



Future Mobile Communication – The link between Business Goals and research

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TeliaSonera

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TeliaSonera group strategy

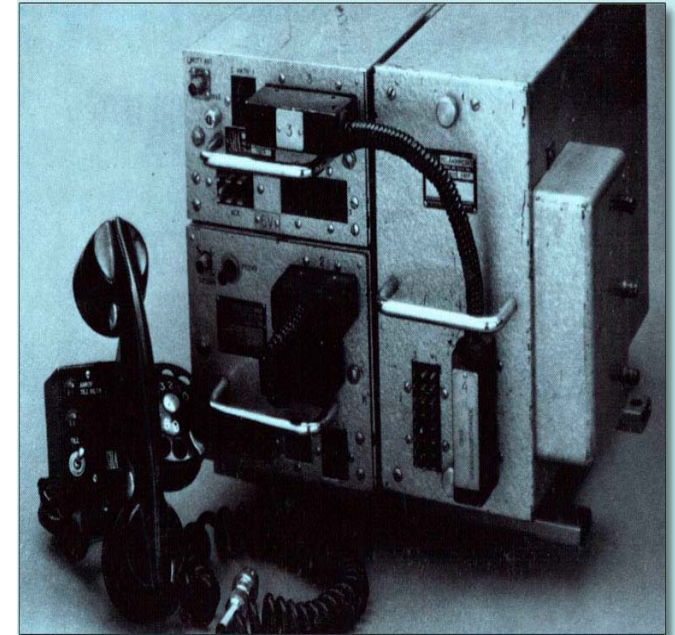
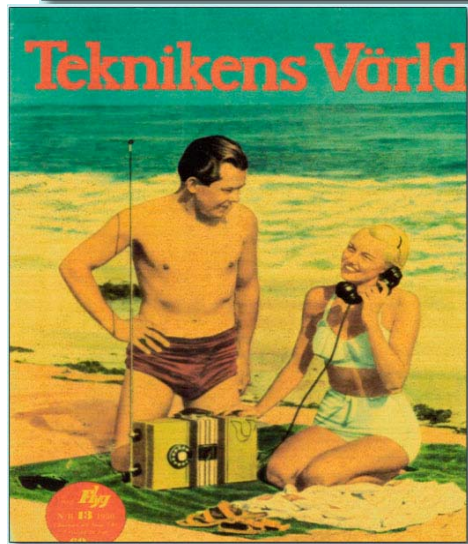
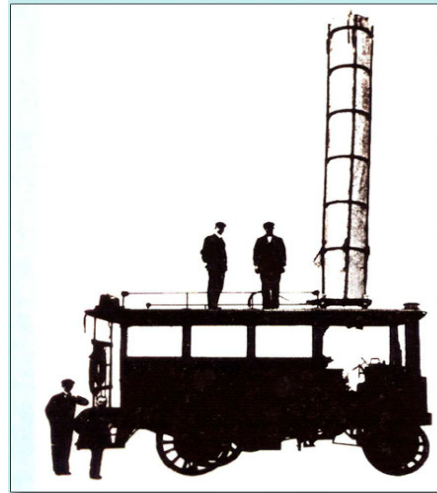
“Focus will be on best serving customers in core business and creating value for shareholders through stronger profits and cash flow”

A passion for customers and profits

The first 50 years of Mobile Communication



About 1900
Marconi
Ford



1956

A new way to work – a new way to live



On holiday



On the train



At home office

At office



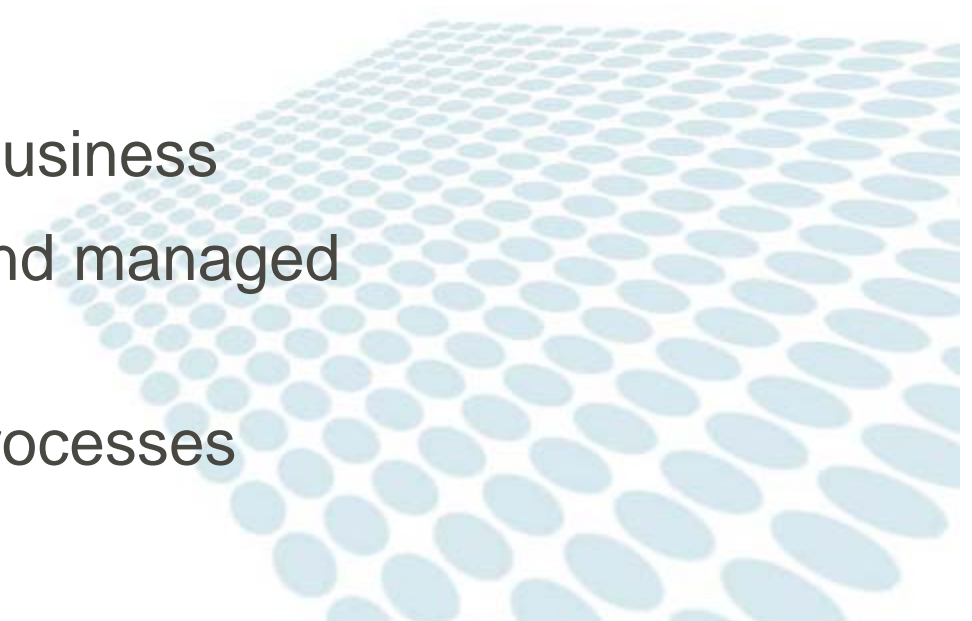
On the road



At the airport

Basic customer needs and drivers

- Mobility
- Cost reduction / cost efficiency
- The new possibilities and functionalities (with IP technology)
- Simplicity
- Improvement of customer business
- End-to-end management and managed services
- Integration with business processes



Important Trends in IT and Telecom

- Always on-line
- The digital assistant
- Everything becomes software
- Future services are electronic
- Continuous learning
- The technical and biological worlds meet
- Security and integrity

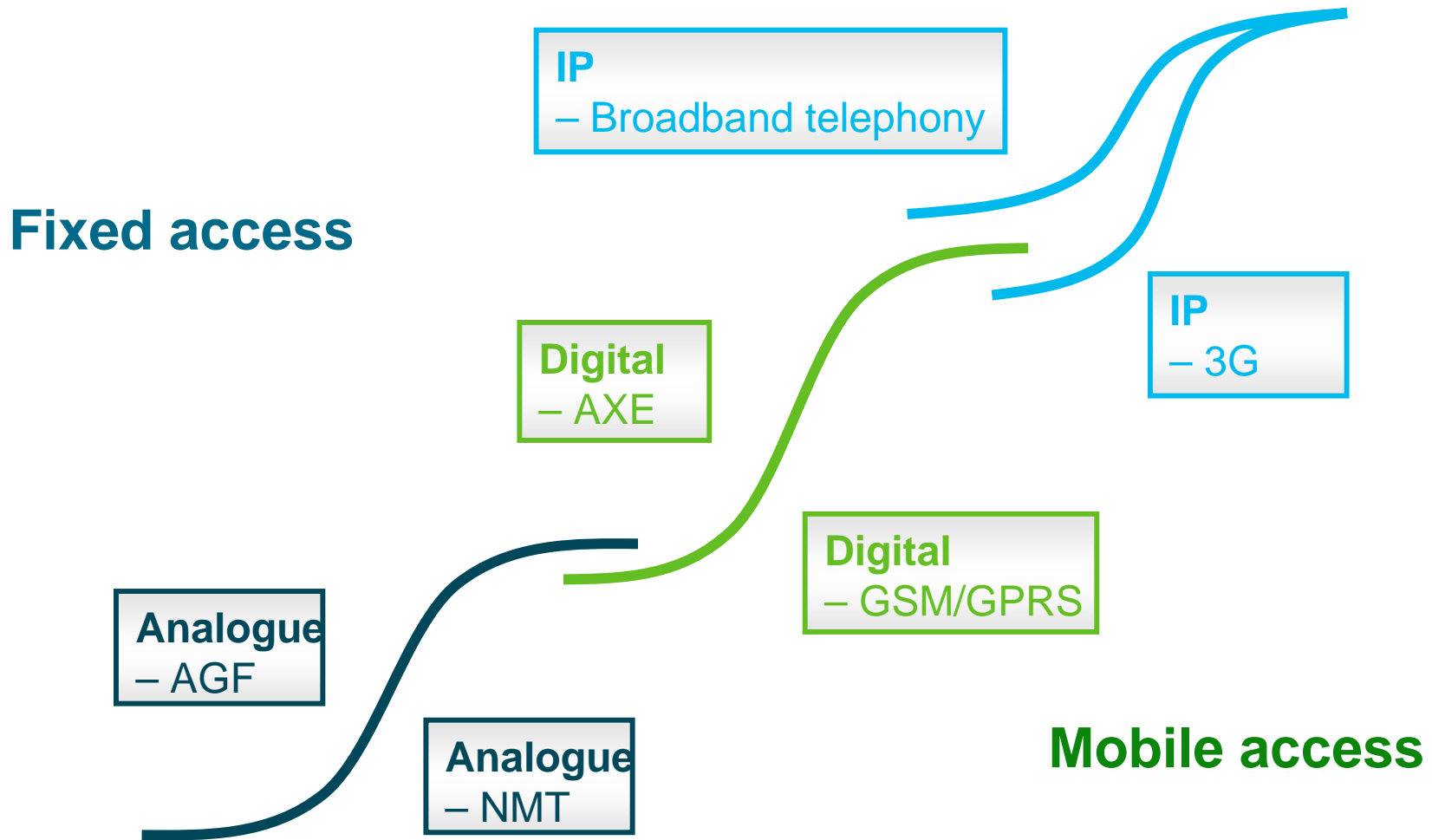


Areas of Mobile Services

- Communication
- Messaging
- Entertainment
- Information retrieval
- Transactions
- M2M communication
- Internet browsing
- Positioning



Evolution of voice products



Development

From speech only to speech plus much more

The handset has become a multimedia device

Colour screen

Gbyte memory

Megapixel camera

Digital video camera

Juke box

High capacity computer

Calender, alarm clock

For what usage?

Simple everyday applications
For
Private life and business use

Production for mobile consumption of services

SMS & MMS



Animation & Speaker



Streaming Video



Required amount of information to be sent (still picture)

Still images: 15 kB – 20 MB

Motion pictures: 10 kb/s (synthesized video)

20 kb/s (animation)

20 kb/s (video conference with model based coding)

(64 kb/s) 128 kb/s – 384 kb/s (video conference)

100 – 300 kb/s (processed video)

700 kb/s – 5 Mbit/s (TV)

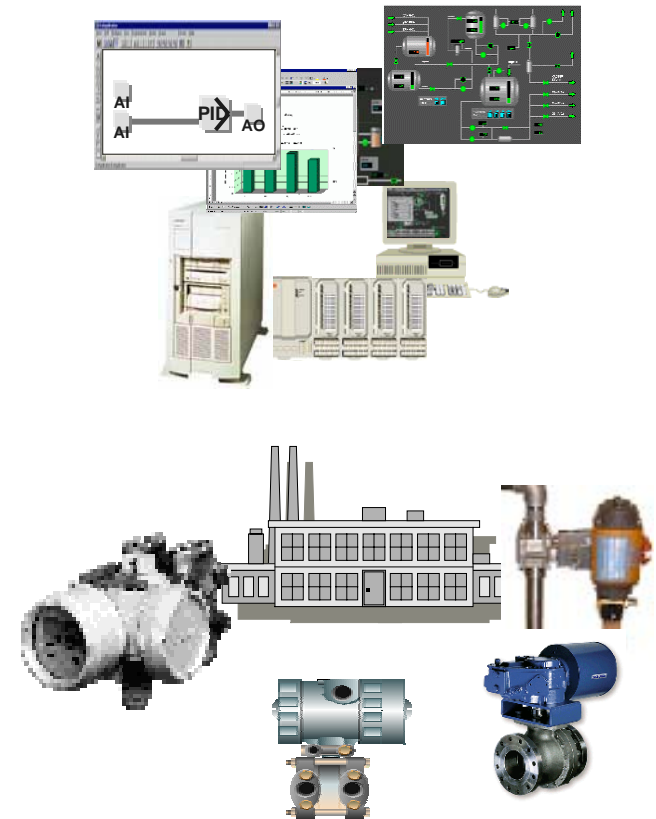
- 700 kb/s or more (see what I see uplink speed)

Business Needs

- to link mobile workforce to order and delivery processes.
- to improve quality of customer service.
- to ensure real time information exchange on critical business processes.
- to enhance company's cost-revenue flow and business processes.
- to control supply chain management end-to-end.
- the benefits of mobile solutions without risk.

Problem Scenario

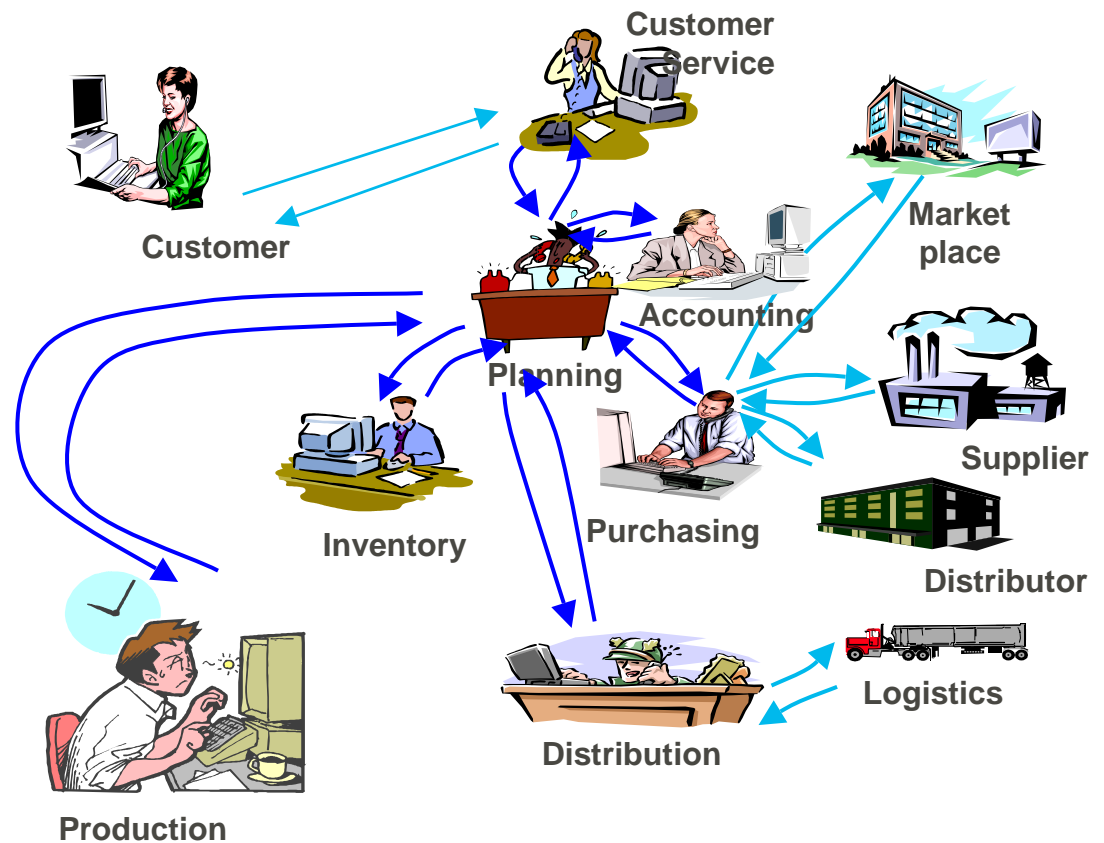
- ABB has a history in SW that integrates computers with reality
- Users wants
 - Transparent integration with reality
 - Seamless integration between software systems
- The system must be Easy to Use and Understand



Information Explosion

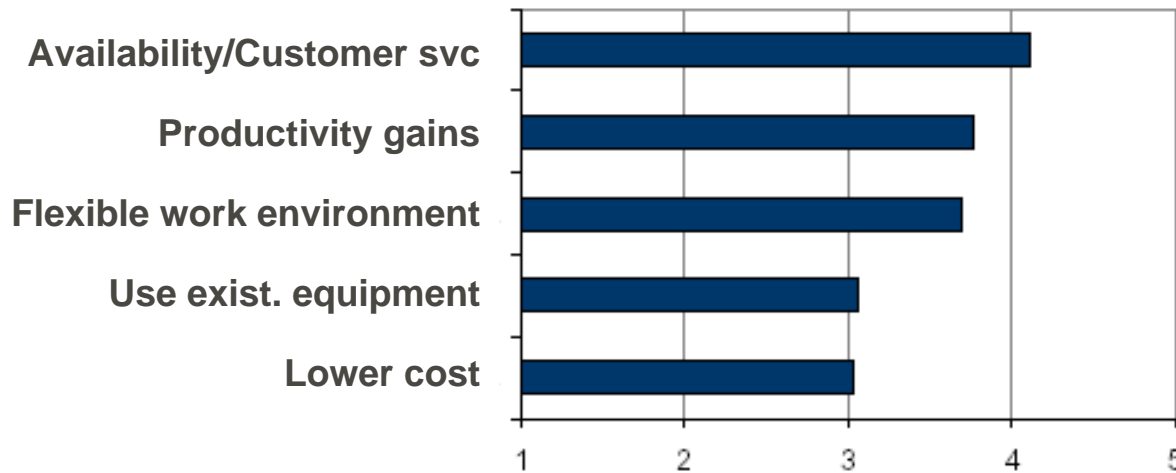
Industrial IT
...the *Next Way* of
Thinking

- Several systems
 - Legacy systems
 - New systems
- Many formats
 - Paper
 - Electronic
 - Web
 - Databases
- Access problems
 - Time consuming
 - Outdated information



Why a mobile solution?

Importance of reasons for choice of mobility solutions, Nordic



Source: IDC

The most important reasons for choosing a mobile solution are

- *Service to customers*
- *Productivity*
- *Flexibility*

Lower cost is not the main reason, in spite of the general cost cutting focus in business today.

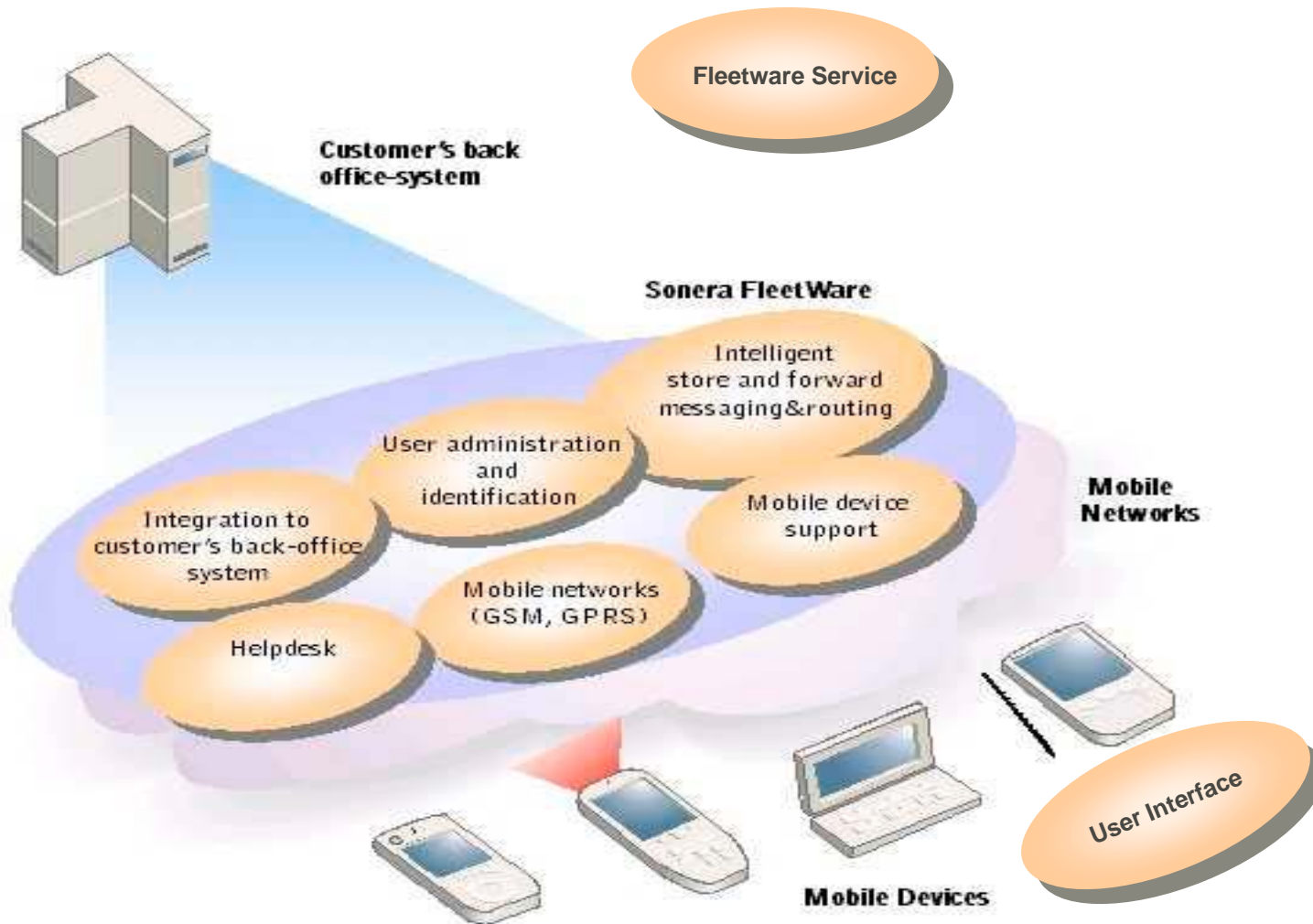
This is valid across the Nordic countries, different industries and company sizes.

What is Fleetware solution?

FleetWare is a hosted intelligent messaging service that links a company's mobile work force to its in-house business IT systems, via a mobile network.

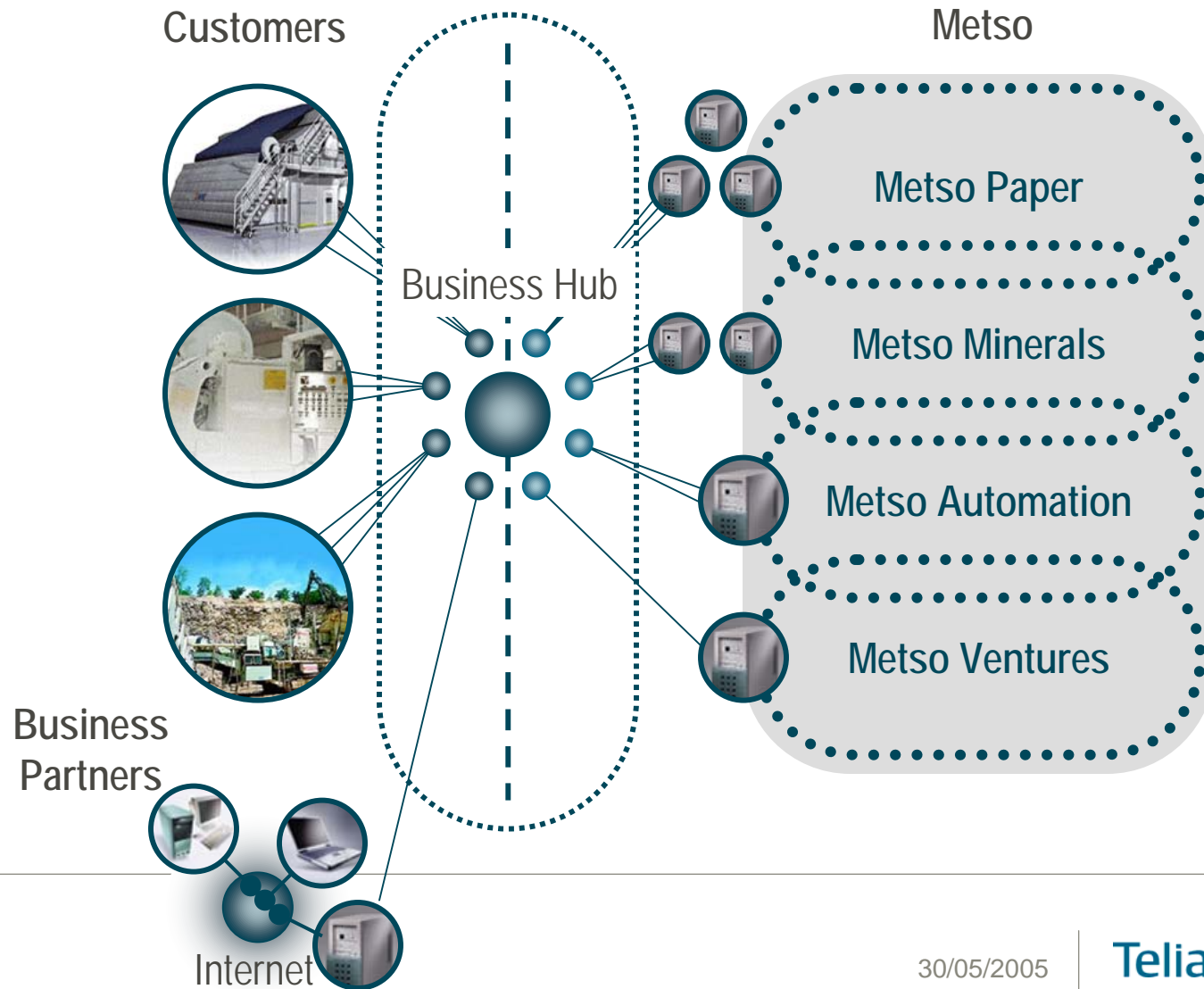
- FleetWare is a service for enterprises whose business operations depend on efficient and reliable mobile data communication.
- extends the existing logistics IT systems to cover mobile field operations.
- replaces inefficient and costly paper/human operations with more accurate, automated management and control.
- FleetWare solutions from Sonera is provided to customers as an hosted service.

Service concept

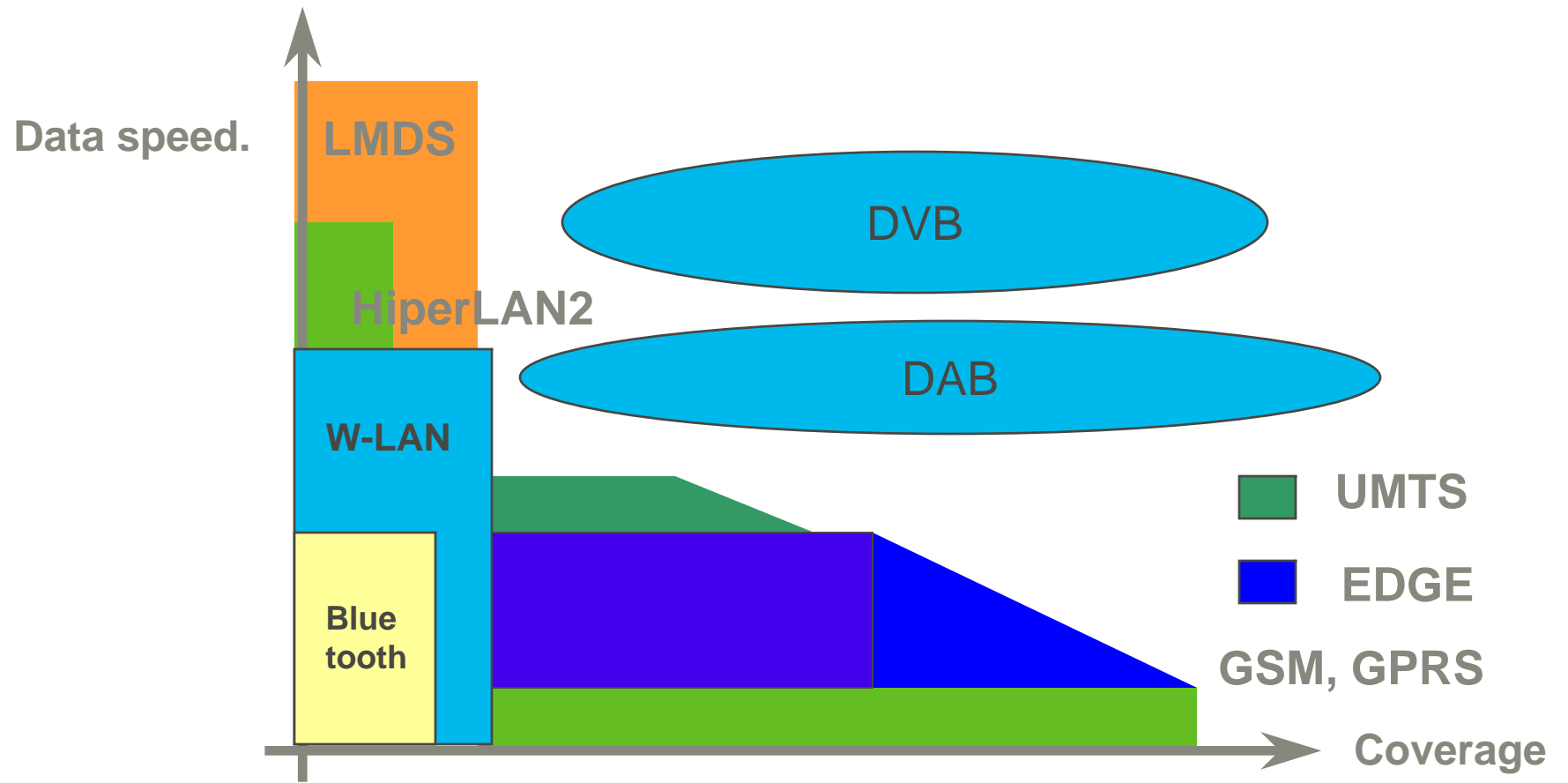


Metso Future Care

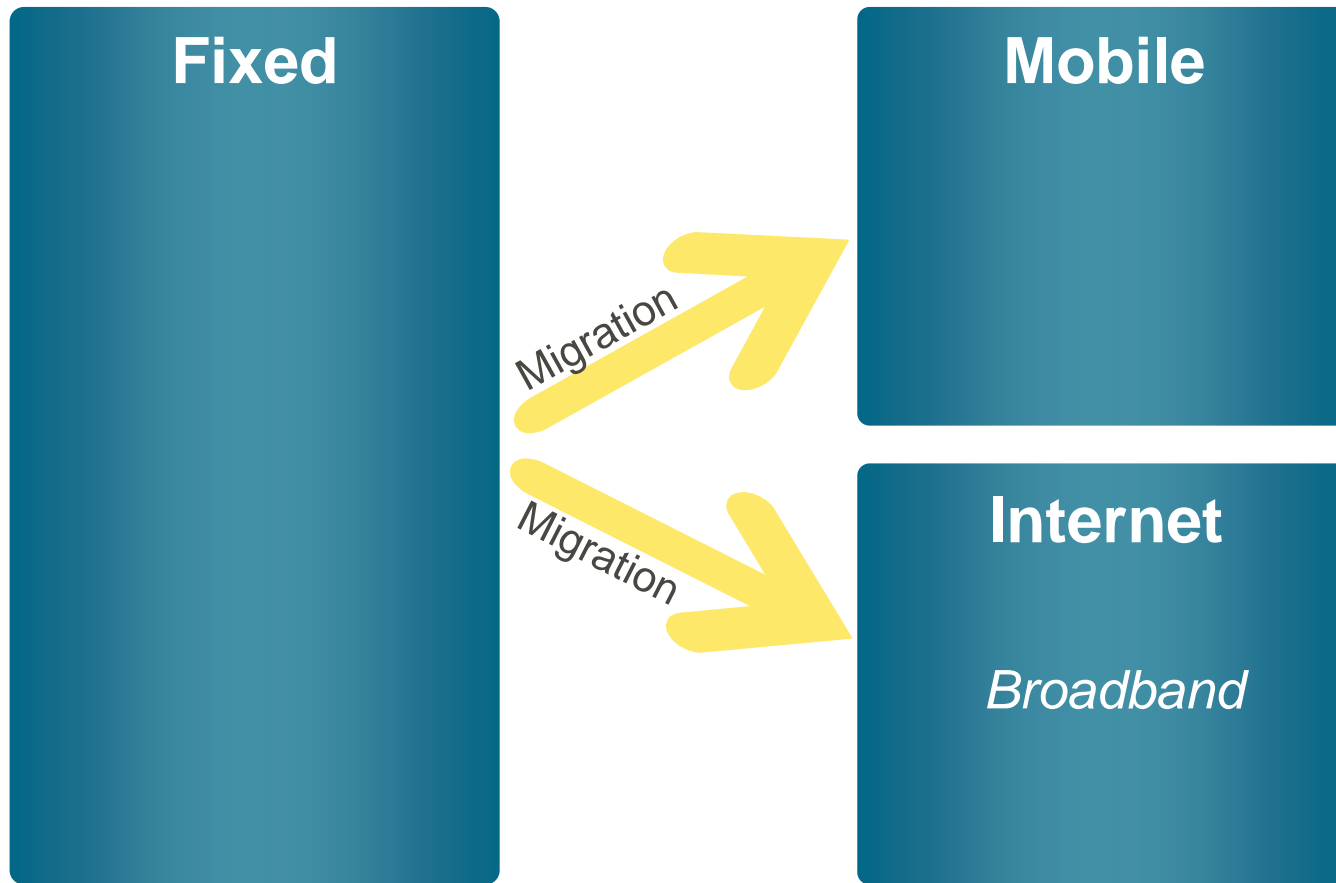
Extended collaboration through ICT



Multi Access: Existing and future radio technologies

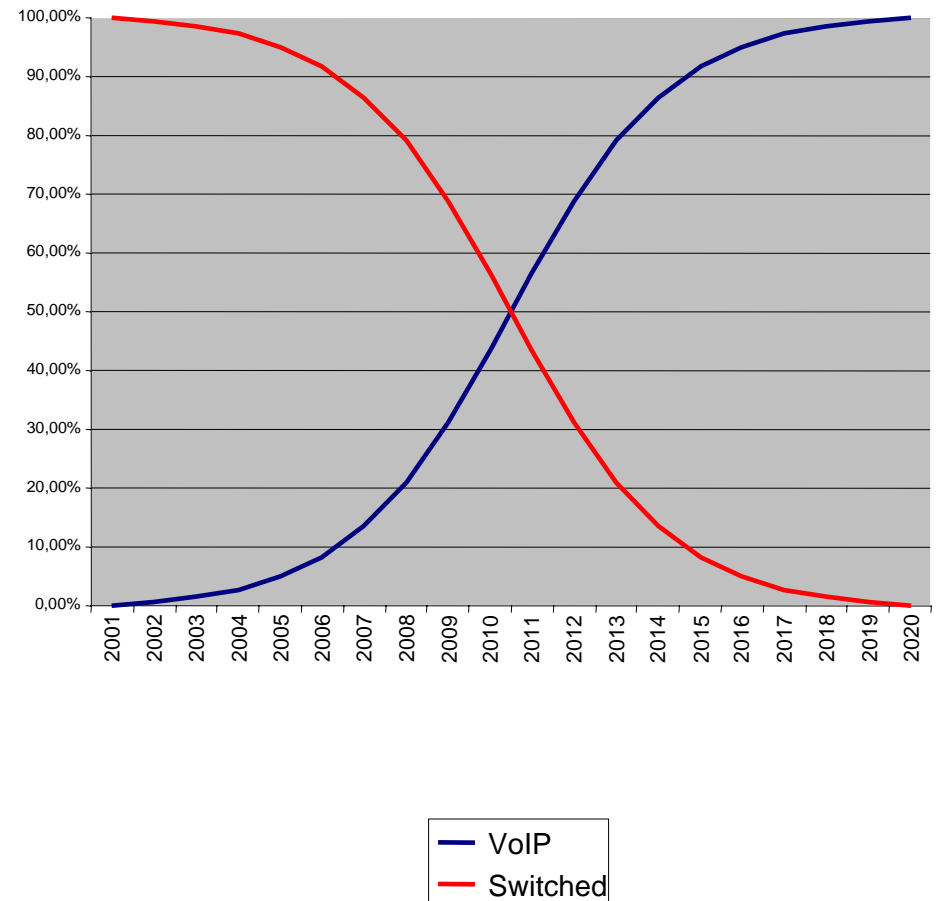


Migration trend



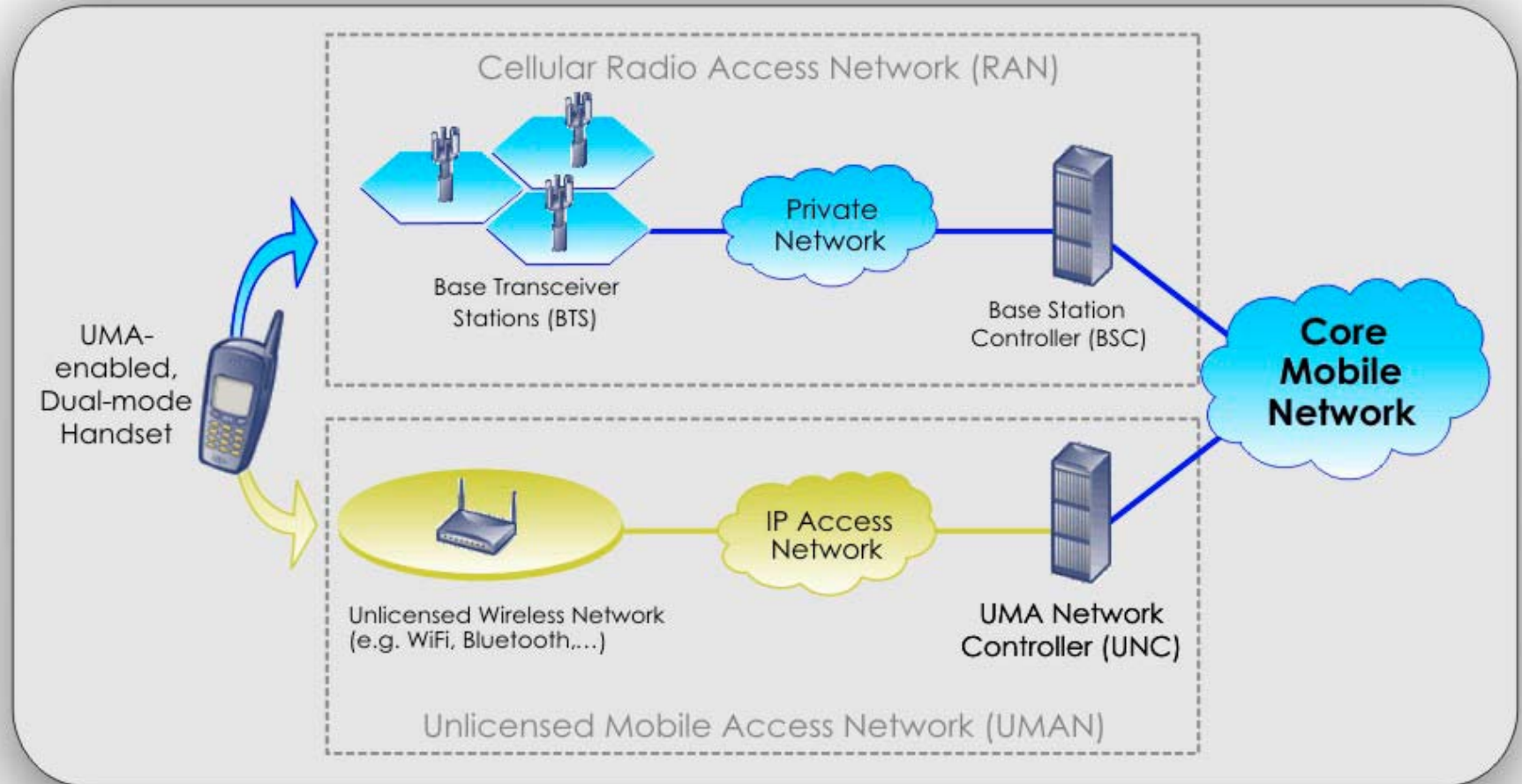
Guesstimating VOIP development in Europe

- 50% of global traffic minutes will be carried on IP telephony networks by 2006*
- Predictions are that no public switched voice services will be left by 2020#
- IP Centrex like services will comprise 20% of business lines by 2005 **

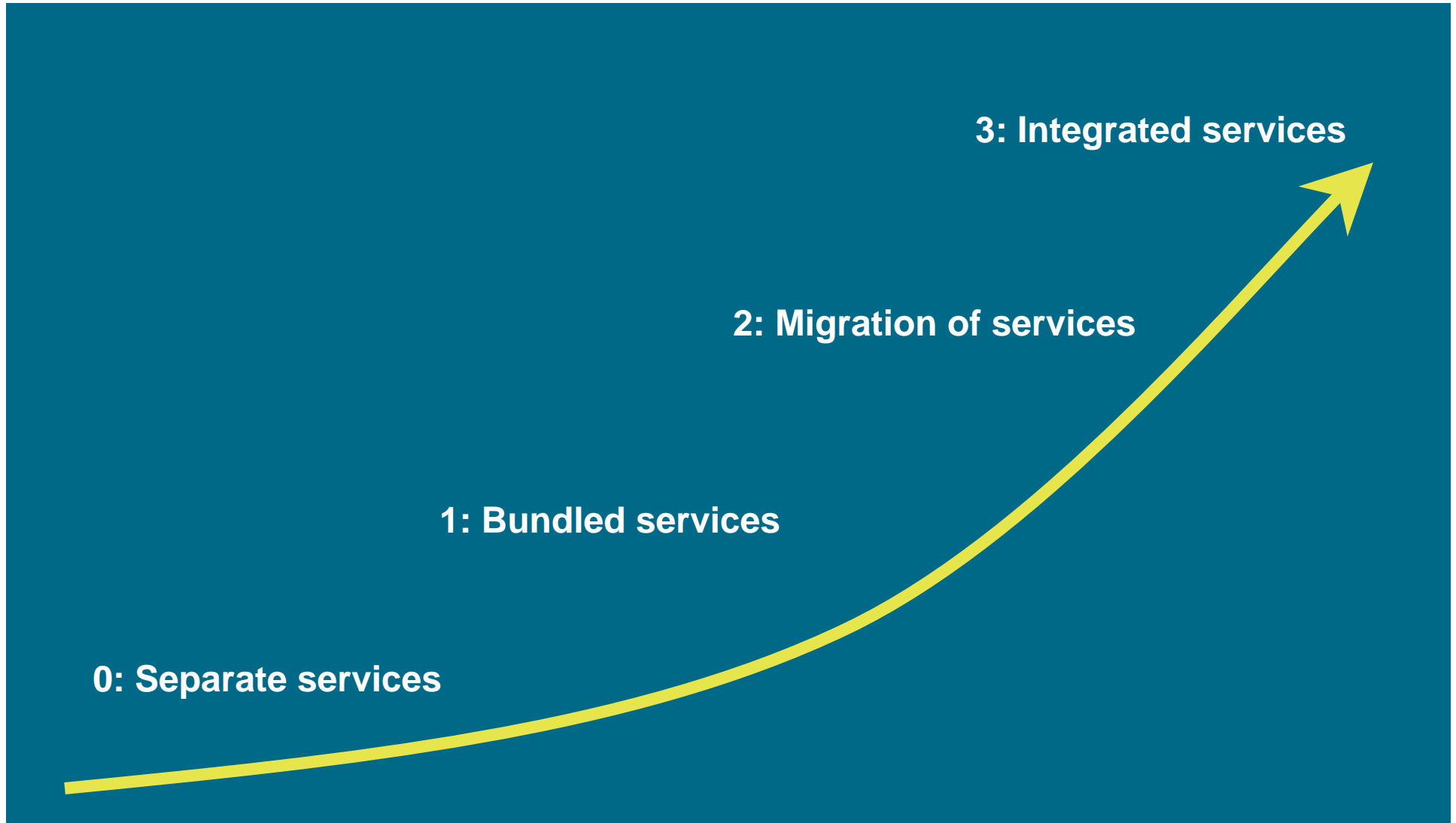


Sources: *IDC, #Forrester Research, **Gartner, α Probe Research

Convergence



Steps to go...



Research needs

Improved reliability

Improved coverage

Ease to use

Biological effects

Lower costs

Protocols for high error rate access (IP)

Integration of access systems

Higher speeds



Simplicity makes everything possible!

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