



A “converged world” is where technology brings connectivity

Nogues Thomas

Director, Standards Coordination, NDS Ltd

VIDEOGUARD®
Conditional Access

MEDIAHIGHWAY™
Middleware

Xtv™
Personal TV

Value@TV
Interactive

Synamedia™
Broadband

mVIDEOGUARD™
Mobile

NDS is the leading provider of conditional access to digital pay-TV operators worldwide

NDS is also a leader in the provision of end-to-end open software solutions including Middleware, Interactive TV applications as well as Digital Video Recording technology

NDS secures US\$32 billion pay TV revenues, with:

72.9 million active smart cards

54.6 million cumulative middleware

6.4 million cumulative DVRs

2.7 million cumulative residential gateway (RG) units;

Over 50 TV platforms

In more than 35 countries and 15 languages

3,460 employees globally over 2,930 are technical

Conditional Access Customers





Mankind overall knowledge increase...

multiplication of experts
and fields of expertise

... but we may have reached some human limits

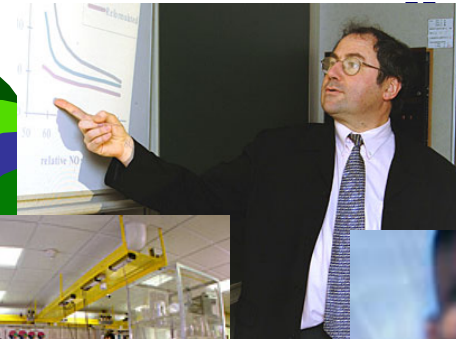
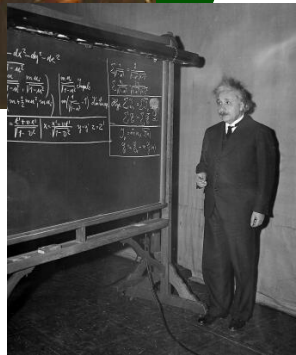
No one will know anything anymore...

the fount
of all
knowledge

becoming
specialised

highly specialised

knowledge
through
TECHNOLOGY



Long time ago

Not so long ago

TODAY

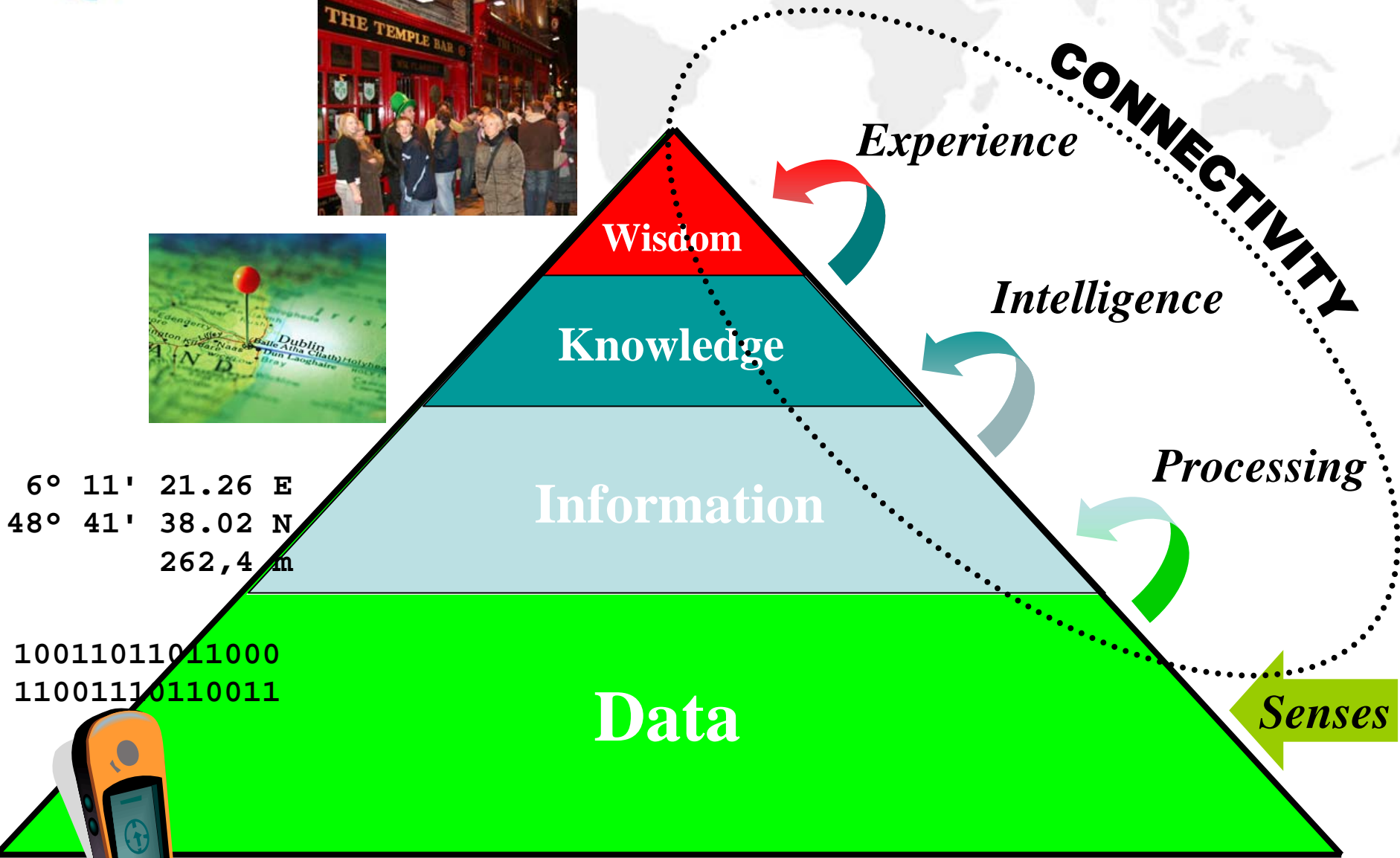
Future

Things need connectivity before they can become "smart"



6° 11' 21.26 E
 48° 41' 38.02 N
 262,4 m

10011011011000
 11001110110011

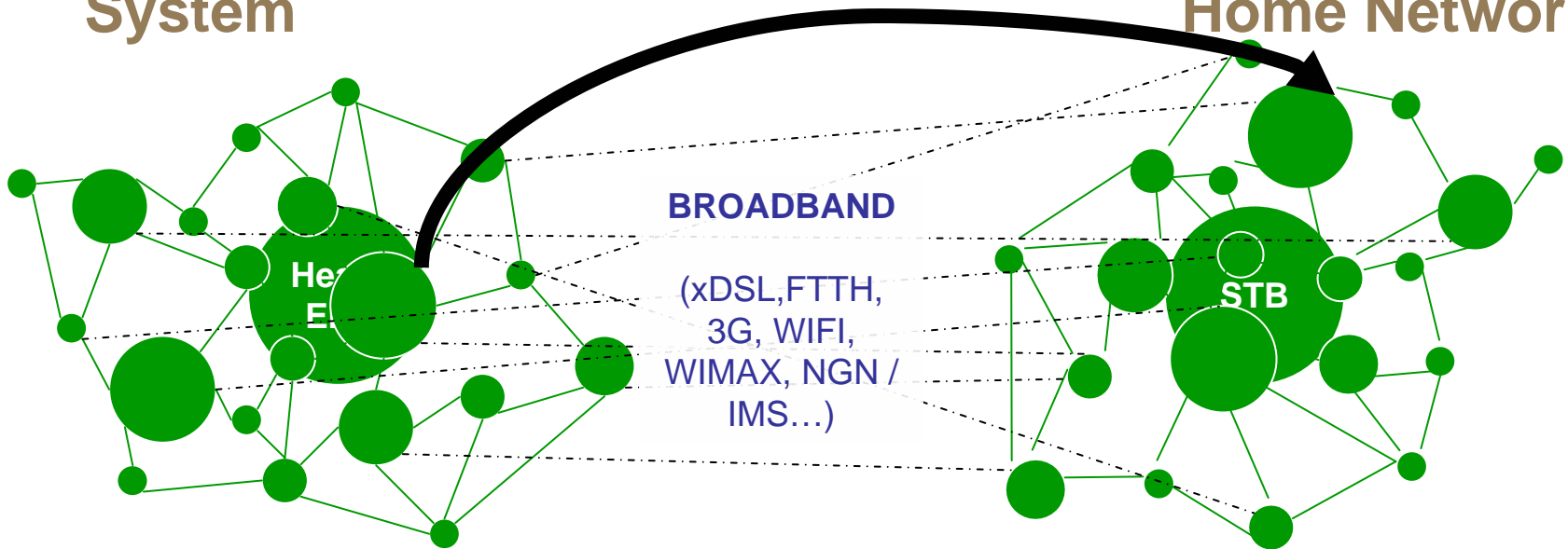


Technology challenge for connectivity: the digital TV view

Distributed
System

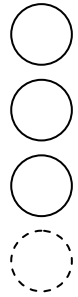
BROADCAST

Distributed
Home Network



Technology challenge for connectivity: the digital TV view

Various content
and metadata
Sources & formats



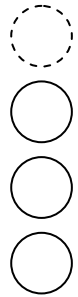
Search
platform



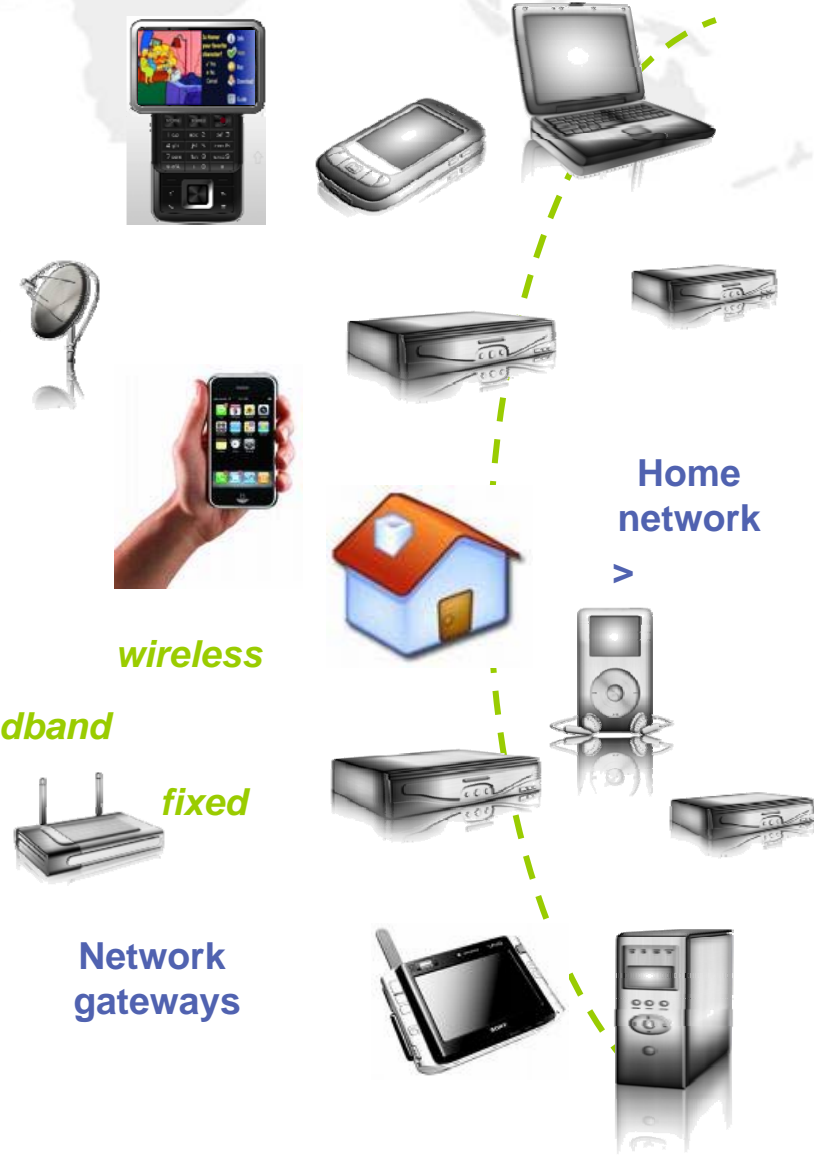
Broadcast



Monetizing
platform



Various service
providers



- Not anymore “at what time?”
- Nowadays convergence is bringing new questions:
 - On which display device? TV? Which one? PMP? Mobile? PC?
 - Where? At home? On the train? In the plane? In the hotel?
 - From where? Satellite? Terrestrial? Cable? IPTV? Which channel? VOD? Internet download? DVD? HD DVD? Buy it? Rent it?
- Efficient localisation and convenient access of content is becoming paramount
- *DRM technologies, intended to secure content and associated business models, should facilitate all this convergence if they want to succeed*

Technology will be the main response to the current challenge for mankind related to the multiplication of data, information and knowledge

THANK YOU

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