

# Bringing IT All Together

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- ITC is at the centre of the business
- Merger and Acquisition activity continues
- Convergence drives the need for more capability
  - Not just VoIP
  - WAN traffic requires consolidation
  - Fixed/Mobile
- Web-based applications drive new network models
- The value chain is increasingly important
- The “Do Nothing” option could be commercial suicide



- Disconnected networks – one per technology
  - Data
  - Voice
  - Dedicated Video networks
- Also:
  - CCTV
  - Control and Measurement
- Traffic was contained
  - Little need for out-of-company exchanges
- Tooling was highly specific
  - But was not responsive enough



- Cost
  - Still trying to do more with less
  - Maintenance still eats up a large proportion of the IT budget
- Business Continuity
  - Disaster Recovery is too late
- Integration
  - Moving from islands of function to an integrated approach
- Value Chains
  - Working directly with customers and suppliers
  - Including virtual workforces
    - Contractors, consultants, sub-contractors

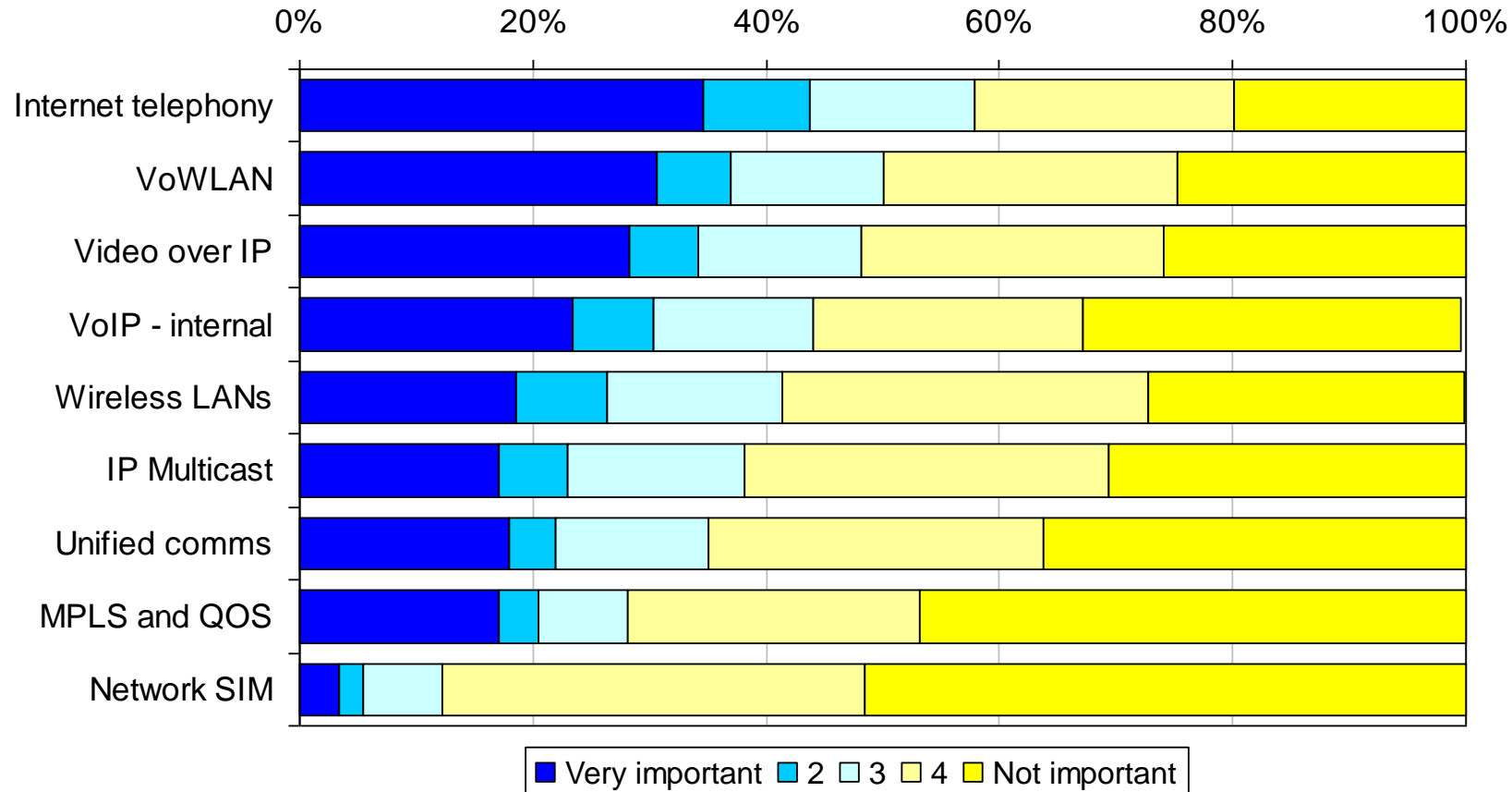


# What are organisations bothered about?

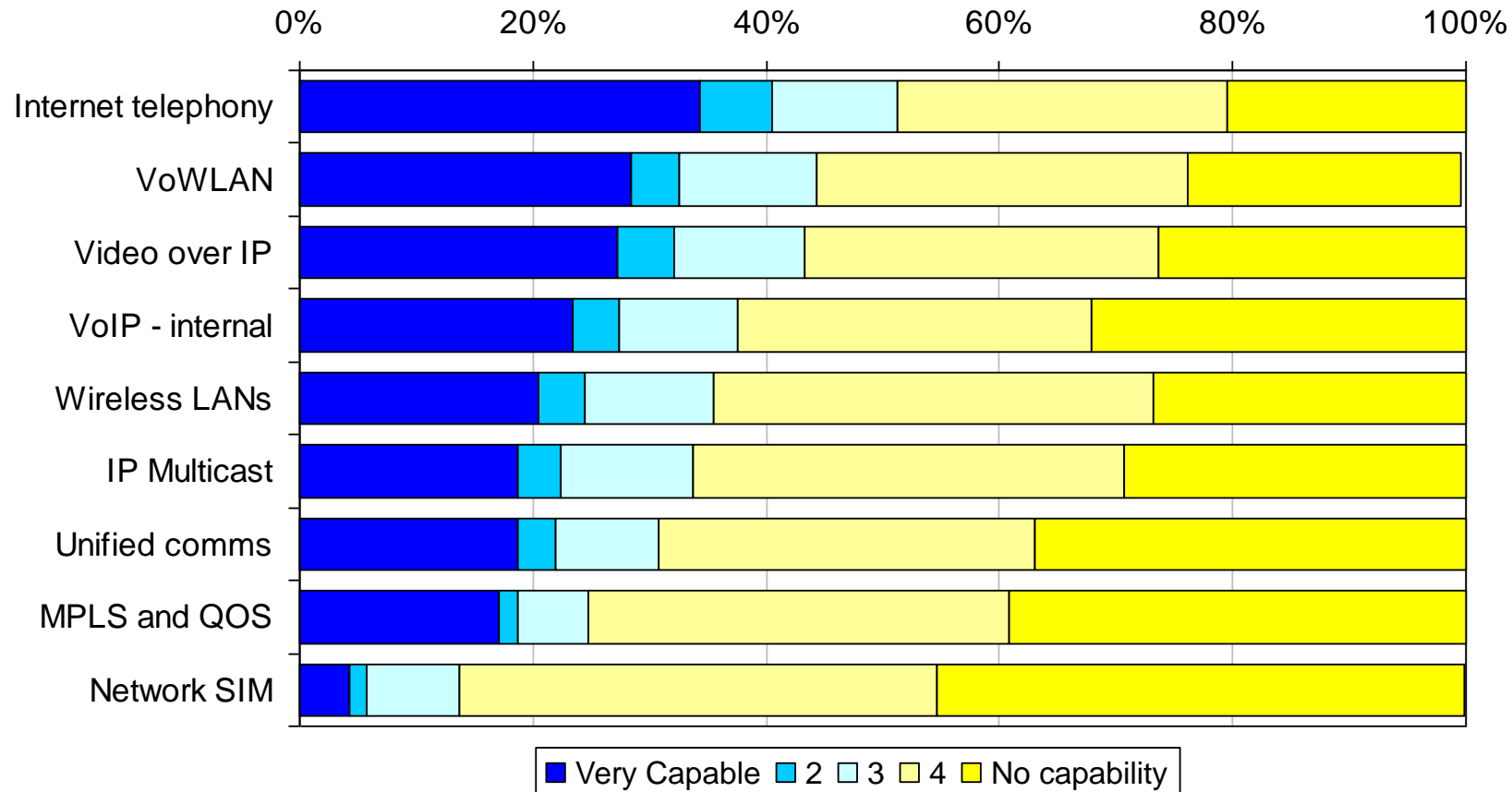
- Quocirca research shows that organisations want convergence
- However, few are prepared for it
- Tools capable of measuring performance are rare
  - Technical tools seem to be there
  - Tools that reflect against business indicators are not



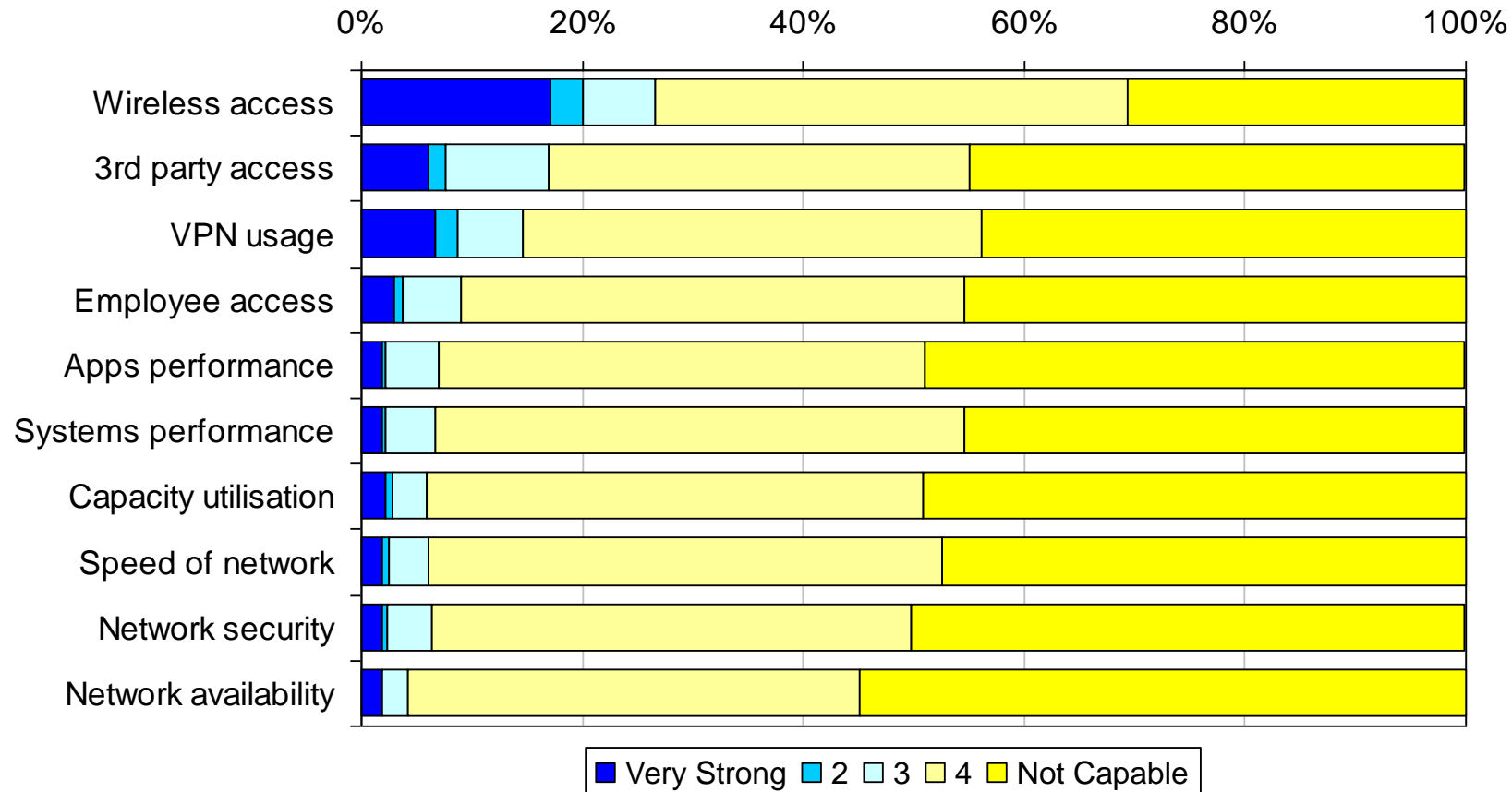
# How important are the following network technologies to your organisation?



# How well is your organisation able to manage these technologies?



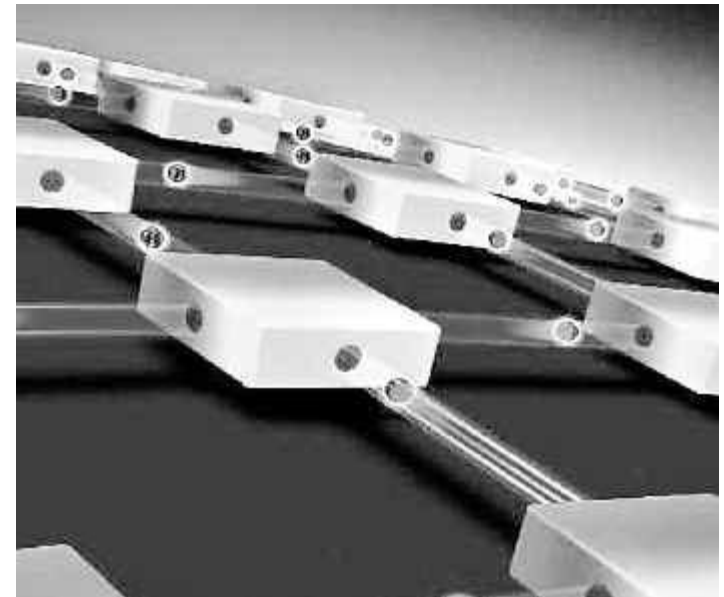
# How good is your organisation's capability to monitor these activities?



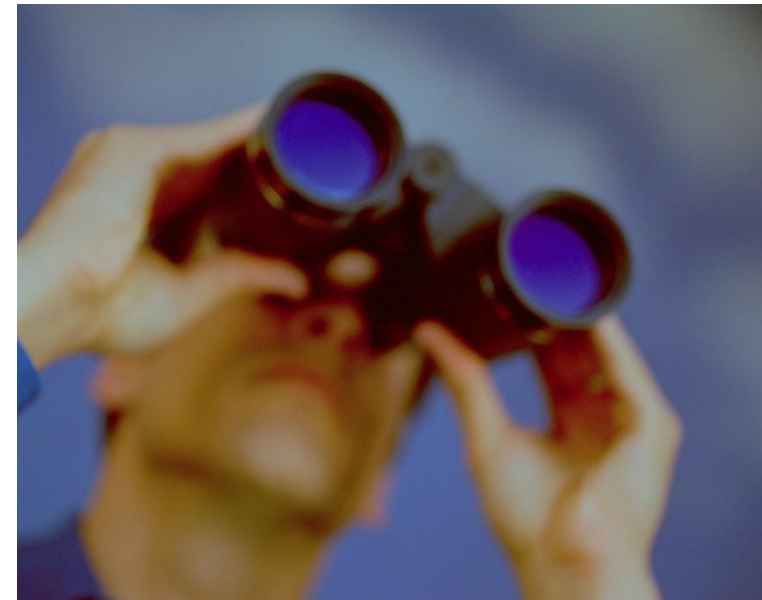
- Heterogeneity is here to stay
  - Virtualisation and SOA drive abstraction of function from hardware/OS stack
  - Heterogeneity of data type, end point device and access method needs to be accounted for
- New tools must cater for this



- Everything is now on a single transport and network
  - Failures can be catastrophic
  - Availability is key
  - Pre-emptive action before failure is necessary
  - Root Cause Analysis is far more important than before
  - Business continuity is the main aim!



- Asset discovery is a must
  - Just what is there out there?
- Tools should be dynamic
  - Rogue devices need to be identified rapidly
- Dependencies matter
  - What effect will changes to one asset have on others?
- Lost or stolen items should be easily dealt with
  - A \$500 device should remain a \$500 device
  - Information must be capable of being made worthless



- Provisioning services has to be fast and accurate
  - Change management has to be accurate
  - Pre-knowledge of where a change will work and where it will not
  - Automated resolution of known issues
  - Automated roll back on failure



- Service Level Agreements (SLAs)
  - Single set of targets
  - Driven by simple metrics
- Service Value Management (SVM)
  - Multiple sets of agreements
  - Flexible
  - Allows the business to choose
    - E.g. internal VoIP calls over the LAN may not need the strict QoS applied for external calls
- Requires tooling that can manage dynamic measurement and provisioning of service levels

- QoE is a qualitative measure, encompassing a range of quantitative capabilities
  - Quality of Service (QoS)
    - 802.1q
    - MPLS
- Priority of Service (PoS)
- However, also needs to include a more subjective component
  - How does the output match the input?

- Different data streams have different needs
  - Voice, video, data
- Different environments have different needs
  - In-building, cross-campus, inter-building, inter-supplier/customer/contractor/consultant, public
- Different devices have different needs
  - Server, desktop, laptop, smart phone, VoIP end point...



- Convergence brings great promise with it
  - Cost reductions
  - Flexibility
  - Consolidated skills
  - ...
- Convergence brings many issues with it
  - Availability
  - Management
  - ....
- New tools are required to ensure that convergence delivers on its promise.