CREATING AND USING UBIQUITOUS COMMUNICATIONS

Is ubiquitous communications a natural outcome of deploying unified communications?

Unified Communications (UC) is a concept rather than a defined set of communications tools or a specific communications capability within an organisation. The historical positioning of UC as a technology to allow many modes of communications to be funnelled onto a single user device or application remains valid, but this should no longer be the principal concept.

Unified Communications should primarily:

Success criterion 1:

Provide a richer, more effective communications and collaboration environment that will increase efficiency and drive better organisational outcomes.

Using this as the key concept might broaden the scope of UC and this is a good thing. A Unified Communications strategy should be predominantly focused upon understanding and defining the organisational outcomes achievable through UC.

The typical challenges associated with delivering Unified Communications are associated with **application integration**, **user adoption** and **operational enablement**. How do you overcome these challenges? And is the result Ubiquitous Communications?

This paper provides an overview of the approach that should be taken when planning for UC in order to ensure project success and operational enablement, and provide a user experience that is as ubiquitous as possible.

What Is unified communications?

It is important to start a UC project with a key objective in mind; that is, to define what UC is for your organisation as soon as possible in the process. The assumption that the base-line deployment of a UC desktop application that caters for myriad types of communications modes (such as presence, instant message, email, video, voice and collaboration) will result in a successful UC project is a dangerous one. It is not just the delivery of the applications that makes the project successful; what is more important is the *use of* the applications by end users, the *availability* of the applications to end users, alignment with broader business strategies and, therefore, the positive impact UC has on the organisation as a whole.

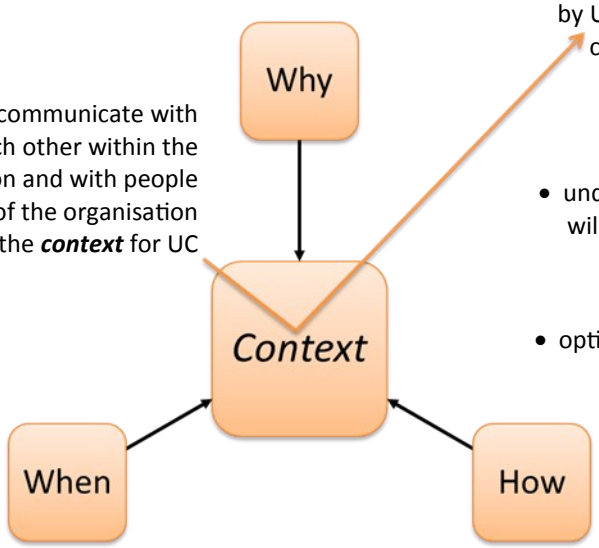
To create a definition of what Unified Communications is to your organisation should be a primary objective of the UC business-requirements specification process. That definition allows you to understand how UC should be used and where it can be used from as opposed to simply what it should functionally provide and 'do'.

Success criterion 2:

Establish a defined and manageable communications and collaboration services portfolio based upon a detailed business-requirements specification.

To support this approach, use the following high-level parameters in this definition process.

Understanding:
why
how, and
when …
… people communicate with each other within the organisation and with people outside of the organisation provides the ***context*** for UC



The ***context*** allows you to:

- identify gaps that can be filled by UC and issues within the current communications environment that must be addressed
- understand which UC tools will be required and under what circumstances
- optimise the organisational relevance of UC
- maximise user adoption

The shaping of these three parameters for your particular environment will allow an initial profile (or groups of profiles) to be developed for all communications users.

It is only these communications profiles and associated user profiles and requirements that are able to provide the necessary baseline and context to continue developing your UC strategy in an optimal way. It is important to complete this process in advance of making definitive decisions around a UC vendor or platform: that decision must hinge on the output of the business-requirements specification rather than being an input.

Taking the time to specifically define Unified Communications within the context of your environment makes UC more tangible for the end users and stakeholders. The approach also mitigates the risk associated with building a UC environment based upon a solution or vendor in isolation of broader business input and requirements specification.

In addition, taking the correct approach significantly increases the value of the requirements-specification process and the business value of the resulting UC environment. By understanding more in advance, you can start to tackle the key challenges and success criteria around a typical UC project:

Contact NSC

Head Office:

68 Waterloo Road
North Ryde
NSW 2113
Sydney
Australia

Tel: 1300 366 304
Fax: 1300 366 305

NSC NZ Ltd
1/106 Bush Road
Rosedale 0632
Auckland
New Zealand

Tel: 0800 672 672

www.nsc.net.au

Success criterion 3:

Broad, but relevant, application integration

Unified Communications is inherently not going to be provided by a single platform or vendor. High-level and low-level applications must be integrated in order to enable Unified Communications to become unified and/or ubiquitous. Application integration includes planning around desktop applications, mobile applications, server applications, network applications and the supporting IP network layers required to transport UC and enable the user experience to be as constant and consistent as possible. Communication requirements and challenges associated with existing business processes should also be understood, as the UC integration scope and user adoption will be influenced by how effectively these processes can be enhanced.

Success criterion 4:

Organisational relevance and user adoption

Although Use Case Scenarios are essential, this is an area that is often overlooked in the planning and discovery phases. When establishing with the user base what UC tools and functions will be available to them, it is essential that the interoperation of those tools (i.e. the real time usage of voice, video, instant message, email etc.) is flexible and functional enough to meet mobility requirements, different preferences and workforce strategies (such as using UC to enable more remote/home working).

Again, with UC inherently encompassing a variety of applications (both data and communications), there is an expectation that everything is accessible and easy to use. Precise Use Case Scenarios should be established before design and deployment to ensure that the solution is viable and that the resulting usability of the environment meets the stakeholders' requirements and expectations.

Success criterion 5:

Operational enablement

This is a broad challenge for Unified Communications deployments that are made somewhat more challenging as the deployment aims to become more ubiquitous. At a high level, the operational enablement is greatly facilitated by understanding and addressing the application-integration and user-adoption challenges. Operational capability and any required adjustments to that capability or cost should be understood as soon as possible within the planning and discovery phases as ultimately they will affect what will be in the UC services portfolio and the subsequent rollout strategy.

Contact NSC

Head Office:

68 Waterloo Road
North Ryde
NSW 2113
Sydney
Australia

Tel: 1300 366 304
Fax: 1300 366 305

NSC NZ Ltd
1/106 Bush Road
Rosedale 0632
Auckland
New Zealand

Tel: 0800 672 672

www.nsc.net.au

What is interoperability within UC? And why is it so important?

- Interoperability analysis should start with profiling the UC business requirements.
- Once why, how and when people need to communicate with and within the organisation are understood, the specific UC services and tools can be better identified.
- Interoperability is initially identified at the user level. If is not **easy** and **relevant** for users to use the tools defined for them in the profiling, then they will either not use the tools at all or not use them effectively or within the context of the UC strategy and required outcomes.
- Interoperability should only then be addressed at the product and infrastructure level because, before this point, you don't really know what needs to be achieved, on what scale, in which locations and circumstances and, therefore, what products, applications and supporting network infrastructure are required for a particular use case.

A note on business-requirements specification

Generating business-requirements specifications for UC should not be about simply sitting down with a range of users and asking them what they want. This misconception and subsequent reluctance to engage with the business properly has led to many UC projects being based around the capability of a product and assumptions around how it might best be used. This is not necessarily an incorrect approach, but it is certainly less than optimal and can become disruptive to the ongoing development of UC beyond the initial deployment.

It is important to understand that gathering business-requirements specifications for UC is about empathy with, and understanding of, the business challenges and inefficiencies associated with the current communications environment. Solve current communications issues, reduce organisational inefficiency and align the UC strategy to other organisational focused strategies and your project will be:

- ***more successful***
- ***more sustainable***
- *and will* ***involve less risk.***

An ideal approach

Profiling is the key to ensuring that the principal factors outlined so far drive your UC project. It represents an opportunity for IT to increase business and stakeholder focus upon, and association with, the project.

On the following pages, a typical range of UC services is used, including:

- voice services and voicemail
- collaboration
- email
- conferencing
- instant message and presence
- video

An increased number of services or a more granular breakdown of collaboration services, for example, might be required, depending upon your required outcomes.

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Australia

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Auckland
New Zealand

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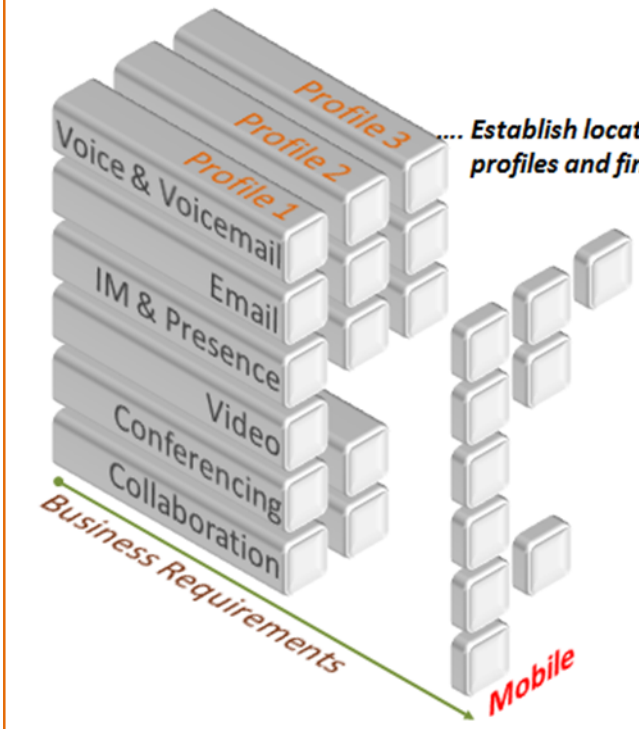
.... Establish UC profiles and UC application filters

Not everyone in the organisation necessarily needs access to all UC applications

The value might be reduced by simply deploying everything, everywhere to everyone and expecting them to use it at all, or use it effectively. Equally the operational cost is higher than it needs to be



.... Establish locations, develop profiles and fine-tune filters accordingly

Mobility, accessibility and flexibility are all key terms for UC and provide the basis for 'Ubiquity'

How does this affect the profiling in principle?

What services should be available under what circumstances to who?

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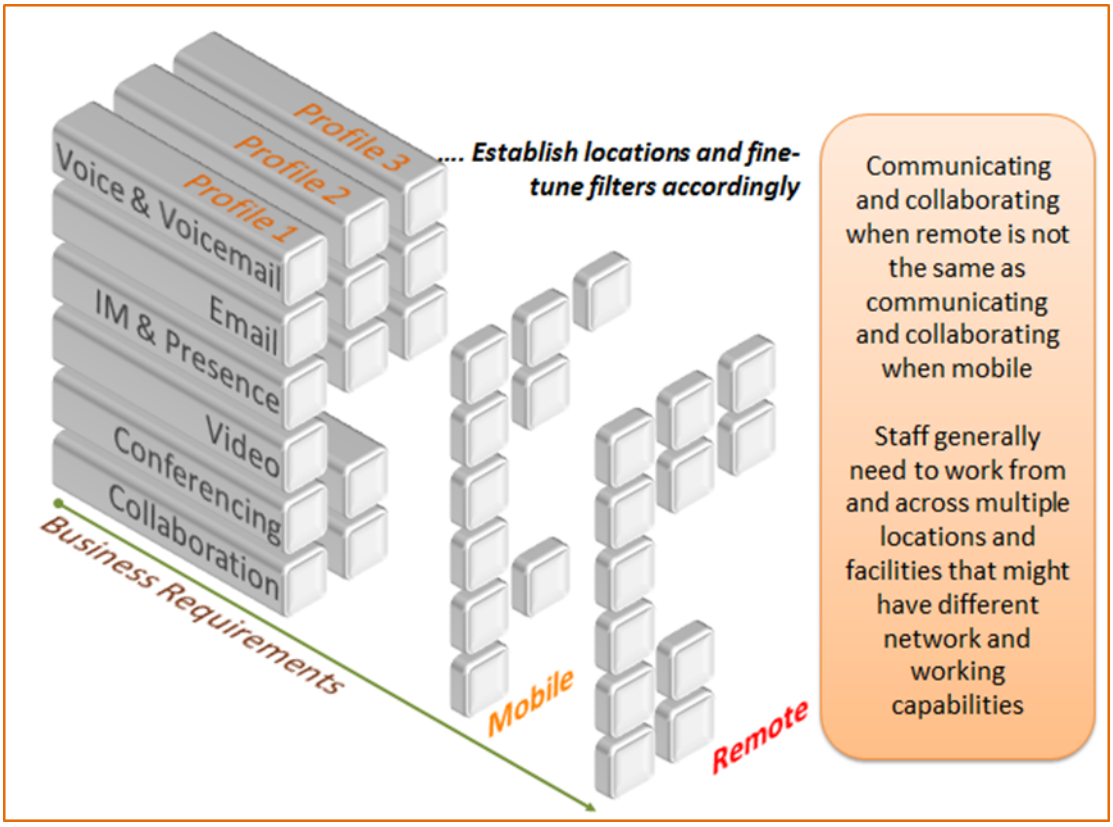

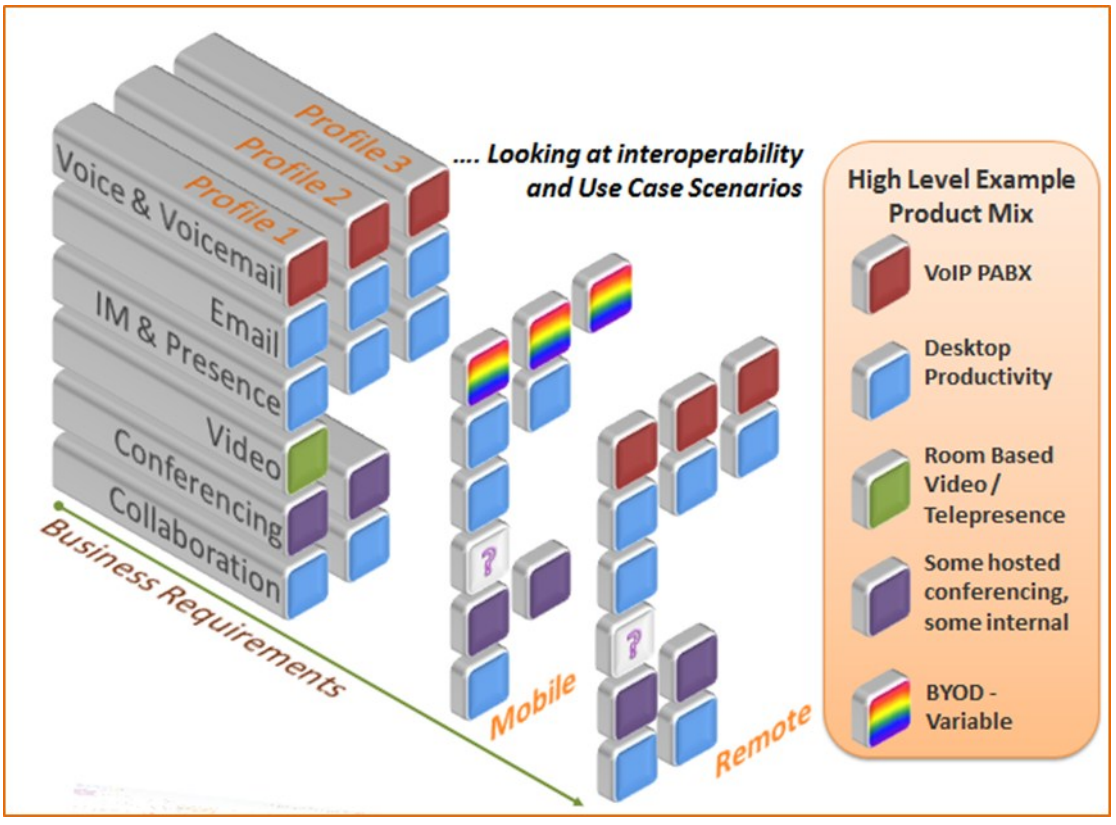

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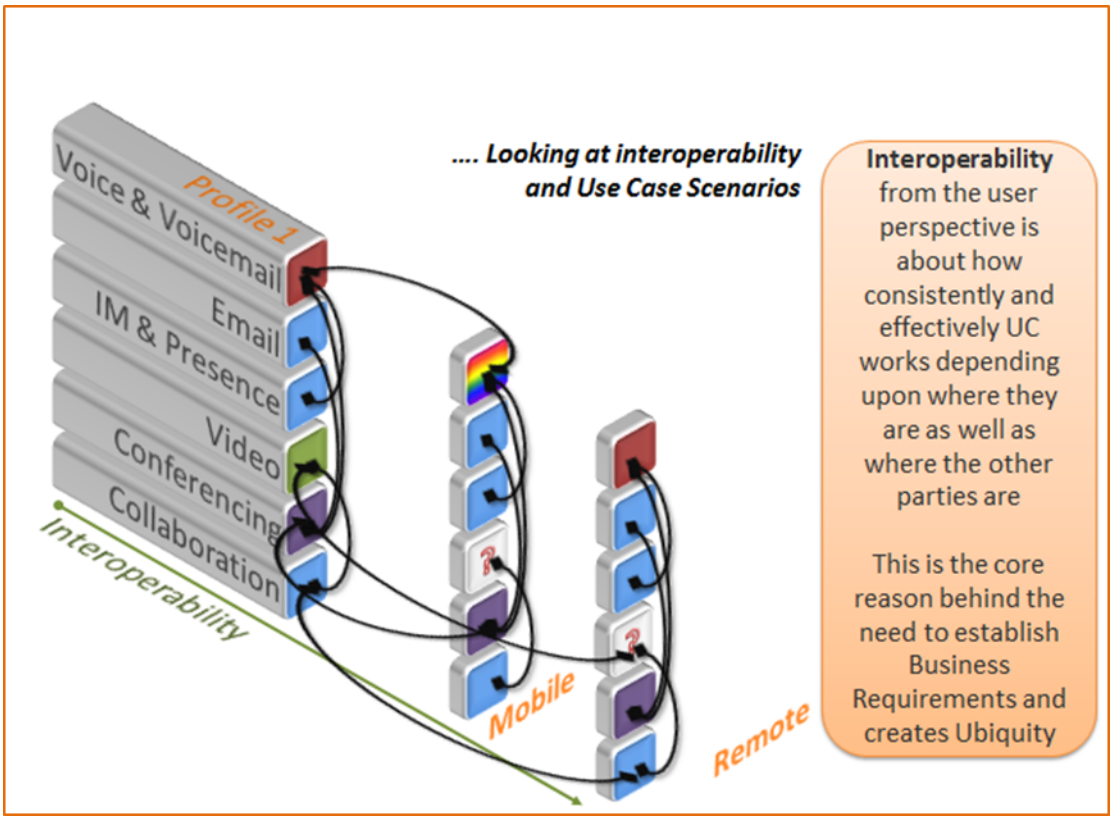

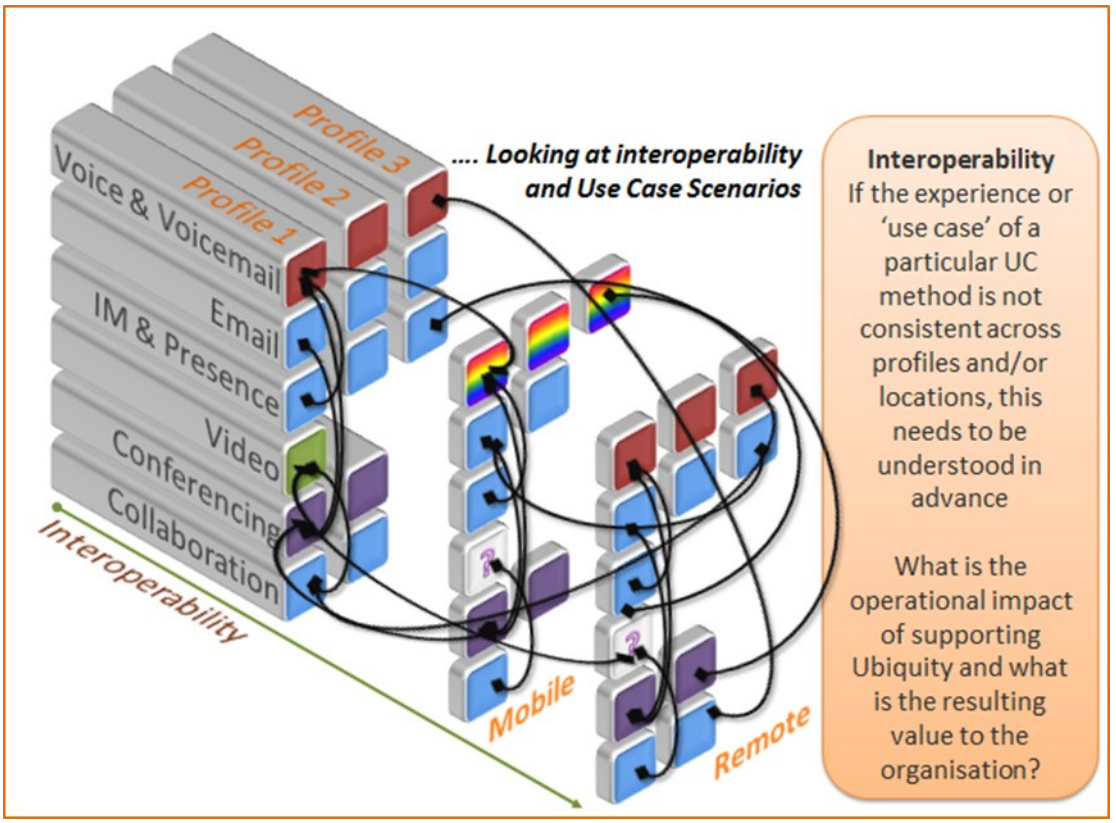

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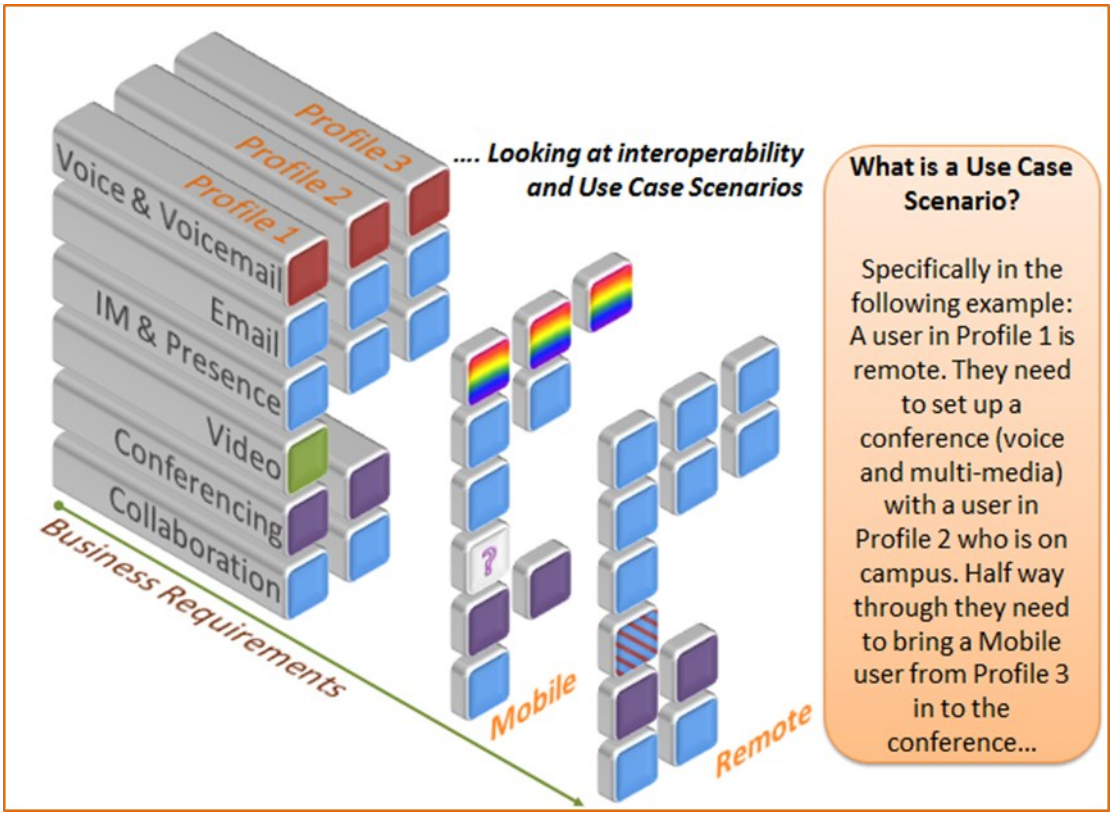

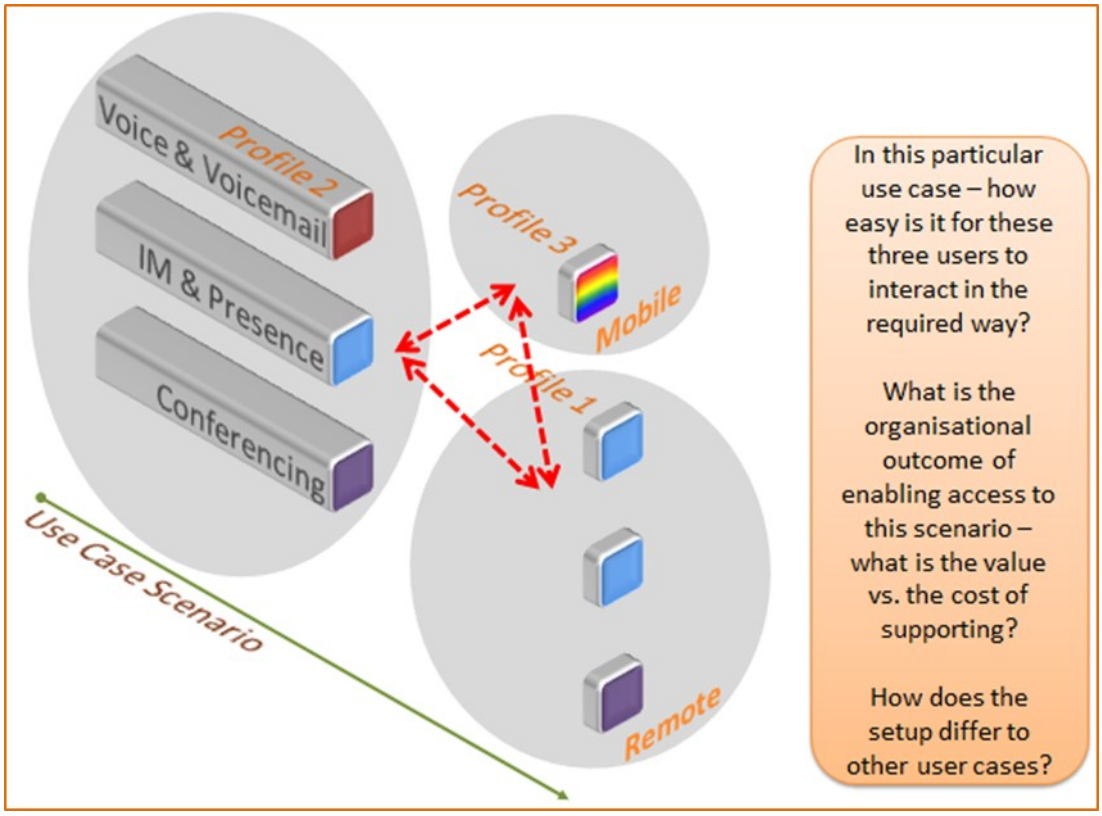

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Conclusion

Setting the correct success criteria around a Unified Communications project and taking an organisational-centric approach will allow you to address current communications issues, reduce inefficiency and align the UC strategy to other organisational strategies. This will mean that the project will be:

	more successful	*more sustainable*	and will *involve less risk*
because	UC will have higher level of business and organisational relevance	UC will have stronger and broader endorsement within the organisation and a more tangible value	Fewer assumptions are required around the operational requirements, accessibility, scalability, flexibility and complexity, along with
which means	UC will have dramatically enhanced user-adoption levels and therefore have a greater positive organisational impact	The underpinning UC strategy will be allowed to move forward with more readily available funding and develop in unison with other IT and organisational strategies	IT can properly plan for the operational impact of UC, which is typically quite high. Unexpected, costly operational overheads as well as unpredicted business demands upon the UC environment will generate an impression of failure of a UC project however well it has been technically implemented – this risk can be avoided

It is, of course, an imperative to deliver a solution that works from a technical perspective. But limiting success factors to technical delivery backed only, as is often the case, by outcomes defined in limited "proof of concept" environments, is likely to result in a less than satisfactory outcome from an organisational perspective. The costs typically associated with taking the approach outlined in this paper are always a fraction of the costs associated with deploying and operating the new UC environment and yet the value is significant.

Ubiquitous Communications is not necessarily a natural outcome of deploying Unified Communications, but it is certainly an extension or leveraging of Unified Communications. The distinctions are really that:

- Ubiquitous Communications is more the concept of being continually connected through a variety of means, methods and applications. A current analogy is where the boundaries between UC and social media are starting to blur and merge.
- Unified Communications is all about increasing efficiencies and the overall capability of an organisation to achieve its goals and strategies. Ubiquitous Communications will provide an additional, passive layer to Unified Communications: the recipient and how they might use that communication are unknown, which – if you think about it – is actually contradictory to this principal of Unified Communications. Ubiquitous communications is distinct in as much as it allows recipients to choose whether or not to respond or add to the communication, or, indeed, even 'consume' it in the first place .

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Auckland
New Zealand

Tel: 0800 672 672

www.nsc.net.au

Author

*This whitepaper was authored by **Stuart Kirkby**, Domain Expert / Solution Architect (Unified Communications) at NSC Group.*

Stuart has been working in multiple roles within the Unified Communications industry for over 16 years spanning architecture, engineering, service delivery and organisational change. Stuart has worked for NSC Group for the past seven years, primarily within Avaya and Microsoft unified communications and messaging technologies.

While working with NSC Group, Stuart has enabled unified communications for tens of thousands of users within business, government and educational organisations. This experience has brought him to his current role within NSC's Consultancy Group as a UC domain expert and solution architect where he is responsible for pioneering NSC's evolutionary approach to delivering communications capability to their customers.

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