

# ICTs & Development: Networked Devices & Growth of MSMEs

ICTD 2015, Singapore



# Agenda

- The Protocol
  - Question, Need
  - Process
- Final Papers
- Findings
- Conclusions

# The Protocol

Does

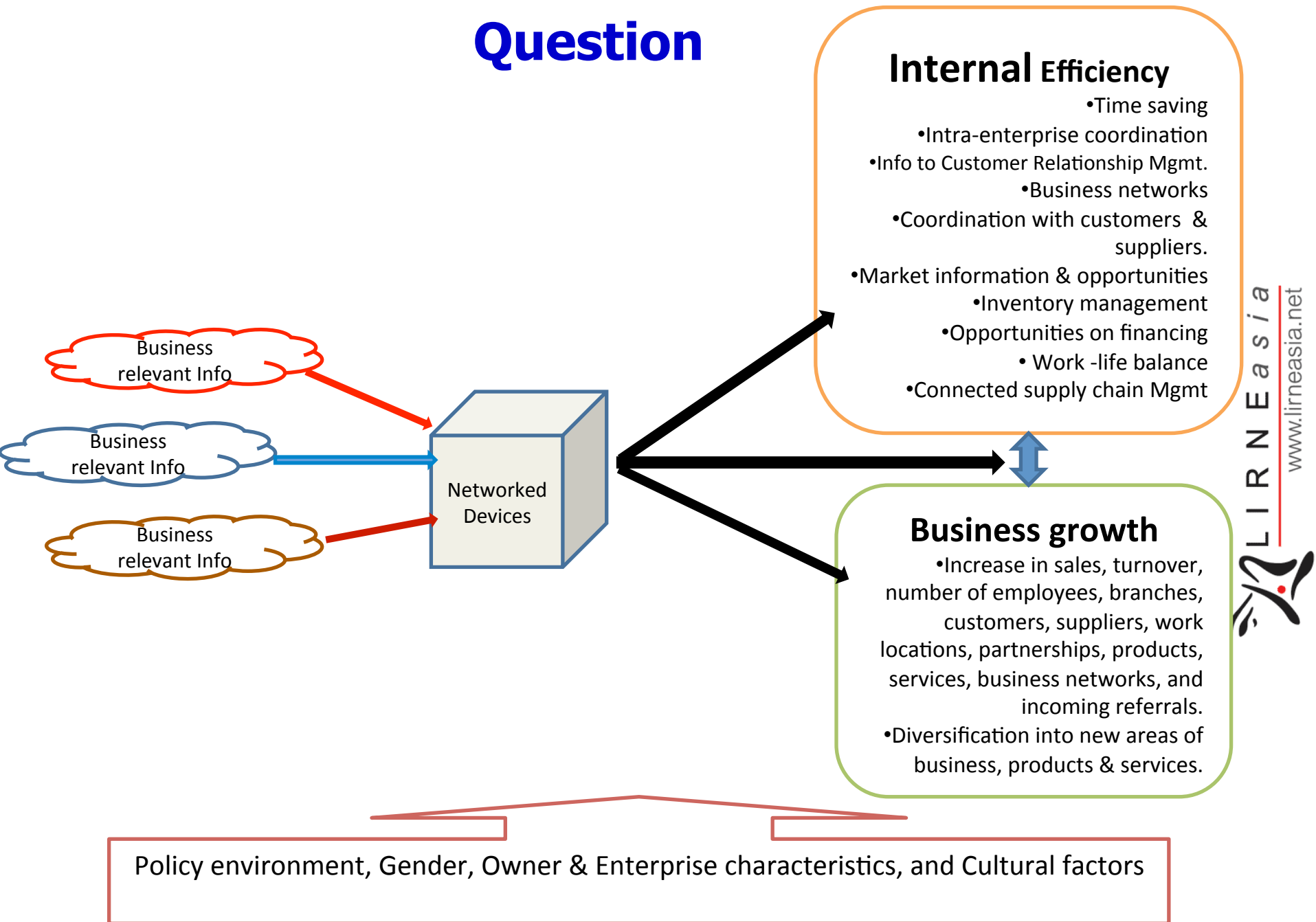
access to business relevant information  
through networked devices

enhance

the internal efficiency and business growth  
of the urban MSMEs

in low and middle income countries?

# Question



# The Need

- MSMEs in national development in developing world
- Ubiquitous mobile devices or low cost devices
- Moving up from 'adoption studies' to 'Impact studies'
- Quantification of impact on MSMEs' growth
  - Causal linkages
- Empirical evidence based policy making

# The Process

- Keyword search of databases
  - Acad Search, business source, Econlit, Scopus, Wos, IEEE, ACM, AIS Electronic Library
  - Example:
    - 10. (SMEs or MSMEs or enterprise\* or business\* or microenterprise\* or microbusiness\* or entrepreneur\* or microentrepreneur\* or self-employ\* or owner\* or businessman or businessmen or businesswoman or businesswomen or "self-help group\*" or cooperative\* or "social enterprise\*" or Start-up\* or incubators or "born global\*").ti,ab,sh.
    - 11. (Laptop\* or computer\* or PC or Internet or landline\* or telephone\* or mobile\* or phone\* or cell or cellphone\* or smartphone\* or CSCs or telecenter\* or telecentre\* or Wifi or WLAN or GDPRS or messaging or digital or ipad\* or iphone\* or apple or android or windows or broadband or wireless or wireline or CDMA or SMS or text\* or MMS or facebook or linkedin or network\* or Intranet or "discussion list\*" or contacts or "online forum" or "discussion thread\*" or "online feedback" or ICT or ICTs or "communication technolog\*" or "information systems").ti,ab,sh.
- Grey Literature

# 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 9 papers
- All regression
  - No experimental designs
- Africa & India

# Findings

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 (7659,  
12284)

Esselaar et al., 2007

Usage of Mobile  
Technologies



Organizational  
Performance (0.419)

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 (0.154)

Length of mobile use  
Biz use of mobile



Chew et al (2012)

Business Growth (0.138; 0.073)

Mobile money use



Fredrick (2014)

Profits (0.362)

ICT Usage Exp



Esselaar et al., 2007

Turnover (3.92)

# Conclusions

- Regression based studies support ‘causal linkage’
- Conclusion on ‘effect’ from experimental designs – still pending
- Need for rigor in reporting –
  - Methodology
  - Stats
  - Sub groups (Ex. gender)
- Need for fact based studies Vs perception studies

# Q & A

Thank you!