

# Systematic Review of ICTs and MSMEs: To policy OR to do better research?

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# Agenda

- Why?
- Question
- Process
- Summary
- For policy?
- To Researchers!

# Why?

- Whether to rollout national eCommerce training programs to MSME?
- Policy = medicine?
- Need proof / evidence
  - Scientific - Systematically reviewed, validated
- ...ICTD researches do not serve as inputs for policy making... (Harris, 2016; Quereshi, 2015)
- Credibility for '(academic) research → policy'?
- Research of researches

# Question / Protocol

Does

access to business relevant information

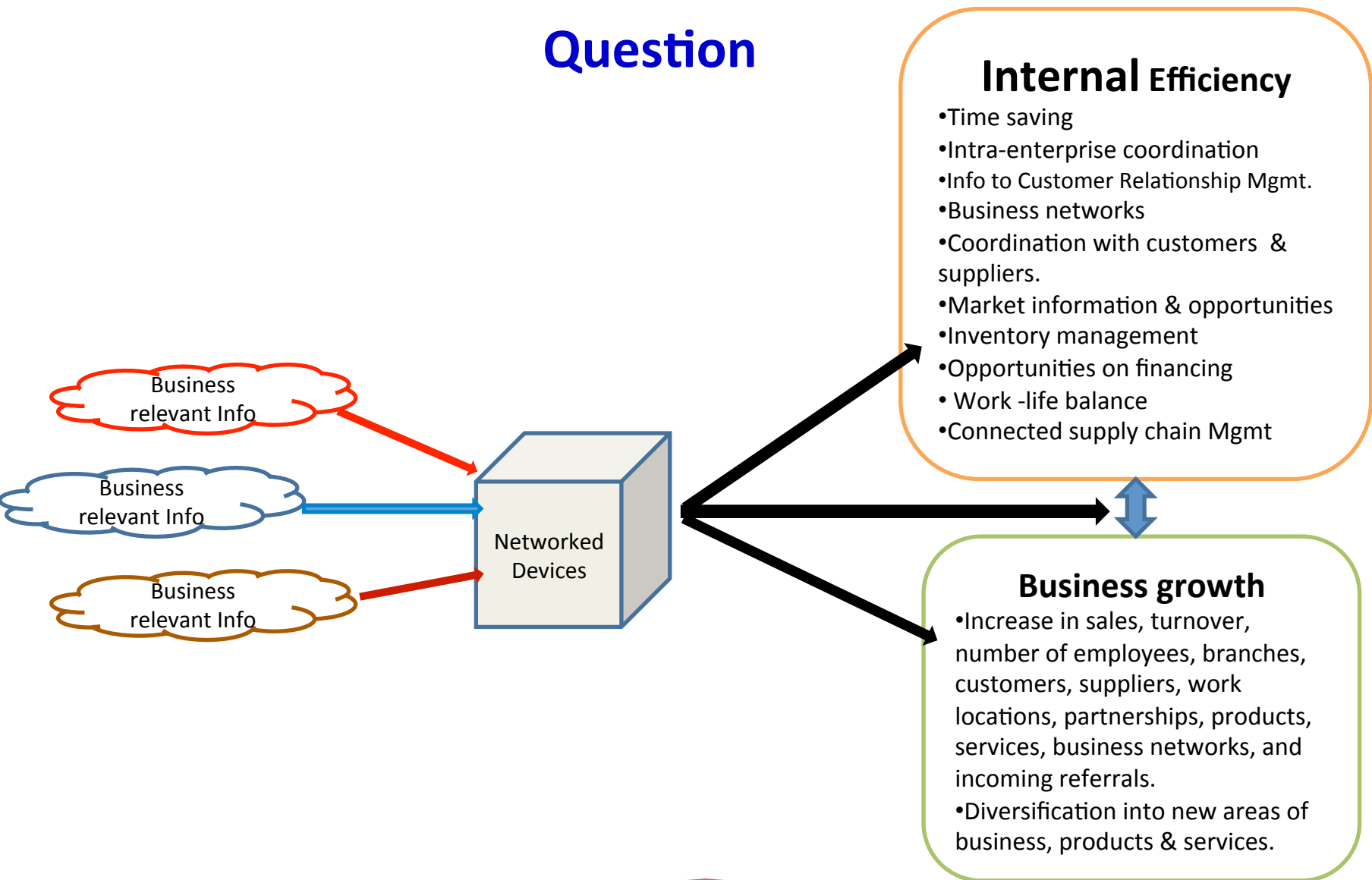
through networked devices

enhance

the internal efficiency and business growth  
of the urban MSMEs

in low and middle income countries?

# Question



Policy environment, Gender, Owner & Enterprise characteristics, and Cultural factors



# Inclusion Criteria

- Urban?
- Low and middle income countries?
- On MSMEs?
- Has primary / numerical data?
- Use at least one networked device?
- Process business relevant information?
- Done 2000 & after?
- English?

# Screening

- 23926 Results
  - Acad Search; Business Source; Econlit; Scopus; WoS
- 1000+
  - IS, IEEE, ACM Conferences
- 500+
  - Grey Literature
- Title → Abstract → Methodology → Full Paper → Data Extraction
- Five screeners
- Double coding in the final stages

# The final papers

- Final 10 papers
- All regression
  - No experimental designs
- Africa & India



# Summary

IT Enabled KM practices



Process Improvement (0.31)  
Operational Support (0.34)  
Strategic Development (0.14)

Chadha, S. K., and Saini, R (2014)

eCommerce Applications



Operational Performance  
(0.98)

Jahanshahi et al (2011)

ICT Usage  
ICT Possession



Labour Productivity (0.55)

Esselaar et al., 2007

Usage of Mobile  
Technologies



Organizational  
Performance (0.41)

Wamuyu and Maharaj (2011)

Length of mobile use

Donner (2006)

Proportion of business calls (0.13)

Total ICT Access

Chew et al (2011)

Business Growth (0.15)

Length of mobile use  
Biz use of mobile

Chew et al (2012)

Business Growth (0.13; 0.07)

Mobile money use

Fredrick (2014)

Profits (0.36)

ICT Usage Exp

Esselaar et al., 2007

Turnover (0.39)

# Meta Analysis

- impact on 'Business Growth'
  - Effect size is positive
  - But, lower than the recommended small effect, 0.2 (Higgins and Green, 2008)
  - Not statistically significant
- Same for 'Internal efficiency'

# To Policy?

- Tiny impact of ICTs on MSMEs
  - Total ICT access; mobile use – length; business use; mobile money use, ICT usage expenditure
- But, not statistically significant
- So...
  - NOT SO USEFUL as a policy input
- As an ICTD researcher, I am EMBARRASED!
  - Risk of bias, weak reporting of sampling, ten studies...

# To Research

- Need for causal studies
  - Beyond 'adoption' studies
- Rigorous sampling techniques to enable possible generalizations
- Other LMI Countries
  - India & Africa
- More beyond mobile centric approach
- Checking recursive relationships
- Disaggregated analysis – MSMEs, Gender, etc

# Thank you!

## Ques?

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