

Mobile Phone Innovation, M-Business and SMEs in Developing Countries

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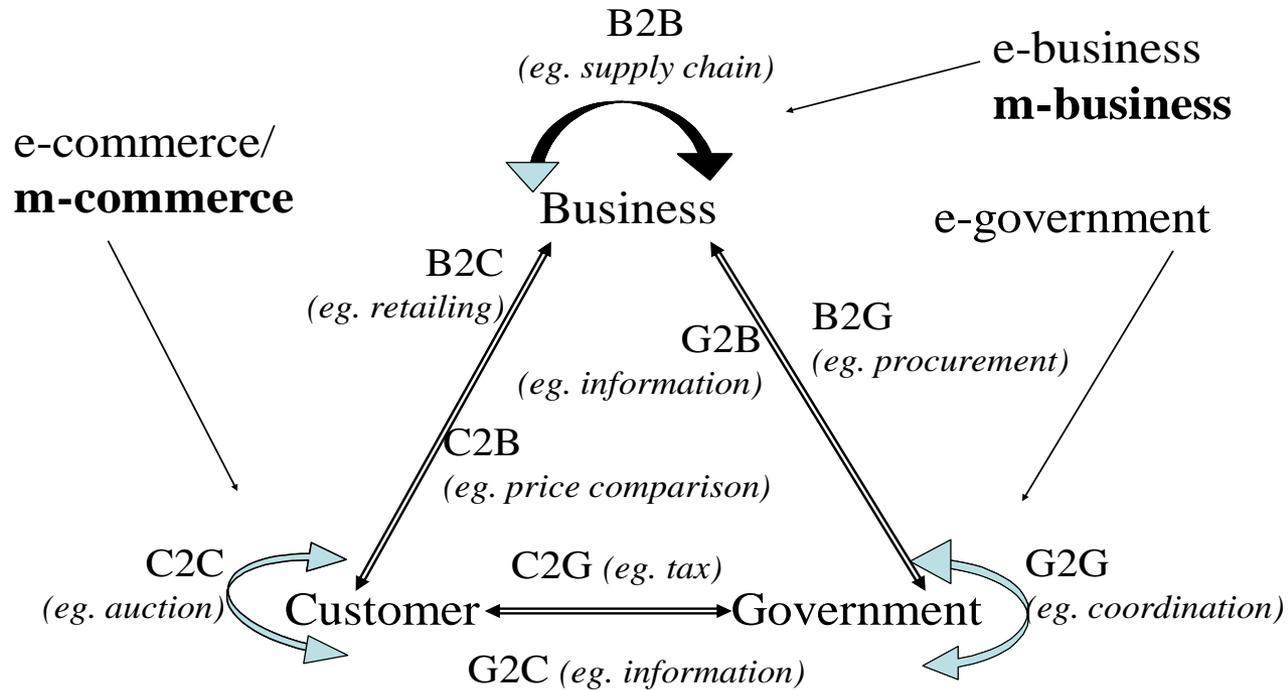
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M-Business is part of a bigger picture



M-business Local Drivers

- **Increasing device performance/price ratio:** processing power, functionality
- **Growing bandwidth:** as mobile technologies move up through the generations (2G, 3G, etc)
- **Handset culture:** a new generation of young "mobile natives" who have grown up used to having mobile devices
- **Service economy growth:** the steady increase in services as a share of GDP in developing countries
- **Vendor push:** the strong advertising and wider marketing drive from mobile operators and manufacturers to "go mobile".
- **Growing population mobility:** rural/urban drift, increased domestic/global migration and trade

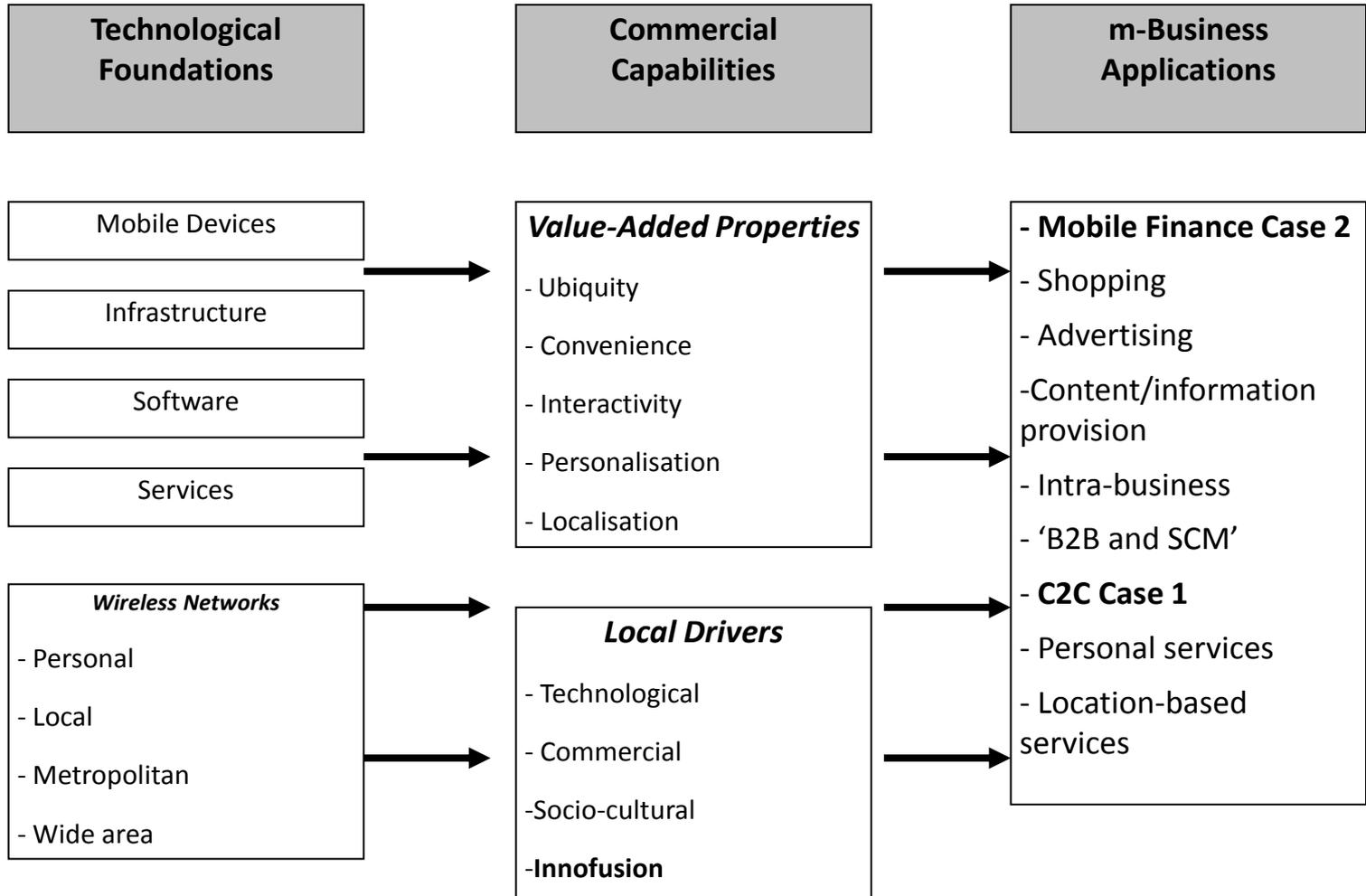


M-Business Value Added Properties/ Advantages

- **Ubiquity.** *Ubiquity* means being available at any location at any time
- **Convenience.** Mobile computing devices are increasing in functionality and usability while remaining the same size or becoming smaller
- **Interactivity.** Delivery of services requires a higher level of customer support and communication
- **Personalization.** Largely owned and operated by a single individual
- **Localization.** Knowing where a user is physically located at any particular moment



M-business Landscape



Innofusion – innovation intermediaries

- Innofusion (Fleck, 1993) is required in markets that are less developed in terms of awareness, capability, mechanisms for cementing trust and completing transactions
- Not a front loaded process of laboratory-based research and application development, but a continuous process that allows innovations to diffuse
- Innovation intermediaries that link core innovators with consumers – adapting and domesticating new innovations
- Innovation and diffusion processes are inextricably linked in developing markets.



Case 1

C2C Auction sites

M-commerce Opportunities

- **Cell Bazaar in Bangladesh** 5 million users/84,000 registered sellers/1000 new posts per day
- **Country-wide penetration** – among ordinary citizens, and the ability to access product/service information via SMS
- **Affordability** – even though both buyers and sellers have to pay to use the service, those charges are set at a very low level combined with the low level of SMS charges
- **Network effect** – of existing mobile phone users via its association with Grameen Phone, the dominant established provider of telephone and banking services that is a trusted institution in Bangladesh.

<http://www.cellbazaar.com/>



Case 1

C2C Auction sites

Limitations on Innofusion

- Unlike eBay, which dominates the trading of second-hand items in the developed countries, **CellBazaar** is only a match-making platform that brings together buyers and sellers
- Does not support the completion of transactions, offers only initial search facility – providing only basic information about a product that is for sale.

This highlights some key *innofusion* limitations

- first, the completion of transactions online through trusted electronic payment systems;
- second, sophisticated feedback systems that can establish an online reputation for both buyers and sellers; and
- third, secure and reliable delivery of items purchased.



Case 2

Mobile Finance

M-commerce Opportunities

- **M-Pesa** reaches 9.0 million registered customers/60% of Safaricom's customer base, 23% of the entire population, and 40% Kenyan adults, 16,900 retail stores half are located outside urban centers. US \$320 million per month in person-to-person (P2P) transfers.
- There are 27 companies using M-PESA for bulk distribution of payments. Safaricom itself used it to distribute dividends on Safaricom stock to 180,000 (out of 700,000) individual shareholders.
- Since the launch of the bill pay function in March 2009, there are 75 companies using M-PESA to collect payments from their customers. The biggest user is the electric utility company, which now has roughly 20% of their one million customers (including SMEs) paying through M-PESA.
- New innovative services – e.g., M-Shwari - customers sign up directly through M-Pesa menu. There are no forms to complete or need to visit a bank branch. Eligibility for loans based on the individual customer's M-Pesa transactions and savings history. Leveraging of FIS for credit scoring/targeting and risk profiling for credit products.



Case 2

Mobile Finance

Enablers for Innofusion

- Achieving scale and traction in individual markets – network effects, effective distribution (agent) channels and empathy and trust within the system
- Agents were given some freedom to innovate themselves – addressing particular consumer demands, inc forms of sub-contracting, managing their cash floats and dealing with local crime/security risks
- Some of these innovations were re-absorbed by Safaricom who attempted to create greater standardisation in their distribution networks
- However, innofusion processes are becoming an ever more important enabler for integrating value added services such as M-Shwari.



Conclusions

Supporting Local 'Inclusive' Innovation

- Little progress in Internet-based e-commerce over the past 10 years – major developments driven by Mobile networks, devices and applications
- Most successful environments (e.g., Kenya and Bangladesh) for development of m-business have strong emerging local collaborative innovation systems
- Indigenous technological capability (e.g., research labs, hubs and enterprise incubators) are important
- But need to be supported by policies for 'inclusive innovation' that focus on encouraging product/service innovation for 'base of the pyramid' markets, with a focus on *innofusion* (refer to paper)



References

- Duncombe, R.A. (2012) Chapter 9 'Finance' in G. Sadowsky (ed) *Accelerating Development Using the Web, Empowering Poor and Marginalised Populations*, World-Wide Web Foundation, , SF, Cal. <http://www.webfoundation.org/>
- Duncombe, R.A. (2012) An evidence-based framework for assessing potential for mobile-finance in sub-Saharan Africa', *Journal of Modern African Studies*, 50(3):369-395
- Fleck, J (1993) Innofusion: feedback in the innovation process, in F.A.Stowell, D.West & J.G.Howell (eds) *Systems Science*, Plenum Press, New York, pp169-174.
- Foster, C. and Heeks, R. (2013) Analysing policy for inclusive innovation: the mobile sector and base of the pyramid markets in Kenya, *Innovation and Development*, 3 (1): 103-119 DOI:10.1080/2157930X.2013.764628
- Mas, I. & Radcliffe, D. (2010) Mobile payments go viral, M-PESA in Kenya, *Capco Institute's Journal of Financial Transformation*, 32
http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/M-PESA_Kenya.pdf
- Turban, E., King, D., Lee, J., Liang, T.-P. & Turban, D.C. (2010) *Electronic Commerce 2010*, Pearson, Upper Saddle River, NJ
- Zainudeen, A., Samarajiva, R. & Sivapragasam, N. (2011) CellBazaar: enabling m-commerce in Bangladesh, *Information Technologies and International Development*, 7(3):61-76.

