

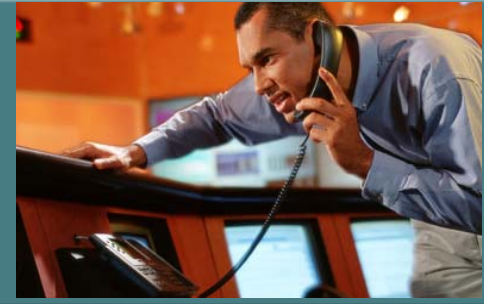
Opportunities and challenges for a global system vendor

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1

CONVERGENCE AND IP-BASED NETWORKS

**Internet Protocol-Based
Platform; Multiple Access
Networks; Security**



2

TECHNOLOGY AND APPLICATION INNOVATION

**R&D, Miniaturization, Greater
Spectrum Efficiency,
Applications (Home, Office,
Mobile)**



3

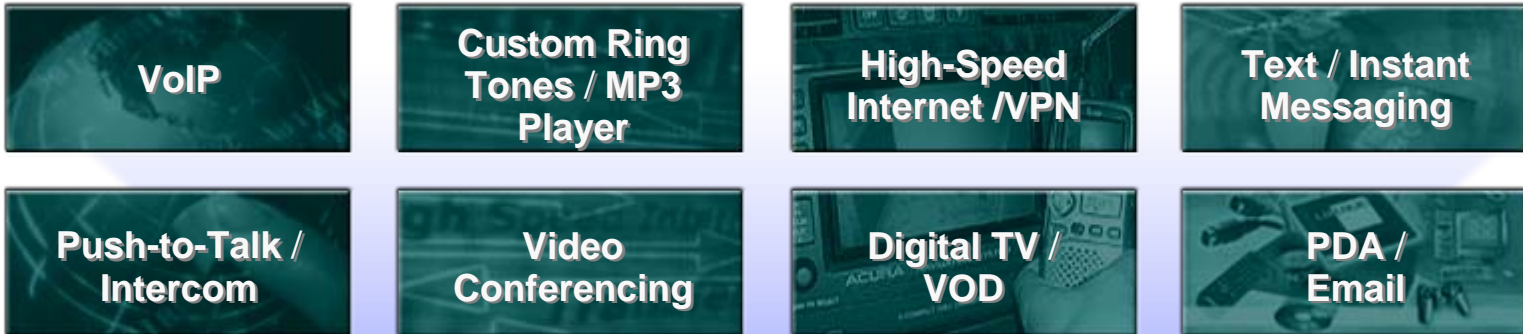
GLOBALIZATION

**Competition, Supply Chain
Management, Global Markets**



Device functionality is blurring...

For Consumers and Businesses: Any Service, Any Device



At Work, at Home, on the Road

ITU-T Workshop "NGN and its Transport Networks"
Kobe, 20-21 April 2006

The “end-to-end argument”

“suggests that functions placed at low levels of a system may be redundant or of little value when compared with the cost of providing them at that low level”

End-To-End Arguments In System Design.
1984. ACM Transactions on Computer Systems,
V.2, N.4, p. 277-88.

J.H. Saltzer, D.P. Reed, & D.D. Clark
MIT Laboratory for Computer Science



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Network services

- o Despite the "end-to-end argument" some services are probably best offered in the network e.g. Content filtering / parental control, but there are not that many
- o Challenges from Internet services (Skype, Google)
- o But restricting users will not work
- o End user has to be prepared to pay for NGN services for investment to pay returns



- o Enormous global market
- o Focus on the end user
- o Social opportunities & challenges
- o Regulation independent of technology
 - Telecommunications - universal service
 - Data communications - unregulated
 - Broadcasting - content