



G2PX IN TOGO: End-to-End Digital G2P for the Urban Informal¹

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Togo was able to affectively reach the urban informal sector with a fully digital social assistance program, Novissi. The denser telecommunications and financial networks found in cities better facilitated the fully digital program but may not have insured inclusion in all cases. Having timely data that served as a proxy for “informal” workers was fundamental to identifying beneficiaries.

Context: A Highly Informal Urban Population That is (Somewhat) Digitally and Financially Connected

The urban informal sector encompasses a large portion of the Togolese labor force, both in absolute terms and relative to the rest of SSA (Cunningham et al. 2023). A 57 percent majority of the population lives in an urban environment, and within these areas, approximately 90 percent of employment is in the informal sector. Half of the individuals working in the informal sector own household enterprises, while the other half works in small businesses as paid or unpaid workers. The informal economy is the dominant source of employment, encompassing 97 percent of Togo’s businesses, yet represents approximately a quarter of gross domestic product (Boko and Akogbeto 2022). It is defined by low productivity, low earnings, significant exposure to economic shocks, and limited access to social services. During COVID, urban African household enterprises were more susceptible to income losses than rural households or those that depended on wage income.

¹ This case study was prepared by Brian Webster, drawing from a background report by Joachim Boko and Jamelino Akogbeto referred to as Boko and Akogbeto 2022.

While mobile phone ownership is widespread in Togo, it is not universal, and low literacy rates may limit access to some phone functions.² With a population of over eight million people, Togo has 6.3 million registered cell phones and 4.7 million internet subscribers (both home and mobile) (Boko and Akogbeto 2022). These statistics do not account for owners of multiple phones. The latest Findex database suggests that 68 percent of adults in Togo own a cell phone, as compared to 75 percent for SSA as a whole (Demirgüç-Kunt et al. 2021).³ With a national literacy rate of 64 percent, a sizeable portion of Togolese cell phone owners are unable to take full advantage of capabilities such as text messaging as well.

Financial inclusion in Togo is limited, but better in urban areas. The 2021 Global Findex shows that 50 percent of adults in Togo have accounts, slightly below the regional average of 55 percent. However, 36 percent of Togolese adults hold mobile money accounts, three points higher than SSA overall, and ownership rates are higher in cities, at 49 percent. Fifty-seven percent of urban adults reported making a digital payment; only 5 percent made a digital merchant payment (Demirgüç-Kunt et al. 2021).

Social Protection: The Emergence of the Novissi Crisis-Response Program

Prior to the COVID-19 pandemic, Togo's social protection programs had very low coverage, with virtually no presence in urban areas. Togo's larger social programs included social transfers (in education and social assistance), health insurance, and a social security scheme. Most programs were for rural beneficiaries (the social assistance program), did not target the poor (such as electricity or student subsidies), or were not for the working-age population (pensions, education benefits). The coverage within programs was relatively limited; the largest social assistance program reached only 60,000 households. Key components of a modern G2P architecture were either entirely absent or deficient, as Togo lacked a comprehensive social registry, had a national ID with low population coverage, and had minimal financial resources to fund social protection delivery systems. However, the government did have access to beneficiary databases for the public and private pension systems, as well as a voter registry covering 93 percent of the population with personal and employment information (Boko and Akogbeto 2022).

The informal sector was particularly vulnerable to the effects of the pandemic-related shutdowns. An estimated 64 percent of firms saw their revenues reduced, both due to firm shutdown (42 percent) or a reduction in economic activity (58 percent). Transportation and retail businesses were hit especially hard (Boko and Akogbeto 2022). Similarly, 62 percent of workers experienced income loss; given the high incidence of informality in Togo, the majority were likely informal self-employed or wage earners. Employment losses were especially large in services and manufacturing, sectors that are more prevalent in urban areas.

The pandemic motivated Togo to launch the Novissi (Solidarity) Program, targeting the urban informal sector in Greater Lomé and later in Tchaoudjo Prefecture. Enacted in April 2020 and fully digital since its inception, it was designed to provide twice-monthly unconditional cash transfers to those typically excluded from employer-financed benefits (Boko and Akogbeto 2022). According to figures published by Novissi, the program successfully distributed benefits to over 500,000 people, and women made up 65 percent of

² Statistics that disaggregate cell phone ownership and internet subscribers by urban and rural locations were not reported.

³ Other estimates suggest a mobile penetration rate of 77 percent. See ARCEP 2021.

beneficiaries during its first phase.⁴ Additional smaller phases of Novissi were launched later, extending the program to rural areas of the country.⁵

Novissi leveraged digital technology and nonstandard forms of data to create a fully remote G2P program, making it unique in SSA. Reached by advertising in large part over radio, potential beneficiaries applied by texting *855# from a cell phone and providing their voter card number, name, mother's name, and birthday. This personal information was then verified against Election Commission data, with applicants being simultaneously screened based on their location, informal status (proxied by profession), age, citizenship, and beneficiary status for other pensions. Telecommunications data was leveraged in later phases. If approved, recipients were automatically alerted via text message, and benefits of approximately \$19 (about 30 percent of the monthly minimum wage at the time) were transferred into a mobile money account for that individual for two months (five months in the second phase). Benefits were increased to \$22.50 if the recipient was a woman, to compensate for women's greater vulnerability to poverty (Lowe, McCord, and Beazley 2021). While beneficiaries were advised to transact electronically, instead of cashing out the benefits, to avoid overcrowding at payment points, most opted to cash out their benefit fully with mobile money agents shortly after receiving the funds (Boko and Akogbeto 2022). As part of the program, MNOs agreed to waive charges that typically applied to mobile money transfers (AFI and GSP Working Group 2022), but many recipients later reported paying cash-out fees.

The Novissi Program successfully reached the urban informal. Over 99 percent of Novissi recipients worked in the urban informal sector. Forty-six percent of Novissi recipients were retailers, and 19 percent were tailors. An additional 17 percent were performing unpaid domestic work within their families. Data from focus group interviews revealed that many used their benefits to purchase goods for resale, suggesting the program may have had secondary benefits for the informal urban economy.⁶

Novissi may have particularly benefitted women in the informal economy. A majority of Novissi's first-phase recipients were women, and they received higher transfer amounts than men. Women also were more likely to be found in the retail and domestic worker segments of the informal economy; both areas suffered significant downturns due to the shutdown. That said, it is unclear the extent to which women were empowered as Novissi recipients. Togolese women are less likely to own mobile phones than men, implying that a certain percentage of female recipients were dependent on a male-owned phone to engage with the program. Such dependencies hold the potential to lessen the degree of agency attained through social protection transfers.

4 See Novissi, <https://novissi.gouv.tg/en/home-new-en/>.

5 Phase 2 relied on a poverty map developed by the University of California Berkeley using AI for targeting localities. Experiments were also conducted on prioritizing applicants with telecommunications data (Blumenstock, Karlan, and Udry 2021).

6 The focus group consisted of five women and one man from Lomé, all working in the informal sector. The session was completed remotely with the use of a translator using a standard methodology. See Boko and Akogbeto 2022.

Novissi Successfully Served Togo's Urban Informal Sector

Several factors underlie Novissi's success in reaching the urban informal, including appropriate screening criteria, timely data, direct onboarding of beneficiaries, and a payment process that leveraged the denser telecommunications and financial networks found in urban areas.

NOVISSI EXCELLED AT IDENTIFYING URBAN INFORMAL SECTOR BENEFICIARIES BECAUSE OF THE CENI VOTER DATABASE.

The Novissi Program demonstrated that well-defined targeting criteria coupled with up-to-date information about urban residence and employment, allow for the effective targeting of the urban informal. The nearly exclusive selection of urban informal beneficiaries reflected all three of these factors. Novissi accurately targeted the urban informal sector in large part because it relied on simple criteria (urban residence, employment in occupations that tended to be informal, and non-social security beneficiary status) to identify potential beneficiaries. By design, the criteria were easily measurable since they were drawn from the information in the CENI voter registration system (namely, the individual's residence and occupation).⁷ Novissi identified occupations that could serve as a proxies for informality and applied them to the employment information on hand. The voter registry had the additional advantage of being unusually up to date, which is particularly important for identifying the urban informal population.⁸ Togo had conducted a presidential election in February 2020, and an electoral census was performed only a few months prior, making their self-declared employment status fairly current.

The Novissi Program's use of individually submitted applications, coupled with the ability to cross-check with other relevant administrative databases, was more appropriate for identifying urban informal beneficiaries than the community-based targeting often used in rural areas. Social protection programs often employ community-based targeting, relying on local officials to identify recipients (Lowe, McCord, and Beazley 2021). Such methods are problematic in urban environments, however, due to higher population density and mobility, which increase anonymity and impede social cohesion (Avalos et al. 2021). Under Novissi, potential beneficiaries applied directly to the program and were screened through a centralized process, bypassing the need to rely on local officials.

URBAN DIGITAL AND FINANCIAL ECOSYSTEMS FACILITATED NOVISSI'S END-TO-END DIGITAL G2P.

Novissi's reliance on cell phones was well suited to urban areas of Togo. Cell phone network coverage and internet penetration are often higher in urban environments, as concentrations of people lend themselves to economies of scale and lower prices (Rodríguez-Castelán et al. 2021). The high prevalence of cell phones allowed for a simple, fast, and paperless application, selection, and onboarding process without any human

⁷ Informality can be difficult to determine, often requiring information across several dimensions that are not regularly collected in social registries, such as registration status of a household enterprise (ILO 2018). While occupation is rarely used as a proxy for informality, it worked well in Togo, due both to the structure of the economy, which is highly informal, and to the ease of reporting.

⁸ The informal economy is very dynamic; most enterprises are relatively new (Cunningham et al. 2023), posing a serious challenge, as social registries often consist of survey or census data that is collected infrequently (Lowe, McCord, and Beazley 2021).

interaction, which was particularly important in the context of the COVID-19 pandemic. This led to a more efficient program rollout than face-to-face processes and a wider and faster program expansion.

The prevalence of mobile money accounts in urban areas enabled a significantly more efficient payment process. The higher cell phone coverage in urban Togo was accompanied by greater ownership of mobile money accounts. By 2021, nearly half of urban adults in Togo owned a mobile money account, versus just under a third of rural adults (Demirgüç-Kunt et al. 2021). This contributed to an easier rollout of digital Novissi benefit payment. For those with existing mobile money accounts, the MNOs instantaneously credited the beneficiaries' account once their application was approved, thanks to the interoperability of Novissi's system with mobile money platforms. For beneficiaries without an existing mobile money account, once MNOs received the payroll information from Novissi, they automatically created an account for them using the associated mobile phone number. The KYC process was conducted internally by each MNO using its own procedures. From a program-administration perspective, using digital payments in conjunction with how the Novissi platform was designed, allowed for daily reconciliation of the program budget as well as the generation of data to monitor program delivery.

Financial regulatory changes during the pandemic that were aimed at increasing digital payments were critical to enabling remote and simplified account opening for beneficiaries. Shortly after the start of the COVID-19 pandemic, the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) issued changes to its customer due diligence regulations to support digital payment uptake in the midst of social distancing. In this context, it relaxed customer due diligence requirements in three important ways. Firstly, the BCEAO allowed for the remote opening via USSD or phone call of Tier 1 financial accounts, which previously could be opened without an ID but could only hold a balance of \$400 and make transactions of \$20. Secondly, requirements for verification of Tier 2 accounts were deferred, enabling individuals to open and use Tier 2 accounts for three months before being downgraded to Tier 1 if no in-person KYC verifications were made. Finally, balance limits for Tier 1 accounts were raised. These regulatory changes made it possible for MNOs to open accounts for beneficiaries quickly and remotely, leveraging the payroll information (name and phone number) transferred by Novissi to them (Kazzaz 2020).

Denser financial agent networks also point to the appropriateness of digital social protection payments in urban areas. Novissi beneficiaries reported quickly cashing out the transfers made to their mobile wallets (Boko and Akogbeto 2022). Togo's network of over 15,000 active financial agents made it possible to reach a cash-out point shortly after receiving a payment notification. Generally, urban areas have a stronger business case for financial agents (Nègre and Muneé Kiamba 2021), suggesting that Togo's urban informal were especially well placed to access these financial touchpoints. To a certain extent, the greater prevalence of mobile wallets found in urban areas should lessen the need for cash-outs by enabling greater use of digital transactions, such as person-to-person transfers or digital merchant payments. Digital merchant payments in Togo are in a nascent state, however, making cash-out necessary to realizing benefits in many instances, further heightening the importance of a healthy agent network to fall back upon.

Novissi successfully used radio to communicate with vulnerable segments of the population. While information about new social programs in rural areas may spread by word of mouth through community meetings and local leaders, these institutions are less prevalent in urban areas (Vasudeva Dutta, Clay, and Avalos 2022). Recognizing that the urban population had greater access to electricity than rural areas,

but that literacy was limited within vulnerable segments, the government made effective use of radio to introduce the program. Focus group members reported learning about the program through radio (Boko and Akogbeto 2022).

While Effective, Novissi Still Faced Challenges in Serving the Urban Informal Sector

Many of the factors that made Novissi a success also introduced potential challenges.

NOVISSI'S FULLY DIGITAL OPERATIONS MAY HAVE CREATED POTENTIAL FRICTIONS FOR SOME USERS.

Those without cell phone access had no channel to engage with Novissi. Close to one-third of Togo's population lacks a mobile phone, and while urban areas have higher rates of ownership, this is likely less true among vulnerable groups. Roughly 62 percent of women in Togo own cell phones, whereas 75 percent of men do (Demirgüç-Kunt et al. 2021), and women tend to make up a disproportionate share of the least secure segments of the urban informal sector (Cunningham et al. 2023). Anticipating that some intended beneficiaries would not have a mobile phone of their own, Novissi allowed for multiple individuals to register for the program using the same phone number. However, unequal access to a mobile phone for some groups—especially those in higher need of the assistance—could still have excluded intended beneficiaries from accessing the program (although the extent to which this happened is yet to be quantified). Without alternative registration options, exceptions to make payments over the counter, or policies to ensure mobile phone ownership, the likelihood of excluding intended beneficiaries is higher.

Illiteracy can impair the ability of individuals to transact digitally, rendering them dependent on cash (Hudson Matthews, Tiwari, and Anand 2017). This is potentially a significant issue in Togo, given that only about two-thirds of the population can read, and particularly so for informal sector members who tend to have low levels of education. Indeed, the majority of focus group participants reported needing assistance to register for Novissi and to access payments.

NOVISSI'S DESIGN COULD BE ADAPTED TO RELIEVE CONSTRAINTS THAT USERS FACE AFTER RECEIVING THE BENEFIT.

In spite of denser financial ecosystems in urban areas, Novissi beneficiaries still faced challenges to using their benefit digitally. Urban informal focus group participants reported cashing out and purchasing goods for resale, though they would have preferred to have the ability to use digital payments (Boko and Akogbeto 2022). The paucity of electronic payment acceptance among merchants in Togo meant that Novissi recipients who wished to purchase from merchants had to cash out in most cases, potentially involving a fee that would erode the value of the transfer. There are a multitude of potential causes behind the low electronic payment acceptance among merchants. One is that opening an SME account in Togo requires formal registration documentation. Since informal enterprises are, by definition, not formally registered,

this requirement prevents informal businesses from becoming financially included and thus from accepting electronic payments.⁹

The fully digitalized end-to-end delivery of the Novissi Program could have reduced the opportunities to provide complementary services. Novissi did incorporate a dedicated call center for problems and complaints into its design. In some contexts, digital technology can offer opportunities to deliver complementary services. Jordan's Takaful program, for instance, made enrollment sessions that offered information on basic financial literacy remote during the pandemic (G2Px 2020). For the most vulnerable beneficiaries, however, face-to-face support may be important to utilizing digital financial tools to their fullest extent. This could be especially important for members of the informal sector, who are often lacking in financial literacy, as compared to formal business owners.

Looking Forward

To reach the urban informal, Togo's social registry will need to include simple, time-invariant (to the extent possible), and relevant screening information. Although CENI proved to be functional for beneficiary screening on an emergency basis, the use of voter registration records for non-electoral purposes may prove problematic in the long term. To serve the highly dynamic urban informal sector effectively, a new social registry should incorporate simple information, such as occupation, that allows for the easy identification of informal sector members. For less static individual information (such as monthly income), provisions should be made for frequent updates, to keep up with the highly volatile urban informal population.¹⁰ Experiments with the use of cell phone data to assess financial need as part of beneficiary evaluation may offer a viable method of identifying potential urban beneficiaries. This may be especially true when mobile and conventional social registry data are paired (Aiken et al. 2022). The higher rates of cell phone ownership in cities make them well suited to such methodology.

To reduce the risk of exclusion, Togo may consider offering an in-person registration option and incorporating over-the-counter payment exceptions where needed, or implementing policies to ensure mobile phone ownership among beneficiaries in end-to-end digitalized social protection programs serving the urban informal. Although access to financial and digital infrastructure is greater in urban areas, it is far from ubiquitous. Novissi was able to mitigate the risk of exclusion by ensuring that MNOs could automatically open accounts for beneficiaries without a mobile money account and allowing for multiple applications from one phone. However, access to a phone was still necessary to engage with the program, creating a dependence on social networks for those who lacked them. Offering an in-person registration option to ensure all intended beneficiaries have the ability to apply independently will be important to reduce exclusion risks. Once these beneficiaries are identified, policies can be implemented to ensure that those who do not own a mobile phone can access one (for example, through the provision of stipends for the purchase of mobile phones). Over-the-counter payments can be incorporated in exceptional cases

⁹ Being limited to cash transactions prevents such enterprises from engaging with more efficient wholesalers as well, increasing their operating costs. In theory, a business owner could use a personal account to conduct business transactions, as is often the case in the informal sector, but little evidence exists of this practice being widespread among Novissi beneficiaries. Even if it were, the mixing of personal and business finances creates inefficiencies for operators of small enterprises.

¹⁰ Togo's voter registration records were remarkably up to date at the time of the pandemic, but this was due to the recent elections, not from a deliberate effort to maintain them.

where the availability of mobile phones or financial access points remains a challenge. Over-the-counter G2P payments are often comparatively inefficient, however.

Policy makers in Togo could seek to deepen financial and digital inclusion to make end-to-end digital social protection programs more effective and accessible. Initiatives to lower further the cost of cell phone usage may be fruitful in this regard. While Togo has made dramatic progress since 2008, the cost of 70 voice minutes and 20 SMS text messages was still roughly 11 percent of gross national income per capita in 2021, as compared to 4.2 percent in Kenya and 1.7 percent in Nigeria.¹¹ Fostering a more robust digital ecosystem would be beneficial toward enabling end-to-end digital G2P as well. Current levels of digital merchant payments in Togo suggest that many people still must cash out to realize their benefits. This practice can create a number of inefficiencies for informal consumers and producers alike, including unnecessary cash-out fees and potential complications in using benefits to engage with wholesale suppliers.

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