

G2P 3.0 A Future For Government Payments

A photograph showing several fishermen silhouetted against a bright sunset or sunrise sky. They are wading in shallow water, pulling a large, rectangular fishing net. The net is partially submerged and appears to be filled with fish. The water is calm, and the overall scene is peaceful and traditional.

Most focus and momentum is here;
yet significant limitations and risks.



G2P 3.0 **delivery over multiple channels
and choice**

G2P 2.0 **digital delivery over a single channel**

G2P 1.0 **cash delivery**

Why consider a more advanced approach to G2P?

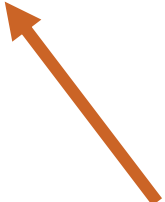


G2P includes a variety of (one-to-many) payments

Social protection and social safety net programs

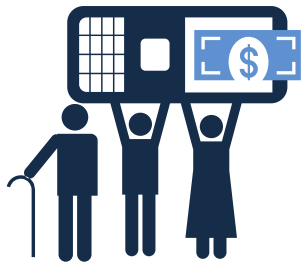
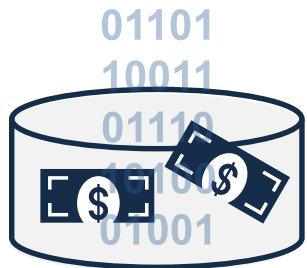
Subsidies (e.g. in agriculture) or fee waivers

Salaries and wages to public officers and workers



Focus of this concept and case studies is on social protection programs; though other G2P payments are important flows, too, adding to the volume of digital transfers.

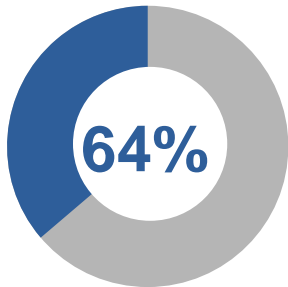
Social protection programs are moving from in-kind to cash (G2P 1.0), and from cash to digital transfers (G2P 2.0)



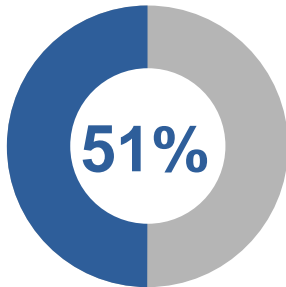
Between 2010 and 2017, digital social transfers...

increased by 300%
to more than US\$194 billion per year

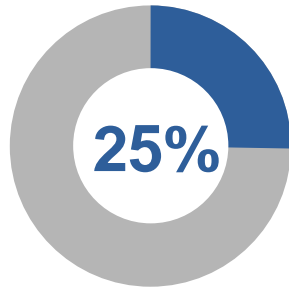
In 2014, **US\$111 billion** of government transfers (64%) were transferred digitally into accounts.



In 2015, **221 million** social transfer recipients (51%) received payments digitally into an account.



Over 25% of low income countries transfer G2P payments electronically.



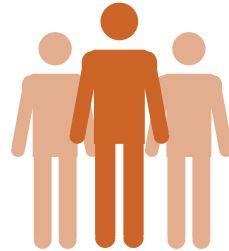
G2P 2.0 comes with benefits

Reduced delivery costs



The Mexican Government saves an estimated US\$1.3 billion per year, or 3.3% of its total expenditure, on wages, pensions and social protection transfers.

Transparency



The Government of India has saved US\$7.6 billion in two years, mostly through the removal of duplicate beneficiaries.

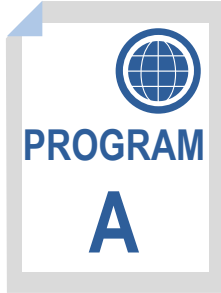
More value for citizens



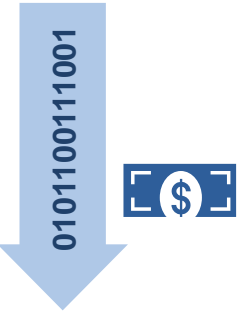
Around the world, research shows that the digitization of cash transfers saves recipients time and money. And reduced leakage increases the amount received by end recipients.

But G2P 2.0 has limitations: often there is only partial digitization

Government Programs



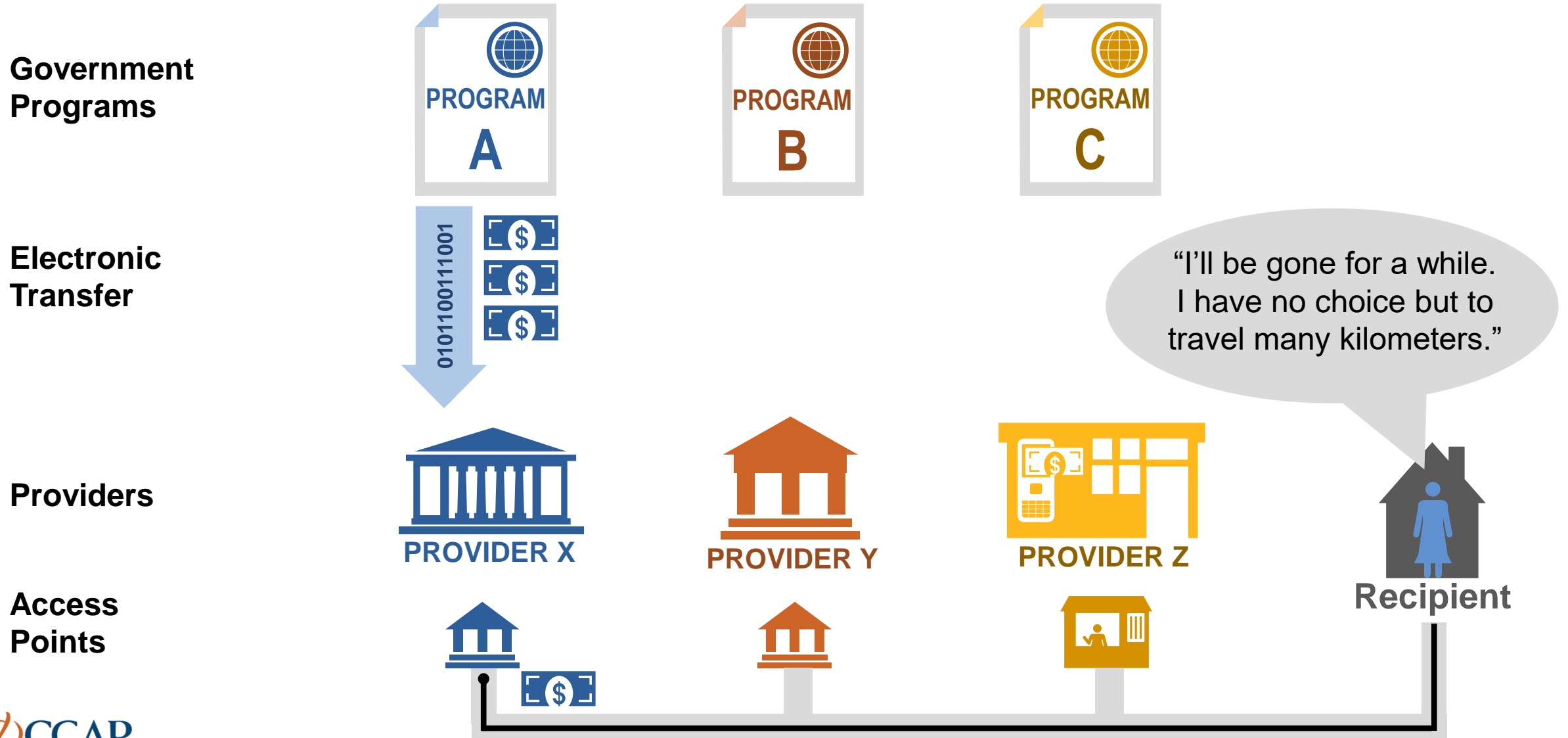
This aspect is digitized



Getting money from the provider to the recipient is not always digitized.

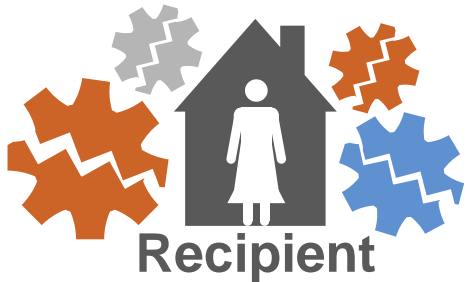


But G2P 2.0 has limitations: limited choice and longer distances



But G2P 2.0 has limitations: individual provider contracts

Government Programs



Providers

Access Points



Multiple time-bound dedicated contracts, bespoke technology, closed loop systems, lengthy and opaque procurement.

Design negotiated between programs and providers; little feedback from recipients, leads to low impact or failed digitization.

G2P 2.0: A case of vendor dependence from South Africa

South Africa's largest social protection scheme, managed by the South Africa Social Security Agency (SASSA), has relied on a contract with a single provider (Net1) since 2012.

This contract was due to expire by end of in 2017 and a suitable arrangement between SASSA and Net1 was hard to find. This left the 17m SASSA recipients unclear and concerned whether they would continue to receive their payments.

The Constitutional Court allowed Net1 to continue paying grants until March 2018 so that SASSA could appoint a new service provider. Since April 2018, SASSA pays grants both in cash and through their Postbank account into personal bank accounts.

Sassa bank cards to expire at end of year

POLITICS / 11 MARCH 2017, 12:22PM / BULELWA PAYI



DA members marched to the Department of Social Development offices in Pretoria yesterday over the social grants debacle. Picture: Jacques Naudé

“Judging by what I have seen in townships and villages across the country, when beneficiaries stand in long snaking queues waiting to be paid, there could well be serious tensions if people do not receive their grants.” — Milton Nkosi, BBC, 03/14/2017

Sassa crisis: South Africa's social security payments in chaos

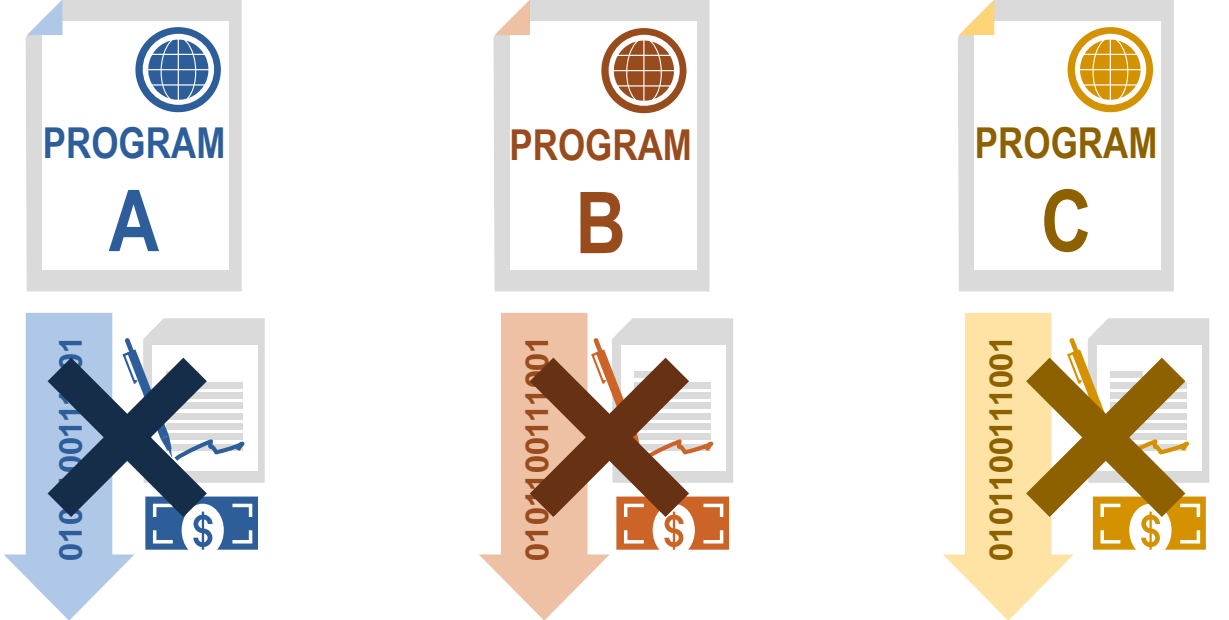
By Milton Nkosi
BBC News, Johannesburg

© 14 March 2017 | Africa



G2P 3.0: Move away from single channel delivery

Government Programs



Providers

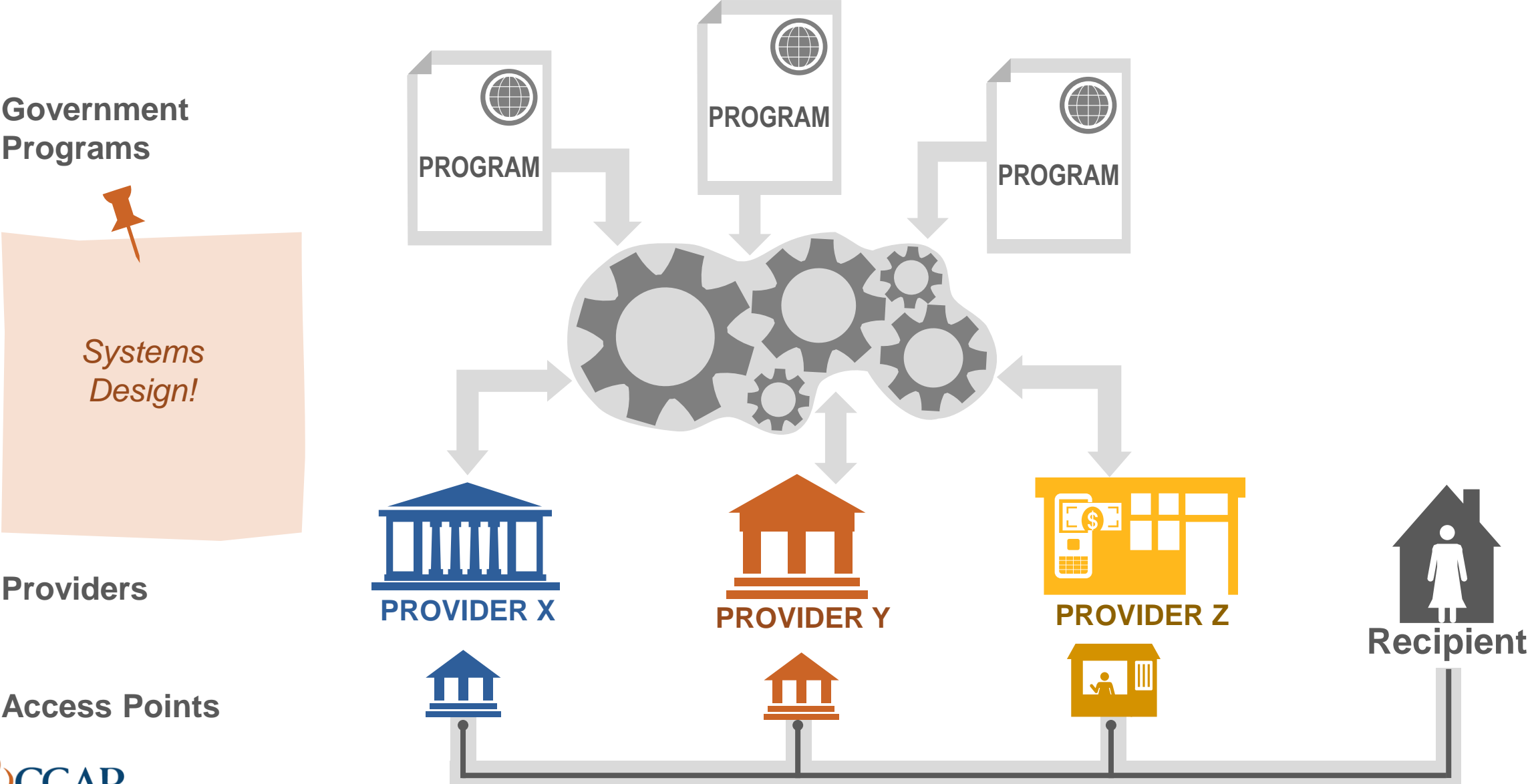


Access Points



Recipient

G2P 3.0: Focus on systems design



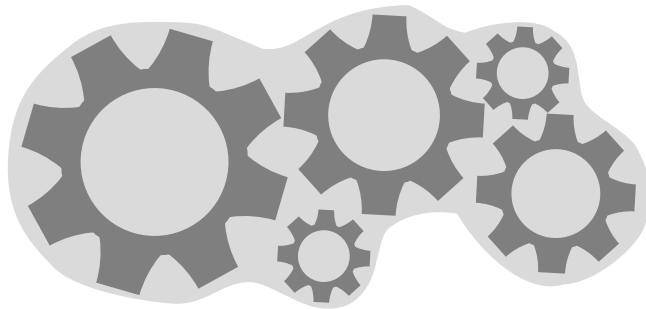
G2P 3.0: Scope of systems design



Government Programs

Program management is separate from the systems design and includes:

- Enrollment
- Eligibility criteria
- Case management

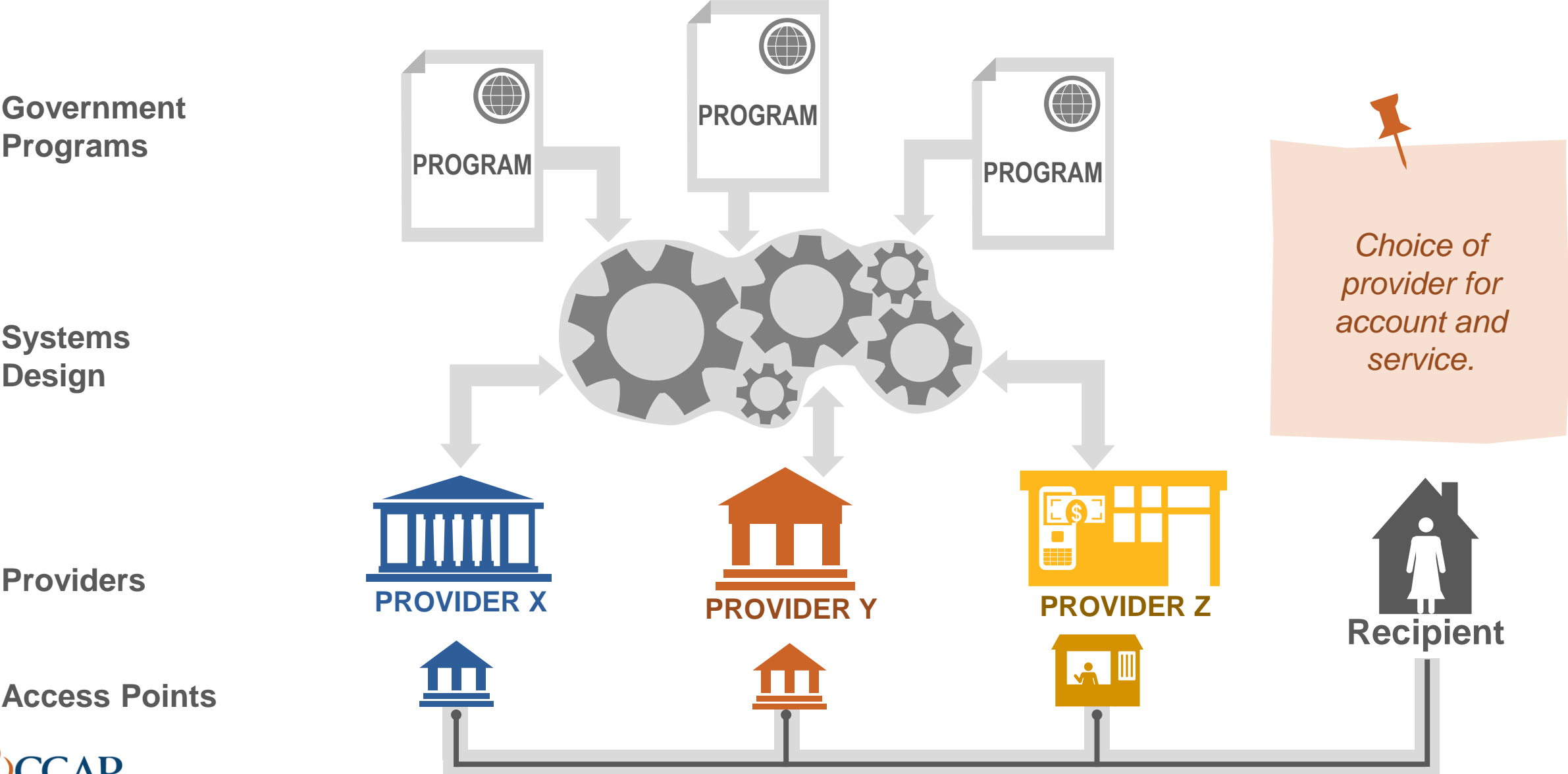


Systems Design

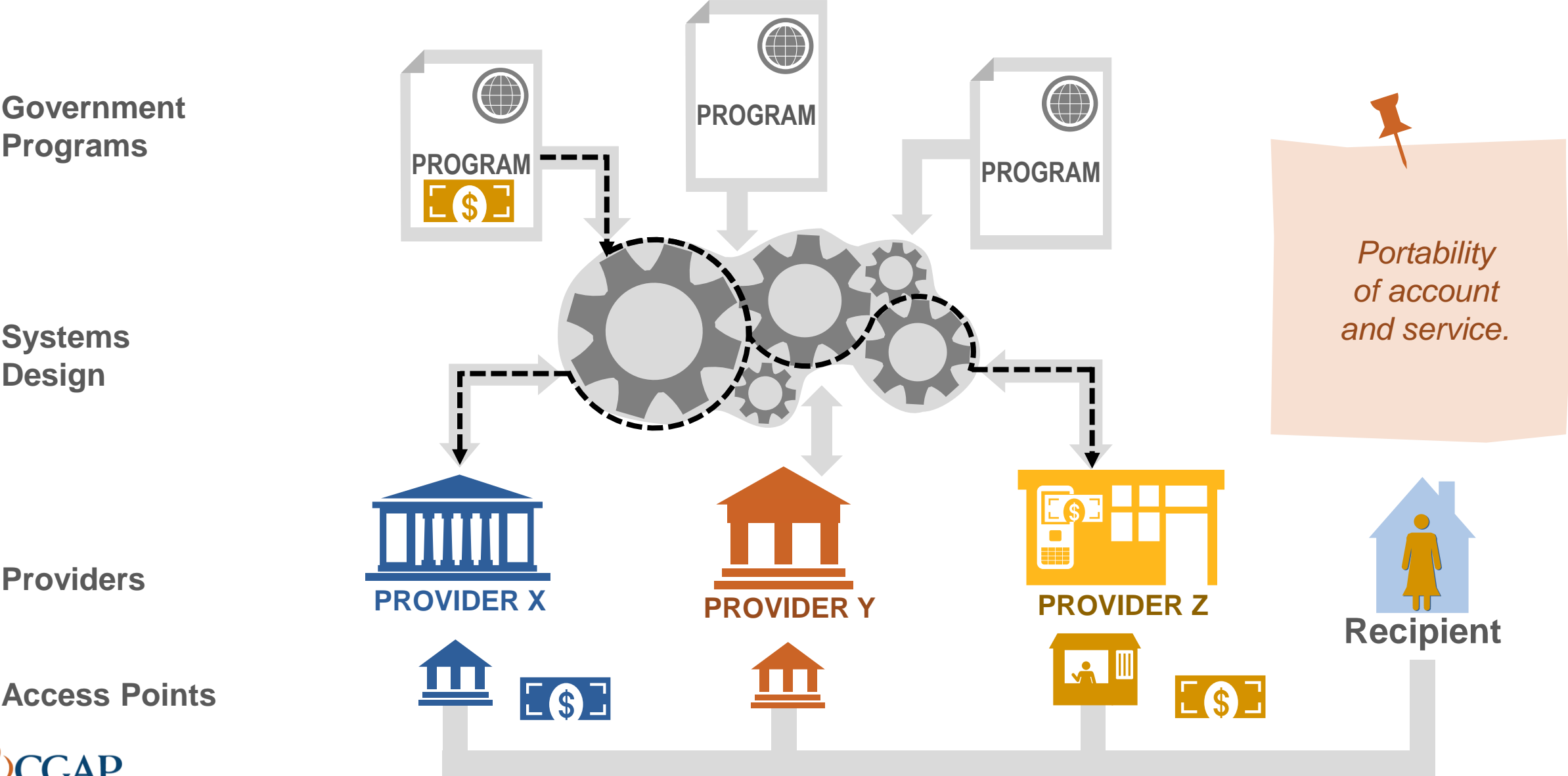
Main task of systems design is to connect the payments leg and includes:

- National payment systems (including clearing and settlement)
- A “plug and play” payments portal for government
- Mapping of recipient ID number with landing accounts

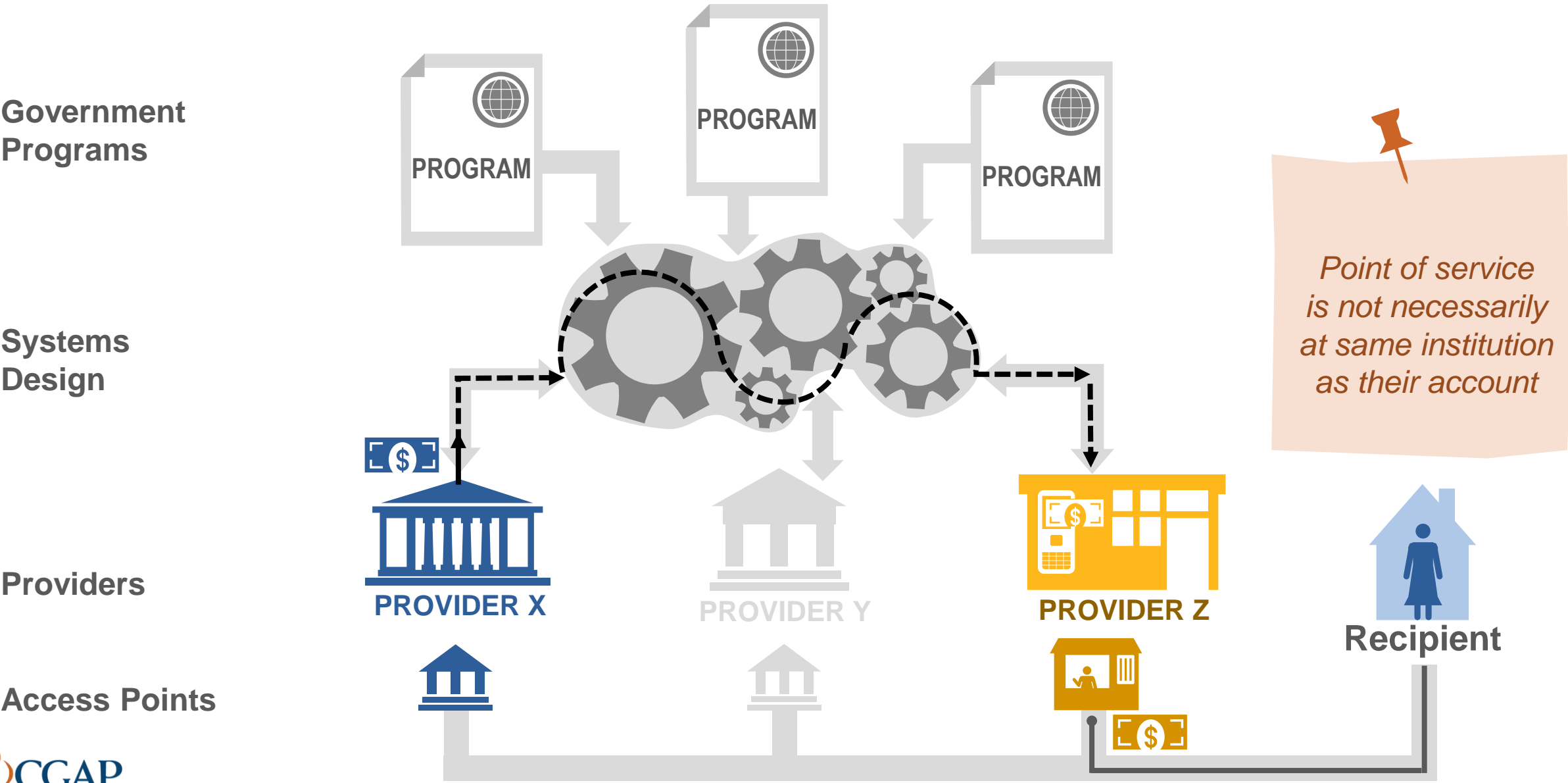
G2P 3.0: Recipient choice of providers



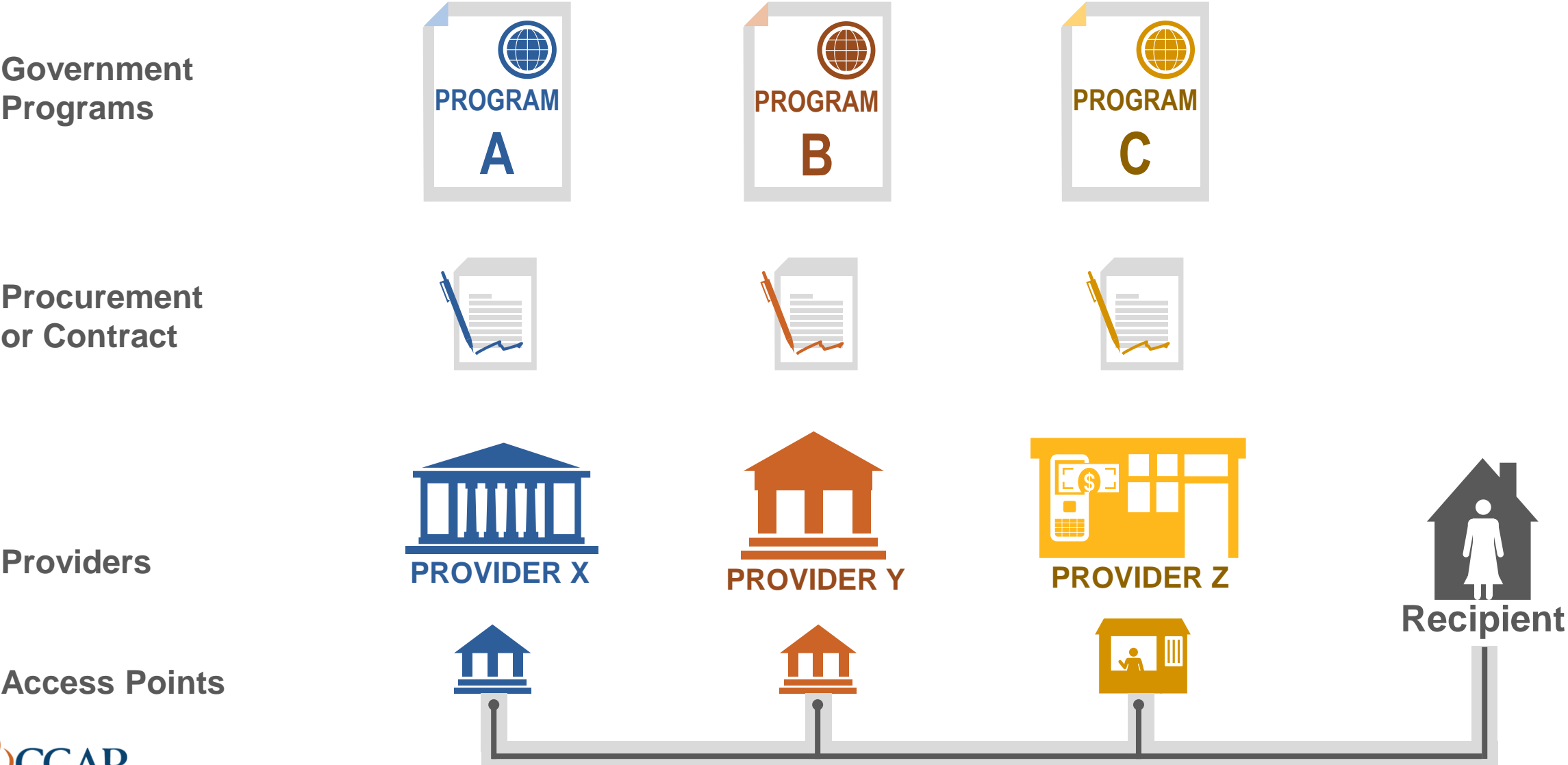
G2P 3.0: Enable recipient account portability



G2P 3.0: Recipient level of choice (cash out)



G2P 3.0: No procurement or contracts with providers



G2P 3.0: Summarizing the potential

LIMITATIONS OF G2P 2.0

Recipients

- No provider choice = poor service
- Little choice of access points = costly and inconvenient
- Multiple accounts/interfaces = duplication and cost

Governments

- Vendor dependence
- Heavy burden on procurement
- Higher unit costs (closed loop; single use cases)

Ecosystem

- Incentivizes government contract seeking
- Locks in closed loop non-interoperable system

POTENTIAL OF G2P 3.0

- Choose and switch providers = competition
- Choice of service points = lowers cost of access and adds convenience
- Simplifies multiple payment flows from different payers

- Leverages multiple providers
- No need for procuring providers
- Larger transfer volume, integrated in system = lower costs

- Shifts provider focus from government to recipient
- Incentivizes interoperability

G2P 3.0: Not without challenges

THE CHALLENGES

Requires a **systems level view** to connect payments, ID systems and government programs

Development of a **clear design** and promotion of **cross-government collaboration**

Tailoring to the potential of each **specific context**

Incentives for private providers to join a shared delivery ecosystem

POTENTIAL OF G2P 3.0

— Recipients

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— Governments

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— Ecosystem

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G2P 3.0 Case Studies

G2P 3.0: Three early case studies

Zambia's Ministry of Social Affairs launches pilot delivering payments across multiple providers with customer choice.

Tanzania's Social Action Fund (TASAF) designs multi-channel payments delivery for social safety net payments.

Bangladesh's Access to Information (A2i), a cross government e-government initiative, designs a "plug and play" system. The first test payments are planned in mid-2018.

G2P 3.0: The Zambia case so far



Government Program

Girls Education and Womens' Empowerment and Livelihood Project (World Bank)

- Total of two cash transfers per recipient
- Use software for program management (enrollment, etc)



Systems Design

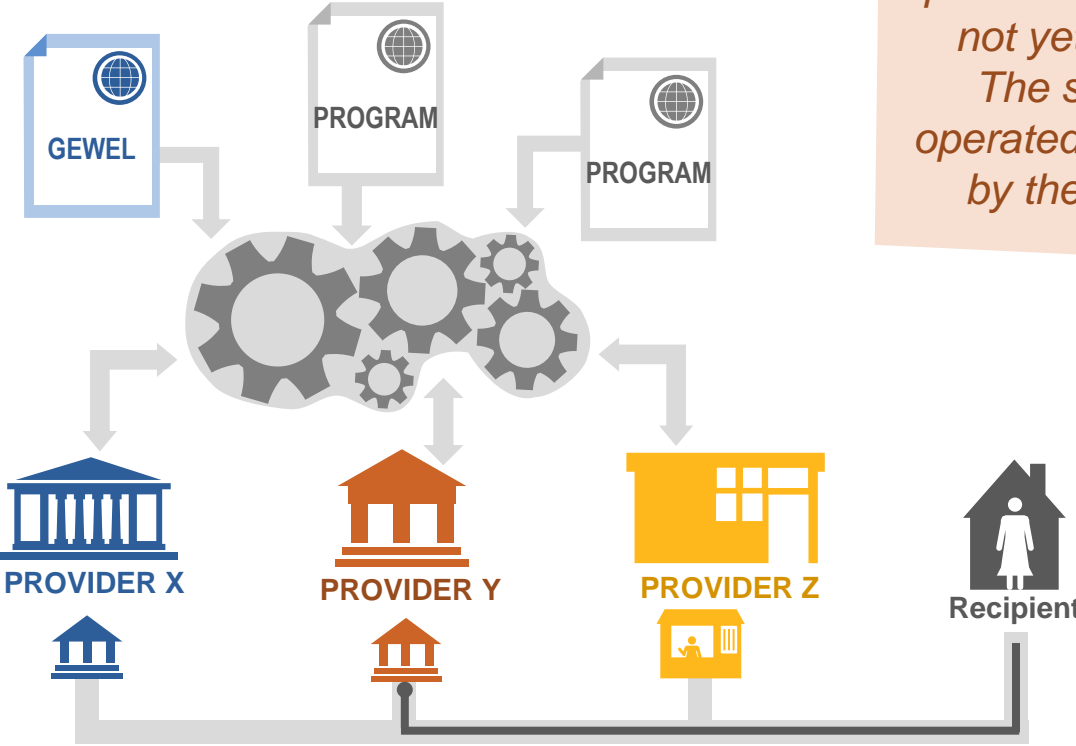
Ministry of Community Development and Social Services

- Use software to manage payments
- Two-staged payments process: Prefund providers, then recipient accounts



Providers

5 participating providers



Recipients can choose a provider but have to go to that provider's access points. Portability is not yet enabled. The system is operated and owned by the Ministry.

75,000 Recipients in first pilot

G2P 3.0: The Bangladesh case so far



Government Program

Ministry of Social Welfare

- Piloting payments in one program
- Seed database with ID



Systems Design

Ministry of Finance

- Treasury payments

Bangladesh Bank

- Payments switching

Election Commission

- National ID
- Biometric authentication

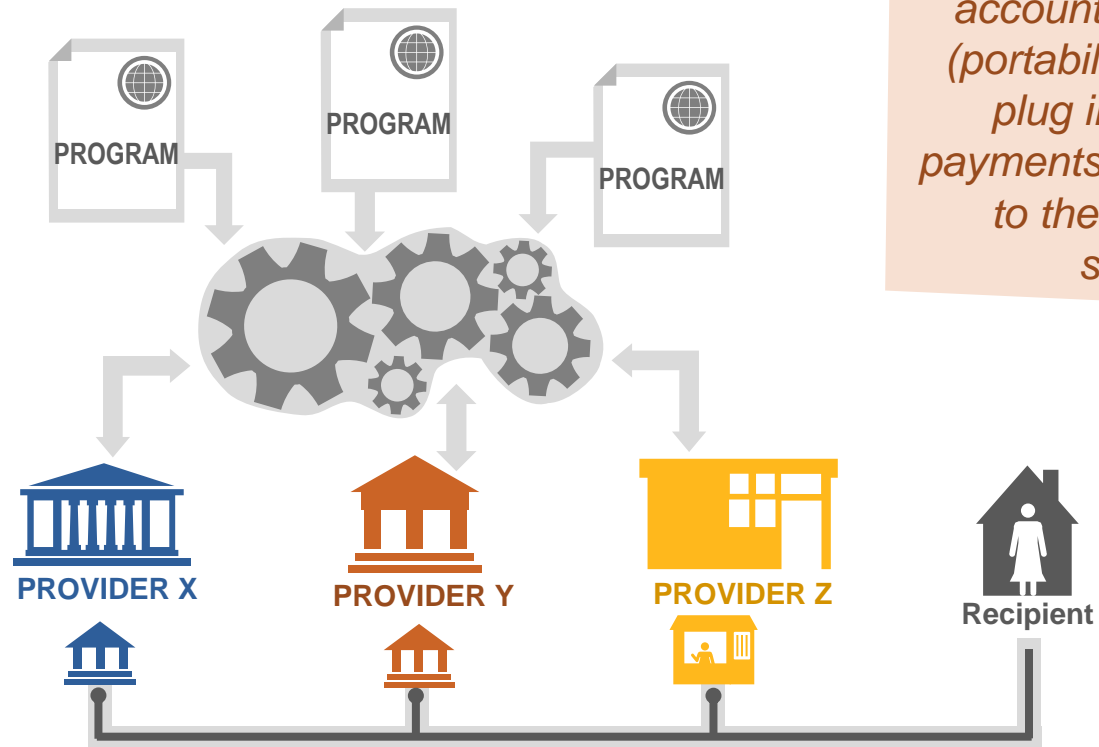
A2i @ Prime Ministers Office

- Building a mapper linking recipient ID number and bank account



Providers

Any provider who participates in the national payments system can 'plug in'



Recipients can choose their provider and can access their funds at any financial access point. They can change the account and provider (portability). Ministries plug into national payments system, linked to the national ID system.

G2P 3.0: Three Case Studies Early Learnings

Bangladesh, Tanzania and Zambia all shared the same goals

- Choice for recipient on where to get an account and portability
- Choice for recipient about where to cash-out

Design centered on 4 key pieces:



Scope

Systems may include both payments leg and broader G2P program management. This is driven heavily by which institution is championing the effort.



Interoperability

Leveraging available payments interoperability or building workarounds. This design is driven by what is available.



Identification

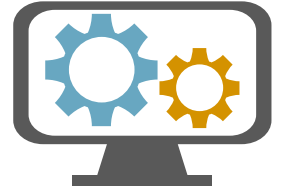
Whether leveraging a digital ID is possible and important for program design.



Provider Incentives

How to incentivize and engage providers for participation in the system.

G2P 3.0: Three Case Studies Early Learnings



SCOPE

- **Bangladesh:** Effort focused solely on payments piece; recruits government programs who can plug and play into system. Reflects A2i's cross-cutting function. Requires more government coordination, but comes with less near term pressures.
- **Tanzania and Zambia:** Efforts focused on improving design of G2P program enrollment and entitlements alongside payment delivery. Broader scope reflected having the social protection programs themselves lead the design.

G2P 3.0: Three Case Studies Early Learnings



INTEROPERABILITY

- **Bangladesh:** Existing payments system included 50 banks (though no DFS providers). Decided to focus on leveraging existing system to bring in DFS players and promote interoperability. Longer play.
- **Zambia:** Very limited existing interoperability among banks and non-existent for DFS players. Created a two-stage workaround to pre-fund providers, then fund individual accounts. Short run expediency but unclear if the approach promotes longer term interoperability.

G2P 3.0: Three Case Studies Early Learnings



IDENTIFICATION

- **Bangladesh and Tanzania:** Latent potential for digital IDs and initial design seeks to leverage this capability by using national ID database for customer verification (for account opening) and authentication.
- **Zambia:** Few prospects for a digital ID and thus became less important within design.

G2P 3.0: Three Case Studies Early Learnings



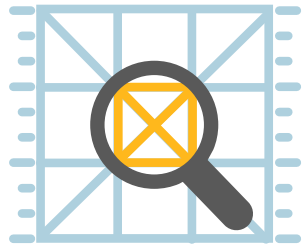
PROVIDER INCENTIVES – three very different and unproven approaches

- **Bangladesh:** Require providers to join interoperable scheme to participate. Decided against requiring recipients to pay cash-out as politically difficult. Instead, will try to pay 5% to issuing banks on payment delivery whilst acquiring banks will earn on interchange.
- **Zambia:** Avoided paying anything to providers directly and therefore avoided procurement. Instead top up grant payments with cash-out fee that recipients pay to providers. Engage providers in monthly payments meeting to ensure awareness. Succeeded in getting 5 providers to participate and bilateral technical integrations have been reasonably manageable. More providers may join.
- **Tanzania:** Intent is that programs procure multiple providers who each provide a complex package of products/services that go beyond basic account and payment. There may be some regional allocation of territories to different providers.

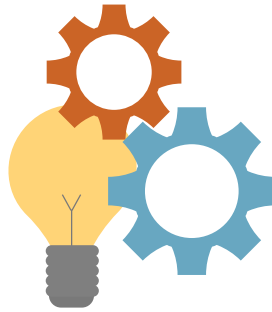
G2P 3.0 Design Sample Terms of Reference



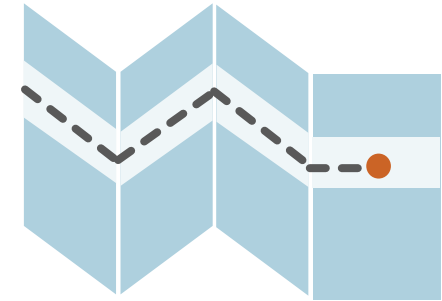
G2P 3.0 Sample Terms of Reference



**As-Is Context
Assessment**



Systems Design



Implementation

G2P 3.0 Sample Terms of Reference: Team Composition

Designing G2P 3.0 by necessity involves a cross section of skills that can include:

- **Payment systems:** experience assessing, building and/or regulating country-level payment systems; specific skill sets that can see the big system picture and have the technical depth to assess viability of ideas.
- **Social protection operations:** experience building and managing social safety net programs and how they work operationally; ideally experience in the local context.
- **Identification (optional):** technical expertise in how ID systems can link to payment systems and G2P payments. This is critical in markets where biometric and digital ID systems are being built or used; less important in environments without new digital ID systems in the near future.
- **Financial sector regulation:** broad understanding of banking regulations, AML/CFT and payments regulations.
- **(Local) financial sector knowledge:** experience working with a range of banks, microfinance institutions, payment providers and mobile money operators; critical is understanding of their distribution networks and agents.
- **Recipients:** deep understanding of social and economic behaviors and context of program recipients; strong feel for variety of financial literacy, digital literacy, access to mobile phones, access to banking system, including social barriers.
- **Software:** experience assessing and building databases and government program management software.

G2P 3.0 Sample Terms of Reference: As-is Assessment

The as-is assessment is a fact gathering and technical review phase.

The goal is to determine how things work today and what assets exist already. This assessment would cover a wide range of critical areas:

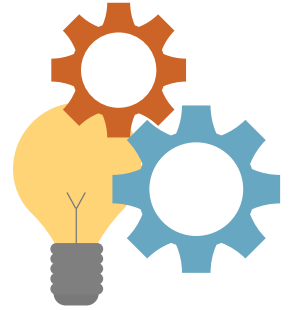


- **G2P programs:** number, volume, payments delivery, ministries and departments, operations, regions/geography.
- **Payment systems:** existing and planned payment switches, clearing and settlement systems, ATM systems, Point of Sale merchants, significant bilateral agreements, significant aggregators.
- **Financial sector:** summary of most significant providers in terms of reaching potential G2P clientele covering banks, microfinance institutions, cooperatives and non-bank mobile money schemes; requires deep attention to their cash-in and cash-out networks of branches, ATMs and agents.
- **Financial sector regulation:** banking, microfinance, payment systems and AML/CFT.
- **ID systems:** coverage of population, quality, and if digital, the ability to link with payment systems for account opening and payment authentication.

G2P 3.0 Sample Terms of Reference: Systems Design

The systems design stage brings all facts on the table to consider choices and to optimize. It is critical that stakeholders identify their own priorities early on because each design choice has consequences and possible tradeoffs.

Design choices need to be further vetted for technical viability. Ultimately, the design choices involve carefully calibrated judgements about objectives and the viability of key choices.

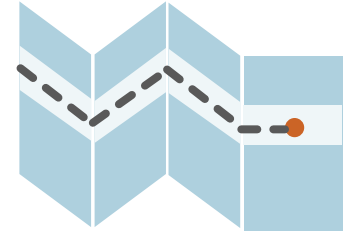


- **Re-affirm key stakeholders' objectives:** Is the goal to digitize one G2P program or are there aspirations to digitize many of them? How much time does the key champion or stakeholder have – a few years or a decade ahead? Does the champion aim to influence eGovernment and digital finance nationally; or are there imperatives to digitize something more close at hand?
- **Design:** this is more art than science. Putting all the as-is facts on the table, the systems design team might come up with 2-3 possible scenarios and debate key choices and tradeoffs.
- **Technical vetting:** once a preferred design is identified, this will need a deeper technical vetting to validate key assumptions and do a diligent technical viability assessment.

G2P 3.0 Sample Terms of Reference: Implementation

Once design is settled, implementation can begin. This can be a separate stage of the work but is vitally critical. Inevitably, small (and sometimes large) systems design changes happen along the way.

- **Identify and task an implementation team:** this can include members of more than one institution, but a consistent and persistent team is needed to make things happen. Under ideal circumstances progress can happen in 1–3 years, but often it takes longer.
- **Build a roadmap:** there is a sequence of steps that need to happen, many in parallel, but can be tackled by doing critical path steps first.
- **Adjust:** inevitably the design will meet with challenges; some big and many small. The implementation team will need to be able to adjust implementation, while recognizing that some changes may fall short of the original objectives set out in the systems design.



Example G2P 3.0 Design in Bangladesh



A Direct-to-Citizen Payments System for Bangladesh

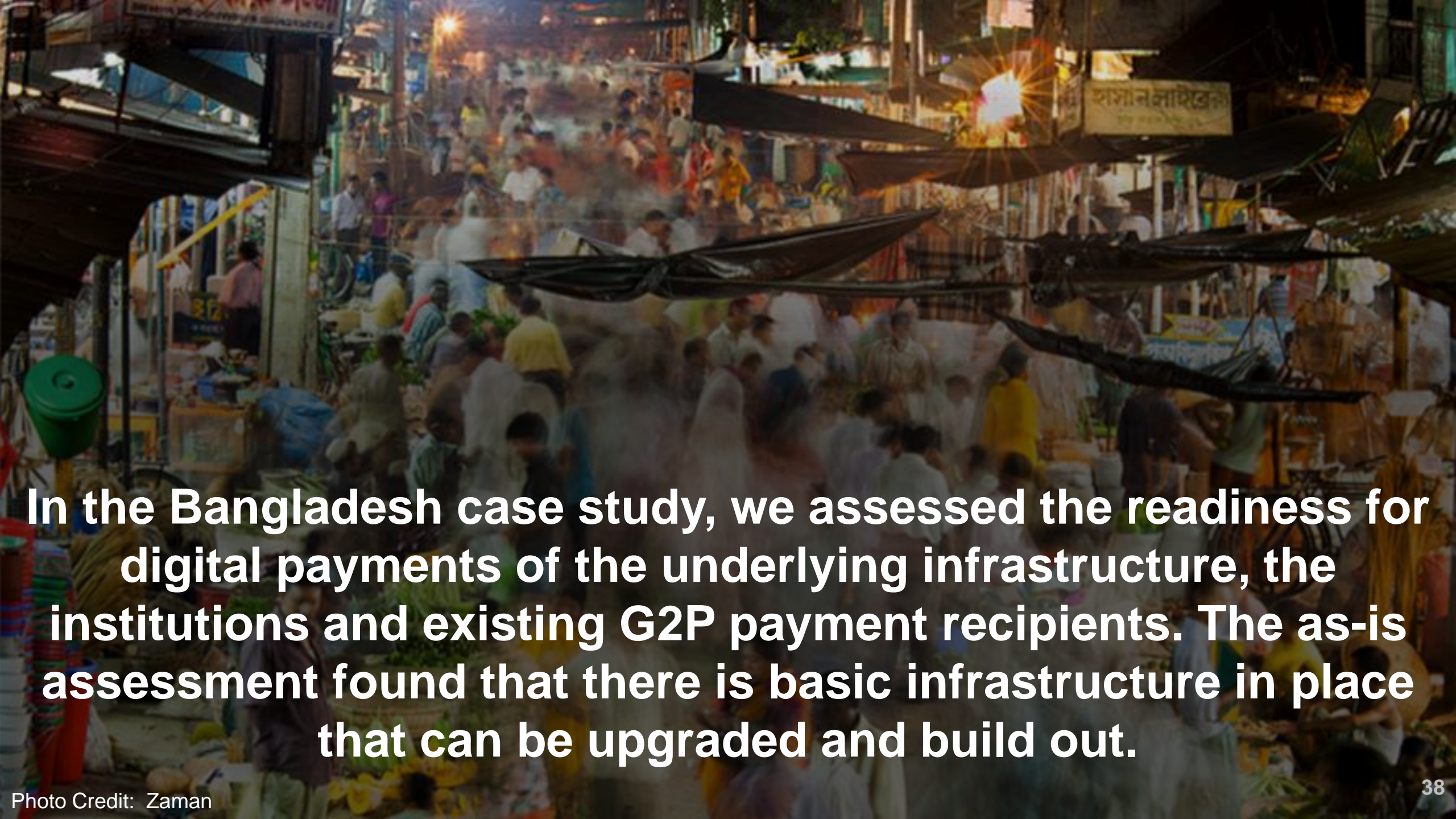
In 2016-2017, CGAP helped an initiative of the Government of Bangladesh to identify a more effective and efficient system for delivering social safety net payments to their citizens.

To do so, the initiative wanted to **move beyond simply digitizing payments and overhaul the whole payments architecture** to achieve the following:

- Enable **choice** (in terms of provider, access point and payment modality) and convenience for recipients;
- Put in place a **single government payments system** and payments portal;
- Leverage and build out **existing infrastructure**, e.g. link payments to national ID database;
- Promote a more open payments system and **interoperability**.

CGAP helped identify how this new architecture would look and how the existing infrastructure could be leveraged and connected by following the three step process described above.

The following slides will show some key outputs and processes.



In the Bangladesh case study, we assessed the readiness for digital payments of the underlying infrastructure, the institutions and existing G2P payment recipients. The as-is assessment found that there is basic infrastructure in place that can be upgraded and build out.

The as-is context offered basic infrastructure to leverage



Financial Access Points

- Low POS penetration (192 per million citizens) leads to inconsistent acceptance of digital payments
- Low ATM penetration (92 per million citizens), coupled with geographic concentration
- Bank cards (60,000 per million citizens) are not widely popular
- There are 5,000 Union Digital Centers that could serve as agents and facilitate recipient onboarding

Payment and ID Systems

- The National Payment Switch (NPSB) is saleable and robust but does not support real-time biometric authentication
- Only banks connect to the NPSB, no mobile financial providers, limiting interoperability
- National ID database contains biometrics and covers 95% of population, but does not link to payments system for fast and secure customer verification and authentication

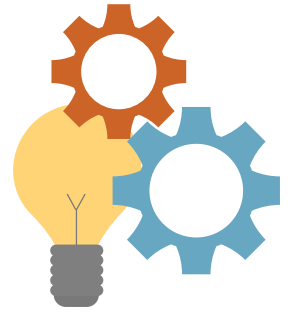
Institutions

- Bangladesh Bank needs more forward-looking policy interventions to facilitate digital payments
- Government offices lack technology platform to track digital payments and receipts.
- Government officers need more exposure to digital payments technology
- Banks still depend on manual and proprietary systems, very low levels of digitization

Citizens

- Limited mobile phone ownership (40%), esp. G2P recipients (18%)
- Low levels of financial literacy
- No clear incentive of digital over cash
- Citizens spend time, effort and costs in travelling to bank branches

Prioritize needs of stakeholder groups



The Bangladesh project team identified 9 key principles that the new G2P payments delivery system should accomplish.

First, the team evaluated the specific needs and objectives of each stakeholder group, and then prioritized the most important ones.

CITIZEN

1. Citizen centricity through reduced time, visits and cost leads to choice
2. Reliability and security
3. Future ready

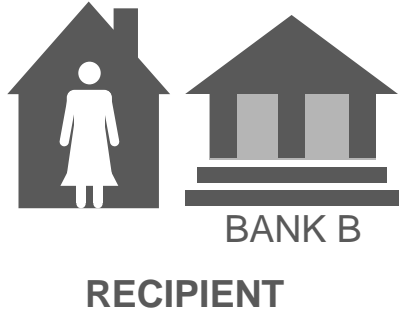
GOVERNMENT

1. Shared system across government
2. Leverage national ID and other existing infrastructure
3. Promote digital ecosystem and interoperability

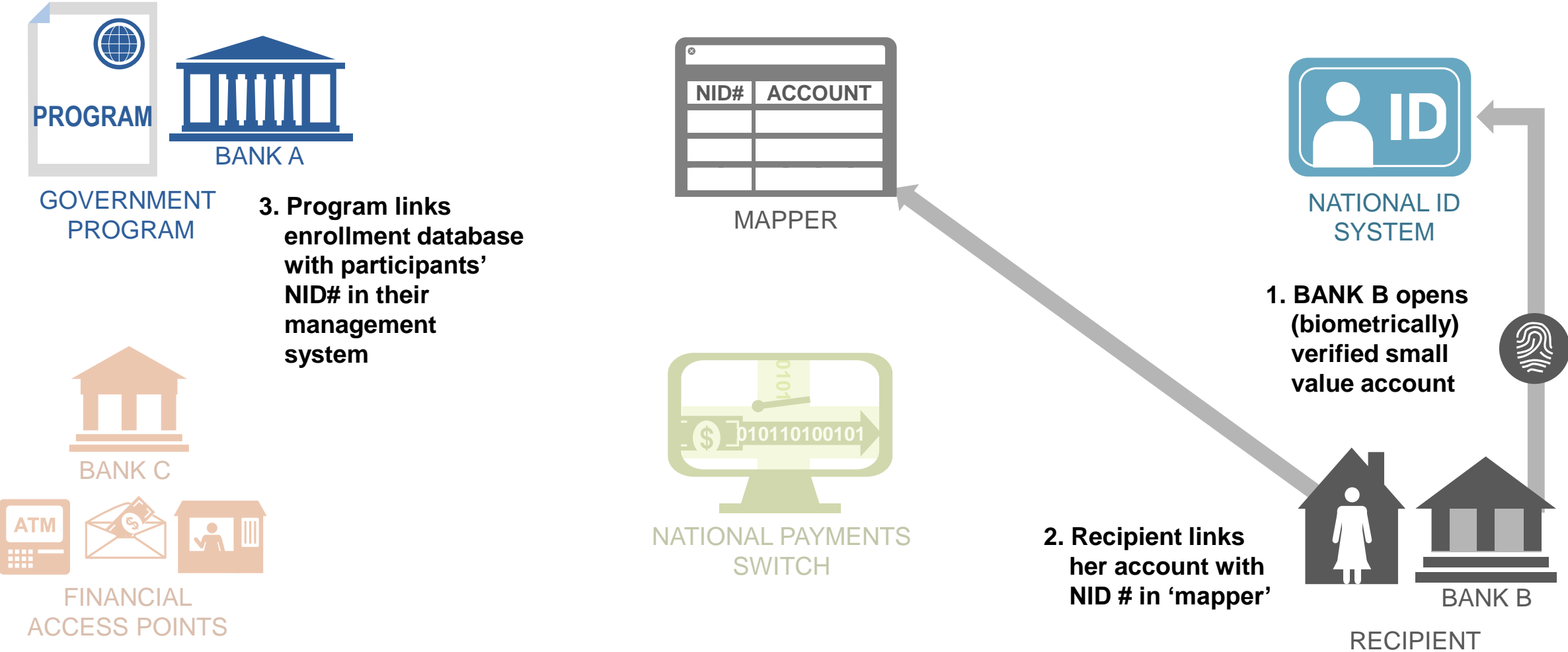
SERVICE PROVIDER

1. Open system – every provider can plug and play
2. Leveraging technological innovation
3. Incentivize participation

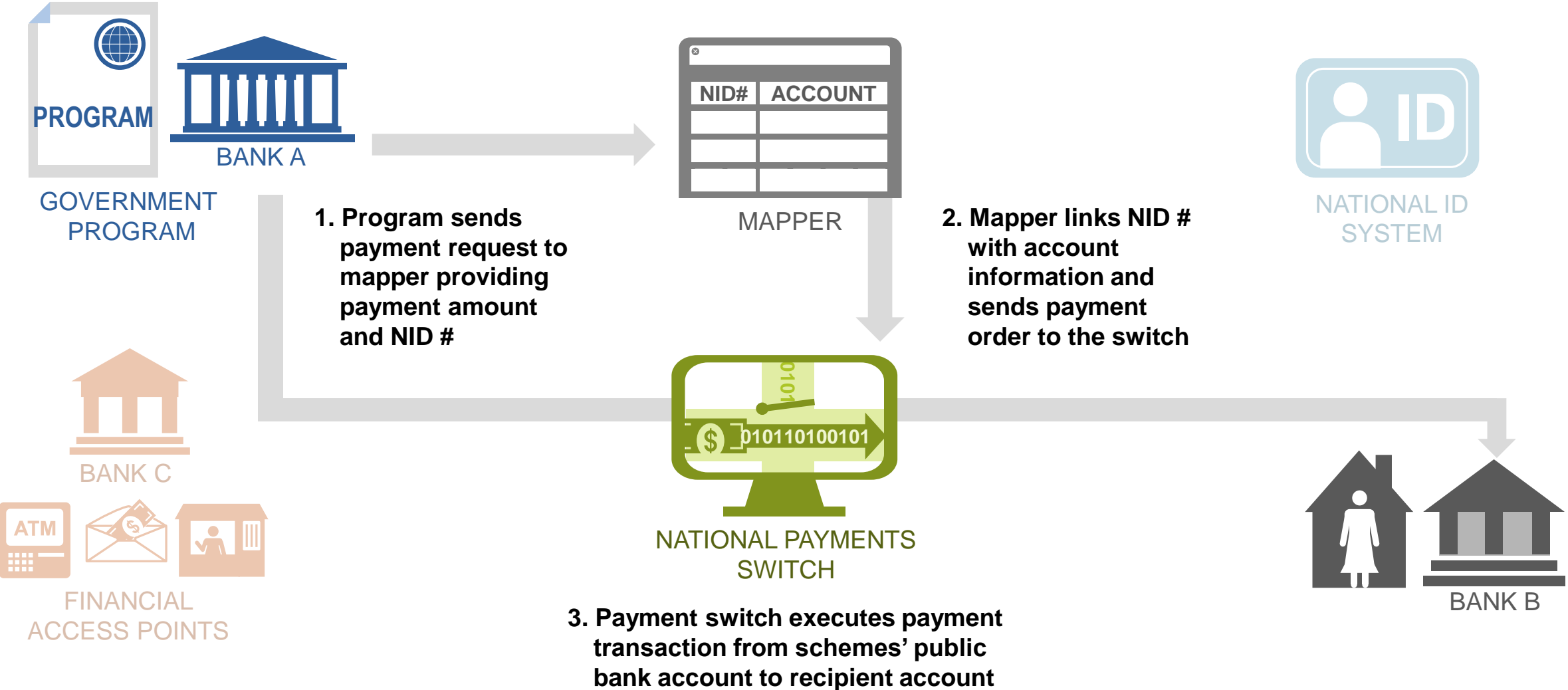
Systems Design: Existing payments infrastructure



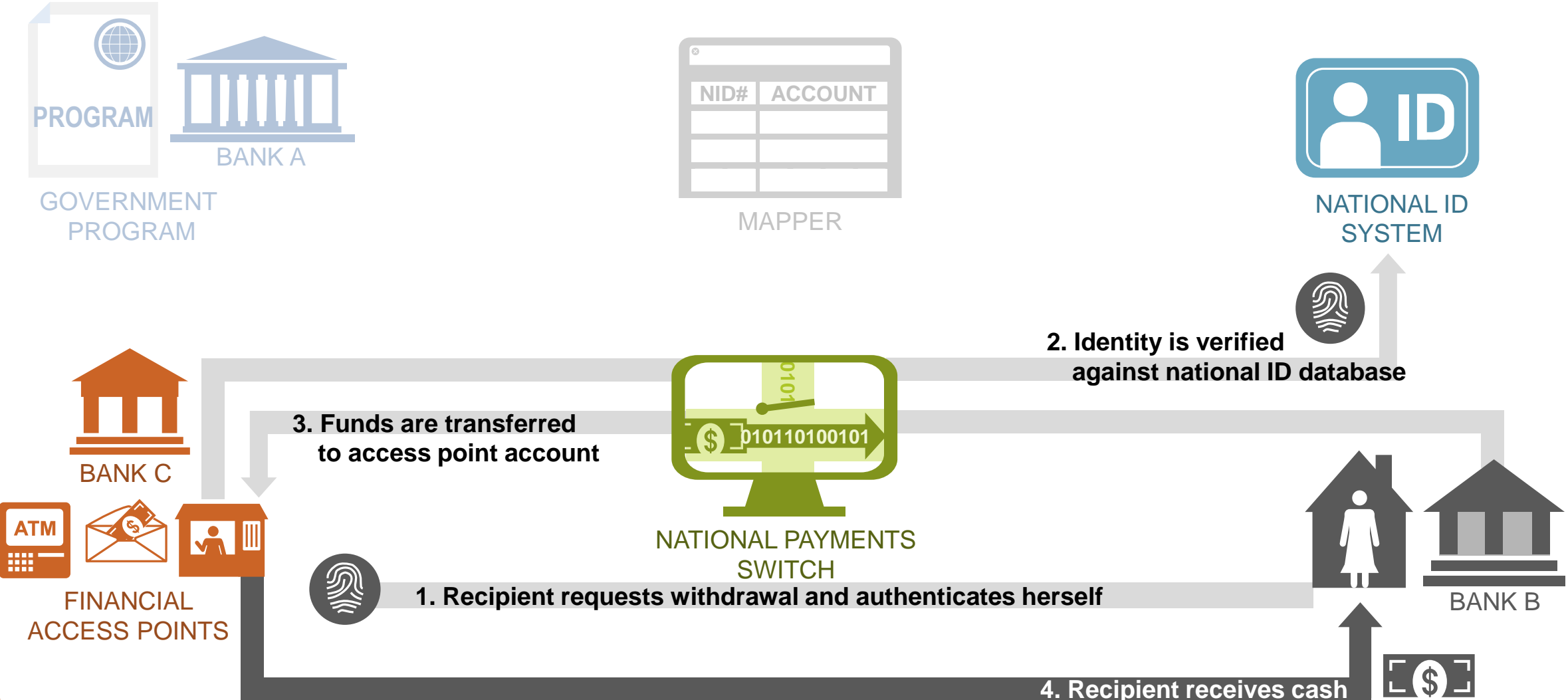
Systems Design: Account opening and seeding



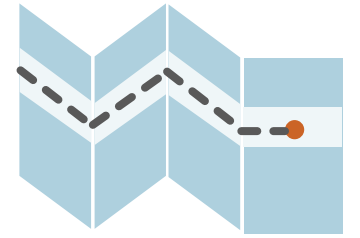
Systems Design: Payment delivery



Systems Design: Recipient cash-out



Implementation



The Bangladesh roadmap towards a G2P 3.0 payment model is staged in three phases that build on each other. The objective of these three stages is to sequentially build in more choice and convenience for the recipients. The three stages also take into account that some changes in the ecosystem will need more time to become functional.

