

Trust Models for the Developing World

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SAP RESEARCH 



Agenda

- Introduction
- GaRO – Business in your Pocket
- The Problem
- Security in Technology for Emerging Economies

Introduction

- **Emerging economies (EE) and fast growing markets (FGM) have different business requirements from those of developed economies.**
- **Technologies designed for the developed world fails to make an immediate impact in the EEs and FGMs**
- **Such technologies fails to capture the context of EEs and FGMs**
- **The end result: technology misappropriation – technology dumping**
- **A need exist to design disruptive and innovative technologies for EEs and FGMs**
- **Technologies that consider the context of EE and FGM**
- **SAP Research IA&S Africa has taken the initiative**
 - Investigate state-of-the-art approaches of delivering innovative and disruptive technologies for EEs and FGMs

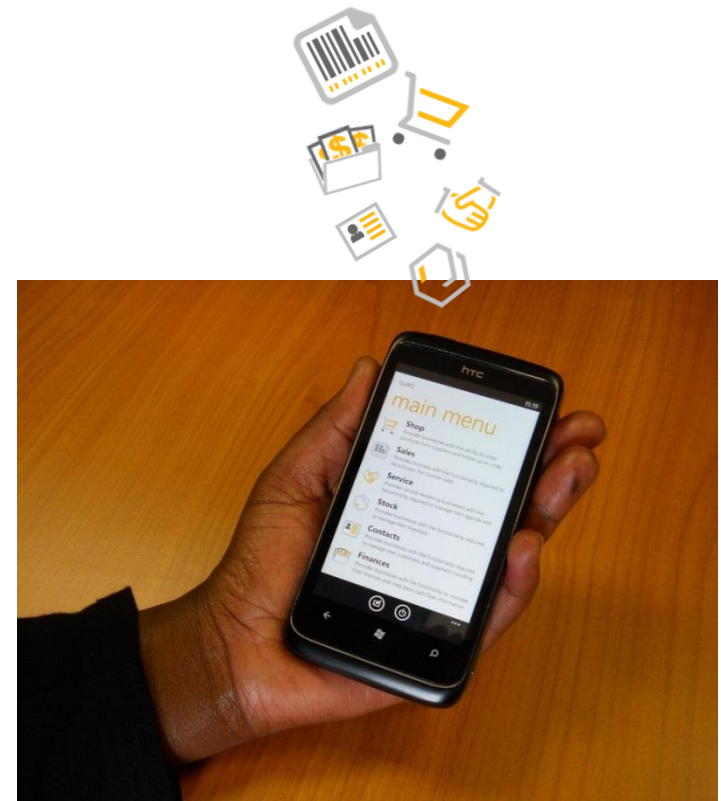
GaRO – Business in your Pocket

Background

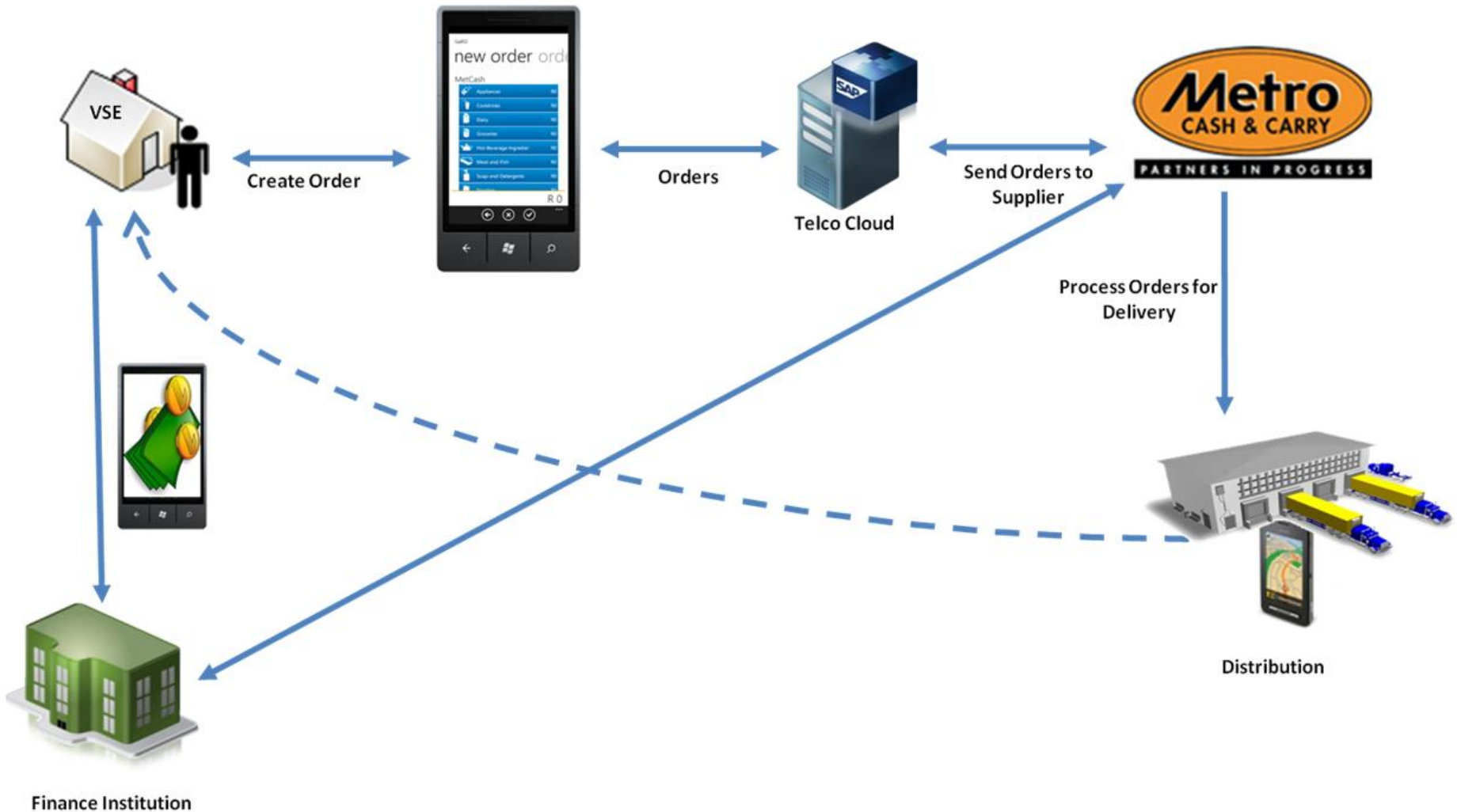
GaRO is a mobile application prototype that offers business services for VSEs to conduct day-to-day business.

GaRO business services:

- *Shop*: product procurement
- *Sales*: over-the-counter cash and credit sales
- *Services*: rendering business services
- *Stock*: inventory valuation
- *Contacts*: customers and suppliers
- *Finances*: cash flow analytics



GaRO – Business in your Pocket Ecosystem



The Problem

What do we want to achieve?

A sense of “normality”



Social controls

Institution guarantees

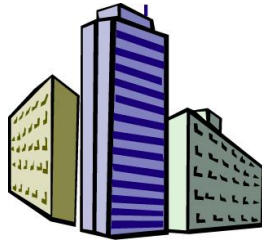
Rule of law

Assurance



The Problem

In contrast...



Social controls ?

~~**Institution guarantees**~~

~~**Rule of law**~~

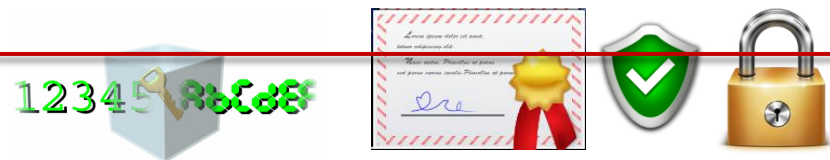


~~**Assurance**~~



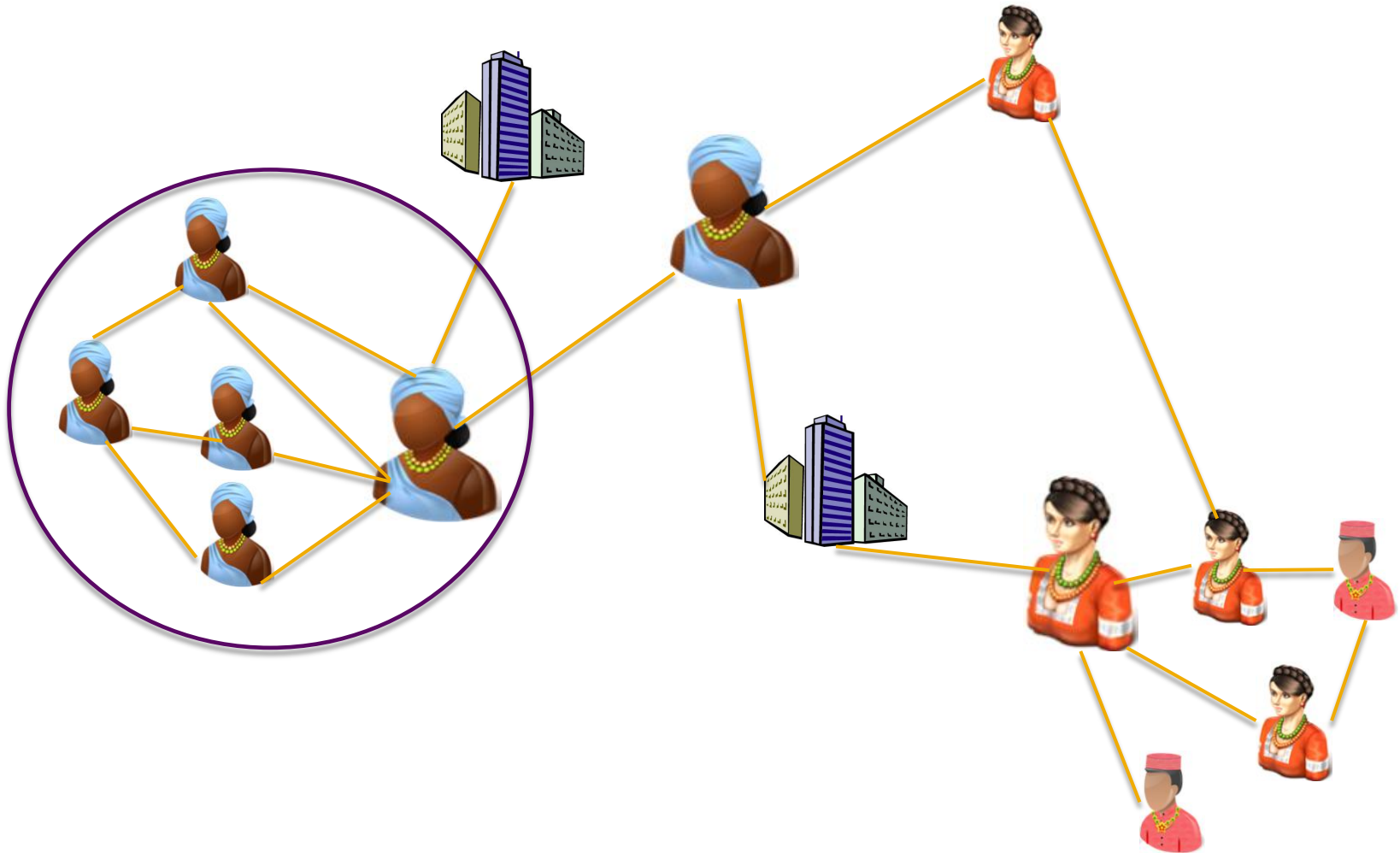
~~**Security**~~

Identity, confidentiality etc..



Security in Technology for Emerging Economies

Scenario



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Trust in rural communities

- Social structures govern trust between members
- Social position governs activities within rural communities – the chief can influence business collaborations
- Informal community structures reduce exposure to risk and provide a sense of social security – stokvel
- Rural communities require a different approach to business due to unique social structures, social norms, and traditions.
- Concept of social capital will be unique – certain trust properties can be attained

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Trust and social capital



Bonding Social Capital

- Personalised trust
- Families and close friends
- Strong ties



Bridging Social Capital

- More generalised trust
- Horizontal relationships between community forums
- Weaker ties

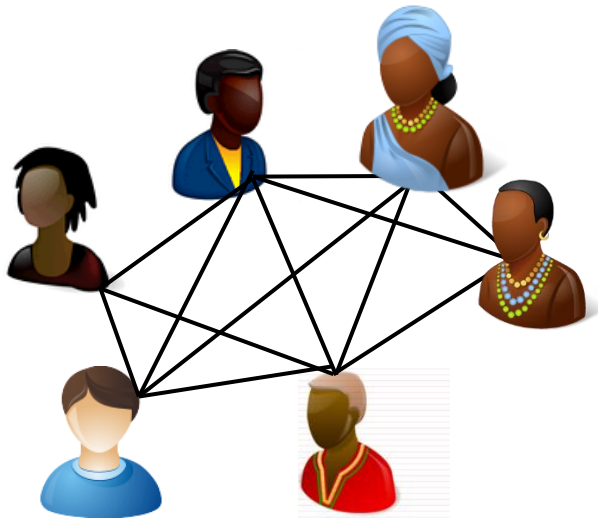


Linking Social Capital

- Generalised trust
- Vertical relationships between community and government and social classes
- Weakest ties

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Bonding social capital - *stokvel*



- Formed on the basis of trust between members.
- Members agree upon the group's purpose, its rules and its outcomes.
- Members conform to group specific norms of behaviour
- Group members act in a way to enhance and mutually benefit the group
- If trust is not present in groups then they will fail

“**Indigenous** trust properties are derived from emerging economies”

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Stokvel rules

1. If I am similar to another person (e.g. female, age, culture, language, goals etc.) my trust is higher in that person
2. If I belong to the same group as another person my trust increases in that person
3. If I do not know you and you are different to me, I distrust you
4. If you do not pay at the end of the month, my trust in you will decrease and the group will sever ties with you
5. Initial trust can be established from social capital
6. New members are trusted if they are recommended by existing members
7. If we meet and see each other often, I have more trust in you
8. The groups reputation facilitates trust among the group members due to its importance
9. Trust is based on personal characteristics and traits

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General trust and reputation

General trust properties

- Trust is asymmetric
- Trust is subjective
- Trust is formed over direct experience and recommendation
- Trust is dynamic

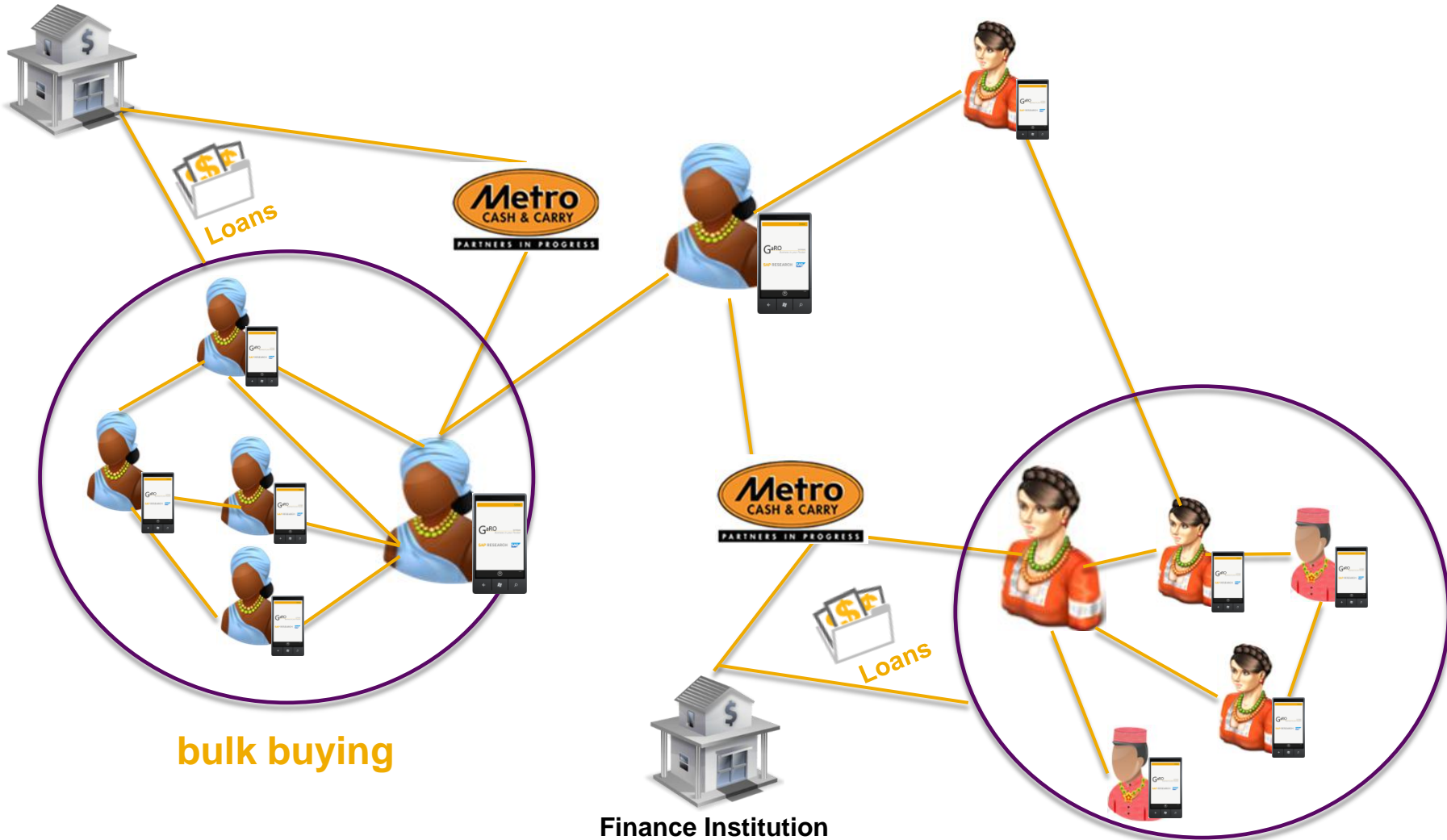
Indigenous trust properties

- The more cohesive a group, the higher the trust in the group
- Trust is a collective decision made by a group
- Trust is strongly supported by social capital
- Failure to comply to rules leads to a high level of distrust
- Trust is influenced by social network position

Security in Technology for Emerging Economies

Future work

Finance Institution





Thank You!

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