

The evolution paths of neutral host businesses: antecedents, strategies, and business models

Research motivation

- Neutral host strategies are still poorly understood
- What are the logic differences between communications and data businesses?
- Which business strategies city operator have chosen?
- How the emergence path of a city operator has effect on business strategies?

Research design

- Qualitative case study
- Qualitative data analysis
- Comparison analysis
- Data sources: Annual reports, press releases, other public sources, scientific literature, Orbis database

Results and contribution

- Four distinct emergence paths align with business strategies selected by operators
 - Infrastructure leasers, Domain specialists, Public authorities, Incumbent MNO alliances
- Ownership structures have significant impact on company strategies, but categories are not clear-cut
- Data and communication businesses are significantly distinct

Conclusions and implications

- Urban communications market is highly fragmented due to different strategies selected by stakeholders
- New emerging city operators need to consider their fit for market legitimacy

	Data offerings	Communications offerings
Typical chosen business strategy	<ul style="list-style-type: none"> • Innovation and agility • Differentiation • Learning through experiments • Start-up co-operation • Security • Privacy 	<ul style="list-style-type: none"> • Service stability and quality • Cost efficiency • Telco regulatory compliance • Tight MNO co-operation • Economics of scale • High degree of standardization • High degree of automation
Business metrics	<ul style="list-style-type: none"> • Created ecosystem value through the data • Number of successful and abandoned innovations 	<ul style="list-style-type: none"> • Service quality • Ability to provide a required capacity
Activities and processes	<ul style="list-style-type: none"> • Sales • entrepreneurial, opportunistic, integrative • Packaged data mostly online based • Solution sales and consultative sales through partners • Customer service • Skilled data specialists • Application specific knowledge through partners • Production • Data analysts and specialists that keep wheels spinning 	<ul style="list-style-type: none"> • Sales • Catalogue based • Standardized services • Customer service • 24x7 automated incident management through customer portals • Automated service provisioning • Production • Fixed network, radio network and infrastructure specialists • Automation application development
Core assets	<ul style="list-style-type: none"> Tangible <ul style="list-style-type: none"> • Sensors • Cameras • Lightning units • Power production Intangible <ul style="list-style-type: none"> • AI & ML algorithms • Application source code • Data sources • Knowledge network 	<ul style="list-style-type: none"> Tangible <ul style="list-style-type: none"> • Poles and distribution • Active and passive infra • Fiber infra • Datacenter infra Intangible <ul style="list-style-type: none"> • Radio frequencies • IP addresses • Service management applications • Automation systems

