

A Critical Exploration of the Brussels App Economy



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25 June 2014

2008 was a turning point

- More mobile than fixed broadband subscriptions
- More “things” than people connected to the internet
- More than 50% of the global population lives in urban areas

The “Smart” Angle

- tele- (1980s)
 - Telecommunications, PCs
 - The death of distance between 2 physical points
- e- (1990s)
 - Web platforms
 - Moving from physical to virtual collective space
- i- (2000s)
 - Mobile technologies
 - Personalizing virtual space
- smart- (2010s)
 - IoT, wearables, cloud computing
 - Internet becomes contextual
 - Merging of virtual and physical space



Abstraction of Smart City thinking and mobile app hype

- What is really going on with apps in cities?
- What is really going on in Brussels?

Mobile and the City

- Infrastructure, connectivity
- (Linked) (Big) (Open) Data
- Platforms
- Changing role of the user

Mobile City Services BM Framework

	Value network	Technical architecture	Financial architecture	Value proposition
Business design parameters	Control parameters		Value parameters	
	Control over assets	Modularity	Investment structure	User involvement
	Ownership vs Consortium Exclusive vs other Influence	Modular v integrated	Concentrated v distributed	Enabled, Encouraged, Dissuaded or Blocked
	Vertical integration	Distribution of intelligence	Revenue model	Intended Value
	Integrated v disintegrated	Centralised v distributed	Direct v indirect	Price/Quality Lock-in effects
	Control over customers	Interoperability	Revenue sharing	Positioning
	Direct v mediated Profile & identity management	Enabled, Encouraged, Dissuaded or Blocked	Yes or no	Complements v substitutes Branding
Public design parameters	Public governance parameters		Public value parameters	
	Good governance	Technology governance	ROPI	Public value creation
	Harmonising existing policy goals & regulation Accountability & trust	Inclusive v exclusive Open v closed data	Expectations on financial returns Multiplier effects	Public value justification Market failure motivation
	Stakeholder selection	Public data ownership	Public partnership model	Public value evaluation
Organisational	Choices in (public) stakeholder involvement	Definition of conditions under which and with whom data is shared	PPP, PFI, PC...	Yes or no Public value testing

Why Brussels

- Capital of Europe
- Wide range of urban challenges
- Governance structure
- Manageable from research perspective
- Nascent mobile app sector
- Limited Smart City initiative (so far)

Getting a grip on the Brussels app scene

- Data scraping from App Store & Google Play
- Brussel, Brussels, Bruxelles
- Cleaning up
- 185 iTunes App Store
- 136 Google Play
- 22 semi-structured expert interviews

State of the Art I

- Platform distribution
 - 58% iOS – 42% Android
- Pricing
 - 62% free
 - 2 most expensive at €5,49
 - Real revenue is in freemium (in-app)
- Public v Commercial
 - 7 official Brussels apps
 - Not very popular (apart from STIB-MIVB)
 - Not very highly rated
 - No integrated approach

State of the Art II

- Adoption and appreciation
 - Limited insights
 - Most downloaded: international public transport guide
 - Official apps score poorly
 - Highest rated are commercial, cultural apps
- Categories
 - Travel and Transportation around 50%
 - Lifestyle second at around 10% (shopping, cultural guides, one-time events...)
 - Around 15% of apps created for one-time events

Brussels App Economy

- Extremely hard to capture in data
- Estimates
 - 2012: 400 active developers in BE, 16% Bxl based
 - 2014: 1.000 active developers
- Increasing professionalization
- Main business model is creating commissioned apps
- Appears limited

Reality Check for Brussels

- Hype needs to be put in perspective
- Connectivity:
 - Mobile broadband not there yet
 - 33% in BE, only beating Hungary and Romania
 - 54% avg. in EU27
- Open Data:
 - Experimental, limited
 - Foremost: fragmented
- Changing role of the user:
 - First lessons from Fix My Street Brussels

Other Lessons

- Lots of spam in App Stores
- Exploring role as a platform
- Official apps are hardly adventurous
- Lack of internal change agents
- Lack of quadruple helix approach
- But learning

Conclusion

- Framing Smart City discussion and hyperbole
- Difficult data acquisition
- Need for combined methods
- Brussels is lagging behind
- But could leapfrog if some forward-looking decisions are made under a common goal and vision



Thank you

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