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Voice is an App

Issues around Enterprise Collaboration Systems



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A Short History of Electronic Communications

- Pre-electronic: 1792 Signal posts; 1860 Pony Express
- 1831 Telegraph invented
- 1876 Telephone; 1889 PMBX
- 1902 Trans-Atlantic radio signal
- 1951 Computers first sold commercially
- 1965 email and instant messaging invented
- 1960's PABXs common
- 1969 ARPANET .. the first internet
- 1976 Apple 1; 1981 IBM PC
- 1990's corporate email systems become common



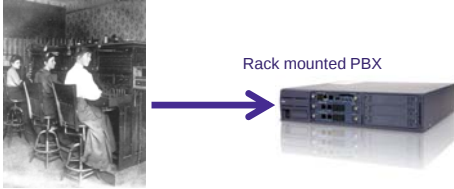
Fig. 15. — Télégraphe de Chappe.



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These Days?

PBX's are part of IT



Rack mounted PBX

Although most desk phones analogue and not linked to computer



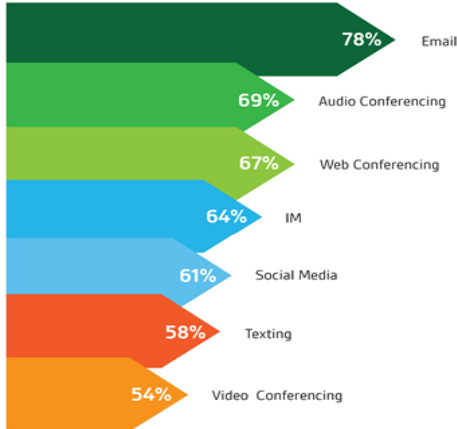
Analogue/VOIP Phones

Still rare to have a Unified Client with PSTN connectivity

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We are Communicating more than Ever!

INCREASES IN COMMUNICATION USAGE SINCE 2005



Communication Method	Percentage Increase Since 2005
Email	78%
Audio Conferencing	69%
Web Conferencing	67%
IM	64%
Social Media	61%
Texting	58%
Video Conferencing	54%

Plantronics 2010

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What is important to the Enterprise?

The study findings show professionals have clear preferences regarding communication tools that contribute to their success. 83% of surveyed professionals said that email is "critical/very important" to their overall success and productivity. 81% said the phone is "critical/very important" to their overall success and productivity. These two seemingly declining methods of communication outpaced everything else by 20 percentage points or more.

Plantronics 2010

eMail and Voice are equal kings

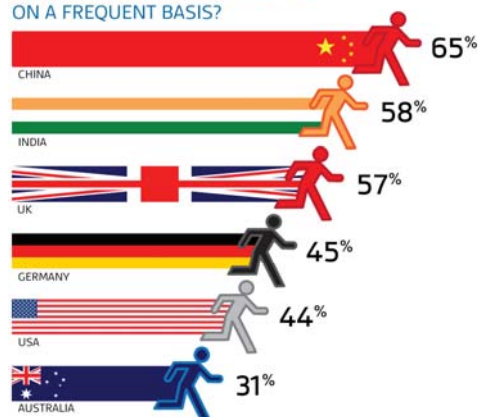
Unified Client is still rare

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Video Conferencing is becoming mainstream

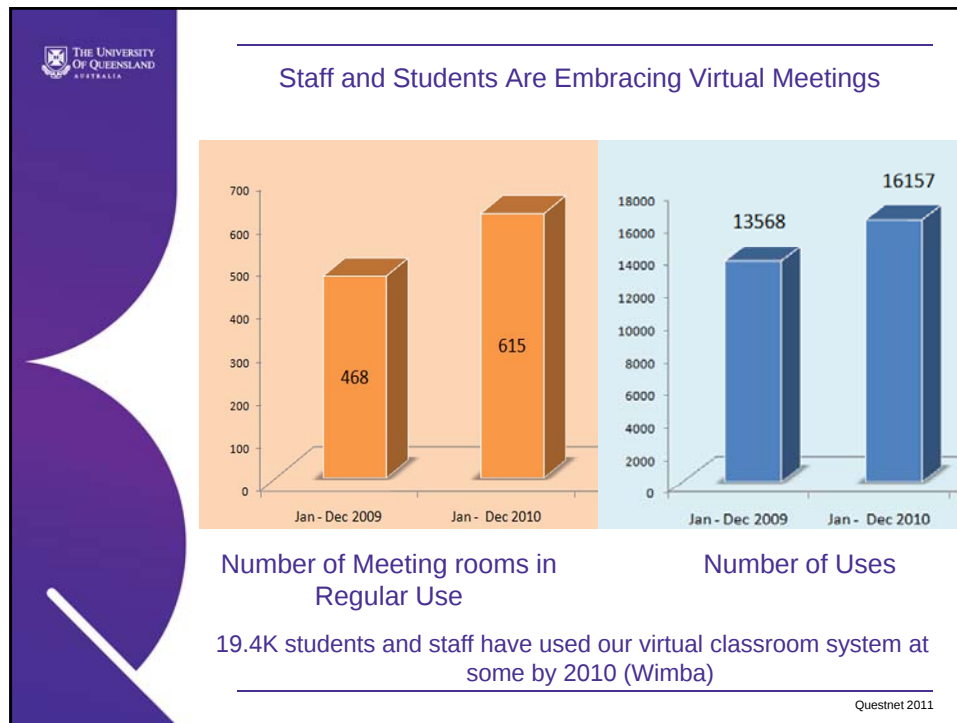
most places...

WHO USES VIDEO CONFERENCING
ON A FREQUENT BASIS?



Plantronics 2010

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So what is the big Opportunity for eCommunication?

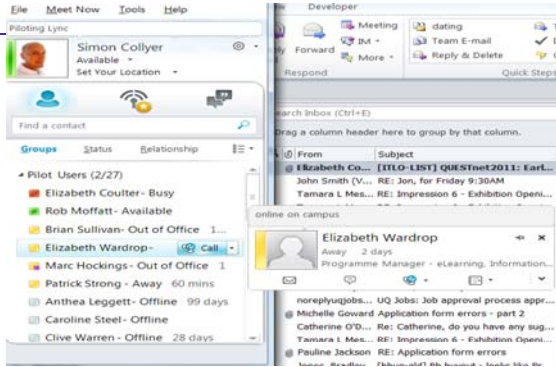
- Spending \$big on virtual meeting systems
- Spending \$big on traditional PBX systems
- Spending \$big on room based AV conferencing systems
- Spending \$big on 1000's of mobile phones
- Staff embracing consumer systems: Skype, Google Talk etc

No Single Unified Communications Client, Service or Strategy

Most desk phones are annoying push button clunkers

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What would a Unified Client have?



- Email
- Voice
- Screen/App share – PPT/ Whiteboard
- IM
- Current presence
- Future presence (calendar)
- Video camera
- Massively multipoint – e.g. 100
- Recording, Hands-up, Surveys

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Also Need...

- Compatibility – Ability to talk to other systems: SIP, H,323, E.g. Skype only talks to Skype ATM... standards based if possible
- Client platform independence: Clients for Windows/Mac/Linux/smart-phone/browsers
- Use the existing enterprise directory – no manual sharing of Ids
- Integration with desktop apps...Click to dial rather than manual.
- Intuitive use – WYSIWYG not DOS era buttons
- PSTN and PBX (analogue phone) connectivity essential for the transition (esp. for any non PBX solution)

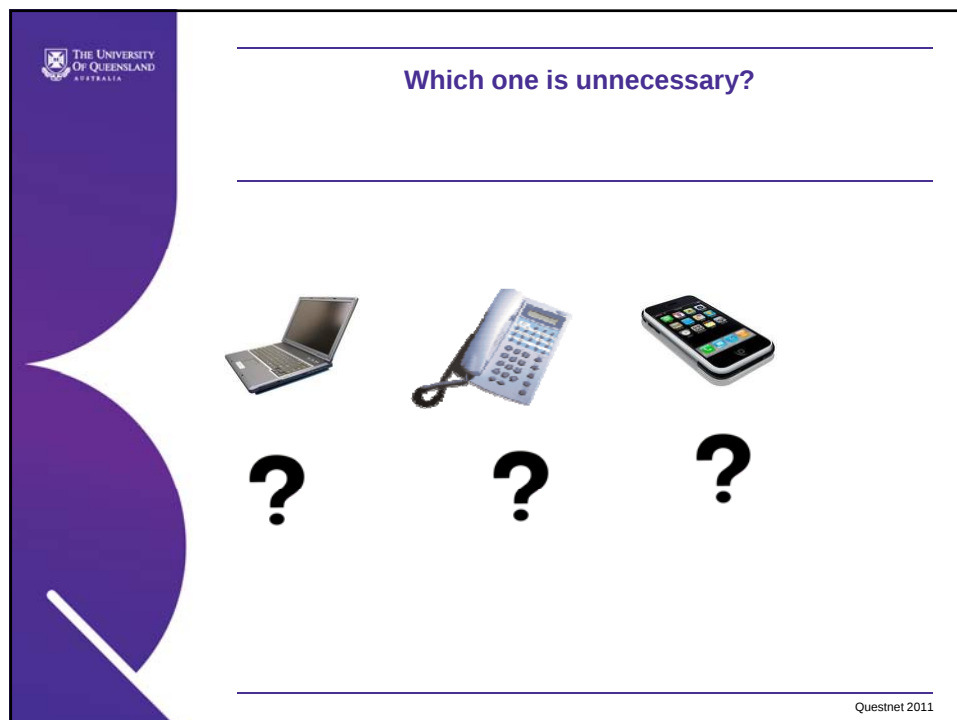
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Who are the Players?				
	eLearning Users	Conference Users	Phone Users	Consumer Conferencing
Example Use	Multi-point; soft client; commodity h/w; voice, presence, text and screen sharing	Quality voice and video on special h/w	Voice-only call to PBX or public phones, special h/w (desk phone)' Also voicemail, fax etc	Browser or soft client; on commodity h/w; voice, presence, text and screen sharing
Example Vendor	Wimba/Elluminate/Big blue button etc	Tandberg	NEC/ Avaya/ Cisco	Skype, Messenger, Google Talk

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Where are their Issues?				
	eLearning	Conference Users	Phone users	Consumer Conferencing
Example Vendor	Wimba/Elluminate/ Big blue button	Tandberg	NEC/ Avaya/ Cisco	Skype, Messenger, Google Talk
Enterprise Provider	eLearning team	AV team	PBX team	Self Installed
Typical Current Situation	Not accessible by all staff. No mass headphone rollouts	Only have a few rooms with this capability;	Immobile, slow to deploy and very low functionality (voice only)	Self managed ID; Self managed PSTN link; interoperability issues

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Consideration – Mobility

- Laptops currently represent 2/3 of all computers purchased and will be 3/4 by 2015 – IDC
- Most first year students now come from a school with a 1-1 laptop programme.
- Most uni courses now online – Blackboard/Moodle 18K+ on a Sunday
- Laptops are Green!! They use less than 1/3 the power
- Wireless usage exploding – UQ doubled compared to 2010
- Campuses have been offering blanket wireless since 2000
- By 2015 WiFi devices will be consuming more bandwidth than wired devices –CISCO

User Communications are likely to be Mobile

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Which one's Not Mobile?





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What's Wrong with the Desk Phone?

- Slow and resource intensive to deploy: weeks not minutes
- Hard to move (Esp. Analogue)
- Slow to use– manually type number in
- Hard to use – all those codes? No WYSIWYG
- Only Voice – No IM/screen-share/video etc.
- Expensive to buy
- Ruin the environment
- Cause neck pain = \$B's annually
- Duplicate expensive infrastructure: datacentres, help desks, support teams
- There were no desk phones on the Enterprise

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What about Smartphones?

Aren't they a Unified Communication Client?

- **Yes** smartphones have Voice, IM, eMail, Video, Directory etc !!!
- **No** smartphones are too small for a lot of work
 - Can't read big docs
 - Can't type big docs

Smartphones are good, but you need a computer too

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 **What's UC Utopia** 


+


<u>Large</u> screen mobile device Unified client with fully integrated voice. Need for <u>usable screen and fast data entry</u> Insufficient for battery life and portability	<u>Small</u> screen mobile device Has unified client.. Text, voice, email, camera etc. Need for <u>portability and battery life</u> Insufficient for significant data entry, editing and reading large volumes
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 **Consideration – Fragmentation**

Why not let everyone go their own way with Skype etc

- Manual client deployment costs
- Manual account creation costs
- Manual ID sharing costs
- Incompatibility with other VOIP systems
- Incompatibility with legacy analogue systems
- PSTN call cost accounting? Who pays-how.

An Enterprise Deployed Solution is Important

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Other Considerations

in the mix

- Existing large investment in analogue phones
- Physical VOIP phones more expensive than analogue phones
- Legacy Issues: Fax machines, headphone aversion, security phone and general expectation of reliability
- PSTN connectivity and call accounting (for non PBX systems)
- Cloud - Google Apps or Office 365 – Issues: Latency and functionality limitations (office apps)
- Give everyone a mobile instead of a desk phone. More mobile and simpler deployment. Yes
- PSTN and Analogue phone connectivity essential for legacy collaboration
- PSTN call accounting. Perhaps report but don't charge.
- Is one imperfect solution better than 4 imperfect solutions?

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What does Gartner Think?

Figure 1. Magic Quadrant for Unified Communications



Source: Gartner (July 2010)

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Summary

There is increasing overlap between various University eCommunication systems.

May be merit in consolidation and coordination of services and strategy.

Delay may result in missed productivity benefits and increasing adoption of disparate consumer systems.

Missing functionality has 0% reliability.

Consider what happened to the record industry when they initially resisted then embraced the internet.

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