Switching over to IP Telephony

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This sessions objectives

There are three key scenarios organisations are faced with when switching over to IP Telephony

- Co-habitation of existing PABX and IP Telephony
- Pure IP Telephony; and
- Outsourced IP Telephony
  (either through hosted or managed IP Telephony)

This session discusses the common and unique challenges represented in each of these scenarios

Common Issues

- **Project Management**
  - End User expectations
  - Enterprise expectations
- **Technology**
  - Technology and its functionality
- **Ongoing Operations**
  - Management
  - Flexibility
  - Cost

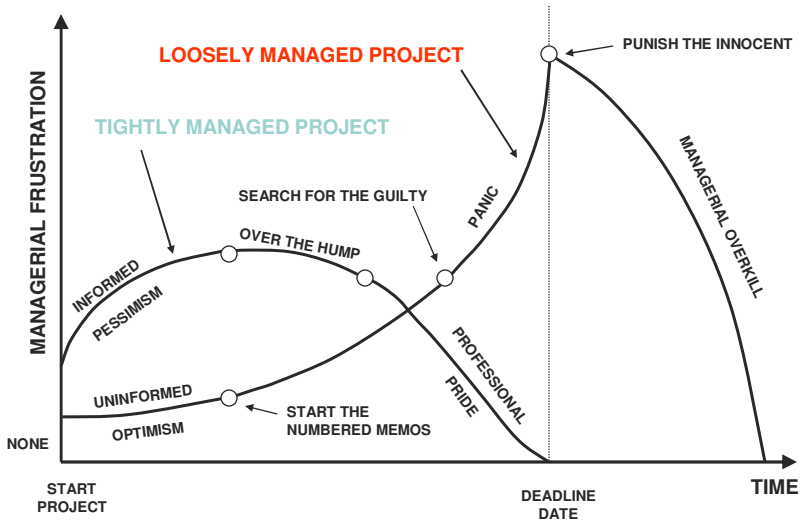
Planning, planning and planning

Telephone systems are mission critical.

The planning for a new system is critically important. Planning and preparation will represent at least 40% of the project effort

- Build the business case.
- Gather comprehensive information on legacy systems.
- Establish appropriate project processes and structures.
- Undertake a thorough risk assessment.
- Build a strong, cross functional A-team
  (executive, users, technical, support, project management, technology partner)

Project Management Reality



User Expectations

Every user is an expert, and they may use the phone system in ways you don't anticipate. Understand how your users use the phone system, accommodate this and manage their expectations.

- Research the use of the legacy system.
- Trace user requirements into the IP Tel design.
- Execute a thorough communications plan.
- Early user exposure to phones through demonstration facilities.
- Establish training needs and execute professional training to achieve high user satisfaction.

Security

IP Telephony runs on data networks, which can be subject to threat.

- Design security into the solution.
- Apply established prevention and protection techniques.
  - Virus protection, firewalls, hardening.
  - VLANs and traffic separation.
  - Specific capabilities provided with products.
- Utilise a partner who has full range of technology and security capabilities.

Technology

Fact: IP Telephony technology sustains mission critical telephony systems around the world. Technology risk is perceived by some to be high. Technology risk is readily managed through a thorough project approach:

- ✓ Requirements gathering
- ✓ Design
- ✓ Product selection
  (has the product set been successfully used before?)
- ✓ Test Labs
- ✓ Pilot deployments
- ✓ Practical and sustainable deployment methods
- ✓ Transition to support and operations

Availability/Reliability

It is perceived by some that IP Telephony systems will not be as reliable as traditional systems.
The required availability is achieved through a total systems approach.

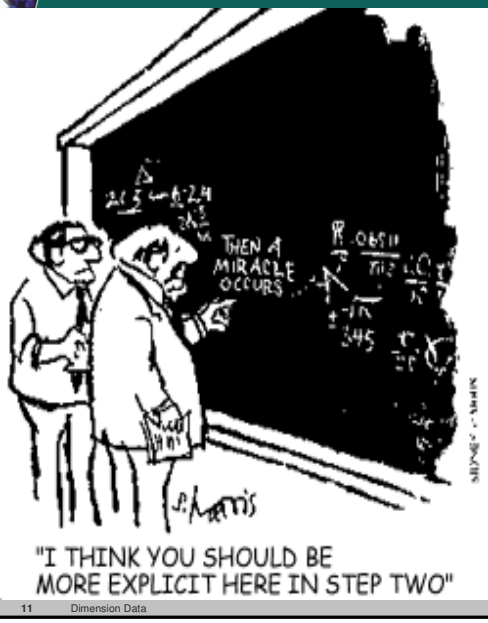
– Total solution must be engineered to the availability standard.
– Clustered IP Tel call management servers can readily achieve 99.999% availability.
– Underlying infrastructure must also be reliable – diverse, redundant, power protected, secured from attack.
– Operational processes and systems must be robust.
– Appropriate support must also be in place.

Skills Gap in Organisation

New technologies for traditional voice experts to adopt …. QoS, VLANs, IP, DHCP, routers, switches etc.
Skill gaps must be addressed.

– Engage an experienced partner with comprehensive skills for the plan, design, build and deploy (data, IP Tel, security, projects)
– Have the design reviewed by an independent party if concerned about your organisation's ability to review it.
– Create test systems, prototypes and pilots – and use these to skill your people.
– Train your people - ensure you have the right skill levels across the board for the ongoing maintenance, support and operation (or use a partner who does)

Working Miracles on Deployment



"I THINK YOU SHOULD BE
MORE EXPLICIT HERE IN STEP TWO"

Developing a realistic architecture is one thing

Effectively implementing is another

Migration is everything

Deployment

Deployment method – Big Bang versus Phased.
Decision is dependent on circumstances.
Risks need to be actively managed.

- Big Bang is sometimes forced eg new building (DD has moved 1000 new IP Tel users into a new building in one weekend) – emphasis is on stronger preparation, testing and pilot.

- Phased – more emphasis on legacy system interworking and configuration management.

Co-habitation

Areas of Interest

- Operational Functionality
  - Common Signalling ; QSIG v.s. Proprietary
  - Receptionist / Console
  - Voice Mail / Unified Messaging
  - Accounting & Billing
  - Two-Tier society – disparate user-populations
- Operational Management
  - Managing two voice solutions
    - People, Processes, Maintenance
  - Capacity Planning – trunks

Pure IP Telephony

→ Areas of Interest

- Operational Functionality
  - Consistent look and feel across user-population
  - Ability to introduce developing functionality
    - Softphone, Video, IM, Presence Management
  - Ability to expand coverage
    - Wireless, Internet, VPN
- Operational Management
  - Single network and application platform
  - Integration into organisations directory structure (AD etc)
  - Reduce costs
    - Capital & Operational

Outsourced IP Telephony

- **Areas of Interest**
  - Hosted or Outsourced?
    - Hosted – Centrex style
      - All equipment and management operated by external entities
      - Totally separate voice and data network
      - Limited flexibility
    - Outsourced – Managed Service
      - Equipment internal, management external
      - Management services integrate with the organisations work-flow practices
      - Organisation retains architecture and therefore the flexibility on how this is developed over time

Top 10 reasons why large IT projects fail

1. **Lack of proper senior management sponsorship**
2. **Complexity of stakeholder relationships**
3. **Poor management of expectations**
4. **Poor corporate governance**
5. **Mistaking the non-project effort required**
6. **Scope creep**
7. **Culture of denial**
8. **Poor resourcing**
9. **Employing the B-team**
10. **Underestimating the importance of project management**

Source: Australian IT, Project perils in technology revival, Andrew Cunningham, 04 May 2004

Summary

•IP Telephony technology is well established and deployed in many organisations.

•The major risks revolve around the organisation's preparedness to invest in the preparation, development, test, deployment and ongoing support.

"The decision to move to IP communications based services is more about weighing up the business benefits, good design and implementation practices and learning from the lessons of those who have tried, than about understanding the technology."
Rosemary Sinclair, Managing Director, ATUG

"Having a good systems integrator and a good project manager typifies most successful deployments." Frank Zeichner

Questions?