

AFFORDABLE 5G

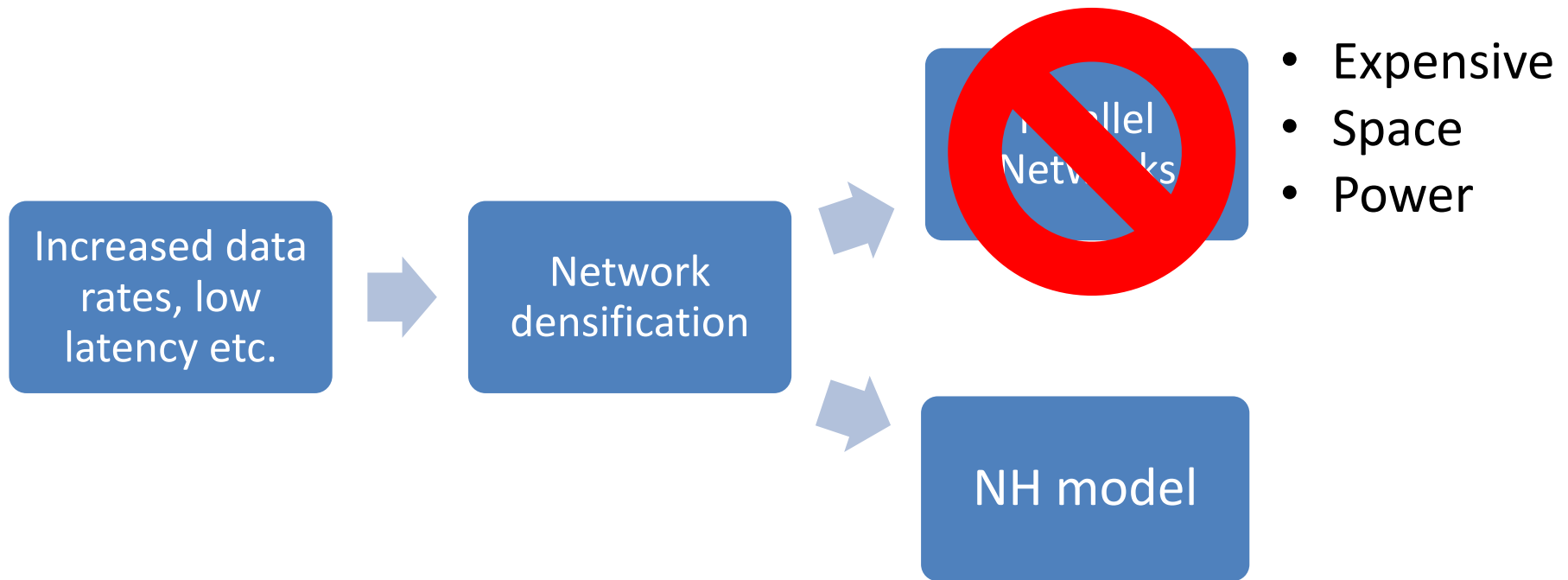
The neutral host model and the business opportunities of private networks

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The Need for the NH Model



The Need for the NH Model

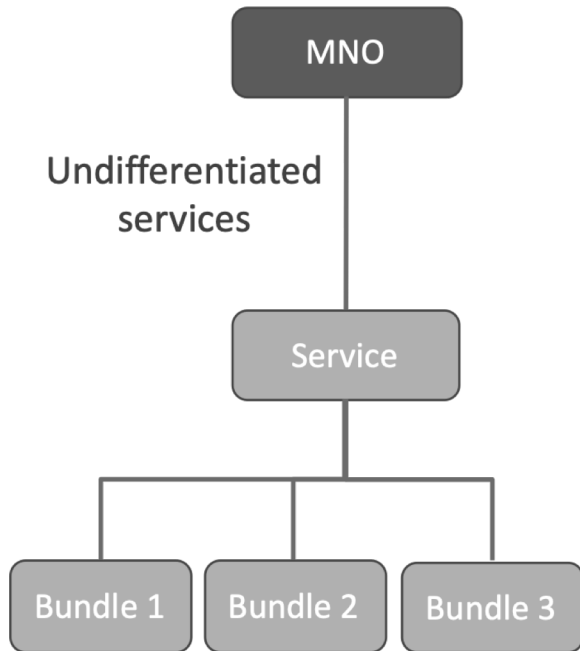


Definition of the NH

A Neutral Host is a **third-party wholesale provider** offering its network assets on an **open-access basis** to mobile operators and other providers.

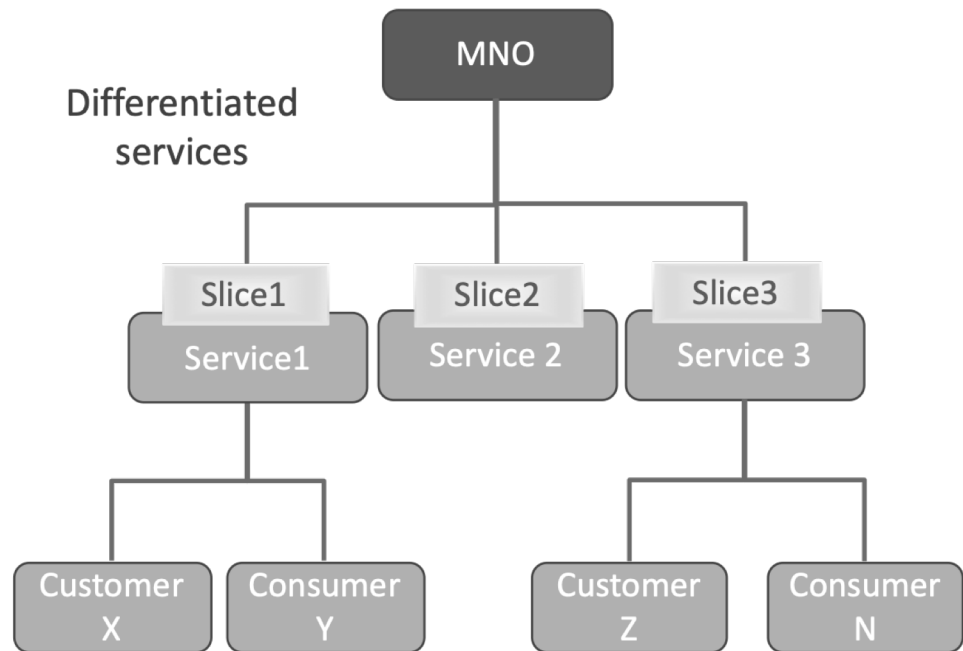
Service differentiation

With existing networks



With 5G

Differentiated services



The NH in the Value Chain

Neutral
Host



HW Manu/rers -
Vendors

- Net equipment
- CPEs, Sensors
- Cars, AR

SW Developers

- Virtual functions, Applications, platforms...

Facility
Managers

- Pole / Lamppost, cabinets, towers, buildings...

Network
Operators

- Mobile and fixed operators, Spectrum Owners, Data Centers

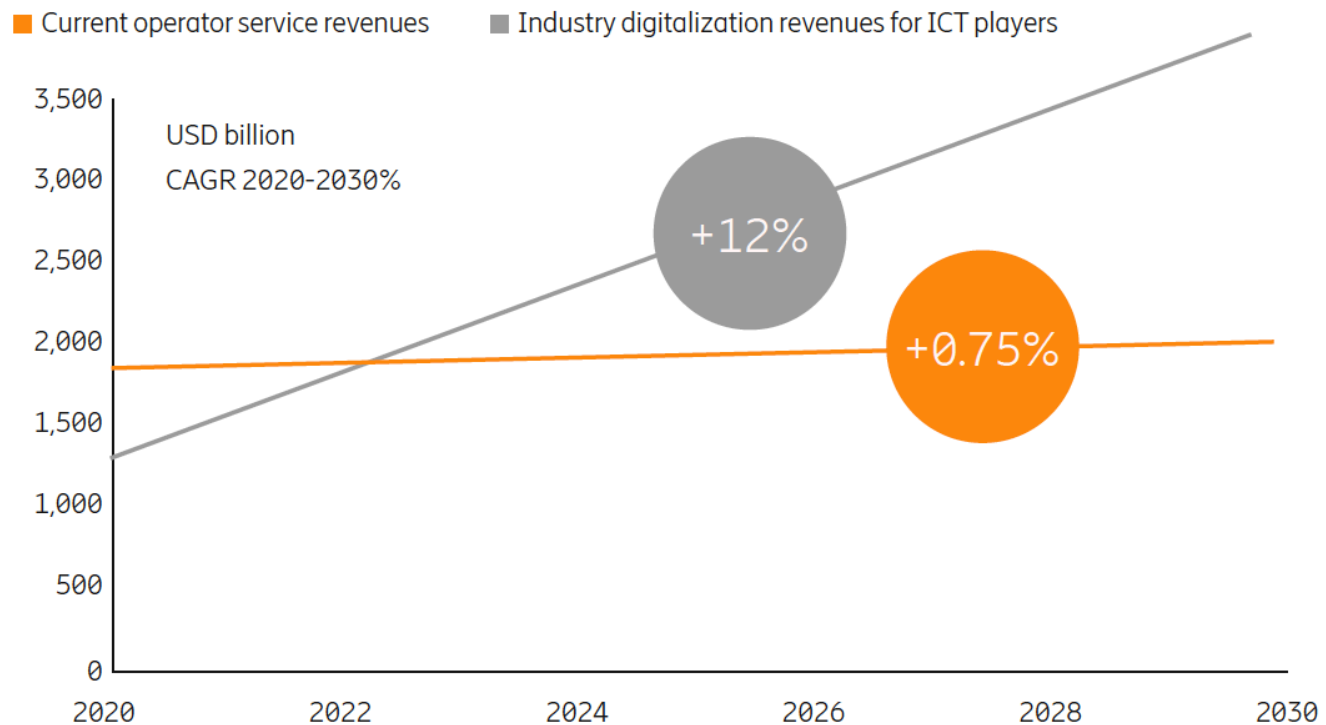
Content / Service
Providers

- Event organizers, journalists, media...

End-users

- Customers
- Business users
- Verticals

The need for Private Networks

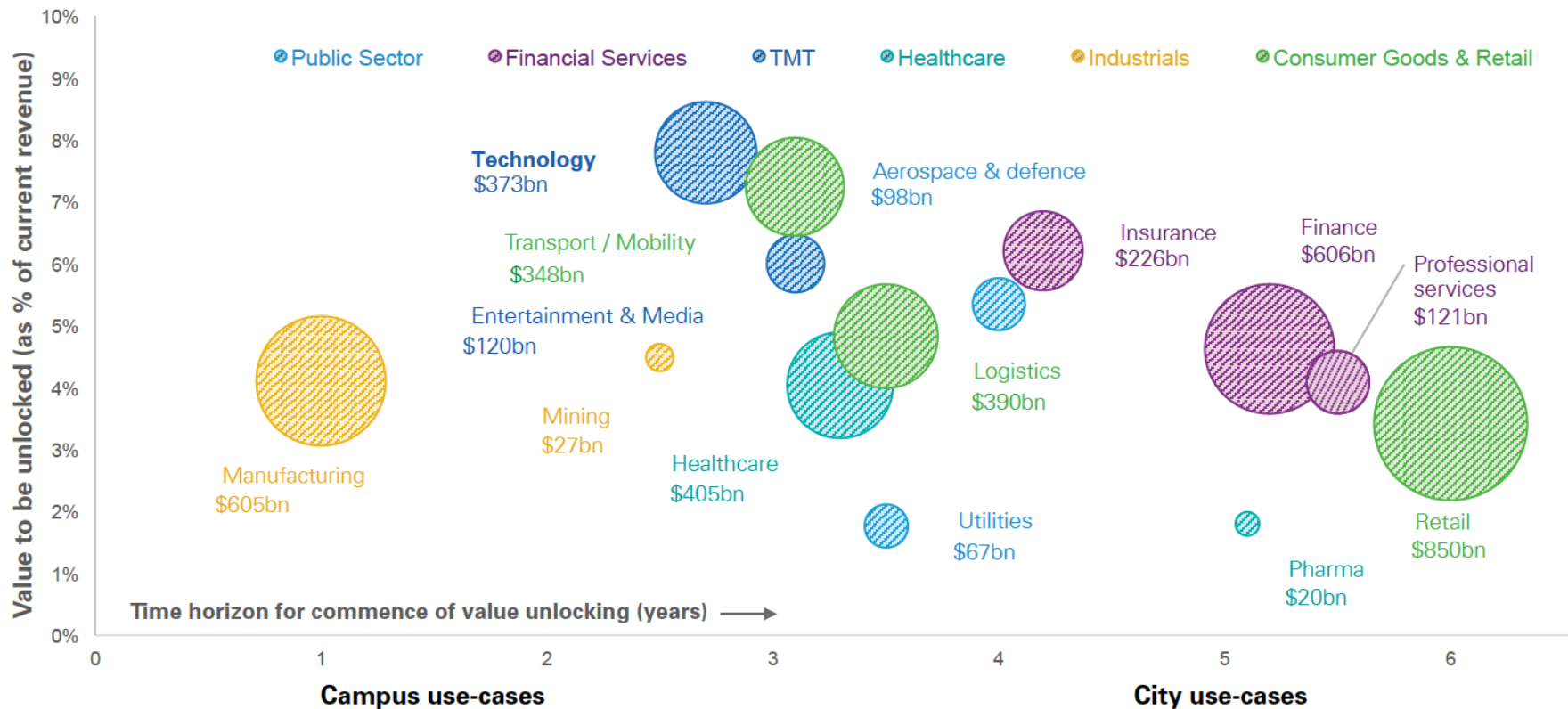


Source: Ericsson and Arthur D. Little

The benefits of Private Networks

- The minimization of human error and the improvement of decision making through machine assisted techniques
- New business models that can exploit the vast amount of data availability, through countless connected devices such as sensors, cars, IoT devices etc.
- The ability to transfer and visualise data in real time will provide operations personnel or customers with great insights and the ability to read and react effectively
- The seamless interconnection of numerous devices will allow a new era of agile automation without hurting customization, flexibility or quality
- Access to data and computational power will create a combinatory force that improves efficiency and process quality, reducing friction and wastage
- Connection trustworthiness through the provision of critical services/products that ensure data security and network uptime

Value of Private Networks



Source: KPMG

Neutral Host regulatory issues

- Ensure non-discrimination
 - no operator or other party should be refused access to the neutral host's infrastructure, subject to regulatory approval
 - provide the same level of service to those who have subscribed to the same service bundle
- No retail
 - The neutral host should be prohibited from offering retail services that would put them in direct competition with existing MNOs
 - Direct competition would turn operators away from trying to do business with the neutral host
- Price regulation
 - The wholesale prices offered by the NH should be regulated to avoid extraordinary prices, squeezing their profit margins and creating distortions in the market
 - several pricing schemes could also be investigating, such as the 'pay as you grow', 'pay as you use' or one with a flat annual fee.

Spectrum Issues

- Timely availability
- Price of spectrum: investigate solutions beneficial for both the regulator and interested spectrum buyers
 - ‘spectrum fee holiday’, that is to provide free access to spectrum for a predefined period provided that spectrum owners allocates pre-defined capital resources in 5G
- Who owns the spectrum
 - Spectrum sharing between the network operators and small cell operators, should be in place
- Spectrum licensing for local/private 5G networks

Thank you!



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