skills in project management (e.g., Project- and Portfolio Management, and Design Thinking), stakeholders on the national level participated in international exchange formats in conjunction with technical inputs.

The more ambitious cases are those where competence development is anchored in the country's own systems, based on including capacity development components in the respective strategic documents. There are different approaches for how this can be implemented. **Rwanda** has included the roll-out of a digital skills development program for state employees as part of its ICT for Governance Strategy. It requires each ministry to develop and fund its own action plan to achieve this.²² **Egypt** has adopted a more centralised approach, where the Ministry for Communication and IT has since 2020 developed a range of standardised training programs for state employees²³ and for public servants at the governorate level.²⁴ For management staff in the state administration, these programs include an innovation and leadership component implemented by the Information Technology Industry Development Agency (ITIDA), while the majority of trainings are distance or blended learning programs implemented through the regular curriculum of the National Training Agency. In the Egyptian digital governance strategy, these capacity building measures form an integral part of moving the administration to the planned New Administrative Capital and therefore require the qualification of large numbers of staff in a short amount of time; in the first year 18,000 state employees received trainings in digital skills, out of which 5400 received leadership skills.²⁵

TAKEAWAYS

Capacity development needs to be part of a strategy. Short-term training interventions can be effective if they serve as incentives to encourage participation and engagement by partners, or if they provide necessary competences (such as basic ICT skills) necessary to kick-start the process; but in the long run, competence development needs to be part of a joint, strategic approach with the partners.

22 Rwanda Information Service Authority (2019), ICT for Governance Cluster Strategy 2020-2024, https://www.risa.rw/fileadmin/user_upload/Others%20documents/ICT4_GOV_CLUSTER_STRATEGY_2020-2024.pdf.

23 MCIT (2021), State Administrative Apparatus Employees, https://mcit.gov.eg/en/Institutional_Development/Developing_and_Building_Digital_Capabilities/Developing_and_Building_Digital_Capabilities_of_Employees_at_Administrative_Apparatus.

24 MCIT (2021), Programs for Government Employees, https://mcit.gov.eg/en/Institutional_Development/Developing_and_Building_Digital_Capabilities/Governorates_and_Subordinate_Directorates.

25 „Egypt finalises building digital capability programmes for public workers moving to NAC“, Daily News Egypt, 23 January 2021, <https://dailynewsegyp.com/2021/01/23/egypt-finalises-building-digital-capability-programmes-for-public-workers-moving-to-nac/>.

- At the Unfreeze stage, include capacity development gaps in the analysis of the (permanent) cooperation system and build a capacity development strategy. This is best done in partnership with the national public servant training academies or authorities.
- Seek readily available, off-the-shelf digital literacy and transformation capacity building measures online and try to integrate them into the training curriculum (examples: LinkedIn Learning, Atingi).
- At the Unfreeze stage, include capacity development gaps in the analysis of the (permanent) cooperation system and include it in a review of the capacity development strategy. In the capacity development strategy, differentiate between long-term capacity development and short-term interventions (necessary to kick-start the change process - e.g., basic ICT skills training for staff in pilot municipalities, or communication and facilitation skills for key change agents - and/or to develop and pilot training content for later outscaling).
- Include not only knowledge, but also skills and attitude aspects. Skills are built through experience; attitudes are changed through exposure to different contexts and ways of addressing the same problem.
- At the Unfreeze and Change stages, build on the existing provisions for building the digital capacities of state employees in the national e-government plans to anchor the long-term capacity development in national systems. Such a system could be e.g., the National Administration School (École Nationale d'Administration), building, if possible, upon the existing good governance collaboration with GIZ.
- For the Refreeze stage, identify long-term financing options for outscaling capacity building from the beginning. Support the allocation of financing by the state to arrive at a long-term sustainability perspective, with the option to build partnerships with other international agencies that support digitalisation, especially in financial cooperation, as an intermediate step.

ADDRESSING LONG-TERM SUSTAINABILITY

CHALLENGE

Reform processes need a credible sustainability mechanism in order to be successful. The **potential** is that the reform process will outlast the development intervention; the **risk** is that reforms stall and built capacity will dissipate not long after the project ends.

CASE EXAMPLES

The key success factor and a necessary condition for the sustainable introduction of digital P2G payments is the presence of strong political leadership and an embedding in a clear national digitalisation strategy. In the aforementioned success stories of **Rwanda**, **Egypt** and **Kazakhstan** the full support of the government has been instrumental.²⁶ Similarly, high-level commitment has been a key success factor in **Cambodia**, where the introduction of an Automated Online Payment Gateway in 2017 was anchored in the national ICT Master Plan 2020.²⁷ High-level political commitment facilitates stakeholder engagement and helps overcome barriers and mobilise resources, both for the short-term implementation of measures and their long-term anchoring in national systems. Without such high-level commitment, broader impact cannot be expected.

In the **Tunisian** case the strategic anchoring is somewhat more complicated due to the relative independence of the municipal level, the more heterogeneous landscape of actors involved in the digitalisation of the state administration, and because some of the intended changes also impact the fiscal procedures of the municipalities. This means that the change must be anchored at least at two sides, namely with respect to the digitalisation commitment of the state - based on two arguments: the commitment of the state to e-government, and the necessity of achieving e-government in order to reach the e-economy to which the state has also committed itself) and within a reform process concerning the state-municipality interface and municipal fiscal relations.

An evaluation of other ICT-related GIZ projects shows some general principles that are applicable in the Tunisian case as well.²⁸ Projects that manage to build strong buy-in at implementation levels (director and operational staff) find that the system directly enhances the partners' work processes and is considered highly relevant. When measures by the partner are built into the approach from the outset, handover at a later stage is not necessary and resources typically spent on handover activities can be

26 See above.

27 GSM Alliance (2020), Digitalizing person-to-government payments, <https://www.gsma.com/publicpolicy/wp-content/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf>, pp. 24ff., 30f.

28 Ludwig, Stephanie (2021): Information and Communication Technologies (ICTs) contributing to achieving development objectives. Project experiences and lessons learnt. Cross-section analysis. Published by GIZ Evaluation Unit

redistributed to building capacities and strengthening ownership throughout the project. At the same time, various stakeholders develop trust and support during implementation.

However, beginning from the implementation level means that without explicit prioritisation of ICT in strategic documents, high level representatives lack guiding frameworks and buy-in has to "trickle up". Such projects need to work overtime to create buy-in at higher level.

Another finding is that creating a financially sustainable approach is crucial and should not be overlooked. The funding for platform maintenance needs to come from somewhere – either the platform generates income to fund itself, or a budget line in the regular municipal budgets needs to be identified and allocated. A project's delivery on a platform might meet a typical indicator but cannot be deemed successful if it is not sustainable.

TAKEAWAYS

Sustainability comes from embedding the changes in a long-term strategic context; otherwise it is unachievable. Institutionalisation in the partner system is best achieved if it is addressed from the start of the project as an integral part of project design. This concerns the organizational aspects, but also the technical implementation: for example, it does not make sense to implement yet another IT system from scratch with a European contractor that will then not be embedded into the local technology ecosystem.

- For long-term sustainability focus on the broader, permanent cooperation system within which the intended outputs need to be achieved, and its two dimensions (digitalisation reforms and municipal administration reform).
- Already in the beginning, identify strategic frameworks in this landscape that permit anchoring the introduction of municipal digital P2G payments in high-level strategies, tied to high-level actors with commitment and political influence. Include these actors, e.g., through the steering structure of the temporary cooperation system. Without having these actors and their long-term perspectives and commitment on board, any system will remain an island and sustainability will not be achieved.
- Because the municipal level is so disparate and independent, and because there are multiple actors, there should be a clear national strategic vision, especially in the Unfreeze and Change phases.
- At the Change and Refreeze stages at the municipal level, ensure that the process allows them to have "quick wins" in the form of budget and technical support for digitalising their internal processes, training their staff and covering operational costs. And identify long-term sustainable financing pathways as well.



BEST PRACTICE AND COMMON CHALLENGES:

Introducing e-services and e-payment solutions in public administrations and to citizens on the local, regional and national level

P2G payments, such as personal income taxes, fines, and fees for public goods, play a substantial role in the overall payments landscape. Global P2G payments are estimated to be worth \$8 trillion, of which \$375 million (0.005 percent) are made in low- and middle-income countries.²⁹ Digitalising these payments could have tremendous economic and social benefits for governments, as well as citizens and businesses. For governments, digitalising payment streams can increase government revenue, reduce revenue leakages, and improve accountability, operational efficiency, and public-sector transactions.³⁰ A McKinsey report estimated that if governments around the world digitalised their processes, it could save them over a trillion dollars annually.³¹ Governments have the opportunity to dramatically improve governance (e.g., increase transparency, address corruption, better understand citizens). For example, the education ministry in Ivory Coast is now making policy decisions based on data collected on 1.5 million students as part of a school registration payment process. As such, digital P2G payments directly contribute to the UN Sustainable Development Goal (SDG) 17.1: strengthening domestic resource mobilisation to improve domestic capacity for tax and other revenue collection. The digitalisation of P2G payments also increases resilience to shocks such as the COVID-19 pandemic.³² Due to this overall compelling value proposition for digitalising these payments, the Tunisian government is also in the process of digitalizing its public services and payments.

Yet, digitalising these P2G and G2P payments has received relatively little attention to date. Therefore, this chapter has identified key success factors for the integration of e-payment services for the Tunisian municipalities based on their specific set of challenges. Each of the identified main challenges related to integrating e-payment in municipalities with a focus on municipal civil servant users is being described. Selected (good or best practice) case examples from e-payment implementation experiences around the world provide a deeper understanding of different successful approaches and relevant factors for consideration. This report then highlights the relevance of these case examples (Takeaways) for the Tunisian e-payment integration challenge.

29 Dalberg Global Development Advisors (2016). Global Landscape Study on Digitizing P2G Payments. <https://www.karandaaz.com.pk/wp-content/uploads/2017/02/Global-Landscape-Study-on-Digitising-P2G-Payments.pdf>

30 GSMA (2017). Person-to-government (P2G) payment digitization: Lessons from Kenya.

31 Corydon et al. (2016). Transforming Government through Digitization. McKinsey; also https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/06/GSMA_Championing-a-unified-digital-person-to-government-payments-strategy.pdf

32 <https://www.karandaaz.com.pk/wp-content/uploads/2017/02/Global-Landscape-Study-on-Digitising-P2G-Payments.pdf>

LOCAL INTEGRATION OF P2G PAYMENTS INDEPENDENT FROM A NATIONAL PAYMENT GATEWAY

CHALLENGE

While the Tunisian Payment Gateway is in development, local governments and municipalities do not have alternative means to conduct digital payment. So far, they have not integrated “low tech” e-payment options that allows them to process payments easily and quickly while getting used to e-payment processes before plugging into the Payment Gateway, whenever this will become an option.

CASE EXAMPLES

Kenya— direct integration with digital payment provider: In Kenya, mobile money providers were able to adapt their platforms to meet the needs of different government agencies. A study of the Kenyan market came across four distinct models in which digital payments were adopted (refer to the annex for more details on these models):

- 1 Direct integration between mobile money provider and government agency
- 2 Third-party integration through a payment aggregator
- 3 Centralised e-government platform connecting multiple government agencies
- 4 Physical service centres where government agencies provide assisted government services

It is important to note that this study demonstrates that multiple operational models are viable in terms of their ability to digitalise P2G payments—in fact, some government agencies receive digital payments via more than one model. However, multiple technical integration models and e-service platforms can create inefficiency and potential confusion for users. One of the key advantages of having a unifying champion and policy instead is that the technical integrations required enabling P2G payments can be carried out more efficiently and without duplication of effort. In the absence of a centralised approach, government agencies often end up adopting different technical integration models for digital payment.

The first model used in Kenya, direct integration between mobile money provider and government agency, is the quickest and easiest to implement and is therefore described in more detail here:

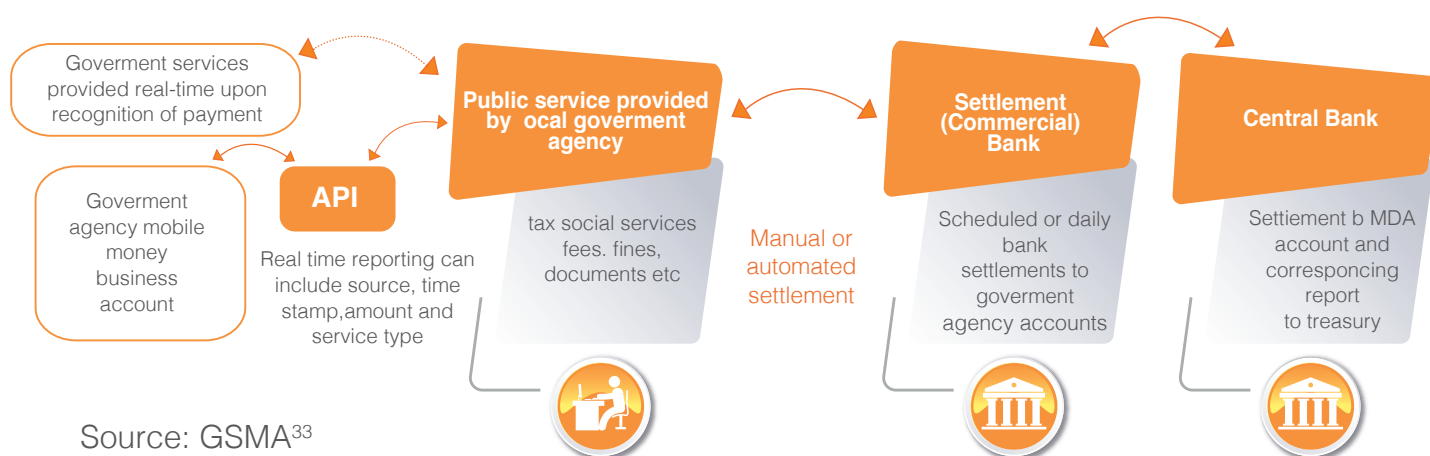
1. **Set-up:** Mobile money provider assigns government agency with unique digital ‘business collections’ account to facilitate collections through a ‘pay bill’ number. Citizens use unique ‘pay bill’ number to pay for specific government service using their mobile money account, which may include an additional reference account number to

identify the service. Mobile money providers may give government access to online mobile money system to facilitate reporting, reconciliation, and settlement.

2. **Reconciliation:** Where transaction volumes are low, government may manage reconciliation manually. Alternatively, an Application Programming Interface (API) may be used to facilitate automatic, real-time reconciliation.
3. **Settlement:** Once collected in the mobile money account, settlement of funds can be initiated by the government agency using the online mobile money system. Depending on capabilities, settlements can also be automated. Funds are transferred to the government agency's bank account within an agreed time period.

This approach focuses on the payment integration and does not integrate the response of the government that provides the service upon payment. This service can either be automated and linked with the payment confirmation or it can trigger a notification to the officer in charge to immediately work and make available the service.

Figure 1: Schematic of direct digital payment integration between mobile money provider and government agency in Kenya



Source: GSMA³³

Advantages:

Relatively fast, simple, and easy set-up from a technical perspective because the process of setting up a mobile money collections account can take less than one week. Where APIs³⁴ are used, reporting, reconciliation and settlement happen real-time.

Disadvantages:

Mobile money provider needs to make individual integrations with each government agency – this may be time consuming and costly especially because government agencies have different processes. Other than potentially duplicating government costs, the main drawback

33 Ibid.

34 An Application Programming Interface is a set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other service.

of having a variety of P2G service models is that citizens must interact with P2G payments in different ways, experiencing various interfaces and several different customer journeys. In the focus groups, citizens reported that this caused confusion, and that they found it challenging to memorise multiple ‘pay bill’ numbers. APIs require investment, time, and technical expertise to put in place. Without APIs in place, manual reconciliation, reporting, settlement is error-prone and lengthy.³⁵

CASE EXAMPLES

Jordan – Inclusive and consumer-friendly payment ecosystem: The government of Jordan’s recent investment in developing its national switch (JoMoPay) alongside a range of payment solutions (bank and mobile-based) is a good example of a government’s commitment to developing an inclusive and consumer-friendly payment ecosystem. Jordan, like many other countries, has an existing payment infrastructure, but does not yet fully have the infrastructure in place that facilitates the adoption of digital payments by “underserved” citizens. “Inclusive” refers to payment infrastructure that can accommodate the needs of the underserved. This means the availability of a wide reach of cash-in points and digital payment solutions such as mobile wallets, prepaid cards, and rechargeable cards – all solutions that do not require bank accounts. “Consumer-friendly” means that payment infrastructure incorporates, plans to incorporate, or is capable of incorporating features that improve the overall attractiveness of digital payments to consumers more broadly. These include features such as interoperability, real-time (or near real-time) funds settlement, a national switch, open-loop systems, etc. Jordan put a focus on integrating these approaches in their overall roll-out.³⁶

TAKEAWAYS

Although a payment gateway is the preferred e-payment option for integrating a large number of services and stakeholders and citizens, simple digital payment systems at the municipal level can be a first, less complex step of reaching citizens locally. Overall, implementing silo approaches should be avoided. At the same time, approaches with a straightforward frontend interface help tearing down perceived barriers to using e-payment approaches and enhance acceptance once the gateway is ready to be implemented.

- Digitalise services end to end. In addition to digitalising the payment, the service itself should be digitalised end-to-end to strengthen the benefits of paying remotely. To reap the full benefits of digitalisation, government services should be digitalised from start to finish. If the individual must still engage with a service provider in-person for certain aspects of the service, the convenience facilitated by digital payments is lost. Furthermore, a streamlined technical integration can boost the digitalisation of P2G payments. It is important that users can digitally request, pay for and, where possible, receive the public service (for example, in Rwanda and Cambodia for certain services).³⁷

35 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

36 <https://www.karandaaz.com.pk/wp-content/uploads/2017/02/Global-Landscape-Study-on-Digitising-P2G-Payments.pdf>

37 <https://www.gsma.com/publicpolicy/wp-content/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf>

- While various payment integrations are possible, it is crucial to look at what is most accessible, convenient, and easy to use for the end-users (which, to a smaller degree, also includes public servants), while ensuring inclusivity. This can even mean facilitating payments, not in public offices but in other places with citizen touchpoints that already have a well-accepted, trusted, and used payment structure, like supermarkets, post offices, or kiosks (for example, Kenya or Egypt). Overall, working with established digital payment providers is key.

SELECTION OF SERVICES

CHALLENGE

In Tunisia, school fees, and utility payments are payable digitally. Yet, taxes and most public services are not yet. For Tunisian municipalities it is a crucial step to decide which services they prioritise and make available online first and how they sequence their e-service roll-out.

CASE EXAMPLES

Egypt (GIZ Improvement of Public Services Project (IPSP) – selection based on utilisation of e-gov building blocks and pain points: The IPSP contributed to process mapping and business process redesign of selected public services. Working procedures and processes in administrations were standardised, simplified, and made transparent. Citizens got more options for communicating and interacting with the state, for example, via the internet, email, and regular exchange forums in communities. This not only improved the public service orientation but also led to better service for citizens overall.³⁸

CASE EXAMPLES

Case examples India (Karnataka.gov) – adding B2C services to increase adoption: MobileOne is a mobile based e-governance platform that gives Karnataka residents access to ~1,000 state and national government services and ~3,000 private services. They can be accessed via an application, on SMS, USSD, IVR, and a website (www.mobile.karnataka.gov.in) in both English and the local language, Kannada. The government has found it challenging to drive adoption and identify the right use cases for bringing in users. It has therefore adopted a “platform” approach in which it brings high-volume private business-to-consumer (B2C) services onto the platform to drive adoption. Examples include mobile bill payments and taxi bookings.³⁹

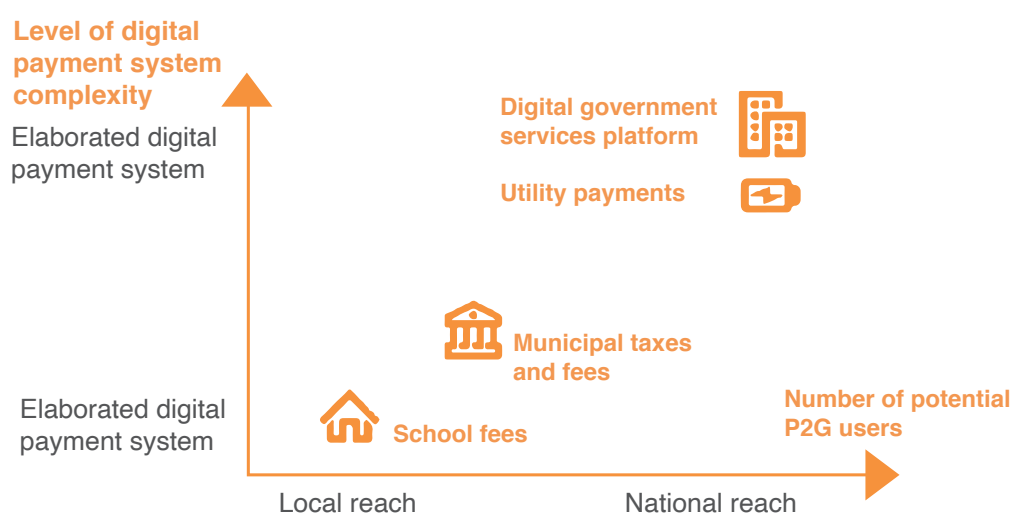
38 Interview with GIZ project manager Marcel Haessler in February 2022.

39 <https://dalberg.com/wp-content/uploads/2016/11/Digitizing-P2G-Payments.pdf>

TAKEAWAYS

Understanding government services and underlying processes and related challenges can help identify the most promising services to be selected to go digital next. There are various factors to consider when mapping and weighing the relevance of services, including the volume of users requesting the service, the volume of revenue it brings in, the level of automation or simplicity (few use case exceptions), the reach of the service, low security requirements (typically in terms of KYC) or whether the service is currently very problematic in its delivery and can highly benefit from a process reengineering (addressing pain points).

Figure 2: Comparison of digital P2G payment systems by reach and complexity



Source: GSMA 2020:⁴⁰ Digitalising P2G payments, p.12

- Conducting a landscape study or mapping of public services can support a service selection. Non-complex, high-demand and high-frequency services are typically considered to be digitalized first.⁴¹ Users more easily adapt simple payment habits and then transition to more complex ones. The most popular payments to start digitalising using digital money are education, tax, and public services (incl. utility services).⁴² In Pakistan, for example, passport application and traffic fine payments were among the first P2G payments to be digitalised.⁴³ Similar to general-public services, transport-related payments are a growing category and include a wide range of services, going beyond typical transport fees like bus tickets, traffic fines, and toll fees covering also driving license and motor vehicle registrations. Generally, to fully understand which services qualify best, a process analysis (breaking down each of the potentially selected

40 <https://www.gsma.com/publicpolicy/wp-content/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf>

41 Not only digitized, but digitalization also includes a process adaptation.

42 According to a bi-annual e-government survey of both developed and emerging economies, utility payments are the leading digital P2G payment type (140 countries). After utility payments (45 countries), tax and education-related payments are the second and third most common types (29 and 28 countries respectively). This data suggests that utility services represent the most practical entry point for governments considering a digital P2G payments approach or strategy, or for countries in the initial phases of transitioning from cash.

43 <https://www.gsma.com/publicpolicy/wp-content/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf>

- processes into separate steps) helps to create a better understanding of the service as well as on possible non-serving process complexities that could be smoothed out during digitalisation.
- If the municipality is experiencing a clear pain point that also has a strong impact on its citizens due to the limited service delivery, the municipality could focus on this service first. To analyse the situation, public servants and officials could conduct a quick collection and mapping of existing pain points in a moderated workshop setting.
- Municipalities could team up with selected private services that are in high demand and would benefit from going digital as well, especially if these services are complementary such as taxi bookings to use public (e.g., health) services on-site.

USER EXPERIENCE SIMPLIFICATION FOR LOCAL ADMINISTRATION STAFF

CHALLENGE

Cash is still king in Tunisia. Digital payment processes are still predominantly perceived as more complex and cumbersome than cash handling by local civil servants. These concerns need to be addressed in order to increase acceptance for change.

CASE EXAMPLES

Argentina – Redesigning the Disability Certificate: In Argentina, an estimated 3 million people have some disability. To provide access to rights and benefits, a Disability Certificate (Certificado Único de Discapacidad) is required. However, the process for obtaining a Disability Certificate was difficult and could take up to seven months. The National Agency for Disability and the team at Mi Argentina, Argentina’s platform for providing citizen centred services, worked on overhauling the service. This multi-disciplinary team consisted of software engineers and designers as well as psychologists, political scientists, anthropologists, and sociologists. Their intent was to not only simplify and speed up the process but to provide citizens already dealing with difficulties, with a service they deserve and appreciate. Developing the solution was only part of the challenge because the solution needed to work with the 453 separate Medical Evaluation Boards responsible for certifying a disability. This required the team to address the relationship between central government and the boards, support the practicalities of connectivity and focus on developing the necessary skills through training.

A wizard now guides citizens through their application rather than requiring them to attend a physical meeting to establish what documentation is required. Should in an exceptional case a physical meeting be necessary an online appointment system schedules the interview, meaning that users can avoid hours of waiting in queues. Finally, the service proactively provides notifications in the citizen’s digital profile ensuring the user knows when the Disability Certificate is expiring and offering to help with its renewal.

Because of the new system that is guiding the citizens, the public servants are relieved from some of their procedural duties and can focus on quality support, which is appreciated by both citizens and civil servants. In addition, with the system having clearly established roles and responsibilities of the various stakeholders in the back end, civil servants do not need to act as a bridge between public authorities and deal with often resulting delays.⁴⁴

CASE EXAMPLES

Slovenia – easy to use low code building blocks: In Slovenia, this need is met by the Electronic Procedures Building Block (Jedro elektronskih postopkov, JEP) with the intention of allowing for public servants to manage digital services from design to live, with minimal programming knowledge while being user-friendly, trusted, and working across platforms in a way that re-uses all the elements discussed previously.

JEP operates on the basis of initially understanding the design of the process that is needed and then using the building blocks to convert that into a digital experience. By re-using the existing components, all the quality control that goes into their design is replicated, and the benefits are scaled across the services developed using JEP. Services can be assembled that handle authentication, data capture, provision of evidence (either through documents or in reference to existing data sources), e-signatures where necessary, payments and notifications throughout the process. With the right philosophy of service design and delivery and the necessary support to create high-quality user experiences, a tool like JEP has the potential to support the government as a platform ambition of scaling the delivery of public services while retaining trust and quality.

Similar to the DIAL e-governance building blocks, this “low code” system, uses a visual interface to construct end-to-end services out of smaller constituent parts. It is complemented by design systems that collate re-usable user interface components, design patterns, accessibly written guides for public servants and the guidance to support implementation that ensures service teams can build in a consistent fashion. A simpler backend interface increases the acceptance of a new system and reduces the fear of a perceived, increased job complexity for civil servants.⁴⁵

CASE EXAMPLES

Egypt (GIZ project) – Public service mapping: The IPSP created a Public Services Map, which provides a wide range of information on the 500 most demanded governmental services. Originally intended primarily for citizens, it turned out that the services mapping is also quite heavily used by public servants. They use it as a guide to better understand the process in their explanation to the citizen and they also appreciate the list of required steps and documents to complete the service delivery. Due to the large number of services, including niche services that are not often requested, public servants benefit from an online registry and guidance that simplifies their work. It also gives them confidence in the quality of their service delivery and reduces their time per citizen, which in return reduces stress for them.

44 OECD Observatory of Public Sector Innovation (2018[86]), Redesign of the Unique Certificate of Disability, <https://oecd-opsi.org/innovations/certificado-unico-de-discapacidad-cud-redesign-of-the-granting-service-of-the-unique-certificate-of-disability/>

45 <https://www.oecd-ilibrary.org/sites/3252a73a-en/index.html?itemId=/content/component/3252a73a-en>

While an end-to-end integration is desirable, even providing digital, accepting future digital integrations such as payment options.⁴⁶

CASE EXAMPLES

Tunisia (GIZ project) – Back and front office separation: Workflows in selected municipal citizens' offices have been streamlined and digitized following the design thinking methodology. It has been recognized that inefficiencies resulted from the lack of separation between citizen requests and document processing. Therefore, the offices have been divided into a front and back office. In addition, a user-friendly software connecting both offices has been developed and released. As a result, the contacts between front and back office have been significantly narrowed, paperwork has been reduced, and bureaucratic processes have been minimized. Citizens benefit from a better user experience: due to shorter waiting times and increased transparency regarding the processing status. In a next step citizens will have the possibility to submit their requests online.

CASE EXAMPLES

Kenya (M-PESA) – Providing simple and transparent pricing structures for mobile payment: When Safaricom launched the service in 2007, mobile payment was extremely new. Therefore, it was especially important to reduce barriers to use and to provide simple and transparent pricing. The only service that has a fee is to send money. Fees were transparently and broadly communicated. Every agent has a fee table. This was beneficial for both, users and agents who often operate a small kiosk. The fees used to be rounded up; today they have become a bit more differentiated, possibly due to the user experience over the last 15 years. All other features are free including the first user registration and depositing money. It was designed to be as easy to understand and use as possible. So, there are no minimum balance rules either.⁴⁷

TAKEAWAYS

A streamlined digital process with a simple interface for citizens and frontend (ideally also backend) civil servants enhance the uptake of a digital system. Case studies give evidence of various approaches of making e-payment processing for the administrative staff simpler.

- Simplification needs to be customer-driven, which also includes user process journeys when applying design thinking approaches. Workshops following the current user journey from a civil servant perspective, which aim at understanding their gains and pains, contribute to adapting the process to also address their needs. However, the citizen as end-user has to come first and helping civil servants to put themselves into the citizens' shoes and reiterating the user journey from a citizen journey can be highly useful.

⁴⁶ Interview with GIZ project in February 2022.

⁴⁷ Field research author Stephanie Ludwig, Kenya 2009

- Multi-disciplinary teams from various levels and areas of engagement at the local governance level, as well as neutral externals can contribute to a well-adapted service delivery process.
- In terms of payments, these learnings can be translated into a continuous effort to improve fee transparency and innovate on pricing to encourage digital P2G uptake, especially for lower-value transactions. Sometimes, rounding down similarly priced services to simpler amounts (e.g., 50 instead of 48.3) and levelling the prices (all services in price category A cost 50, all services in category B cost 100) can be much easier for citizens and civil servant, not only to recall prices but also to reduce input errors as well. Often, covering small fees through the public authorities can help increase uptake and ultimately save costs. Also, government agencies tend to share their service fees and the payment fees separately. Having one price for the service, no matter which payment method, is easier to be understood.

FULL MIGRATION TO A NEW SYSTEM VERSUS MAINTAINING PHYSICAL PAPER TRAILS IN PARALLEL

CHALLENGE

Tunisia is currently opting to maintain both systems. Down the line, the maintenance of both systems leads to higher costs and efforts, while it also allows for analog data security and traditional paper handling.

CASE EXAMPLES

USA (Electronic Immigration System) – Understanding when digital or paper is better for users: The paper-based immigration system in the United States requires applicants to complete 1 out of 94 forms before sending it to different locations according to the nature of the application. In 2005, the U.S. Citizenship and Immigration Services (USCIS) decided to take the analogue process and digitalise it as the Electronic Immigration System (ELIS).

However, ELIS was built on the e-government premise of documenting an analogue process, digitalising it, and considering the problem solved. Putting something online has upfront appeal, but simply making a digital replica of a process does not make it better, especially if it fails to acknowledge the user experience of public servants. Therefore, while the ELIS project spent a lot of time thoroughly documenting business processes and data flows, little effort was put into understanding how immigration officers worked; in the end only two forms were available online. The work was built on the assumption that digital would always be unquestionably better than paper. But what user researchers discovered was that paper was actually superior for some of the nuanced tasks involved with providing the service. In failing to understand the overall experience of immigration applications the project overlooked the needs and behaviours of USCIS employees.

Part way through the project a change was made to reflect a more user-driven approach. However, decisions and omissions made in the first phase limited progress and saw USCIS

employees develop workarounds to make ELIS usable. As such, legacy overheads are not necessarily caused by old software – modernisation efforts approached in the wrong way can lead to decisions or strategic direction that constrain attempts to transform the experience of a particular user need.⁴⁸

CASE EXAMPLES

Slovenia – Digital as the basis for both paper-based and online interactions: Public services are not only provided online and efforts to introduce a “digital-by-default” approach that removes offline access can exacerbate digital divides and fail to respond to the needs of particular segments of society. Slovenia operates local administrative outlets for numerous different government departments and agencies, while municipal governments offer their own solutions too. Prior to the COVID-19 era, these physical services were a highly appreciated part of the infrastructure for the public sector, as citizens knew that they could arrive in person and be helped with minimal friction and no cost. This is particularly relevant for services where identification is required, given the early adoption of digital identity by public services and citizens in Slovenia. Slovenia also invested in access for those who choose not to use digital technologies and thereby avoided increasing digital inequalities by “empowering the already empowered”. While the majority of citizens may still continue to access services in paper, there are opportunities for digital transformation that enable a multi-channel approach of accessing services through any channel, at any point in the process. Services such as these which involve a more elderly user base are being given support by the Slovenian government’s partnership with the project “Simbioza”. This programme encourages intergenerational co-operation, volunteering, lifelong learning, social entrepreneurship, and socially responsible and ethical activities and has made a significant contribution to digital literacy across the whole of Slovenian society.

In 2018, a change to the methodology for calculating the value of pensions to include payments received from foreign pension schemes meant the Slovenian digital system had to update the data held on 125 000 beneficiaries distributed across 50 countries. Its existing pension services platform was used as the basis to simplify this exercise. The approach involved developing forms in multiple languages and providing solutions that would work digitally and in-person as well as using QR codes to connect physical paperwork with the relevant online aspects. However, the average age of those registered to use the platform was 49, whereas the average age of those needing to calculate their average annual allowance was 71. This meant that inevitably the vast majority of affected users would use the paper process and so internal systems needed to be developed to address the volume of physical documentation involved. Nevertheless, the platform used this as an opportunity to encourage wider adoption through information campaigns and other outreach actions and saw around 10% of all applications completed digitally through the e-form. The average age of those beneficiaries who did so was 70, showing an important initial achievement in terms of helping new audiences acquire the skills to work in a digital age.⁴⁹

48 <https://www.oecd-ilibrary.org/sites/3252a73a-en/index.html?itemId=/content/component/3252a73a-en> taken from Dawson McGuinness and Schank, (2021[76]), *Power to the Public*, <https://press.princeton.edu/books/hardcover/9780691207759/power-to-the-public>

49 <https://www.oecd-ilibrary.org/sites/3252a73a-en/index.html?itemId=/content/component/3252a73a-en>

CASE EXAMPLES

Guinea – Mobile vehicle tax payment: In 2016, Guinea adopted mobile money as a mode of payment for the vehicle tax. This led to two main financial planning improvements for the government: a daily report on the amount of vehicle tax paid, and payments of the vehicle tax collected the previous day. In addition, the government has access to a digital platform that tracks vehicle tax payments in real time (the platform is updated every 15 minutes). Digitalising payments improved financial planning for the Guinean government as it facilitated reporting, reconciliation, and settlement. With the shift from paper to digital recordkeeping, tasks are now done digitally and almost instantaneously, which improves data processing and reduces errors and time spent on manual processes. Digital records enable the comparison between different sets of data and allow governments to manage their financial resources based on more reliable and up-to-date information.⁵⁰

CASE EXAMPLES

Egypt (GIZ project) – increasing efficiency of a paper archive: In a project in Egypt it was found that public employees are afraid that digital documents get lost. People trust in paper, not in IT or the state. The project provided support with reorganizing one selected paper archive in West Cairo as a pilot. It was sorted and made fire safe. The aim was to create an archive that is fit for using bird eye cameras to access the paper.⁵¹

TAKEAWAYS

Case studies highlight the benefits and disadvantages of both approaches. Overall, it is likely that pure paper-led processes are due to be phased out eventually. If not actively phased out, paper archives do have a limited life span which will threaten existing Tunisian records over time.

- When digitalising Tunisian local processes, it is crucial to conduct a pragmatic process flow analysis with local officers and to include their feedback on how to enhance the process overall. In the first brainstorming, process improvement could be considered irrespective of any technological involvement. Civil servants need to be facilitated by the system to utilise digital processes, which can mean changing requirements such as stamps on paper verification, faxes, paper records as proof, etc.
- In Tunisia, with a lower tech affinity than for example in Slovenia, there is a tendency that more population segments besides the elderly need stronger support with going digital. This typically includes more women than men, and more people with lower income.
- Making the best use of existing paper archives is an alternative approach, using technology such as bird eye cameras, text scanners, etc. to find and structure information. It has to be considered that this medium-term approach can be rather cost-intensive.

50 <https://www.gsma.com/publicpolicy/wp-content/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf>

51 More detailed information can be provided by Mr Hässler, IPSP Project in Egypt.

CREATION OF STRONG INCENTIVES TO REPLACE CASH PAYMENTS IN LOCAL ADMINISTRATIONS

CHALLENGE

Often in local administrations, well-known yet outdated processes persevere as the known is trusted more than the unknown. Civil servants need incentives that reflect their values and work requirements to embrace change and to be willing to take the extra effort for getting used to a new payments system.

CASE EXAMPLES

Philippines and Rwanda – focus on internal process redesign and training: does not have to take a long time or even a significant amount of money but is an often overlooked or poorly executed step. Rwanda and the Philippines learned that digital payment integration requires fewer internal challenges by considering and implementing the necessary business process changes upfront (e.g., which departments are involved in payments processing, what the order of the work flow is, who needs to provide oversight, etc.). By focusing on internal training, employees, particularly government agents who have citizen-facing roles, will be better equipped to ensure that the initial deployment is successful. Rwanda, for example, begins its awareness and education efforts by training government officials as the first points of contact, and then spreading the message from there.⁵²

CASE EXAMPLES

Senegal and Burkina Faso – budget saving incentive at decision-making level: Savings generated by digitalisation can provide users with a further incentive to adopt digital payments. For example, the Customs School in Senegal noted a 50 per cent increase in registrations after digitalising payments for its entrance exam registration. Before digitalisation, the school had 25,000 registrations from candidates who were mostly based in the capital city where the office is located. After registration fee payments were digitalised, registrations increased by 13,000, which (in their view) were due to new candidates from areas outside Dakar. Based on that assumption, each of the new candidates saved at least eight dollars in transportation costs by using the digital platform. The government saved opportunity costs stemming from issues relating to a lower number of suitable candidates.

As with customers, end-to-end digitalisation can provide sizeable benefits for government stakeholders, too. For instance, the Ministry of Higher Education in Burkina Faso reported that digitalising university registration and fees led to a cost savings of five per cent of their total annual budget, mainly on personnel and registration material. In Côte d'Ivoire, the Ministry of Public Works translated similar cost savings into fee reductions, consequently lowering the civil service exam entry fees by more than half (from \$77 to \$39).⁵³

52 Ibid.

53 https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/06/GSMA_Championing-a-unified-digital-person-to-government-payments-strategy.pdf

CASE EXAMPLES

Senegal and Burkina Faso – time and work effort saving incentive at implementation

level: Although cash is ubiquitous, managing cash payments has challenges. Public authorities cited security, corruption and handling costs as the key challenges associated with accepting cash payments. For example, universities in Burkina Faso hire police to escort university fee collectors to protect them from theft, which is not only costly but above also cumbersome and time-consuming. Cash is also difficult to trace and increases the chance of errors and leakages, which sometimes put the public officer in charge in an uncomfortable position if discovered.

Administrators of the Customs School entrance examination in Senegal noted that before requiring all payments to be made via digital money, they would usually find more people registered than the registration fees paid due to errors in the registration process. Public authorities explain that mobile money P2G payments save money and time by reducing or repurposing cash collection points and eliminating manual processes for reconciling cash payments.⁵⁴

CASE EXAMPLES

UK (Suffolk Coastal Port Health Authority) – Reduce paperwork for civil servants:

The Suffolk Coastal Port Health Authority (SCPHA) introduced a Port Health Interactive Live Information System (PHILIS) that resulted in requiring less paperwork, both for staff and for food importers themselves. The system has generated productivity gains of up to 22 per cent or annual savings of around 17,000 working hours. An official audit conducted a benefit realisation analysis which showed double-digit savings in staff time.⁵⁵

CASE EXAMPLES

UK (Leeds City Council) – Reduce typically more taxing front desk citizen contact by fostering self-help:

The Council provides self-service through live web chat to its constituents. Leeds' live chat is about providing support to website users to help them complete their business with the council online. It encourages customers to change their behaviour and stay connected, even when they reach a point where they are not clear as to how to proceed. Advisors can chat with customers while they are online, helping to guide them through the process and preventing the need for the customer to telephone the council or visit in person, either of which costs the council more money. Customer advisors can deal with three enquiries simultaneously, making live chat much more efficient. The council has so far saved £18,360 over eight months from August 2013 to March 2014. The savings figures, however, miss the real benefits that come from both the reduction in further calls that would have been made had the improvements to the website inspired by feedback from the chats – resulting in 400 changes to the website in eight months – not been made, and the 'conversion' of web users to true self-servers. Post-chat surveys show consistently that 70 per cent of customers

54 Ibid.

55 <http://www.local.gov.uk/sites/default/files/documents/transforming-public-servi-80e.pdf>

say they would have telephoned had they not used web chat, and a further 20 per cent would have emailed.⁵⁶

CASE EXAMPLES

Senegal and Kenya – active help and reduction of hurdles as incentive at implementation level:

Of the two universities that Orange supported in Senegal for a computer subsidy programme, the one with a mobile money agent on site providing active help and guidance to users during the payments process accounted for the majority of mobile payments. While this example highlights the need for guidance for the citizens as users, the same is true for civil servants as users.⁵⁷

Government agencies in Kenya cited entrenched manual internal procedures as a hindrance to digitalisation. In some institutions, compliance officers still require a stamped receipt, and some agencies are not legally able to accept electronic receipts. Performance measurement may also work against digitalisation if KPIs are linked to the collection of cash at outlets. It was required to first rid systems of these hurdles to facilitate the work of civil servants and support them in doing their job well, completely and being fully recognized for it.⁵⁸

TAKEAWAYS

Dalberg research⁵⁹ highlighted that building internal commitment and capacity has been an area of relative underinvestment. Training administrative officials within a government agency, ensuring alignment with other relevant departments (e.g., finance and education ministries, school boards, internal IT, finance departments, etc.), and making sure all relevant people - all the way down to the people who collect funds - are informed and incentivised, can help ensure implementation success. Wherever possible, it is useful for departments to prioritise digital payments as part of their own strategies and allocate budgets (where needed) as signs of their own commitment. This is particularly true in the case of integrated initiatives that require support across government agencies. How staff is being incentivized varies and its success is highly context dependent.

- Incentives can help drive the adoption of P2G digital payments over cash by means of discouraging cash payments and increasing the use of digital services. Although the examples are country-specific, they could be adapted to Tunisia.
- Building upon the experiences from other countries, local administrative staff are much more likely to buy into e-payments related changes if they are not only well informed but also have tangible incentives to engage. The strongest incentive is making their job easier and faster. Process design should focus on achieving this.

56 <http://www.local.gov.uk/sites/default/files/documents/transforming-public-servi-80e.pdf>

57 https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/06/GSMA_Championing-a-unified-digital-person-to-government-payments-strategy.pdf

58 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

59 <https://www.karandaaz.com.pk/wp-content/uploads/2017/02/Global-Landscape-Study-on-Digitising-P2G-Payments.pdf>

- Government processes are complex, and all stakeholders need to be aligned to navigate through these complexities to transition to digital services. Once the government takes the lead, it should also create an enabling environment for digitalisation by understanding and removing any hurdles. Such hurdles may include unsupportive policies, vested interests from procurement and collection departments, external political pressures, and inefficient internal processes due to deeply entrenched cultures.

CASH-RELATED INFORMAL PRACTICES AND POWER DYNAMICS IN LOCAL ADMINISTRATIONS

CHALLENGE

Cash handling agents often block e-payments as they lose the opportunity of bribes or other power relations or exchange of favours with citizens and other stakeholders involved in the payments process.

CASE EXAMPLES

Bangladesh (GIZ project E-Governance in Municipal Administration) – supporting civil servants to avoid corrupt behaviour: Corruption is often not a sign of the lack of willingness, but the incidence of helplessness. What that means is that Bangladeshi civil servants are often not well enough informed about the actual rules and they do not have the resources available to look them up either. Another issue is that local civil servants may also find it challenging to understand and interpret legal texts, if available as resources, which is written in even more complicated “legal speak” in Bangladesh than in Europe. In Bangladesh, there is a tendency to first not facilitate a request if the rules themselves or the public servant’s understanding of them are not fully clear. At the same time, exchanging favours or money is widely practiced. Making an official decision based on lacking information can put them in a delicate situation. Therefore, it often appears more practicable to make an informal decision, often linked with granting a favour to someone due to an existing network or accepting petty bribes or another benefit. The GIZ project’s staff has been sensible on these informal dynamics and worked with their partnering municipal administrations on providing needed, suitable resources to deliver local government’s needs. *What can a national government do to support and empower them to deliver?* Manpower, knowledge, financial support and interoperable, user-friendly data management systems....

CASE EXAMPLES

GIZ project – addressing gate keeping aimed at retaining a traditional status quo: These gatekeepers can be located at lower hierarchical levels, as a reviewed GIZ project experienced. While project agreements were made and buy-in was developed at director’s level, the digitalisation process in this project was not supported by field staff who continued using analog procedures. Managing gatekeepers can be crucial, especially for projects supporting digital processes. Digitalising mechanisms frequently entails an overhaul of the process itself. Intermediaries or gatekeepers are often cut out due to direct access to the digital format. This affects power dynamics and potential informal income sources. Very often, reasons for blocking a project can be simply a certain fear of or inflexibility to change.⁶⁰

⁶⁰ The project was qualitatively reviewed by the author. It is anonymised in this report.

TAKEAWAYS

Conducting qualitative research on motives and drivers of cash-related informal practices and power dynamics in local administrations can be a starting point to develop a strategy on how to address these.

- Making processes understandable for front-end officers, including providing supportive guiding material, and helping them navigate more complex situations (e.g., hands-on training scenarios) can reduce corrupt practices.
- Creating buy-in for the new system needs to happen at all levels. Understanding who gains from which process (informally) and which fears and possible rumours are circulating is crucial and typically requires closer engagement by local project staff. It is advisable to use a soft leadership approach and be flexible to the various situations. Different gatekeepers are to be addressed in different ways.

LOCAL ADMINISTRATIVE STAFF'S CHANGED ROLES, REQUIRED SKILLS AND RESPONSIBILITIES IN FRONT AND BACK END

CHALLENGE

Tunisia has a cash-based agent structure in local administrations. With an increase in e-payment, their job descriptions will change, which also impact staff's motivation, capacities, and confidence in the job. In addition, digitalisation leads to automation and cost saving, which can result in a leaner staff structure down the line. To anticipate making positions obsolete, case experiences can shine a light on re-skilling and adapting job roles. In addition, the municipal leadership level is often not tech-affine and could face challenges being in charge of an electronic service and payments platform.

CASE EXAMPLES

Kenya – ret(r)aining and redeploying staff: Most government agencies in Kenya report that digitalisation of government services has not resulted in mass public sector layoffs, but rather the up skilling of existing staff, and the employment of more skilled ICT professionals. Often, departments recruited additional staff for customer service, finance, accounting, and IT.⁶¹

- Staff of a public transport corporation who were previously involved in cash collections were retrained and redeployed to other roles such as vehicle inspection centres to cater for a spike in the number of citizens requesting various services.⁶²
- At a public insurance fund, digital payments reduced the workload of cashiers, inspectors and other branch staff involved in cash collection. These staff now focus on facilitating new registrations, responding to customer queries, quality control (inspections at hospitals to

61 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

62 National Transport and Safety Authority (NTSA): NTSA is a state corporation formed to harmonise operations of key road transport departments. The authority issues driver's licenses, among other functions. NTSA services can be accessed via eCitizen and payments can be made through mobile money, internet banking or debit and credit cards.

ensure that services are up to standard) and processing claims.⁶³

- After starting to digitally collect court fines, the Judiciary reported no decrease in staffing. In fact, the process mapping undertaken to prepare for digitalisation revealed staffing gaps prompting some departments (e.g., accounting) to increase staff levels.⁶⁴
- Across provinces, at Huduma service centres and cyber cafes staff started offering customers support in getting online and navigating the digital payments process.⁶⁵
- At the ICT authority, the number of staff and their skill sets expanded to support the implementation and migration of government agencies to the eCitizen platform (one-stop shop gateway). Staff pitched the benefits of the service, managed the migration of projects and supported customer service.⁶⁶

Overall, digitalisation simultaneously improved customer service quality and staff motivation by raising employee skill levels. It also reduced corruption and fraud by minimising opportunities to interface with cash. When transactions are traceable, the transparency created by the real-time payments records promotes improved financial management, which in turn leads to increased revenues and reduced costs.

CASE EXAMPLES

Egypt (GIZ Support of e-Government and innovation of public administration – recruit specialized staff and support job specializations): The Egyptian government has recognized that it needs staff with specialized IT skills. It has therefore started to sponsor specialized degrees for Egyptians to increase the number of Egyptian people with these skills. The InnoPA project, in short, supports the government in adapting job profiles and upskilling. Output 2 aims to prepare the Egyptian government’s human resource management for the challenges of digital transformation. The focus is on the introduction and further development of digital personnel management tools, for example for competence management or the performance evaluation of public service employees. It is planned to first identify the needs of selected ministries for the skills required for the digital transformation in the public sector, to accompany the development of a skills framework, to record the current level of skills and to derive qualification and recruitment needs from this. In the next step, targeted training offers will be developed, expanded or converted together with state authorities (e.g., NIGSD, authorities of the MCIT). Output 3 aims to improve administrative capacities in the context of

63 National Hospital Insurance Fund (NHIF): NHIF is a state parastatal with a mandate to provide medical insurance to Kenyan citizens at an affordable price. Membership is open to all Kenyans 18 years of age with a monthly income of US\$ 10 or more. NHIF is directly integrated with mobile providers, which enables members to make contributions using mobile money wallets.

64 Digital payment through ‘Faini chap-chap’, a mobile money-based P2G collection instrument.

65 Huduma: In 2014, the Kenyan government established the Huduma Kenya Service Delivery Program, whose main mandate was to roll out physical government service centers in all of Kenya’s 47 counties to improve the accessibility of government services. At these centers, government agents from the respective ministries, departments and agencies provide government services to citizens, who then pay for these services using either cash or digital payment methods. Services previously not accessible especially in rural areas are now offered there.

66 eCitizen is an official government digital services and payments platform that enables Kenyan citizens, residents and visitors to access and pay for a wide range of services online. A one-stop information portal, eCitizen pioneered the concept of making it more convenient to complete government transactions.

the provision of user-centric digital public services. Concepts for reformed work processes are being developed and handouts for user-oriented services are being developed and made available to the entire Egyptian administration. Over 20 services will be digitalised using ICT building blocks from the GovStack Initiative. Output 4 aims to create institutional and personal foundations for innovation management in public administration. The project and its government partner plan to launch an Accelerator Program for Innovations, which include five services to be digitalised and five work processes to be reformed.⁶⁷

CASE EXAMPLES

Slovenia (GOV.SI and e-Uprava) – outsource when upskilling is limited: Slovenia is limited in its ability to develop its internal digital capabilities. In one public authority whose systems provide support to more than 70% of Slovenian households, the internal digital team numbered just 13 and, while they were responsible for transformation, most of their time was spent on procurement and administering the relationship with external vendors. The majority of Slovenian authorities (26) outsource their delivery capability while 19 authorities have project-specific contracts with suppliers. Several organisations use external capability to build a service but hand the operation and maintenance over to in-house teams. Without an effective strategy for minimising the gap between policy, delivery and operations, there are risks to the quality of services and the capacity for government to iterate and improve over time.⁶⁸

CASE EXAMPLES

GIZ e-government project⁶⁹ – planning for and institutionalising scale: The project worked according to the logic that consideration of participatory development plans as a basis for developing a respective budget plan leads to financing and implementation of strategic and demand-based development priorities. The system that is introduced could reduce common ad-hoc spending practices (e.g., based on the interests of individuals or the elite) and increase the quality of local-level infrastructure and service delivery. In turn, this would lead to greater satisfaction of the local population. Specifically, through the use of the digital system, two partner provinces have increased their revenue by 30 percent compared with the previous year. Partners are considering extending this approach to a broader use case and in more provinces. The above project had an impact and has the potential to scale up because this approach was conceptualised from the beginning, as projects reported.

In this project, a digitalisation activity was piloted in two provinces. A digital budget management system was implemented for water fees and had the potential to be extended to other type of fees. This reduced the risk of overloading the project's capacities during the piloting stage. The pilot had a strong impact on local governance structures within its narrow area. It sparked

67 Further details on the InnoPA project can be taken from its project proposal or the project team directly. This report relied on the project proposal. While this project has not yet been completed and actual lessons cannot yet be derived, inputs on their planned activities were appreciated by the Tunisian project and therefore integrated into this report.

68 <https://www.oecd-ilibrary.org/sites/3252a73a-en/index.html?itemId=/content/component/3252a73a-en>

69 The project was qualitatively reviewed by the author. It is anonymised in this report.

local partners' interest in expanding the pilot and other provinces' interest in replicating the approach. The implemented system is in operation, in parallel with the previous paper-based approach, and is ready to be scaled up.

The project achieved extensive scale and high visibility of a women's empowerment platform. At province level, it was implemented with local partners who refused to take over the platform after it became known at parliamentary level. According to the project, the partner got scared about the responsibility and the high visibility of a sensitive topic. Their expectations on scope and scale were different from those of the project, which considered increased scope and scale a success.⁷⁰

TAKEAWAYS

- Retraining staff requires a considerate approach that involves understanding the work context of the staff in Tunisian municipalities in order to assess potential areas of re- or up-skilling.
- Drawing on external technical expertise can be an attractive route to offsetting capacity constraints and limits on the availability of internal skills, in particular to increase capacity in the short- and medium-term. However, this can lead to an unhelpful separation between policy, delivery and operations which can limit the capacity to iterate and improve a service. Another risk of increasing reliance on external actors is that it makes silo-based delivery more likely. Where external suppliers are involved, it can be beneficial to explore ways to work closely together, whether through sharing offices or virtual workspaces, as has been seen to the benefit of the GOV.SI and e-Uprava teams in Slovenia.
- Designing ICT-enabled measures for scale should be considered when a potential proof of concept through a pilot is conceptualised. Often, scaling up approaches requires additional adjustments as new stakeholders come into the picture, which should be accounted for during project planning. Designing for scale can be further embraced by projects if they have strong partners involved at the right level, have a typically inclusive business and market approach and strong institutionalisation from the beginning.
- Besides their partners' mandate, it is important to understand who has which role and capacities to manage their contribution to the project.
- Creating awareness of the pilot's potential, generating interest, and building partnerships are crucial to create buy-in for scaling up initiatives. However, increasing awareness can also make ICT and other innovative approaches more prone to limitations from the less technologically inclined in decision-making positions.

70 Ludwig, Stephanie (2021): Information and Communication Technologies (ICTs) contributing to achieving development objectives. Project experiences and lessons learnt. Cross-section analysis. Published by GIZ Evaluation Unit

COMPLAINT MECHANISMS OVERSIGHT, ONLINE FEEDBACK, ACCOUNTABILITY, RECONCILIATION, AND PAYMENTS CONFIRMATION

CHALLENGE

In order to establish a relationship of trust with citizens, municipalities have tried to establish faster, more citizen-oriented and more transparent services. However, due to a lack of human and financial resources, municipalities are still far from achieving the desired goals.

CASE EXAMPLES

Ivory Coast– Easy, responsive customer feedback and resolution procedures: In Ivory Coast, SICTA provides a helpdesk where customers can submit grievances related to mobile transactions. The service-level agreement requires that issues are resolved within an hour.⁷¹

CASE EXAMPLES

UK (Fylde Forum) – Combining self-help and feedback for citizens on public digital services: The Fylde Forum⁷² provides a combination of forum and live chat which remains innovative four years after inception. The site is available at <http://getsatisfaction.com/fylde>. As well as providing local people with the opportunity to have their say on service issues, figures from the project show a reduction in calls over four years, producing savings of about £10,000.⁷³

CASE EXAMPLES

Kenya – Payment confirmation, reconciliation, and data analysis: Citizens expressed a loss of confidence in paying for P2G digitally when they faced payments platform issues. The main concerns arise when citizens are denied government services because payments have not been reconciled with their accounts in a timely manner, due to system or process failure on either the payments provider or government agency's side. This scenario erodes citizen trust and causes operational difficulties for the government agency trying to maintain accurate payment records. Problematic reconciliations also consume time and effort and can sometimes be costly. Where such issues exist, it may take weeks or even months to resolve if the correct payments are not traceable, leading to service denial.

71 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

72 Individual case studies from the Customer-Led Transformation Programme are at http://www.local.gov.uk/productivity/-/journal_content/56/10180/3510959/ARTICLE and the evaluation of the overall program is at http://www.local.gov.uk/productivity/-/journal_content/56/10180/5681477/ARTICLE

73 <http://www.local.gov.uk/sites/default/files/documents/transforming-public-servi-80e.pdf>

For citizens using mobile money, the confirmation message serves a critical function as a digital receipt. Yet, delays in receiving confirmation messages and delayed system updates were challenges they still faced frequently. In some cases, although a confirmation message was received, the system was not updated to reflect that the payments had been made and the service thus remained inaccessible.

Analysing available data (in this case through conducting a survey), a profile of the Kenyan user of government services could be created: About 40 per cent of adults surveyed used government services and paid directly for the services themselves, while 26 percent used the services but someone else paid for them. More than 70 percent of those who use mobile money for government payments have a high school education (or more). They are 70 percent male, which is higher than the proportion of men who use all government services (about 60 percent). These insights helped to understand that more needs to be done to ensure women, rural and the less educated are able to benefit from digital P2G services and to put supportive activities into action.⁷⁴

Reconciliation issue type	Impact	Possible mitigation
<p>Mismatches in transaction details between the mobile money transaction records and the government agency database</p>	<p>Internal Risks:</p> <ol style="list-style-type: none"> 1. Fraud may go undetected e.g., internal staff channelling funds to other accounts. 2. Undetectable collusion in money laundering e.g., internal staff accumulate funds into an 'unclaimed funds' account. 3. Where processes are broken, internal staff will have to deal with more frustrated customers. 4. Incorrect tracking of payment reversals may lead to revenue losses for the government agency. 5. Double counting of payments may lead to revenue losses for the government agency. 	<ol style="list-style-type: none"> 1. Segregation of payment collections and management duties to reduce error or fraud in high-risk procedures. 2. Employee training on roles and responsibilities 3. Short term investment in Instant Payment Notification (IPN)³⁷ hub can help automate some administrative functions related to payments and report them real time. 4. The use of mobile money APIs to allow integration with the mobile money system can have built-in functionalities such as account validation. 5. Set threshold limits to reduce risk associated with AML/CFT, e.g., not allowing any account to receive more than a certain amount. If it happens, it is flagged for investigation.
	<p>External Risks:</p> <ol style="list-style-type: none"> 1. Customer pays into wrong account or pays wrong amount, leading to incorrect posting of payments and probable delay or denial of service. 2. Clients remain wary of digital receipts, and continue to place high value on printed receipts, creating inefficiencies. 	<ol style="list-style-type: none"> 1. Creating payments systems that only allow exact amount to be paid, and/or exact transaction number to be entered, with account validation from both system databases before service is offered. 2. Customer awareness campaigns to increase customer education with respect to how to make payments correctly.

TAKEAWAYS

Trust is established by being responsive. There are various ways of increasing responsive exchange with citizens. Most importantly, the public employees, as well as citizens, should at no point feel left alone with dealing with this new process.

- A government service with a simple and user-friendly digital process drives a higher adoption from citizens, as it is more convenient and inspires trust. The citizen journey to request, pay for and receive the digital government service should be constantly monitored in order to improve the user experience, which will drive usage and adoption. User feedback should be collected continuously, as this provides a rich source of information to improve the service.⁷⁵
- Get citizen feedback throughout the process: To ensure that P2G services are widely used and well-appreciated, it is important to invest in methods of soliciting citizen feedback. Feedback should be sought both during the design of the service and then regularly once the service is live. This allows a government agency to get a broad perspective of views and opinions on the usability of the service, to ultimately help to continuously improve the user experience. Some of the recommendations given in the focus group discussions revealed gaps between citizen expectations and service design.⁷⁶
- Citizen user analyses such as understanding the demography, payment patterns, etc. better and to better respond to existing dynamics. All stakeholders (government agencies, policy makers, payments providers, etc.) must consider the underlying socio-economic and socio-cultural elements that determine how people interact with services and technology. Collecting quantitative (and qualitative) data and information makes the better placed design digital processes that most citizens find easy to understand and interact with.⁷⁷

75 <https://www.gsma.com/publicpolicy/wp-content/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf>

76 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

77 Ibid.



RECOMMENDATIONS FOR ACTION AND POSSIBLE IMPLEMENTATION STEPS:

Suggestions for the GLZ project's
context and change management
strategy

5

RECOMMENDATIONS FOR ACTION AND POSSIBLE IMPLEMENTATION STEPS: Suggestions for the GIZ project's context and change management strategy



STRATEGY

The overall strategy, including the Capacity Development strategy, needs to look at what GIZ can achieve in the intersection of the state's priorities on digitalization and decentralization. This is a primary condition for sustainability, both in organizational terms as well as for the medium-term sustainability of the digitalisation support provided by the project.

RECOMMENDATIONS FOR THE OPERATIONAL PLAN:

Technical Development :

- ✓ Conducting **process-mapping workshops** with a multi-disciplinary team of municipality staff at various levels could help to understand the actual process (useful for technical requirements), to outline potentials for reengineering or simplifying the processes, and to create buy-in from partners. The GIZ project in Egypt found this approach highly useful.
- ✓ From a payments perspective, evidence suggests integrating **existing and tested and proven application/s**. Often, when integrating digital payments that already have a market presence the respective private sector providers are in an excellent position to implement the technical integration. Considering that this application is aimed at the municipal level, there is little need for developing a new application. Once the national payment gateway is on the way, a national, centralised solution will be made available, into which local government actors then plug in. To bridge the time until this central solution is available, it is recommended to utilise existing systems. This can also be considered for existing hardware, such as point-of-sales (POS) systems, which are available in supermarkets or post offices.
- ✓ **Use e-governance related ICT building blocks.** GIZ works closely with the GovStack initiative. The use of these building blocks would enhance the project's chances to develop a sustainable solution, as e-government applications are expected to be using building blocks in future whereby customised, silo-systems will become obsolete. Where possible, even if not using DIAL ICT building block, use open standards. It is true that while open-source software appears to be less resource extensive, it often requires significant customisation. Managing customisation can in some instances require more management input than handing over the entire software development to a company that services the partner. However, maintenance and adaptation are more flexible using open source. GIZ HQ has a team in the Digital Society competence centre that works on open-source topics and can provide project advice.
- ✓ **Participatory development:** Using participatory approaches, possibly linked with Design Thinking, could ensure a significantly higher chance of usage of the new system. An iterative implementation may take a bit longer but conducting user testing after a complex system has been developed, can lead to significant issues, especially when the contract is delivered by

a provider who does not have direct end-user understanding and contact (citizens and civil servants). In addition, it is widely understood that cultural considerations are crucial. Often the best ICT-based measure is not the most successful one but the one with the best user experience.⁷⁸

- ✓ **Collect and use data were possible.** Projects are interested in harnessing data and could benefit from guidance and technical expertise during project appraisal. At the same time, there appears to be a lack of knowledge when it comes to a thorough, automated way of collecting, analysing and using data. The GIZ Data Lab and Data Service Centre has developed guidance resources for projects to better embrace opportunities related to data.
- ✓ **Dealing with technology sub-contracting:** Typically, it is recommended to sub-contract to a local IT company as this not only supports the local IT sector but also allows local partners' direct follow-up and maintenance. In order to avoid delivering software that create maintenance or adaptation challenges for partners, detailed requirements in the form of technical tasks need to be precisely formulated for the programmer. Therefore, it could be beneficial to contract an expert to review and quality assure the local coders' work against requirements. Adjusting code that does not adhere to international standards can create difficulties for a new coding team. In addition, when software development is outsourced, external service providers naturally have an interest in developing a new product, due to better income opportunities (especially when they develop software that cannot easily be maintained by non-tech staff). Also, wherever possible, it is recommended to build upon existing solutions rather than developing anything from scratch, which is often suggested by the sub-contracting company. Taking time for realistic specifications that are detailed yet allow coders flexibility to find the best way to achieve the described objective. GIZ can provide pre-selected recruitment of IT professionals (expert roster) to support with writing requirements, quality assurance and coding; GIZ HQ offers services for this, and the project has already contracted a local company under a contract for project management assistance (contrat d'Assistance à Maîtrise d'Ouvrage, contrat AMOA).

Organisational Development :

- ✓ Starting from the existing Operational Plan build a change strategy that considers also the following aspects:
 - Engagement of high-level stakeholders in the process, and the long-term strategies within which the strategic priorities are situated that the GIZ project needs to address in order for the project to be anchored sustainably in their system;
 - Process map of existing processes in the permanent cooperation systems, and the intersection between them;
 - Incentive systems for the various actors of the cooperation system, and options to influence them;
 - Identification of partners who can play (or grow into) the role of intermediaries, in order

⁷⁸ Another case example from GIZ (based on a cross-sectional analysis of project evaluations focusing on ICT) supports the above recommendation further: Project 8 reengineered standard operating procedures through digital means with their partners. They carefully analysed existing processes with the partners and decided on how to adjust them to meet the needs of their partners, who were also the main users.

to make the process less GIZ-heavy, as well as the organizational and capacity building needs for them to fill this role;

- Capacity Development needs of the various actors, as an update to the project's Capacity Development strategy.
- ✓ Identify communication gaps in the system, and include ways to address them, such as peer learning and exchange platforms, in the operational programming of the GIZ project (see below under Communication).
- ✓ Implement the modified Capacity Development strategy, taking care of the following aspects:
 - When working with individuals, make sure to think not only of knowledge delivery, but addressing the skills and attitude aspects as well. Attitude changes can be a target of the planned study tours, for example.
 - Dedicate a separate workstream to developing a long-term perspective where this capacity development can/could take place in the future, if outscaling is supposed to happen, and develop the capacity building materials etc. with a direct perspective towards this outscaling.



COOPERATION

Motivating arguments for local administrations to integrate digital payments

For governments, the digitalisation of payments can generate savings and increase government revenues. For government agencies or municipal authorities that have no or a limited say in their budget, budget arguments have a limited motivating effect. In such a case, translating budget-related arguments into efficiency- and time-saving arguments are more relevant.

- ✓ **Reduced administrative costs:** By digitalising payments, governments automate their payments systems, which reduces the cost of (and time for) collecting, processing, and tracking payments. Due to better data, governments also can increase their efficiency through enhanced planning of processes.
- ✓ **Reduced leakage in government revenue:** By creating a recorded financial history, mobile money brings transparency and reduces the opportunities for leakage between the citizen or business and the government. A GSMA case study revealed that the digitalisation of P2G payments in Kenya increased transparency, accountability and traceability of funds collected, allowing public entities to minimise fraud.²⁶ According to McKinsey (2016), governments of emerging economies could save about \$40 billion annually from reduced leakage in tax receipts by using digital payments. As an example, Pakistan could save about \$2 billion annually.²⁷
- ✓ **Expanded revenue collection base:** The improved accessibility of digitalised services eases compliance, gives governments access to a wider base of citizens and companies. In 2011, Tanzania Revenue Authority (TRA) enabled tax payments over mobile money and mobile banking for property taxes, personal income tax and presumptive taxes. One year later, 15% of the tax base was using the new mobile payments option and, among those, some did not have a history of paying taxes. In addition, mobile payments capability was

linked to a decrease in tax avoidance.²⁸ Following the migration of their services to Kenya's e-Government platform, eCitizen, the Kenyan National Transportation Safety Authority (NTSA) doubled its revenue collection between July 2015 and October 2016—from an average of US\$ 1.1 million to US\$ 2 million per month.⁷⁹

- ✓ **Digitalising payments improves financial planning for governments:** Digitalised payments facilitate reporting, reconciliation, and settlement. When digital payments are coupled with efficient internal processes, government revenue collection can significantly increase. Government agencies attributed revenue increases to reduced pilferage, increased visibility of financial position, increased compliance (digital receipts discourage counterfeits) and overall process improvements that ease compliance.⁸⁰
- ✓ **Digital payments contribute to reducing the size of the informal economy:** By bringing greater transparency and providing access to the formal financial system, digital payments reduce the size of the informal economy which, in turn, increases productivity.⁸¹
- ✓ **Recovering the cost of implementation:** When asked if the cost of implementation of digital services in government was high, most government agencies agreed but did not see it as a deterrent. In fact, those interviewed were able to demonstrate, based on the amount of additional revenue they collected during a short duration since launch, that there was an indication of a high return on investment in the long term when systems are properly implemented. The Kenyan Ministry of Lands, for example, undertook a countrywide drive in 2014 to digitalise millions of land records to improve processes which have historically been a big challenge and have led to non-compliance by citizens. This initiative led to a 1,125 percent rise in revenue collections³⁰. Furthermore, the NTSA benefited from a compliance cost saving of US\$ 18.2 million on 1.6 million eCitizen transactions; costs were saved on receipts, forms, documents, and personnel.⁸²
- ✓ **Better overall data:** Government agencies can use digitally available data across departments and agencies to enhance overall strategic planning, to better share relevant data, and to make more informed decisions.

79 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

80 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

81 <https://www.gsma.com/publicpolicy/wp-content/uploads/2020/09/GSMA-Digitalising-person-to-government-payments.pdf>

82 https://gsma.com/mobilefordevelopment/wp-content/uploads/2017/09/P2G_Report_Final.pdf

Impact of digitalised P2G payments

Impact on public entities	
Increased government revenue	<p>In Tanzania, water bill payments through M-Pesa led to a revenue increase of 28% (about \$540,000 annually) for Dar es Salaam Water and Sewage Authority (DAWASCO) following the digitalisation of its payment options (2013).</p> <p>In Guinea, enabling the payment of vehicle tax with mobile money strongly contributed to a threefold revenue increase from GNF 10 billion (2016) to GNF 34 billion (2017). The number of vehicle licenses sold increased from 124,000 to 360,000.</p>
Lower administrative costs	<p>In Pakistan, the digitalisation of passport fee payments led to a cost reduction of about 50%. The cost of processing a passport payment decreased from about PKR 200-250 (\$2-2.5) to about PKR 100 (\$1). The fee covers costs incurred by both the implementation partner, the mobile money provider (JazzCash), and the National Bank of Pakistan.</p>
Reduced leakage in government revenue	<p>In Côte d'Ivoire, payment of school fees via mobile money reduced the incidence of lost payments, fraud and theft. When school fees were paid in person, a large proportion of school fees payments were lost and armed robbery at cash collection points was common.</p> <p>In Tanzania, the Ngorongoro Conservation Area Authority (NCAA) moved from cash to prepaid and credit cards for park entrance fees in 2011. In 2013, park gate revenues increased from TZS 37 billion (\$16 million) to TZS 52 billion (\$23 million). The NCAA attributed this increase to reduced leakage when moving from cash to digital payments. Also in Tanzania, the introduction of mobile money for the payment of water bills reduced opportunities for petty corruption.</p>
Expanded revenue collection base	<p>In Senegal, the Customs School noted a 50% increase in registration following the digitalisation of registration payments for its entrance exam. Registration increased mainly due to new candidates from areas outside the capital who saved at least \$8 in transportation costs. In Tanzania, the Dar es Salaam Water and Sewage Authority (DAWASCO) reported that mobile money attracted new and dormant customers, increasing the customer base from 25,000 (2013) to 148,000 (2016) households. In Kenya, the digitalisation of voluntary insurance payments via mobile money led to a 500% increase in subscribers from fewer than 440,000 (2009) to about 23 million (2017). With the majority of payments done via mobile money, National Health Insurance Fund offices can focus on other tasks such as responding to customer queries and processing claims,</p>
Improved financial planning	<p>In Côte d'Ivoire, the payment of school fees via mobile money allowed the government to collect fees earlier and over a shorter period of time, which makes it easier to manage annual budgets.</p> <p>In Kenya, billing records showed that users paying their water bill with mobile money are 10% more likely to pay on time. Furthermore, the introduction of mobile money as a mode of payment led to a decrease in the number of monthly disconnections. Mobile money drives more regular payments, which facilitates budget planning.</p>

Collaborate with payments providers (private sector): Where possible, rely for short-term solutions (bridging a gap until gateway implementation) on existing private sector solutions and work closely with the private sector in integrating these. In the case of mobile money, telecommunications operators active in Tunisia are well experienced in implementing P2G and G2P payments.

Identify communication gaps in the cooperation system, where partners are not used to dialogue or no platform for dialogue exists. Design and experiment with **informal dialogue mechanisms** that could address them.

PROCESSES

Process reengineering: Project mappings and other activities can highlight the need for rethinking processes as the local government partners know it. Often, processes are totally obsolete or require a complete overhaul. This is hard to grasp at first for the local staff and needs to be mediated.

Process mapping is also a low-hanging fruit for generating partner buy-in and ownership. GIZ Egypt has good experience with **process-mapping workshops** (assisted by IMO Bochum) with multi-disciplinary teams of state institution staff. This will help understanding the actual processes, identifying streamlining potentials and getting everybody on the same page.

STEERING STRUCTURE

The steering structure of the temporary cooperation system is one of the most powerful instruments that GIZ has at its disposal to ensure the involvement and ownership of all necessary players in the cooperation system in a way that helps the system achieve its intended outcome, and the GIZ project to play its role in it.

For the GIZ project in Tunisia, where one of the main issues is the interplay of decentralisation-related and ICT-related actors, this means that the steering structure can be one of the ways that this is achieved. This also helps with the strategic and technological alignment of the GIZ project towards long-term sustainability within the Tunisian framework of strategies.

The steering structure is also the place to secure ownership and buy-in by high-level actors, and the place to clarify their role.

LEARNING AND INNOVATION

Conduct an analysis of the **capacity development gaps** within the partner system (the permanent cooperation system) and review the project's strategic document on capacity development in order to address these gaps. Many such obvious gaps will be at the level of ICT skills of municipal actors. The revised capacity development strategy needs to address these in a perspective that is as long as possible: short-term training interventions by GIZ are fine if they serve as incentives to encourage participation and engagement by partners, or if they provide necessary competences (such as basic ICT skills) necessary to kick-start the

process; but in the long run, competence development needs to be part of a joint, strategic approach with the partners.

Consider building a **learning network (as a community of practice)** of the participating municipalities and the actors in them, as well as other relevant actors in the network from the ICT side. The learning experiences from developing and installing such systems at the municipal level will generate valuable experience both for the pilot municipalities and for the capacity development that will need to form part of the later outscaling.

Identify **learning partners** who can be part of the cooperation system. The state has existing provisions in place for building the digital capacities of state employees. The goal is to anchor the long-term capacity development in national systems, such as the National School of Administration (ENA), where GIZ has had a long-standing strategic cooperation on governance aspects.

Ensure that there is a **long-term financing pathway for capacity building** after the project ends, as this has strong implications on sustainability and on ownership. If possible, identify (jointly with the partners) means of allocation of financing by the state. Alternatively, identify options to build partnerships with other international agencies that support digitalisation and can support capacity building activities after the project will end; this will mean that the content and material should already be developed jointly with them.



■ ANNEX

OVERVIEW: GLOBAL DIGITAL PAYMENTS LANDSCAPE

While definitions vary, according to the Better than Cash Alliance a digital or electronic payment is “the transfer of value from one payment account to another using a digital device such as a mobile phone, POS (Point of Sales) or computer, a digital channel communication such as mobile wireless data or SWIFT (Society for the Worldwide Interbank Financial Telecommunication). This definition includes payments made with bank transfers, mobile money, and payment cards including credit, debit, and prepaid cards.” Depending on the local regulatory framework and market dynamics, domestic digital payments are offered by a range of providers, including banks and other institutions. Likewise, payments might occur via closed-loop networks or open-loop networks that permit payments directly between accounts held with different financial institutions. With regard to cross-border digital payments, until fairly recently these have relied on both correspondent banking intermediaries and secure messaging systems, like that offered by the Society for the Worldwide Interbank Financial Telecommunication (SWIFT). Merchant-level digital payment systems can be broadly categorized into either point-of-sale payments (including the use of credit and debit cards, radio-frequency identification (RFID) enabled devices, and biometrics-enabled technologies) or contactless payments (such as mobile applications, online browsers, electronic wallets, and machine-readable technologies) to send or receive a specific value. Contactless payments have been on the rise in the last few decades. In 1990, there were fewer than 3 million internet users and 11 million mobile phone users, with most concentrated in high-income countries. By the end of 2019 (nearly three decades later), 3.5 billion people were using the internet, while the number of unique mobile subscriptions reached 5.2 billion.

In the global south, the spread of the internet and mobile connectivity has generated new businesses, including money transfer operators, e-commerce platforms, and ride-hailing services. Retail stores and the service sector (i.e., health, tourism, and entertainment) are using mobile payment applications such as PayPal, Samsung Pay, Apple Pay, AliPay, and WeChat Pay for customer transactions. Government initiatives are also spurring digital payments through e-wallets and point-of-sale machines. Examples of these trends abound across Africa, Latin America, and Asia. A precursor of the digital payments movement was Kenya’s M-Pesa, which steadily transformed what had been a cash-driven economy in 2007 (where 80 percent of transactions were in hard currency) into a cashless society by 2017 (where 80 percent of transactions were done using digital tools). Similarly, in Latin America, the e-commerce giant MercadoLibre launched an Argentine digital payments interface, MercadoPago, in 2003. With its presence now expanded to several Latin American countries (including Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay), this digital payment platform boasted of more than 132 million unique users as of 2020 who could use virtual wallets instead of conducting transactions via traditional banks. During Covid-19, MercadoPago experienced a doubling of its transactions. Meanwhile, in 2016, the National Payments Corporation of India (an umbrella organisation under the ownership of the Reserve Bank of India that oversees the operation of retail payments and settlement systems) developed a real-time payment system called the Unified Payments Interface (UPI) to allow fund transfers between two bank accounts in real time through a mobile platform. As a result of these developments, in 2020, consumer transactions that were made over the internet and through smartphone-enabled payments at points-of-sale hit \$5.4 trillion in value (with Chinese consumers leading this market at \$2.9 trillion).⁸³

83 Taken from https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/210921_Bandura_Digital_Payment_Systems.pdf?v..D1F4a8lbdT3MEs8DToS60D10EjC1

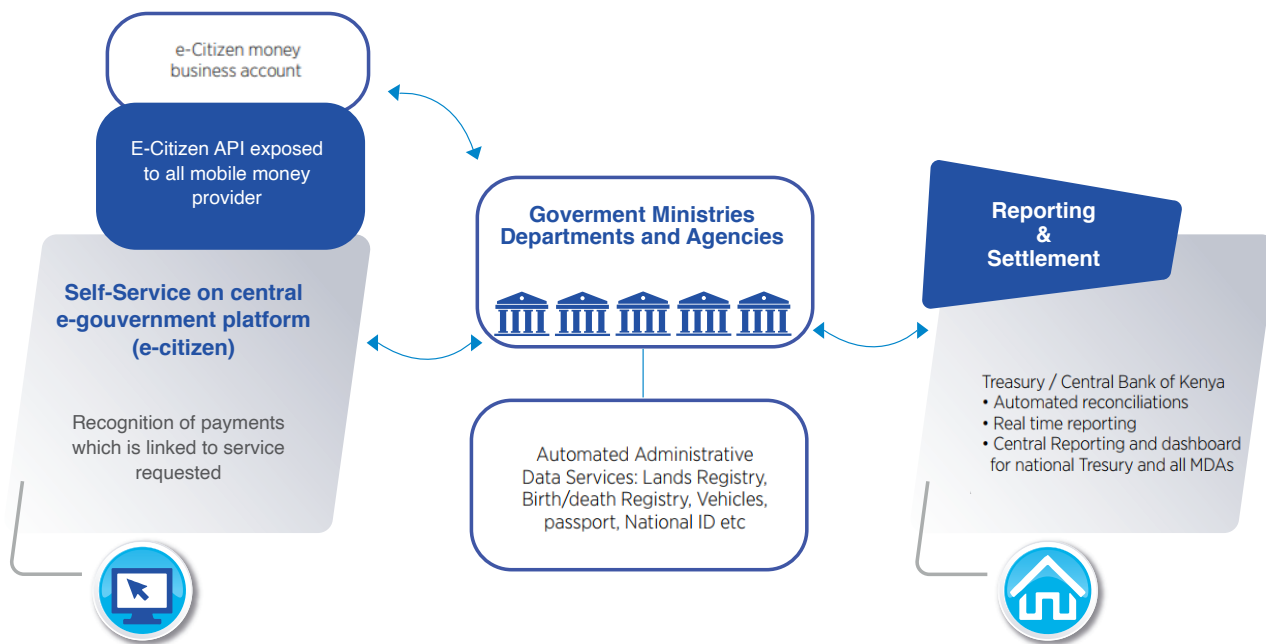
COMPARISON BETWEEN MODELS USED BY MOBILE MONEY PROVIDERS FOR P2G

Description	1. Direct integration between mobile money provider and government agency A government agency seeking to digitise P2G payments may do so by integrating directly with mobile money and other payment providers.	2. Third party integration through a payments aggregator A third-party payments aggregator acts as a bridge between a payment provider and a government agency, seamlessly collecting payments on behalf of the agency via one or more payment channels. ³²	3. Centralised e-government platform connecting multiple government agencies A central government platform acts as a gateway for multiple government agencies to provide services and receive payments via different channels including mobile money, card, and bank transfers. ³³	4. Service centres where government agencies provide assisted government services Government-owned service centres provide citizens with centralised face-to-face interaction points. These centres offer government services and facilitate payment for those services.
Set-up	<p>Mobile money provider assigns government agency with unique digital 'business collections' account to facilitate collections through a 'pay bill' number.</p> <p>Citizens use unique 'pay bill' number to pay for specific government service using their mobile money account, which may include an additional reference account number to identify the service.</p> <p>Mobile money provider may give government access to online mobile money system to facilitate reporting, reconciliation, and settlement.</p>	<p>Mobile money provider assigns third party aggregator with unique digital 'business collections' account to facilitate collections through a 'pay bill' number.</p> <p>Citizens use unique 'pay bill' number to pay for government service using their mobile money account, which may include an additional reference account number to identify the service.</p> <p>Mobile money provider may give the aggregator access to online mobile money system to facilitate reporting, reconciliation, and settlement.</p>	<p>Mobile money provider assigns e-government provider with unique digital 'business collections' account to facilitate collections through a 'pay bill' number.</p> <p>Citizens use unique 'pay bill' number to pay for government services using their mobile money account, which may include an additional reference account number to identify both the service offered and the government agency offering it.</p> <p>The e-government platform automatically links to mobile money platform through APIs to aggregate the necessary information required to reporting, reconciliation and settlement.</p>	<p>Government agents leverage existing service and payment platforms (e.g., e-government platform, or individual government agency online systems) to serve customers at physical centres.</p> <p>Citizens use unique 'pay bill' number to pay for government services using their mobile money account, which may include an additional reference account number to identify both the service offered and the government agency offering it.</p> <p>The service centre only facilitates customer interactions and does not participate in back-end reconciliations and settlements.</p>

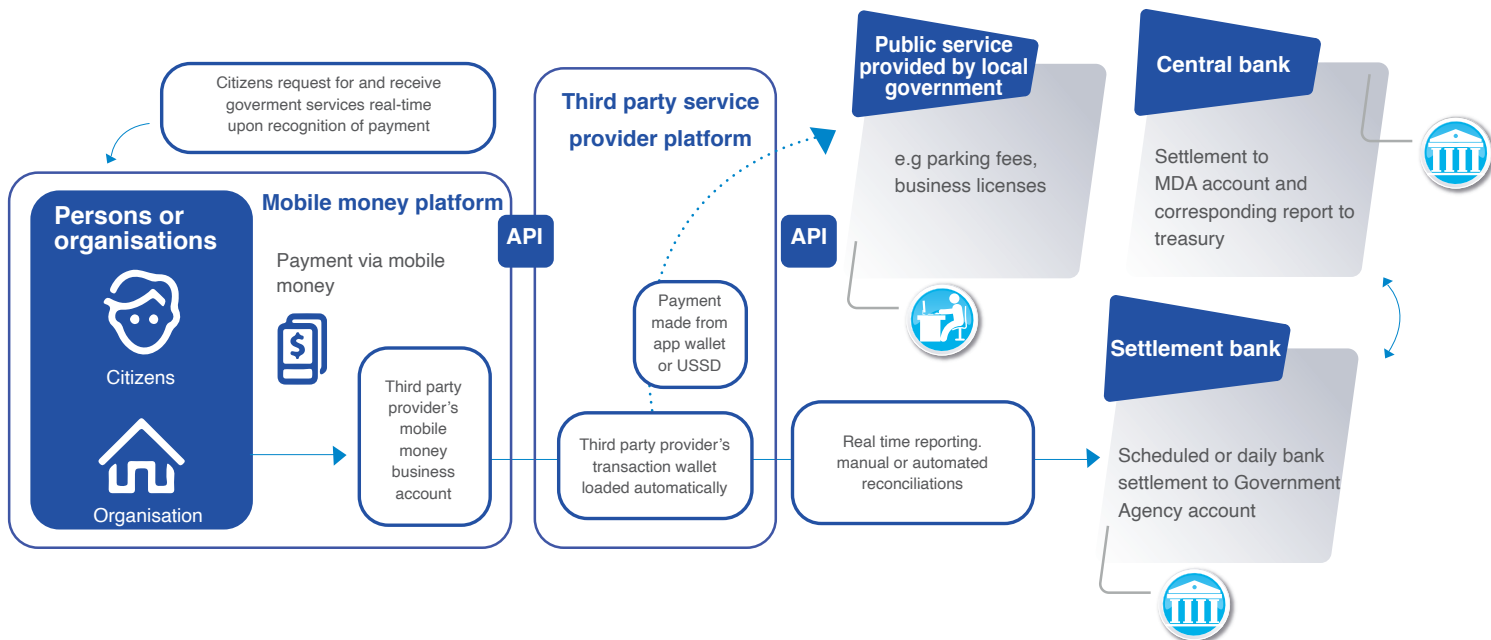
Reconciliation	<p>Where transaction volumes are low, government may manage reconciliation manually.</p> <p>Alternatively, an API may be used to facilitate automatic, real-time reconciliation.</p>	<p>Aggregators handle large volumes of transactions and therefore invest in automation.</p> <p>Most have APIs or build middleware to facilitate the reconciliations.</p>	<p>Since the e-government platform facilitates collections of payments on behalf of several government agencies, each agency collection is identified by a unique invoice number.</p> <p>Back-end systems facilitate automatic reconciliation based on allocations made to each government agency's specific payments account.</p>	<p>Where mobile money payments are made, the service centre does not participate in the reconciliation or settlement of funds. Such centres do not own a mobile money payments account. They simply facilitate service provision on behalf of government agencies.</p>
Settlement	<p>Once collected in the mobile money account, settlement of funds can be initiated by the government agency using the online mobile money system.</p> <p>Depending on capabilities, settlements can also be automated.</p> <p>Funds are transferred to the government agency's bank account within an agreed time period.</p>	<p>Once collected in the mobile money account, settlement of funds can be initiated by the aggregator using the online mobile money system.</p> <p>Funds are settled into the government agency's assigned bank account as per agreed terms.</p> <p>Government agency should have full visibility of accounts and payments.</p>	<p>Once collected in the mobile money account, settlement of funds to treasury can be initiated by the e-government provider using the online mobile money system.</p> <p>Funds are settled into the respective government agencies accounts in treasury.</p> <p>Government agencies have full visibility of their accounts and payments through the e-government platform.</p>	<p>Once collected in the mobile money account, settlement of funds to treasury can be initiated in the back-end by the e-government provider or the agency using the online mobile money system.</p> <p>Funds are settled into the respective government agencies accounts in treasury.</p> <p>Government agencies have full visibility of their accounts and payments through the e-government or their own platform.</p>

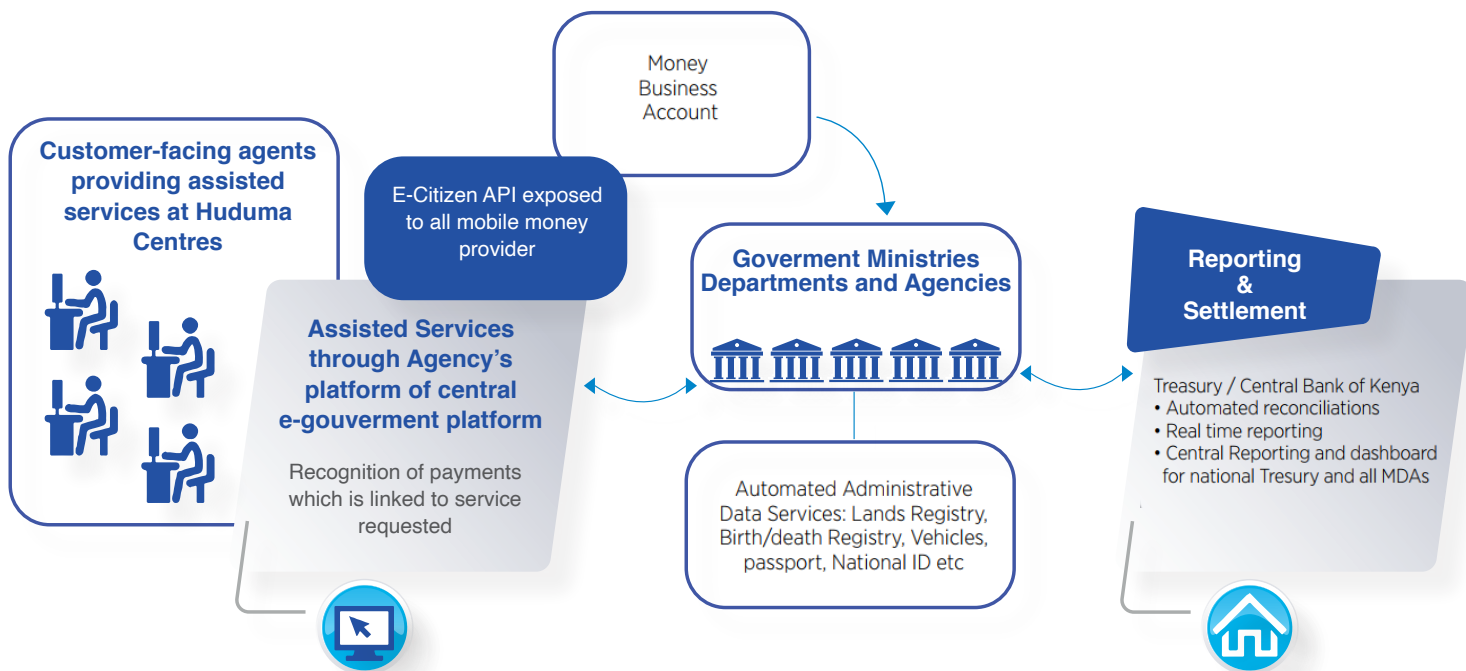
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Advantages</p>	<p>Relatively fast, simple, and easy set-up from a technical perspective because the process of setting up a mobile money collections account can take less than one week.</p> <p>Where APIs are used, reporting, reconciliation and settlement happen real-time.</p>	<p>Functions such as dispute resolution and customer service can be outsourced to the aggregator.</p> <p>Several government services can be integrated simultaneously, reducing the need for multiple integrations.</p> <p>Aggregators can integrate with different payment service providers, providing a ready-set environment for government agencies to leverage.</p>	<p>One portal convenes multiple government services from various government agencies, i.e., it's a 'one stop shop' for payments.</p> <p>E-government platform integrates with different payment service providers, providing this ready- set environment for government agencies to leverage.</p> <p>Reconciliation, reporting, settlement are all seamless and automated.</p>	<p>Through service centres, government services are extended to more marginalised groups – including rural, women, and less literate – because of physicality of service centres.</p> <p>Service centres play an important role in educating users on how to use the services, including how to make mobile money payments.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Disadvantages</p>	<p>Mobile money provider needs to make individual integrations with each government agency – this may be time consuming and costly especially because government agencies have different processes.</p> <p>APIs require investment, time and technical expertise to put in place.</p> <p>Without APIs in place, manual reconciliation, reporting, settlement is error-prone and lengthy.</p>	<p>Set-up usually takes three to six months, longer than the direct integration model.</p> <p>Since the aggregator is a business entity, they will usually structure their models around revenue sharing to cover their costs. This could result in high transaction fees for clients if costs are passed onto the customer.³⁴</p>	<p>May be a long-term project requiring a lot of coordination, time and money to set up. These costs may be passed on to the customer.</p> <p>The e-government system has some standardised mechanisms. Some government agencies may find it difficult to adjust processes in order to adhere to these standards.</p> <p>This model is most dependent on multiple stakeholder political processes to gain traction.</p>	<p>Physical centres still accept cash payments, leaving room for leakage, and slowing down the move to a fully digital ecosystem.</p> <p>Government agents are reliant on third party platforms (e-government, individual government agency) and therefore have limited control, especially in cases of platform downtime.</p>

Centralised e-government platform connecting several government agencies



Intergration through a third-party payments aggregator potential





PRINCIPLES FOR CONSIDERATION WHEN IMPLEMENTING GOVERNMENT-LED PAYMENT SYSTEMS

Bill and Melinda Gates Foundation developed a number of useful principles to consider when implementing large-scale government-led payments systems:

- **Open loop.** A scheme should be open to any licensed provider, as opposed to closed-loop schemes, where membership is restricted to some providers (e.g., restricted to large ones).
- **Participant governed.** The scheme has a democratic governance structure, where participants are given equal ownership opportunities.
- **Not-for-loss/cost-recovery-plus-investment.** A cost-recovery model with an additional set of funds to cover the investments required to operate the scheme. This does not mean participants connecting to the scheme cannot make profit. However, the lowest possible cost to the end user should be a key aim.
- **Real time.** A scheme that clears transactions continuously as opposed to processing transactions per batch.
- **Regulation.** The scheme is regulated by financial regulator and operates in national fiat money.
- **Push payments.** In a push payment, the payer initiates the payment order, and the payee is credited (e.g., ACH payroll transactions), as opposed to pull payments, where the payee initiates the payment order (e.g., checks), which carry more risk (risk of transaction being rejected, risk of fraud, etc.).
- **Irrevocability.** Once a transaction has been made from the payer to the payee, it cannot be reversed. Irrevocability is key to keeping transaction costs low.

- **Same-day settlement.** Transactions are settled intra-day, in near real time, as opposed to deferred settlement to the next day or to the next business day. Same-day settlement is one way of limiting credit risks.
- **Shared fraud detection.** Participants jointly invest in a shared fraud management system, collaboratively design and implement it, leading to cost efficiencies. Sharing data between participants allows more fraud cases to be detected, thereby limiting fraud for all.
- **Transparency of fees.** To ensure customer protection and customer confidence in the scheme, L1P advocates fee transparency within a larger framework including transparency on rights and responsibilities of consumers, including customers with limited literacy.
- **Tiered accounts.** Tiered accounts (and tiered KYC) allow customers with different risk profiles to access the scheme with different sets of conditions. It ensures greater access to the scheme while limiting risks for providers.
- **Use cases.** The system should enable key customer use cases to achieve scale, leveraging the same underlying payment order and settlement protocols.
- **Collateralisation.** To mitigate liquidity risks, or the risk that one participant in the scheme cannot meet its obligations towards other participants, collateral accounts are used.⁸⁴



CHECK LIST :

Challenges and best practices change management

STRATEGY

Technical Development Strategy

N°	Brief discription	Detailed discription	Considered	Proof that all or some aspects have been considered	What actions are needed to achieve "all aspects"??*
1	Elaborated selection criteria which services will be digitalized first.		<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
2	Process mapping workshop with multi-disciplinary team to identify opportunities for process redesign / simplification as well as to foster the partners' ownership.		<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
3	Integration of existing and tested digital payment system considered.		<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
4	Use of e-governance related "ICT building blocks" considered.	(a) Collaboration with Gov Stack initiative	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
5	Use of e-governance related «ICT building blocks» considered.	e.g. by using the «design thinking» methodology	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
6	Development of a user-friendly interface for citizens and civil servants front-end (and ideally also back-end).	(a) Customer-centered process (b) Development by multidisciplinary teams	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
7	It was discussed whether to proceed with a complete migration to the digitalized system or to maintain physical elements on paper in parallel.		<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		

Organisational Development Strategy

N°	Brief discription	Detailed discription	Considered	Proof that all or some aspects are fulfilled	What actions are needed to achieve "all aspects"??*
1	The (e-payment) system is being implemented as part of a broader change management process that is strongly supported by government actors (and corresponds to their individual strategies).	(a) All actors have a clear understanding of their role (b) Evaluation of the degree of ownership of the different parties, e.g. through a process map (c) Equality and participation of all stakeholders ensured	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
2	Sustainability mechanism are an integral part of project design.	(a) Identification of strategic structures that anchor the introduction of e-payments in high-level strategies (b) The partners should have sufficient technical and financial support to digitize their internal processes, train their staff and cover operational costs (c) Identification of long-term sustainable financing options»	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
3	There are actors who strongly identify with the project and are mandated to the role of a leader (formal or informal) and change agent.	(a) Strengthen leadership capacity (within the existing system) (b) Identification of actors who can play (or evolve into) the role of intermediaries, to make the process less dependent on GlZ (c) The identified intermediaries have the resources to fulfill this role»	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
4	Incentive mechanisms have been put in place who encourage the adoption of digitalisation at the municipal level.	(a) Identification of pain points where the need for change is most strongly felt (b) Identification of areas with high potential for change (c) Incentive mechanisms have been put in place	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
5	Informal practices and power dynamics have been analyzed and addressed.	(a) Making processes understandable for front-end officers (b) Analyze who gains from wich process (informally) and which fears and possible rumours are circulating (c) Develop a strategy on how to adress them	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		

COOPERATION

N°	Brief discription	Detailed discription	Considered	Proof that all or some aspects are fulfilled	What actions are needed to achieve "all aspects"??*
1	All partner institutions have a clear understanding of the role that the GIZ project plays in their overall digital transformation process.	(a) Clear distinction at all stages between the change process by the project and the broader transformation process (b) Clear process map (c) Continuous dialogue between high-level and municipal stakeholders	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
2	Use of motivational arguments for local institutions to implement digital payments.	Such as : (a) Reduced administrative costs (b) Reduced leakage in government revenue (c) Expanded revenue collection base (d) Digitalising payments improves financial planning for governments (e) Digital payments contribute to reducing the size of the informal economy (f) Recovering the cost of implementation (g) Better overall data	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
3	Communcation gaps and areas of rigidity in the process map have been identified.	(a) Establishment of informal exchange formats with perspective of moving them to the cooperation system (b) Build a learning network / community of pratice	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
4	Collaboration with payment providers (private sector) considered.		<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		

PROCESSES

N°	Brief discription	Detailed discription	Considered	Proof that all or some aspects are fulfilled	What actions are needed to achieve "all aspects"??*
1	Process reengineering considered.	p.ex.via project mapping acitivity	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		

STEERING STRUCTURE

N°	Brief discription	Detailed discription	Considered	Proof that all or some aspects are fulfilled	What actions are needed to achieve "all aspects"??*
1	Steering Structure developed.	(a) Identification of actors (b) Clarification of roles and responsibilities (also the role of the high-level actors in the RACI matrix has been considered) (c) Design of the steering model: participation and ownership of all necessary actors in the cooperation system is ensured so that the system, as well as GIZ can achieve the desired results»	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		

APPRENTISSAGE ET INNOVATION

N°	Brief description	Detailed description	Considered	Proof that all or some aspects are fulfilled	What actions are needed to achieve "all aspects"??*
1	Continuous collection of user feedback and transparent communication on the processing status of the request.	Creation of complaint, online feedback, accountability, reconciliation and payments confirmation mechanisms	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
2	Capacity development is part of a joint, strategic approach with the partners.	(a) Identification of capacity development gaps (b) Identification of learning partners such as universities (c) Distinguish between long-term and short-term capacity development (d) Include skills and attitude components (e) Identification of long-term funding options «	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		
3	Consider the creation of a learning network, as a «community of practice», for participating municipalities and other important stakeholders.	(a) Identification of learning partners (b) Integration of long-term capacity development into national systems, such as university systems «	<input type="radio"/> All aspects <input type="radio"/> Some aspects <input type="radio"/> None		

*Only applicable if « some aspects » or « none » is indicated in the column «Considered»

