Essential Ingredients for Building a Shared Agent Network

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EFINA Agent Banking Breakfast Series
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Outline

What is a shared agent network?

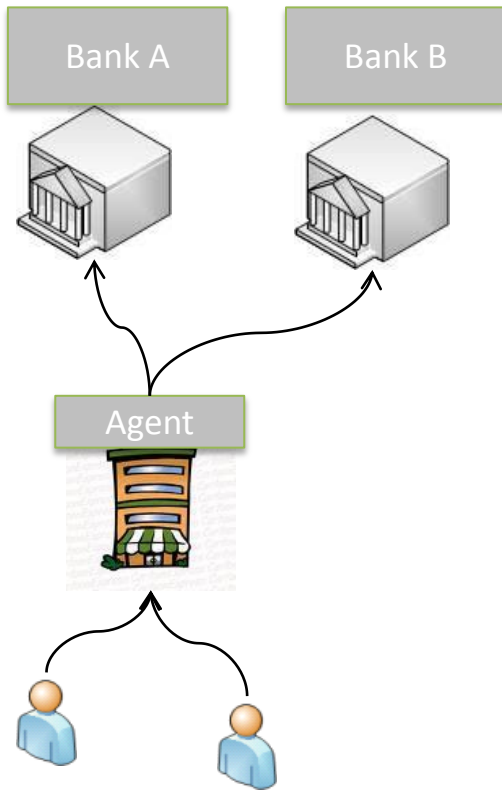Different models

Pros and cons

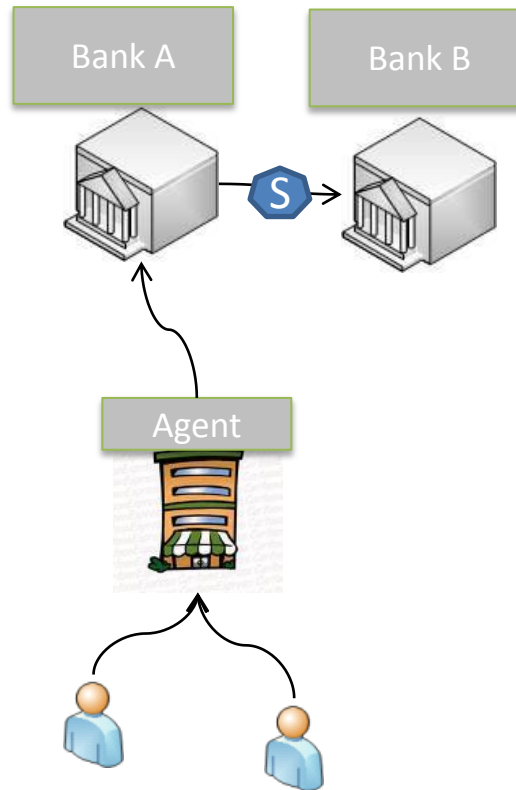A way forward for scale in Nigeria?

Agent use cases

- Origination and sales
  - Seldom successfully shared due to incentive conflicts
  - However, administration functions (documentation collation, delivery of tokens) can be shared
- Cash handling functions
  - More standardized and can be shared as 'cash merchants' but need remuneration formula
  - Cash in/Cash Out
  - Bill pay
  - Remittance

Shared agent models

A: *Defacto* shared
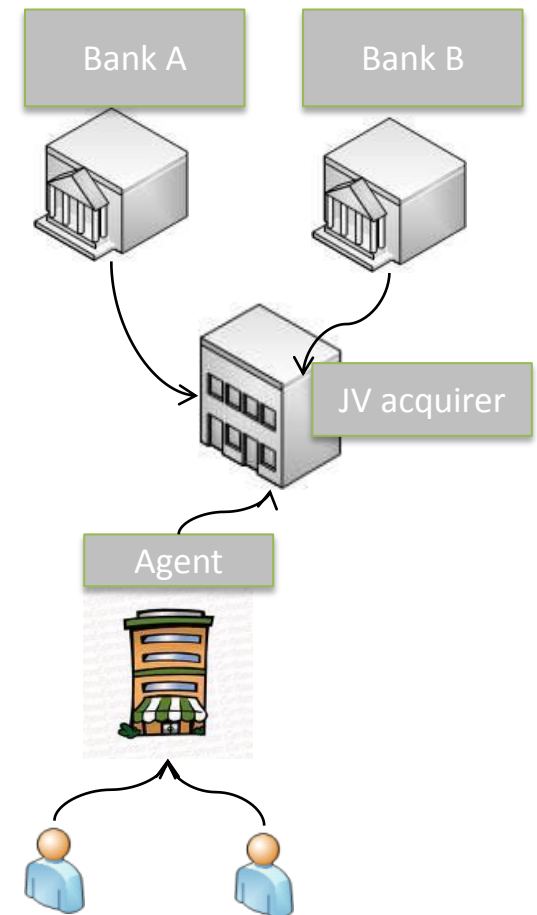
Bank A | Bank B

Agent

B: Interoperable

Bank A | Bank B

S

Agent

C: JV Acquirer

Bank A | Bank B

JV acquirer

Agent

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Dimensions of shared agent models

	A. De facto sharing
1. Agent setup	Each bank
2. Agent branding	Mixed
3. Acquirer (legal)	Each bank
4. IT System—agent management	Each bank
5. Pricing set by	Each bank
6. Who pays for agent setup capex?	Each bank
Example	MM agents, Tanzania

Dimensions of shared agent models

	A. De facto sharing	B. Interoperable
1. Agent setup	Each bank	Acquirer
2. Agent branding	Mixed	Acquirer/ scheme
3. Acquirer (legal)	Each bank	Acquirer
4. IT System—agent management	Each bank	Acquirer (and switch)
5. Pricing set by	Each bank	Scheme agreement
6. Who pays for agent setup capex?	Each bank	Acquirer
Example	MM agents, Tanzania	Planned—but none existing

Dimensions of shared agent models

	A. De facto sharing	B. Interoperable	C. Joint acquiring
1. Agent setup	Each bank	Acquirer	JV Co
2. Agent branding	Mixed	Acquirer/ scheme	JV brand
3. Acquirer (legal)	Each bank	Acquirer	JV Co
4. IT System—agent management	Each bank	Acquirer (and switch)	JV Co
5. Pricing set by	Each bank	Scheme agreement	Agreement
6. Who pays for agent setup capex?	Each bank	Acquirer	Shareholders of JV Co
Example	MM agents, Tanzania	Planned—but none existing	Various—ANMs and Cielo, Brazil

Comparing models
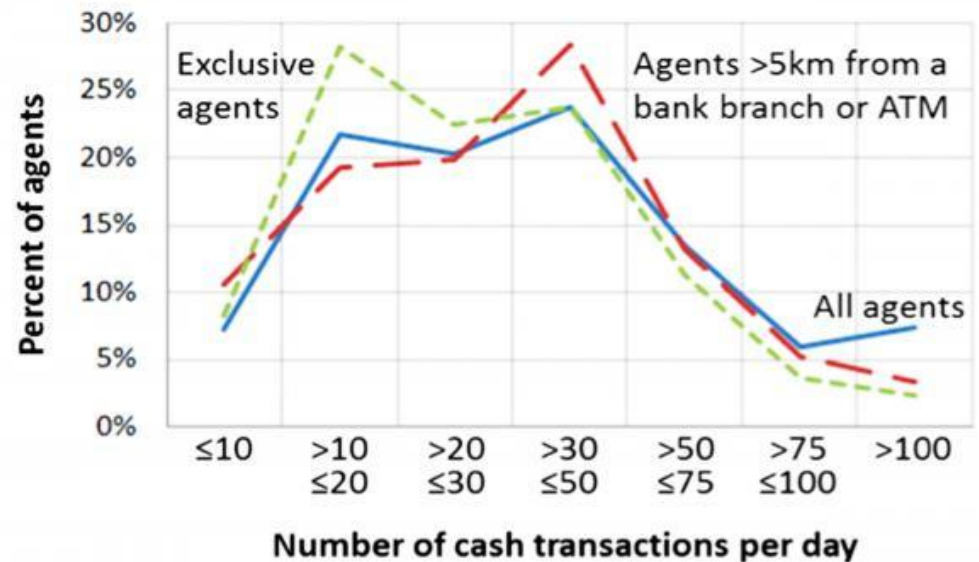
Model A: Tanzania MMOs
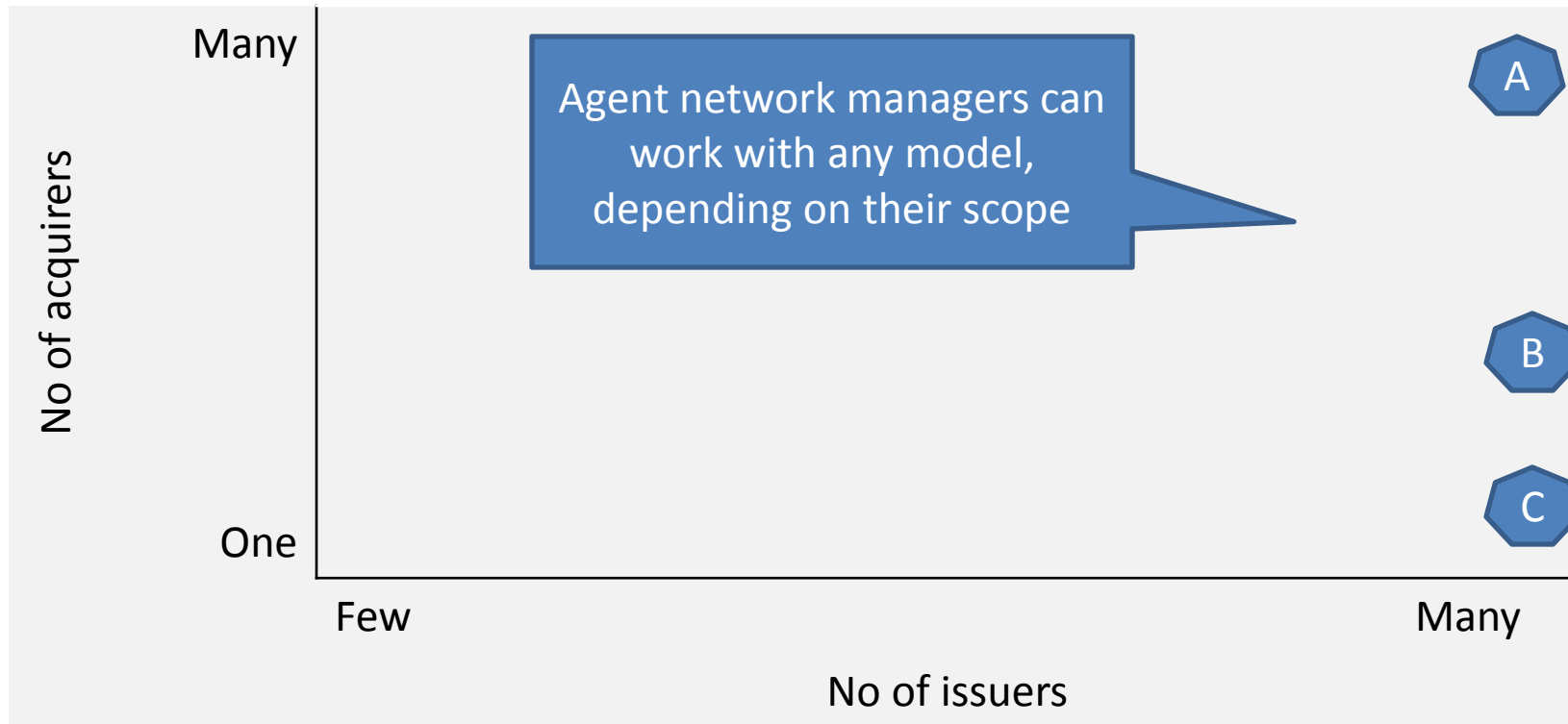
BFA
Bankable Frontier Associates

De facto exclusivity emerges
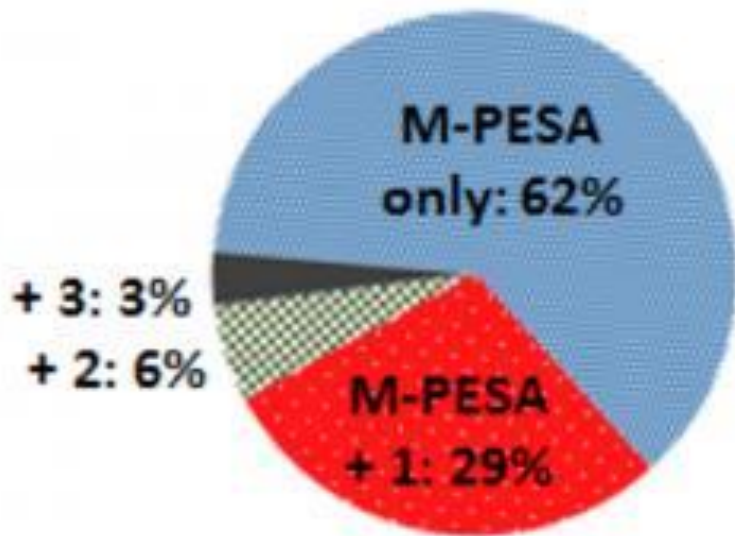
Effect on agent volumes

Source: Mas & John, CGAP Blog March 2013
http://www.cgap.org/blog/mobile-money-agents-tanzania-how-busy-how-exclusive

Model B: Defining the use case precisely: cash in and out

1. Store of value

Cash	Authorized depository accounts

E-money accounts

2. Payment instrument

Cash	Card payments	Credit transfers - batch	Credit transfers - real time	Direct Debit

3. Channels

3a. Bearer channels

Satellite	VPN		Mobile	
		SMS	USSD	Data

3b. Service Channels

Cash handling		Mobile phone	PC
Branch	ATM	Agent	Basic	Feature	Smart

B. NOU Mobile Originated Push Transaction

Mobile originated Push transaction

Sending Issuer

Incoming Translator

Receiving Issuer

Bank

PSP

MNO

Pass-through

2.Mobile
2.Account
2.Card
2.CashMerchant
2.Business
2.Biller

M.2.Account translator

CMID.2.Account translator

MID.2.Account translator

BID.2.Account translator

M.2.Card translator *

Interface

Interface

Translation definition database

Where the definition has not been made or the destination account at the Receiving Issuer is known the transaction destination is not translated and the push payment routed directly by the transaction switch (passes- through unchanged at translator)

Transaction Switch

Route able transaction

Bank

PSP

MNO

Once clients have defined where they want transactions paid to their 'mobile number / CM_ID / MID / BID' to be sent and that relationship stored in the SWITCH translation database. SWITCH then translates the destination 'mobile number / CM_ID / MID / BID' into an account number at the client's Receiving Issuer and then routes the transaction to the RI

Transaction flow: Use case 2ii: Push CI – from CM's device to client's mobile number CM2P

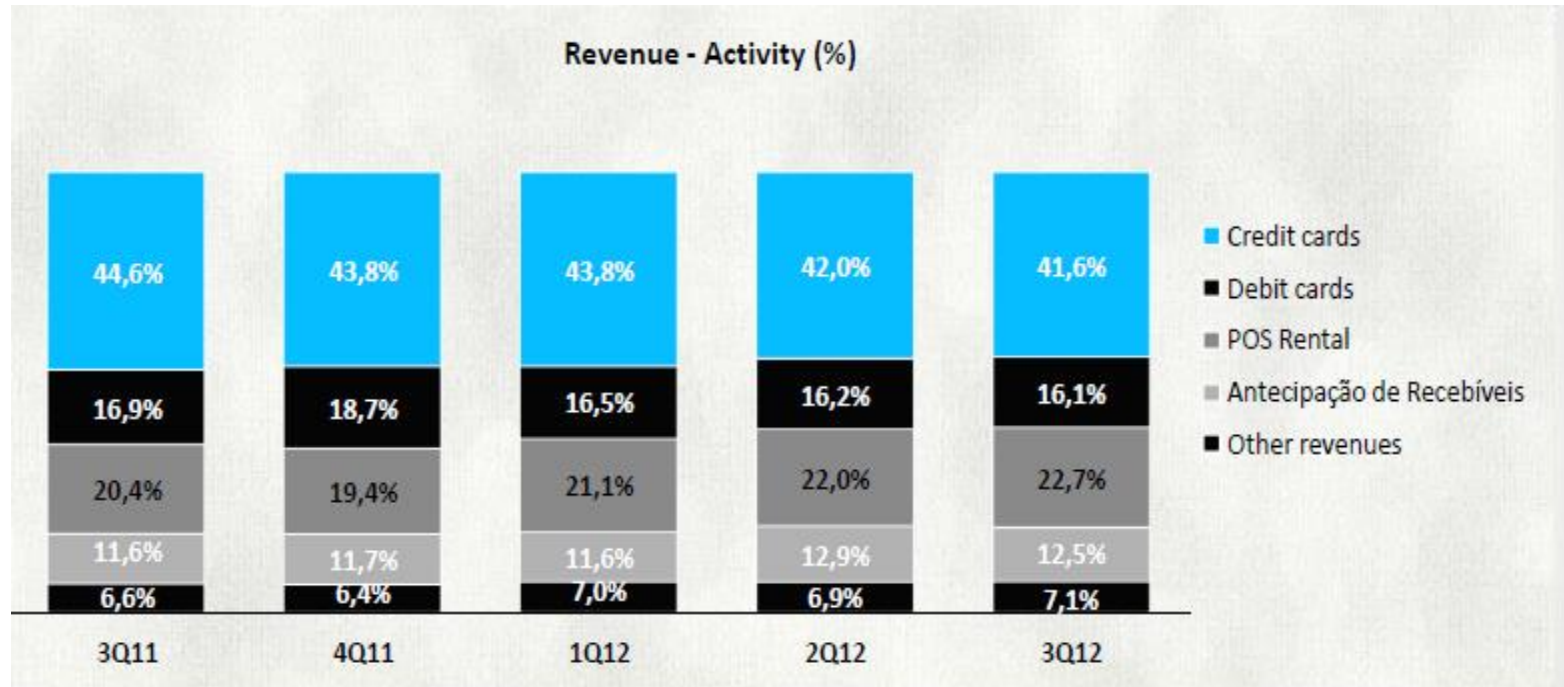Cash Merchant device initiated Push Payment to Client for Cash-in

	Cash Merchant	Sending Issuer (Acquirer)	Switch	Receiving Issuer (Issuer)	EV recipient (payee)
1	a. Receives cash from client. Sends Electronic Value (EV) for Cash-in as per PSP menu on CM's mobile or POS or PC to payee phone number	b. Authenticates, checks funding, detects that the phone number is not on us NoU — passes instruction to SWITCH	c. SWITCH receives instruction, looks up issuer and account associated with phone no and sends instruction to Receiving Issuer to credit account	d. Receives SWITCH instruction; immediately credits receiver account and sends message to recipient	e. Receives message from their issuer confirming receipt of EV funds
2	g. CM receives payment confirmation & balance update	e. SI commits transaction and deducts payment from the CM's balance and credits SWITCH settlement account f. SI sends message on to CM to confirm receipt	c. SWITCH receives message, sends to Sending Issuer d. SWITCH logs transaction in SI and RI settlement files	a. RI debits SWITCH settlement account b. RI Confirms credit to SWITCH	
3	d. Receives commission credit	a. SI credits commission to CM and passes necessary entries wrt SWITCH and internal charging	c. SWITCH charges fees to SI and RI	b. RI charges fees to the recipient (if applicable) and passes necessary entries wrt SWITCH and internal charging	
4			All amounts owing settled through daily process Fees grossed up to a monthly invoice		

Source; BFA Report for FSDK (2012)

Model C1. 3rd party: Globokas Peru

- Founded in 2007 to extend the presence and coverage of financial and business institutions at the national level.

- Owned by foreign (Accion Frontier) and local capital

KasNet agent network service features:

- National coverage with over 1,000 agents.

- Claims the flexibility to deploy an agent in any urban and/or semi-urban area, using either main MNO's GPRS network.

- Serves a range of banks and non-banks: Mibanco, BBVA Banco Continental, Backus, Caja Nuestra Gente, Caja Sullana, Financiera TFC and Caja Huancayo.

Model C2. Bank owned acquirer: Cielo Brazil

BFA
Bankable Frontier Associates

Revenue - Activity (%)

	3Q11	4Q11	1Q12	2Q12	3Q12
Credit cards	44,6%	43,8%	43,8%	42,0%	41,6%
Debit cards	16,9%	18,7%	16,5%	16,2%	16,1%
POS Rental	20,4%	19,4%	21,1%	22,0%	22,7%
Antecipação de Recebíveis	11,6%	11,7%	11,6%	12,9%	12,5%
Other revenues	6,6%	6,4%	7,0%	6,9%	7,1%

Source: Cielo Investor Presentation 2013: http://www.cielo.com.br/ir/

- 1.6m POS installed (44% GPRS)
- MDR: Debit: 80bp; Credit: 116bps
- Net margin 40%

Possible roles: JV as facilitator/ supporter

- **Discretional programs:**
  - Assistance to acquirers to identify, sign up train & support merchants
    - E.g. merchant toolkits, bootcamp training sessions, first line customer call center
  - Funding to banks for acquiring drives
  - Incentive schemes for consumers to user e.g. instant lottery at POS
- **Additional future:**
  - **value added software**
    - E.g. consumer credit scoring algorhythms based on tx
    - Merchant benchmarking or real time performance alerts
    - Distributor data on sales and reordering

Split out technology from acquiring

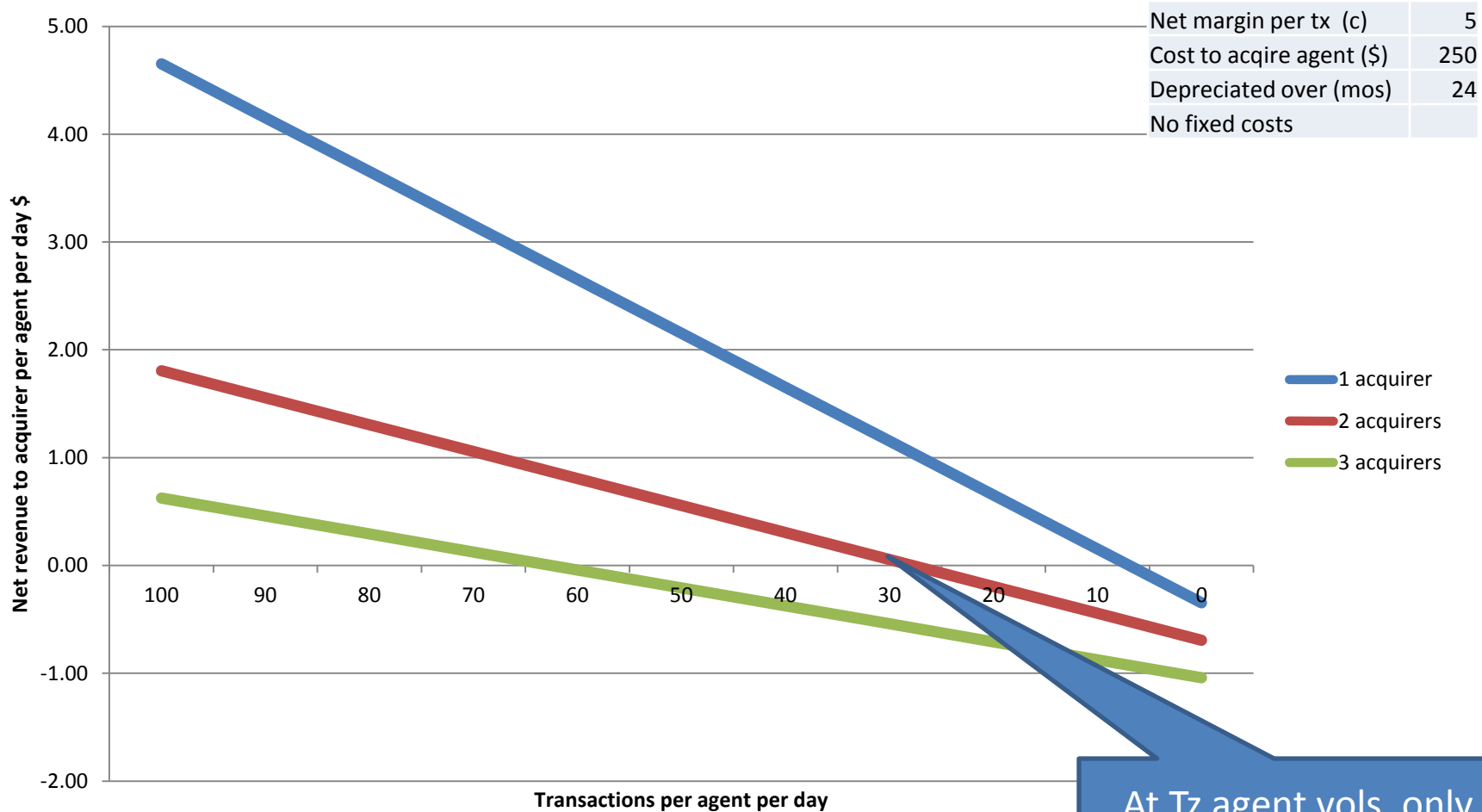|	ACQUIRER	JV Platform
Legal form	Any (could be a bank division focused on acquiring or specialist co.)	Could be a utility entity to house licensing of technology
Governance	Depends on legal form	Board appointed by funders
Revenue base	Merchant fees which vary by type of merchant	Transaction fees from acquirers using the platform
Expense base	Software, hardware Staff structure to acquire and manage merchants	Software platform setup and operation Incentive and subsidy programs as allowed by funds

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Economics of sharing—or not

Net margin per tx (c)	5
Cost to acqire agent ($)	250
Depreciated over (mos)	24
No fixed costs	

Net revenue to acquirer per agent per day $

Transactions per agent per day

1 acquirer
2 acquirers
3 acquirers

At Tz agent vols, only 2 acquirers can survive

Shared agent models: for banks

	A. De facto sharing
Pros	Pricing freedom Low cost for 2nd mover No interchange to agree or pay
Cons	Low oversight of agents Contagion of poor service High fixed costs to channel
Issues	Does not allow specialization Fixed costs not spread De facto exclusivity can arise

Shared agent models: for issuer banks

	B. Interoperable	C. Joint acquiring
Pros	• Better oversight of agents • Don't need systems or capacity to manage	• Better oversight of agents • Don't need systems or capacity to manage • Fixed costs spread
Cons	• Less flexibility on pricing: i/c sets floor • Can i/c accommodate agent commission structures?	• Monopoly supplier sets prices
Issues	How is i/c set?	Governance of entity

Shared agent models: for clients

	A. De facto sharing	B. Interoperable	C. Joint acquiring
Pros	?	• Like ATM	• Like ATM
Cons	• Agent float inadequate more frequently • Search costs higher • Pricing confusing • Trust levels?	• Like ATM	• Like ATM
Issues	Agents have to keep multiple floats, but can arbitrage acquirers		

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Way forward

- Default model is 'A'—this is 'easier'
  - With ANMs likely to emerge to facilitate aspects; **and also** de facto exclusivity over time
  - This is unlikely to be socially optimal or privately efficient → low level equilibrium trap
- Key question for banks:
  - Do they consider cash in/out a utility function?
  - If so, then:
    - How to share costs and risks to create an efficient utility to create and manage?
    - The issue is the business rules and incentives more than the technology

Key components of a effective shared agent network

	In place today
1. Technology	
--Switch for real time mobile push ?	Yes--and low cost
--Agent management module (commissions, monitoring)	?
2. Establish governance structure -- Setting objectives: access vs. lowest cost -- Raising funding: allocation formulae -- Incentivizing know how to be deployed	Existing formulae adequate? Or need for a new entity?
3. Scheme rules --Transaction types --Recourse --Interchange --Agent commission structure	Not yet

Thank you!