

Examining Inclusive Innovation:

A study of micro-entrepreneurs in the Kenyan mobile phone sector

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Outline

- **ICT micro-enterprises**
- **Theories of Innovation**
- **What is inclusive innovation?**
- **Case Study**
- **Discussion**
- **Conclusion**

ICT Micro-enterprise in DCs

- **Emergence of ICT sector micro-enterprises**
 - ‘Extensive’ ICT activity
 - Liminal enterprises and entrepreneurs in the ICT sector
 - Ignored in the literature
- **ICT bring benefits more marginal groups**
- **Availability in developing countries (UNCTAD 2010)**
 - From ‘connectivity’ to ‘use’/‘outcomes’ (Heeks 2010)

Examples of ICT micro-enterprise

- **Internet**
Informal internet cafes
- **PC**
Assembly, repair
Software
- **Media**
Music, Local Film
- **Mobile phones**
Phone selling, repairing, mobile money agents
157,000 payphone & airtime (GSMA 2011); 27,000 Mobile money agents
(Safaricom 2012)

ICT sector micro-enterprises

Majority of jobs in ICTs in DCs

Foster & Heeks(2010) *Researching ICT micro-enterprises in DCs*,
EJISDC 43(7)

Not passive firms

Some types of innovative activities, networked actors,

Suggestion of connection to poor customers

(Cheneau-Loquay 2010, Lugo & Sampson 2008, Rangaswamy 2009)

Weakness of literature

Focus on practice and celebration of local innovation

Disconnected informal sector – ‘How should we make the informal formal?’

No link into policy/enterprise strategy?

Theoretical Models

Using innovation as basis for understanding

Using Innovation

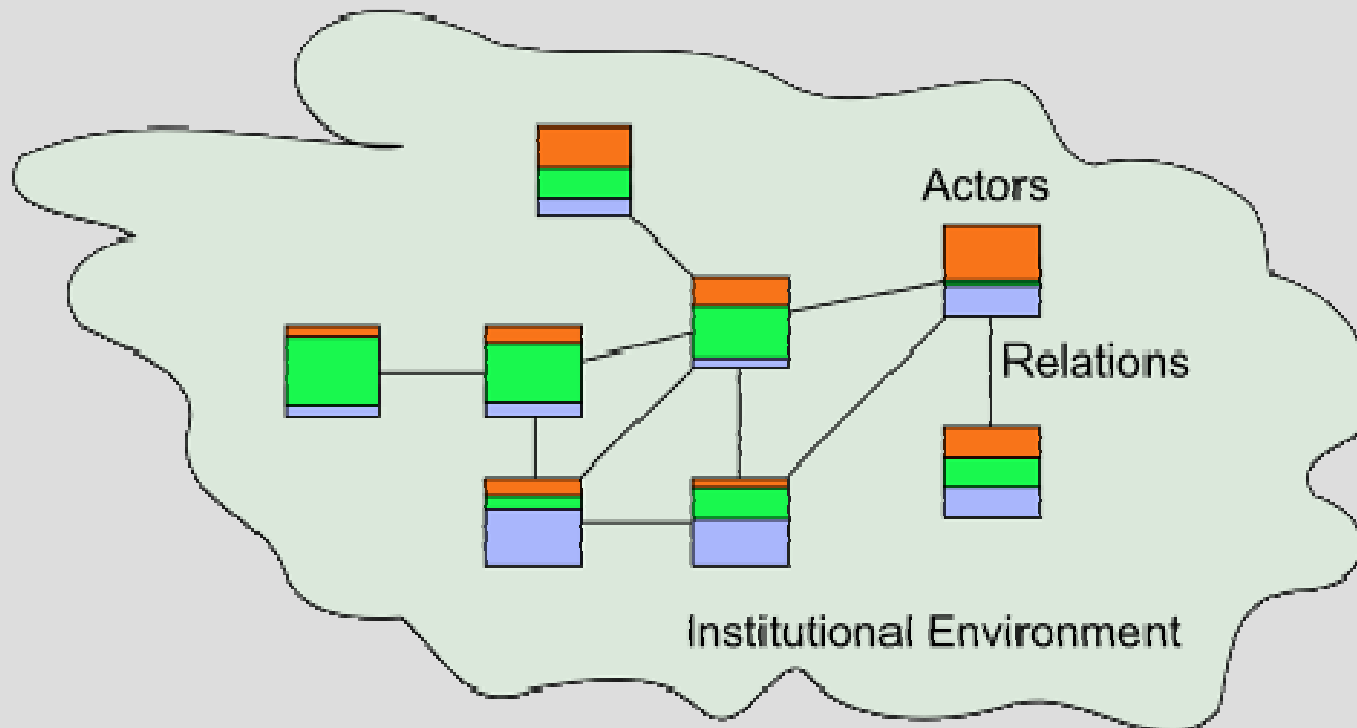
- **Innovation**

Innovation as a study of creation of better organisations, services, products, ideas etc

Innovation and economic development

Innovation well established in policy

Systems of innovation



Does it fit?

- **Actors/Relations typically formal**

Actors: Firms, Universities, R&D/Enterprise support

Relations: Market relations, partnerships

- **Innovation as ‘new to the nation/world’**

- **Manufacturing and formal activity focus in DCs.**

Manufacturing and industrial focus

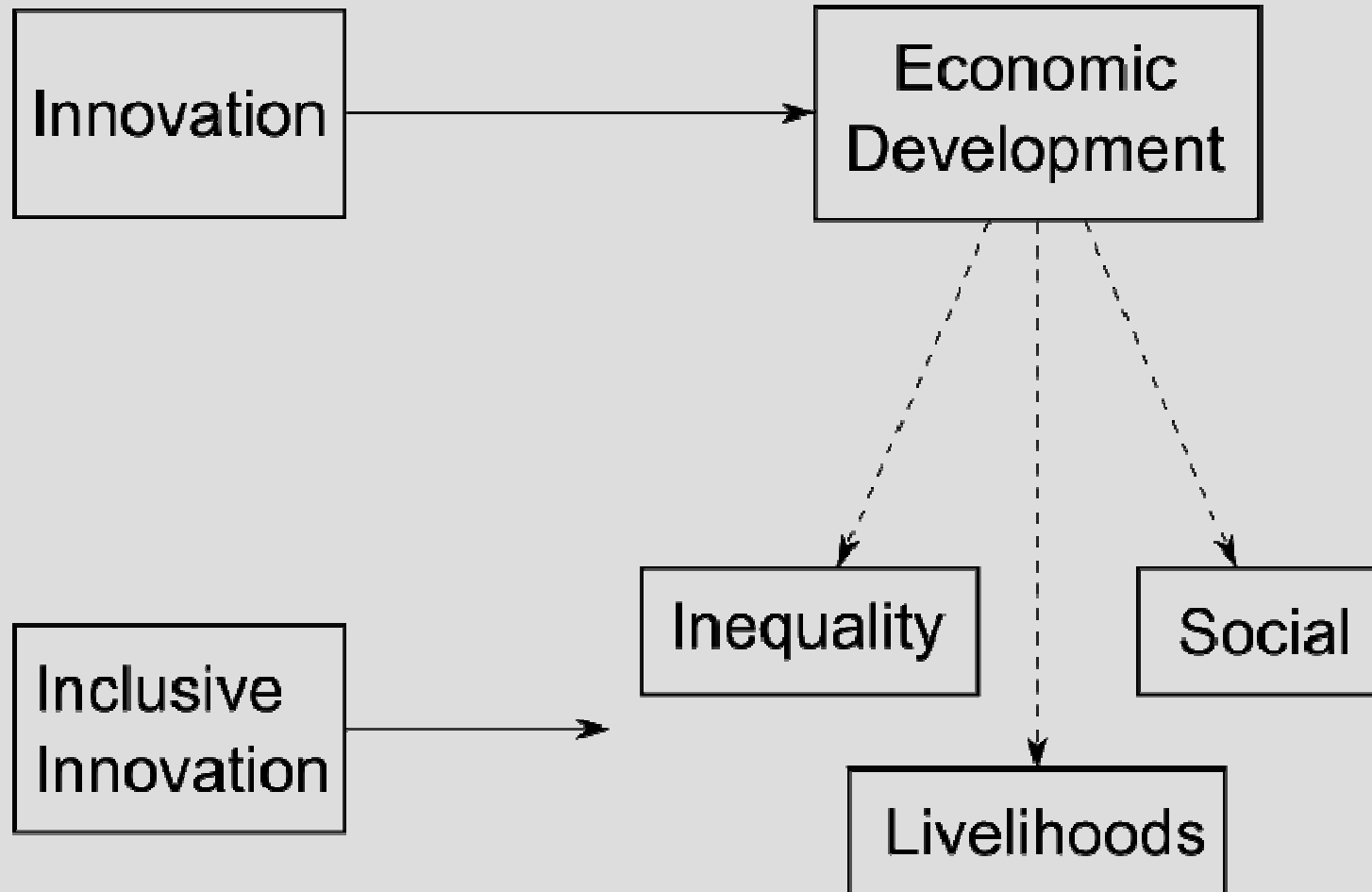
Markets mainly export

Adapting innovation

1) Considering other actors

- **Lundvall's DUI approach** (Lundvall 2009)
System as DUI (doing-using-interacting)
Innovation emerging in learning process

Adapting innovation (2)

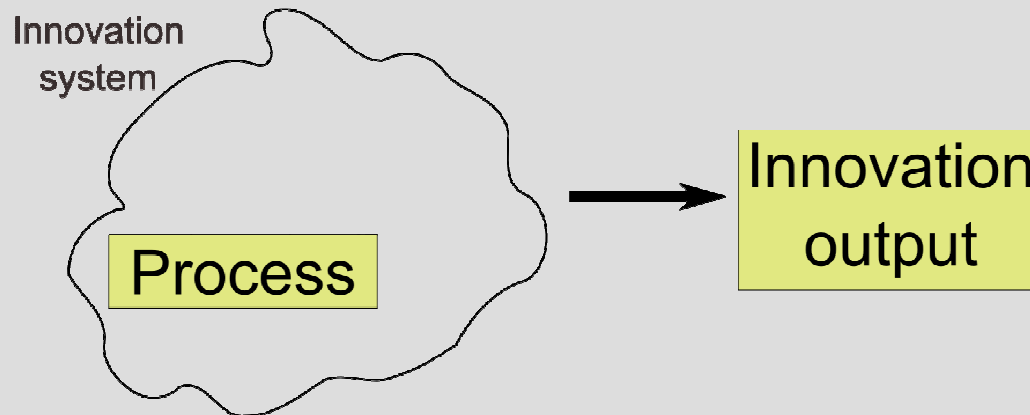


Adapting innovation (3)

2) **Inclusive innovation** (Altenburg 2009, Cozzens 2009, Lorenzen 2009)

Output of innovation– Inclusive focus

Processes within systems of innovation
benefit society more equally



Inclusive innovation and systems of innovation

- ***Outputs:***

More than manufacturing?

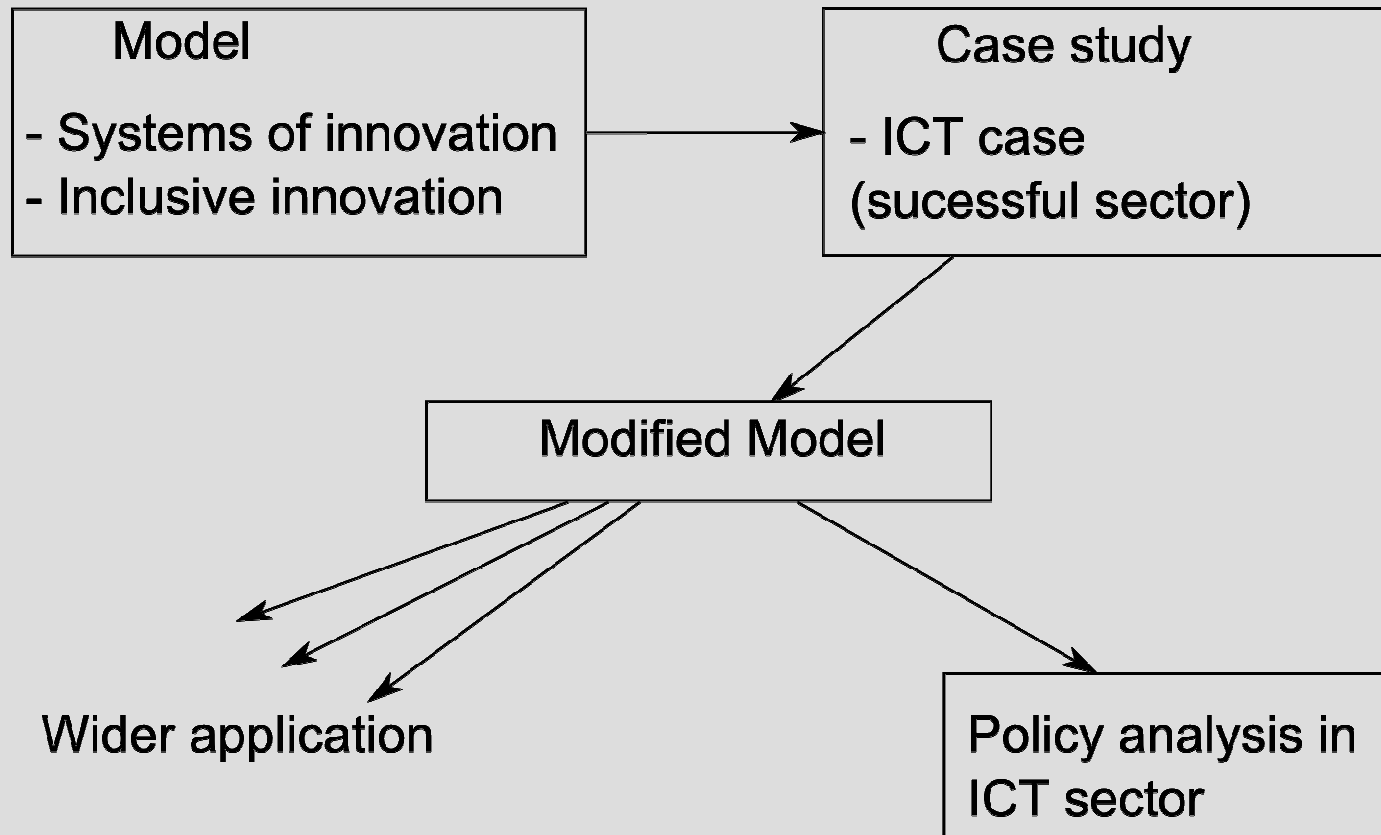
How are innovations pushed to marginal groups?

- ***Process of innovation systems:***

Marginal actors already exist in systems of innovation

Problems with informal (institutions, relations)

Approach



Mobile handset supply, Nairobi, Kenya



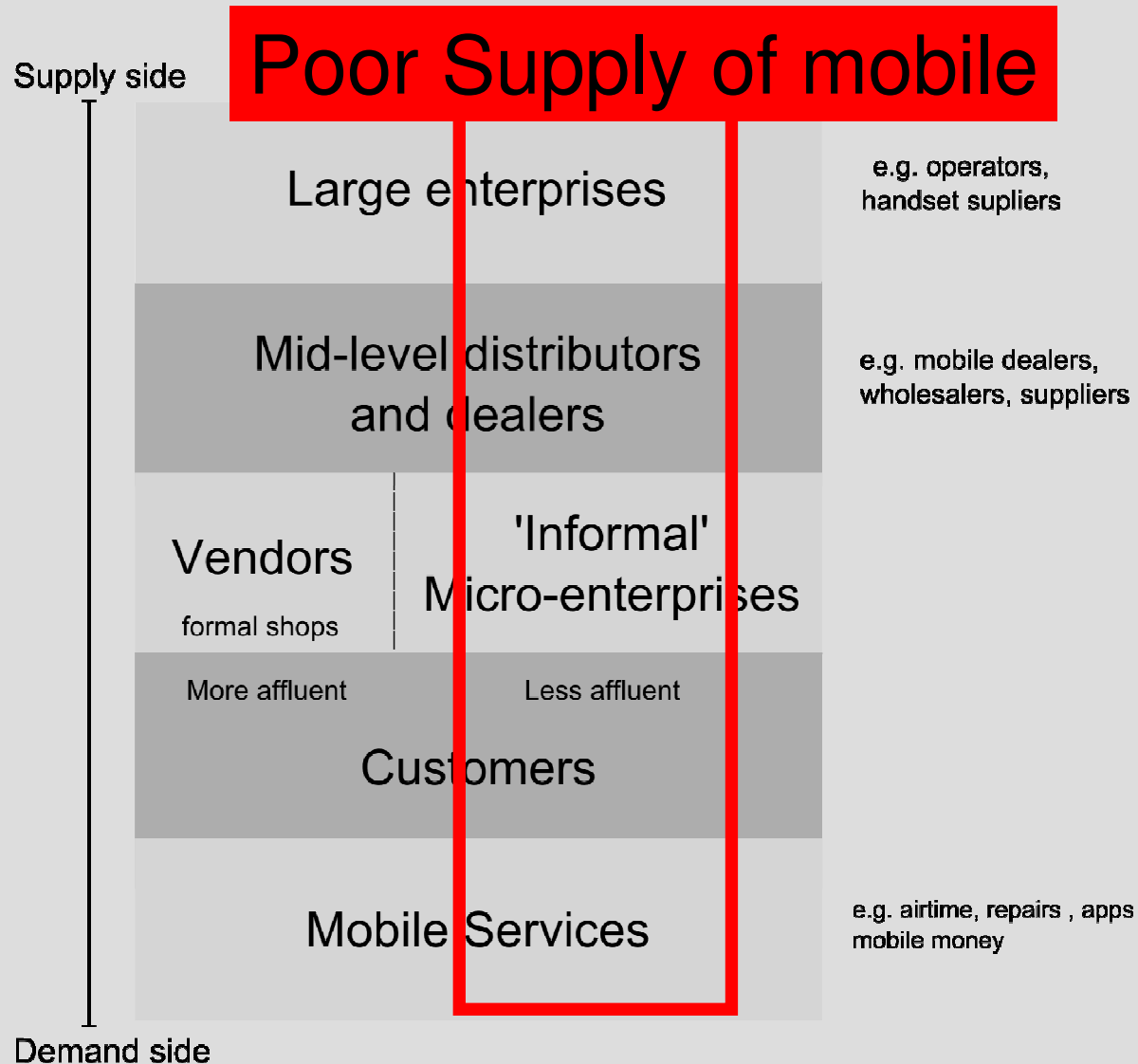
Methodology

- **Qualitative approach**

Interviews throughout the innovation system

Sellers, Policy makers, grey documents etc

Mobile phone innovation system



Results

- **Invention/Reinvention**
- **Innovation**
- **Diffusion**
- **Process Innovation**

Results: Invention

- **Large multinational firms involved in mobile supply**
Low income products with adaptations - aerial, battery life
Very good user research but reluctant to add local adaptations
- **Adaption and diversity**
Rural, youth, migrants, slum dwellers – different requirements
- **Mobile micro-entrepreneurs role in invention**
'Configurations' – Mobile as 'Basket of inventions' + Demand-side services
Links between these two relate in unexpected ways

Results: Innovation

- **More than 'latent needs'** (Alvarez & Barney 2007)
- **Handset firms involved in marketing**
 - Marketing into the poor (Prahalad 2009)
 - Middle class as easier option - 'Low hanging fruit' (Anderson et al 2010)
- **Micro-entrepreneurs strongly involved in this process**

Results: Diffusion

- **Micro-entrepreneurs - Embeddedness**
 - Comfortability with innovation
 - Adapted their forms - kiosks, subdivision, hawking, tents
 - Customers try out, discussion, wider service
- **“Distribution is *[firms]* biggest competitive advantage”**
 - Large multinational who has nurtured such relations

Results: Process Innovation

- **Most innovative effort goes into livelihood issues**

Mismatch

Output -> inclusive innovation

Process -> Instabilities

Reduced learning in innovation system

Discussion

- **What does this mean for inclusive innovation?**

Adaptive Sol for inclusive innovation

- **Output of innovation**

Demand side linking – of outputs (Co-creation literature)

How ICT products/firms enable and disable adaption

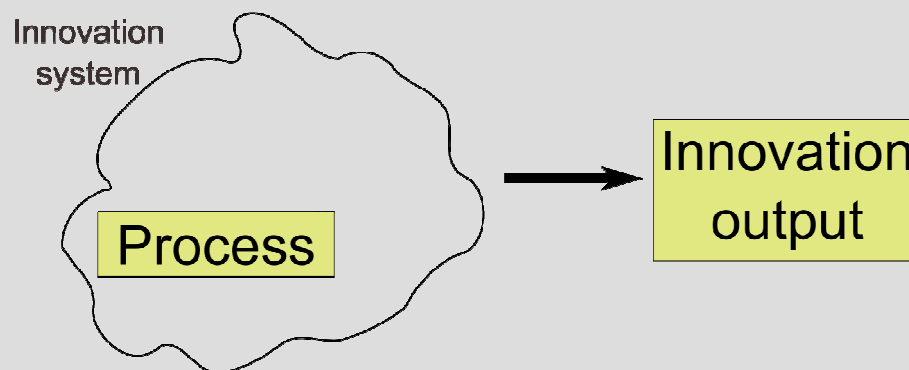
- **Micro-entrepreneurs in process of innovation**

Innovation ‘new to locality’ = entrepreneurship and inclusive innovation

Conditions of actors - Policys which reduce instabilities

- **!!‘Basic economic institutions’ as key!!**

Business licencing, competition and banking regulation (Altenburg 2009)



Further work

- **Relations**

Mid-level actors role in inclusive innovation

'Tight' and 'Loose' innovation systems – effects on inclusive innovation

(Pietrobelli. & Rabellotti 2009)

- **Institutions**

Role of informal institutions

Formal rules and unanticipated effects

Conclusions

- **Models for Inclusive innovation**
 - Systems of innovation (DUI models)
 - Sectoral/sub-sectoral focus
 - Including actors related to poor delivery
 - Innovation as cumulative, and incremental
 - Demand-side inclusion
- **Further work - Inclusive ICT Delivery**
 - Relations, Institutions
 - Policy making

Questions??