

Overall, Industry forces are working against Telco Operators (1)

TMT Industry: Changes & Implications for Telco Operators¹

	1	2	3	4	5	6	7	
	Buyer Power	Supplier Power	New Entrants	Substitute Products	Regulation	Complementors ²	Competitor Rivalry	Summary
Changes	<ul style="list-style-type: none"> • Little or no change in the concentration of customers for Telco operators 	<ul style="list-style-type: none"> • Less reliance on big NEP suppliers with proprietary solutions – increasingly using larger number of smaller IT vendors providing open-source solutions 	<ul style="list-style-type: none"> • Open IP-based networks reduce barriers to entry • Internet companies & retailers expanding into comms– E.g. VOIP, IM from Google, Yahoo, Skype etc. and MVNO's from Tesco, Virgin etc. 	<ul style="list-style-type: none"> • Time Division Multiplexing (TDM) services threatened by IP-based ones • Per minute and per transaction business model being replaced by flat-rate 	<p>Varies by market but:</p> <ul style="list-style-type: none"> • Fixed operators under pressure to unbundle local loop • Mobile operators facing strong price pressure (especially for roaming) 	<ul style="list-style-type: none"> • Substantial Internet developer community looking to work with Telco's to provide innovative new services • Internet developer community also working with competitors 	<ul style="list-style-type: none"> • Existing operators & new entrants fighting for share in saturated market (low/no growth) • Lack of product differentiation = price-cutting • Government licenses mean high exit barriers 	<p>As networks 'open up' (new entrants, substitute products) AND growth in core services reduces (increased competition among existing players) the profit pool for existing services and business models is reducing</p>
Implication for operators	Neutral	↑	↓	↓	↓	Neutral	↓	↓

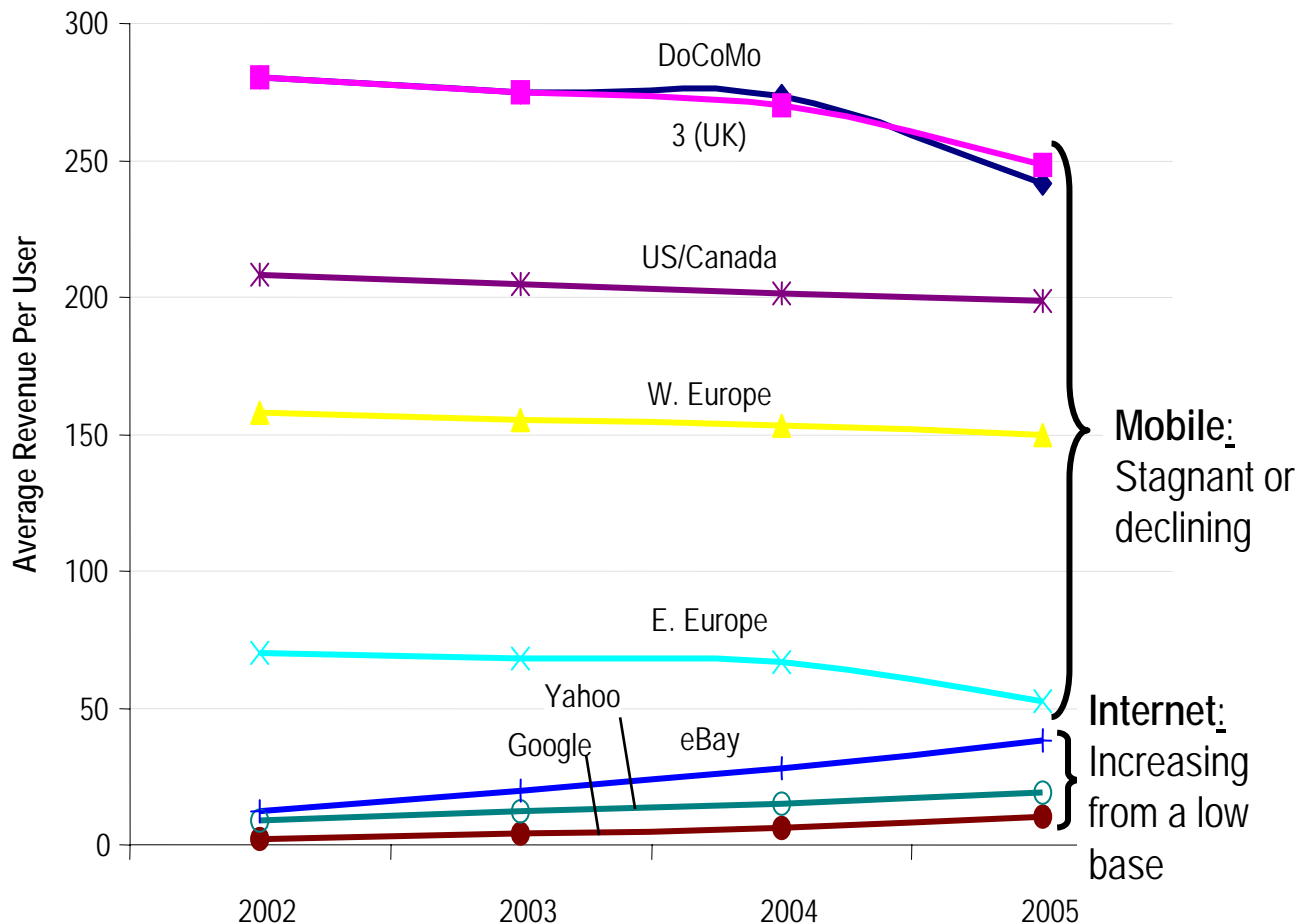


1. Based on Porter's 5-forces model with additions

2. Companies that sell a product or service that complements the product of another company

Historically, Telcos competed with each other but now hungry new players are seeing opportunities to move into real-time communications

Trends in Revenue per user for Mobile and Internet users



Voice and messaging are interesting to internet companies (and other competitors) because:

1. They are highly attractive – existing ARPU levels for Telco’s are much higher than internet companies. Even if internet companies only win a tiny fraction of this, then real-time communications can substantially increase their existing ARPU
2. They are often a natural extension to existing services – e.g. Ebay (buyers and sellers need to communicate), Sony (games players want to talk as they play)
3. They are now relatively simple to deliver using VOIP as voice is just “another application”

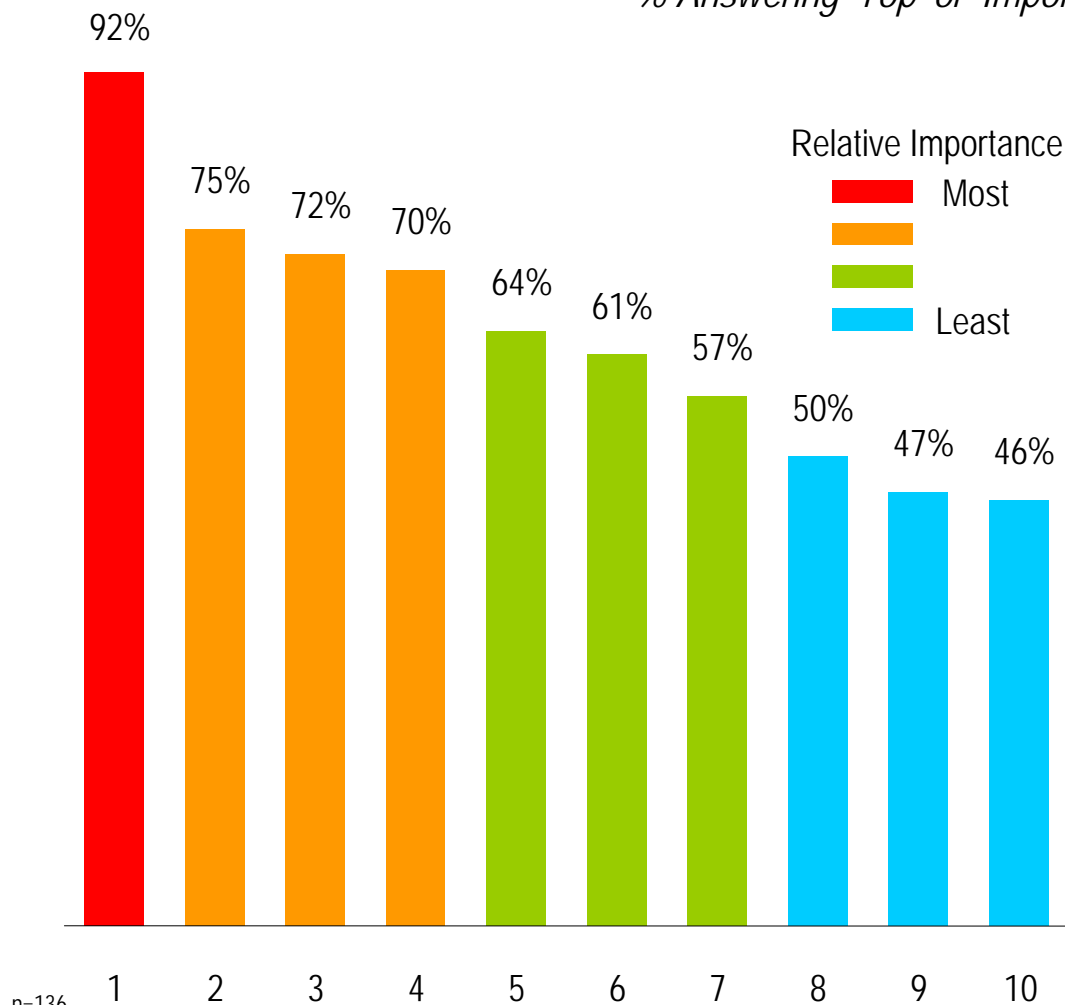
See Section 8 for a Case Study on Yahoo!



92% of respondents believe a strategic re-think of the role of the operator is the 'Top' or an 'Important' Priority

Importance in helping operators prepare to succeed in a world of IP-based converged services.

% Answering 'Top' or 'Important' Priority



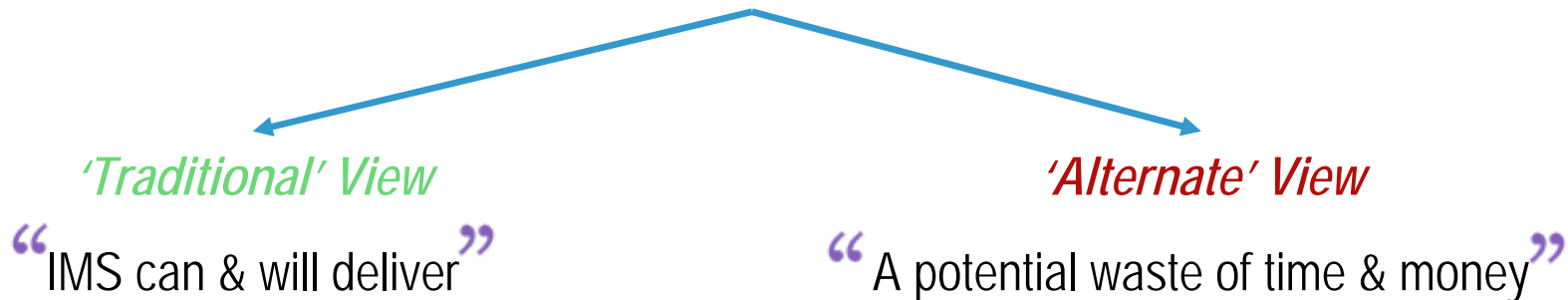
1. Strategic re-think of the role of the operator in a converged world
2. Creating a new common standard for future service creation
3. Re-structure the service prioritization process
4. Set up incubation teams - small x-functional groups to develop and take to market new IP-based services
5. Re-think partnership strategy in the value chain
6. 3rd-party hosting of service enablers (e.g. IMS components)
7. Maximum re-use of existing infrastructure (from parallel to converged network over time)
8. Rapid prototyping of new service types (to agreed QoS)
9. Learn in a more structured way about how other industries create products/services?
10. Partner with Vendors that deliver end-to-end commercial solutions for operators



In the following pages we offer a 'traditional' and an 'alternative' view of IMS' ability to deliver on 7 core evaluation criteria for Network Operators

IMS Evaluation Criteria

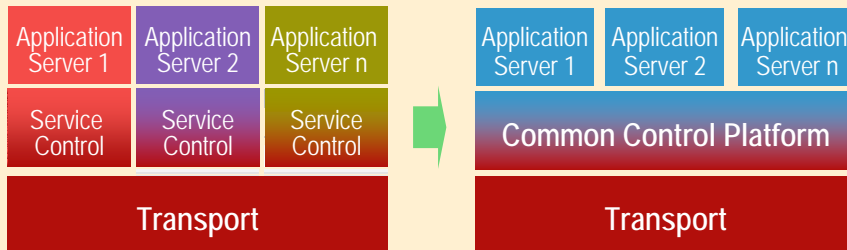
1. Breaking down Network & Operational silos
2. Delivering multimedia-rich services that make customers stickier and more valuable
3. Promoting Convergence: Fixed-Mobile, Voice and Data etc.
4. Lowering Opex
5. Enabling faster Service deployment
6. Future-proofing: Protecting future investments
7. Consolidating operator control and negating 'dumb-pipe' threat



Breaking down Network & Operational silos

'Traditional' View

- Moves from vertical 'silo' deployment of services to horizontal deployment by leveraging Common Control Platform:



- Same application can run across multiple bearer networks breaking these operational silos
- Facilitates the deployment of applications by Marketing & Product development AND third-parties as they can create apps with standard control API's

'Alternate' View

- Because IMS ties functionality and value to the network platform via SIP proxies, IMS in fact preserves the network silo
- IMS still fails to separate connectivity from services:
 - It is this separation that in the main driver of industry change.
- At best IMS moves from a vertical silo to an oblique one:
 - Destruction of the network silo will occur when connectivity is separated from services and a business platform based on web services emerges

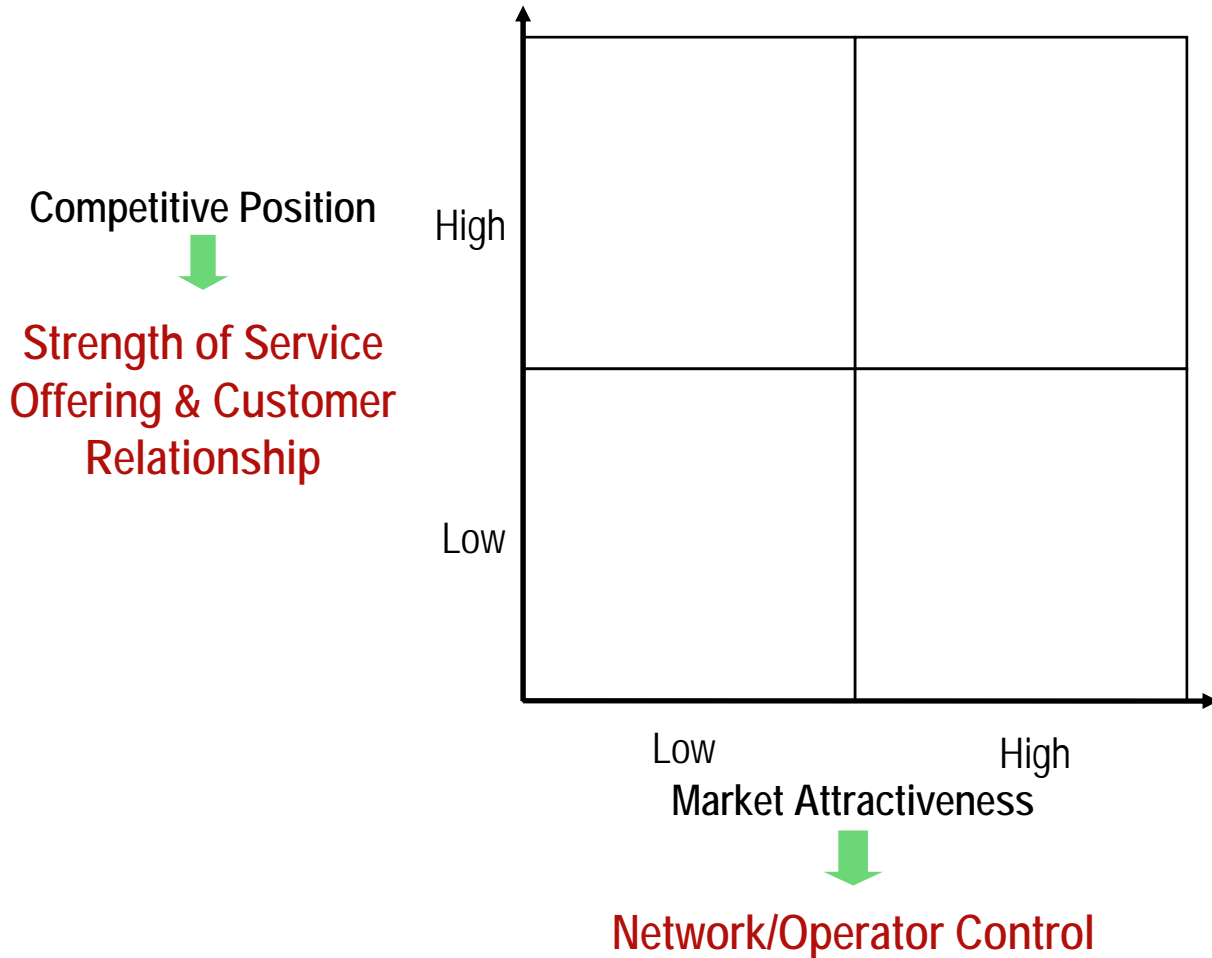
Jury's Out: Truly 'Open' or just an 'Open Prison'?

Traditional

Alternate



Measuring changing and refining corporate & product strategy: A quantifiable situation and strategy analysis tool



- Market Attractiveness in Telco is directly linked to Network/Operator Control:
 - High control for Operator = Attractive market (e.g. Mobile)
- IP networks reduce Network/Operator control and give increasing power to the customer and others at the edge of the network:
 - Owing to greater openness and interoperability between networks, services and devices
- Understanding the speed with which Operator control is weakening (and to what extent they can control it) is critical for operators when defining corporate and product strategies
- As networks 'open up', winners will be those operators (and other service providers) that have a strong service offering and customer relationship:
 - They will capture most value in the chain and be able to charge premium prices for innovative products & services