

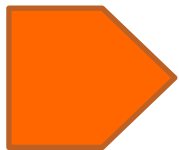


Advancing financial access for the world's poor

Interoperability and Related Issues in Branchless Banking: A Framework

Why we care about interoperability and related issues.

- **Customers**, we suspect, will be best served by systems where they access their accounts through the infrastructure of multiple service providers.
- **Policy-makers** are struggling to understand a regulatory approach that will balance the interest of customers with those of market players. They do not always adequately consider the state of the market or fully understand the implications of their approaches.
- **Businesses** may interoperate their systems eventually but do not want to do it without recouping the substantial investments they have put into developing services and related infrastructure. First movers, in particular, are concerned about government interventions which may force them to give up their competitive advantage.



To better explore the issues we have developed a **simple framework at three levels.**

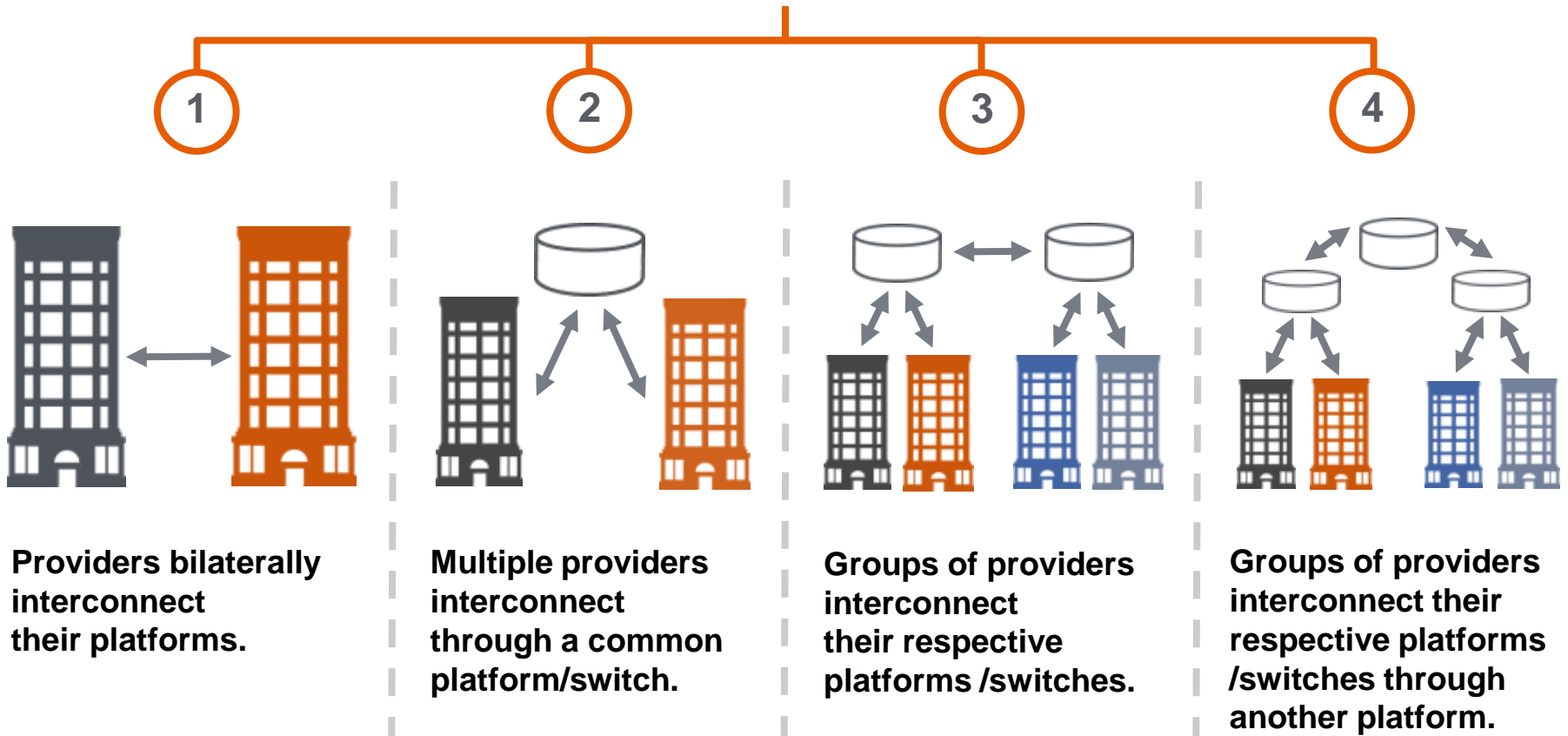
Interoperability and related issues at three levels: examples of what it means for the customer

	Platform NOT interoperating	Platform interoperating
Platform	A customer with an account from one service provider can only send or receive money to or from the account of a customer with the same service provider or engage in off-network transactions.	A customer with an account from one service provider can send or receive money to or from the account of a customer with a different service provider.
	Exclusive agents	Non-exclusive agents
Agent	A customer can only withdraw or deposit money at the agents of their own service provider.	A customer can withdraw or deposit money at an agent of another service provider (or at independent agents).
	Handset/SIM not “interoperable”	Handset/SIM “interoperable”
Customer*	A customer can only use a handset with the SIM provided by their own service provider to access their account.	A customer can access their account using any phone with any SIM card.

For simplicity we have focused just on accounts accessed from a mobile phone, but there are equivalent implications for accounts accessed via cards or by other means.

1. Platform level: types of interconnection

Four types of interconnection *(it is common to find combinations)*



1. Platform level: business hypotheses

- Number of firms and the size of their **relative market shares** (both current and anticipated) will impact incentives to interconnect and on what terms (for example, fee structures)
- Relative **size of existing user base** (both current and anticipated) will influence the setting of fees
- Interconnection would accelerate the need for firms to **differentiate** via product features, pricing, etc.
- Firms may be more willing to interconnect if it will allow them to overcome stagnant growth or enter new markets

1. Platform level: policy-maker issues

- Emergence of a dominant actor in terms of market share of accounts could result in the **lack of competition**:
 - > Dominance in voice market may lead to dominance in the financial services market due to network effects.
- But **competition concerns must be balanced against property rights** (i.e., platform development) and market incentives to encourage early entrants to investment.
- Interconnection may increase **market efficiencies** by eliminating duplication of infrastructure.
- Government-to-person payments (G2P):
 - > Governments may want mandate interconnection so government benefit recipients are not receiving benefits in a closed system;
 - > By giving government volume to one player, governments may unfairly advantage one player contributing to market dominance and frustrating efforts to interconnect down the road.

2. Agent level

Agents

Bank Branch



Sales and Service Center



More limited service than branches including account opening and transaction processing for a more limited group of products too.

Cash-in / Cash-out point



Service limited to cash-in and cash-out.

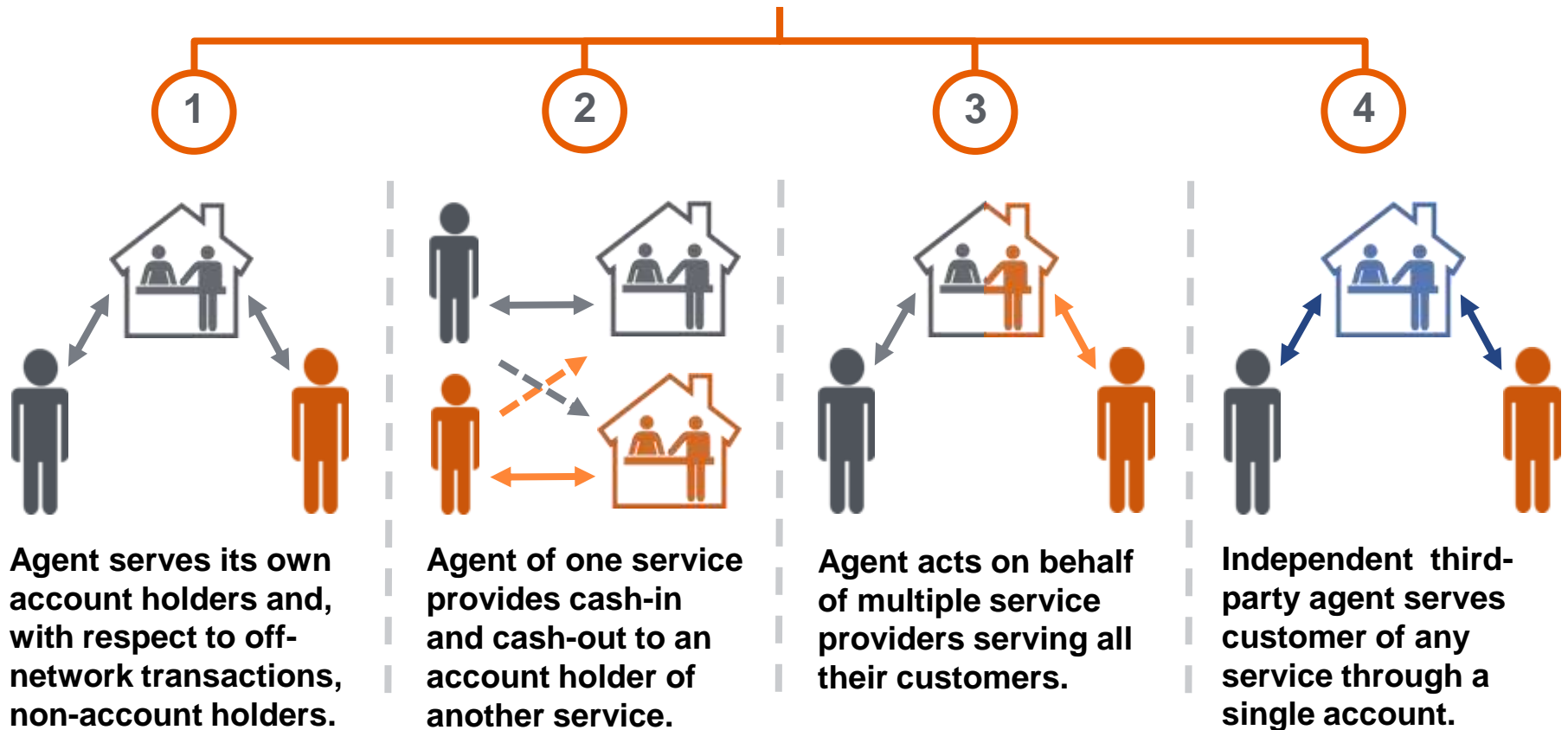
Our focus is on cash-in / cash-out points (cash merchants)

ATM


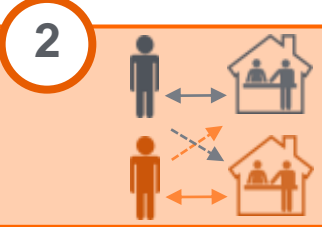

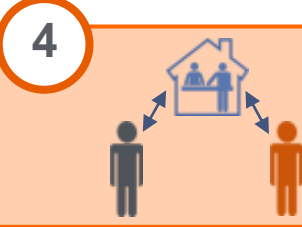


2. Agent level: four agent sharing models

Four agent sharing models



2. Agent level

	1	2	3	4
Description	 <p>Agent serves its own account holders and, with respect to off-network transactions, non-account holders.</p>	 <p>Agent of one service provides cash-in and cash-out to an account holder of another service.</p>	 <p>Agent acts on behalf of multiple service providers serving all their customers.</p>	 <p>Independent third-party agent serves customer of any service through a single account.</p>
Platform Interconnection required?	No	Yes	No	Yes
Is exclusivity of agents possible?	Yes. Agent can remain exclusive to one provider and still cash-out.	Yes. Agent can remain exclusive to one provider as long as platforms are interconnected	No. Agent represents multiple providers.	No. Agent represents multiple providers.
Do agents have single cash till?	Yes.	Yes.	Not necessarily.	Yes.
Does this meet our standard for <u>Financial Inclusive Agent Interoperability</u>?	No (Can only perform transaction on own accounts and off-network transactions require cashing-out)	Yes (Can cash in or out from any account)	Maybe? (Although it is one location the agent may hold multiple accounts to serve different customers)	Yes (Agent serves customers of several service providers from one agent account)

2. Agent level: business hypotheses

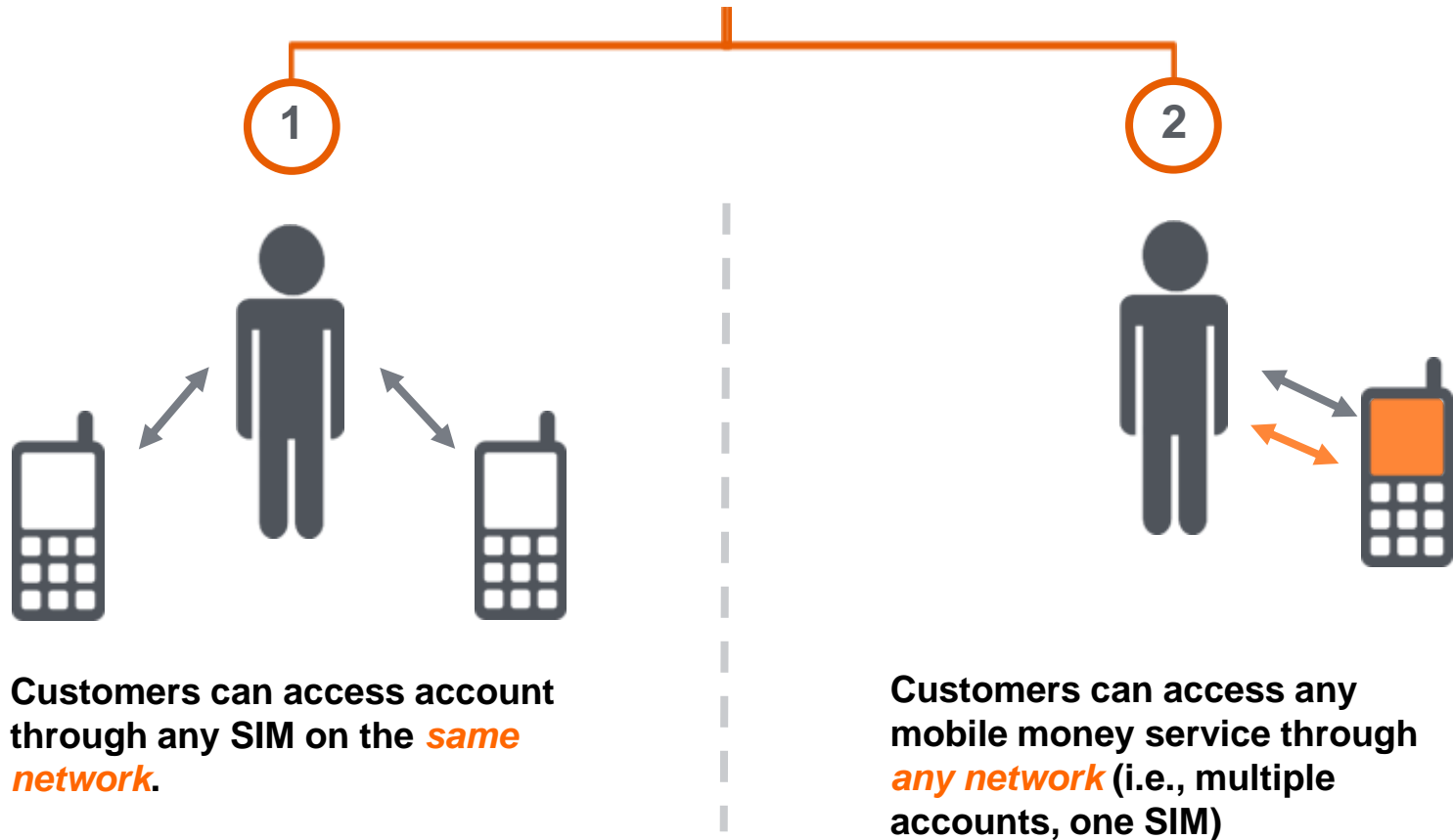
- The **number of potential agents** will impact provider willingness to interoperate.
- **Pre-existing exclusive relationships** (e.g., for airtime sales) may advantage some businesses.
- First movers may not want to interoperate because **agent ubiquity** is considered critical factor to drive initial uptake of service.
- Where **all businesses are in an early stage**, and at relatively equal position to start, they may be more willing to create interoperable agent networks.
- Agent sharing must take into account the business case for the agent.

2. Agent level: government issues

- Emergence of a dominant actor in terms of agent network size could result in the **lack of competition** (especially if the number of viable agents in a market is limited).
- But **competition concerns must be balanced against market incentives** to encourage early entrants to invest in creating agent networks.
- Prohibiting agent exclusivity thwarted by commercial tactics (e.g., issuer canceling contract of agent perceived to favor competition).
- Sharing of agents may increase market efficiencies by eliminating duplication of cash merchant infrastructure.
- Governments encouragement of **public infrastructure as shared agents** may unfavorably impact market development
- **Liability** may be blurred in case of shared agents.

3. Customer level

Two types of customer level interoperability

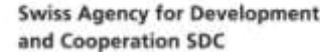
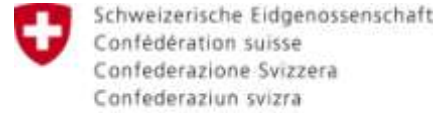


3. Customer level: business hypotheses

- Providers with **large market share** may be less inclined to allow customers of other services to access their accounts.
- Allowing customers to access the account via other SIMs increases the potential size of the accessible market, but reduces the **churn reduction potential of the account**.
- MNOs may fear that another service accessible to their subscribers will **cannibalize their own service**. If they permit access to the other service, they may use pricing, marketing and other features to try to minimize that risk (e.g., they may make it hard to find the other service on the menu).

3. Customer level: government issues

- This level is not currently a priority level of consideration for governments.
- Governments are looking into the question of the availability of USSD gateways and implications of number portability on mobile money
 - > MNOs may control access to USSD channel and governments may need to intervene to make access available to other service providers
 - > Government promotion of number portability is even more important when accounts are linked to mobile numbers
- The bundling of the financial service with the underlying technology to provide that service may be considered restrictive of competition.
 - > For example, regulators may want to permit customers to change their MNO without having to change their bank account and vice-versa.



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