WAINHOUSE
Research

The Enterprise Journey to Transformation
The UC&C Lifecycle and Keys to Adoption

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Overview

The term "Unified Communications" has been both a source of salvation as well as a source of confusion for many enterprises. In the early 2000s, the term was applied to instant messaging solutions, but later became adopted by telephony and conferencing vendors alike. Today, progressive solutions add the term "Collaboration" to the unified stack, evolving from UC into UC&C – solutions that effectively unify IM, presence, audio, video, and web collaboration into a consolidated user experience.

On one hand, a unified platform is easier and more cost effective to maintain, and a unified user experience increases adoption and enterprise collaboration. Conversely, some IT decision makers (ITDMs) feel that a truly unified communications experience is difficult – or impossible – to achieve in their environment, pointing to the complex mix of vendors and competing user requirements they currently support.

Still, many enterprises are working to unify their communications onto a UC&C platform. Wainhouse Research has derived a UC&C Lifecycle that provides a detailed description of the core stages of an enterprise UC&C journey. It attempts to answer the question "what is the current state of enterprise UC&C adoption?" and provides a staged framework with a roadmap for moving to the next level. The Lifecycle focuses on communications within the mid-to-large enterprise (>250 employees).

The detail and observations provided within this white paper are gathered from both objective, quantified sources and subjective, observation-oriented sources:

- **Surveys** – WR conducts a series of yearly surveys, polling enterprise IT decision makers (ITDMs), end users, and channel partners, in an effort to objectively quantify UC&C trends

- **In-Depth-Interviews (IDIs)** – WR engages in formal IDIs in support of consulting engagements, generally targeting ITDMs, in an effort to subjectively understand and document UC&C trends

- **Enterprise Consultation** – WR engages in direct consultation with enterprises, providing guidance on UC&C roadmap and implementation plans

- **Vendor Consultation** – WR supports many UC&C service providers and vendors directly, providing consultation on product roadmaps, industry trends, and moderating executive roundtables

Throughout this paper, we combine Wainhouse Research data and analyst perspective into a centralized view of the stages within the UC&C lifecycle and current state of adoption within the mid-to-large enterprise. Within each stage of the lifecycle, we also include experience, observations, and key solutions provided by Tata Communications, the sponsor of this paper.

The Five Stages of the UC&C Lifecycle

Figure 1 - The 5 stages of the UC&C Lifecycle

Figure 1 depicts the five stages of the UC&C Lifecycle. On the far left exists those enterprises who have not yet embraced digital communications as a concerted strategy, relying instead on primarily analog-based services. In contrast, those on the far right have successfully implemented a UC&C platform, and are leveraging their digital communications environment to transform key elements within their business. As we discuss each stage, we will provide observations on common technologies, cultural attributes, and key steps an enterprise can take in order to move forward in the lifecycle.

Stage One: Silo'd Enterprise

The Silo'd Enterprise is currently utilizing independent, disconnected communication solutions. The communications environment is primarily analog – TDM PBXs support enterprise telephony, audio conferencing services are accessed via the PSTN, and communication tools are decoupled from workflow (i.e. scheduling) and work processes (i.e. CRM or support solutions).

Silo'd Enterprise	
Telephony	Supported by TDM PBXs, no VoIP is deployed
Audio Conferencing	Accessed via the PSTN, per-minute charges create a variable cost that is managed by limiting the number of host accounts within an organization.
Web Conferencing	Services provided by 3rd party web conferencing providers, with a browser-based experience supported by plug-in applications. Costs and support requirements limit the number of hosts.
Video Conferencing	Room-based video is the focus, and the lack of an integrated scheduling process and personal video limits utilization. Users may resort to consumer solutions like Skype and FaceTime to support personal video requirements.
Presence and IM	No enterprise IM solution has been deployed. Users often use their own IM applications in these cases, which are primarily consumer solutions (Yahoo, AOL). IM is therefore used in pockets, likely at a team-by-team level.

In the Silo'd Enterprise, collaboration is often costly and, as a result, is limited to specific users or use-cases – all employee calls, project teams, executive leadership calls, etc. Communication is relatively inefficient in the Silo'd Enterprise, as employees rely more on asynchronous tools (email, voicemail) than real time collaboration to share information. As a result, information hoarding may run rampant, as users struggle to access information held by experts and others within the enterprise.

In order to move 'up the ladder', the Silo'd Enterprise needs to identify key cost components that exist in their communications environment. Expensive TDM circuits, maintenance on analog switches and PBXs, PSTN conferencing charges, and productivity lost to inefficient processes can all be addressed by moving to the next stage.

Tata Communications' Take

Tata Communications has a long history of helping global enterprises in this stage. Although many enterprises have moved past the Silo'd stage, we work with many global enterprises who have at least a few locations or users stuck on outdated communication technologies – sometimes these technologies are inherited during the acquisition of another company, or perhaps the solutions are simply still working, albeit not as efficiently or effectively as newer solutions.

All said, the Silo'd enterprise actually has the most to gain from this transformation journey and can realize immediate and material cost savings by implementing a few simple IP-based solutions. Specifically:

Focus on managed IP networks – the key to moving towards the "Transformation Stage" is a well architected and fully managed next generation network. Now's the time to establish a plan to ensure your network is ready to handle what you're going to throw at it – which, by the way, is a metric-ton of IP-based communications. Our managed network services can help get you there.

Get rid of those TDM trunks – by leveraging our global SIP trunking service, you can achieve the cost benefits of SIP immediately, while you plan to replace your TDM PBX over time. You'll also get the benefit of the world's largest SIP trunking footprint, with local services in over 57 countries and 300 cities, full PSTN replacement in 22 countries, outbound calling in 50 countries and International toll free numbers in 110 countries.

Leverage global conferencing services – By choosing from a range of audio, video, and web conferencing services designed to meet your user's needs, you can enhance your current user experience while preparing and planning for an advanced UC&C experience. Migrating to our automated, access-code audio conferencing and web conferencing services is a good first step – we can maintain your user's experience, establish network connectivity, and plan to migrate, upgrade, and unify solutions at a pace that makes sense for your enterprise.

Stage Two: Enhanced Enterprise

The Enhanced Enterprise has taken the first steps towards digitizing their communications, replacing analog solutions with IP-capable solutions. In this stage, IT teams evaluate their network requirements and begin implementing the augmentations required to converge audio, video and data collaboration onto their data networks. Converting TDM telephony to VoIP opens the door to lower telecom costs, including VoIP-based conferencing. IT-supported enterprise IM solutions are evaluated within the Enhanced stage, and employees begin adapting communications to reduce email-related delays and increase access to expertise within the enterprise.

Enhanced Enterprise	
Telephony	IP PBX deployment in progress, often targeting largest sites first, then moving to smaller sites over time
Audio Conferencing	Still provided by a 3rd party service provider, but larger sites may extend the enterprise network to the provider's cloud, eliminating PSTN conferencing charges where possible. As costs are reduced, additional employees may receive their own host accounts.
Web Conferencing	Delivered by 3rd party services, but IT may investigate services that provide 'native' browser integration, eliminating the need for add-ins and reducing IT support requirements. Incremental costs continue to limit hosts, but reduced support may grow the number slightly.
Video Conferencing	As networks are updated and improved, personal video solutions begin to roll out, sourced by the enterprise's group video and purchased as an incremental license per user, or supported by the enterprise's web conferencing vendor. Incremental costs limit personal video to executives and highly mobile employees.
Presence and IM	The IT team evaluates and selects an enterprise-class IM solution, rolling the service out through a staged deployment. The IM solution should be supported by the enterprise's target UC&C vendor.

Enhanced Enterprises see a general increase in group collaboration as price points begin to drop, allowing for more host accounts and fewer cost-oriented constraints. However, cost and infrastructure barriers limit mass deployment, and collaboration services are still relegated to a subset of employees within the organization.

Tata Communications' Take

Tata Communications helps the Enhanced enterprise expand from IP-based networks into IP-based communications. With thousands of audio and video endpoints under management, we can help you move into the world of IP voice and video applications that reinforce network requirements as a critical success factor. Key solutions to support the Enhanced enterprise include:

Implement a hosted and/or managed IP PBX – whether you are moving from outdated TDM solutions to IP, looking to move your enterprise into the cloud, or just looking for a partner to manage your existing IP PBXs, Tata Communications has the expertise to help.

Move from PSTN to on-net conferencing – our global audio conferencing services can support a range of PC and mobile IP endpoints, while supporting traditional PSTN attendees – and with our network expertise, we can help you move to IP behind the scenes, providing immediate cost savings without disrupting your user's experience.

Engage a managed video service – our 100% IP-based service can help you cost effectively increase utilization and help maximize video adoption. Our solution supports immersive telepresence rooms, standard video rooms, personal video, and B2B video on a global scale.

Deploy a hybrid Skype for Business trial – our hybrid Skype for Business platform is well positioned for an Enhanced enterprise to begin a proof of concept, letting you validate the experience across a small population quickly and with minimal risk. We will help with the planning, deployment and operation, to ensure the service meets your needs.
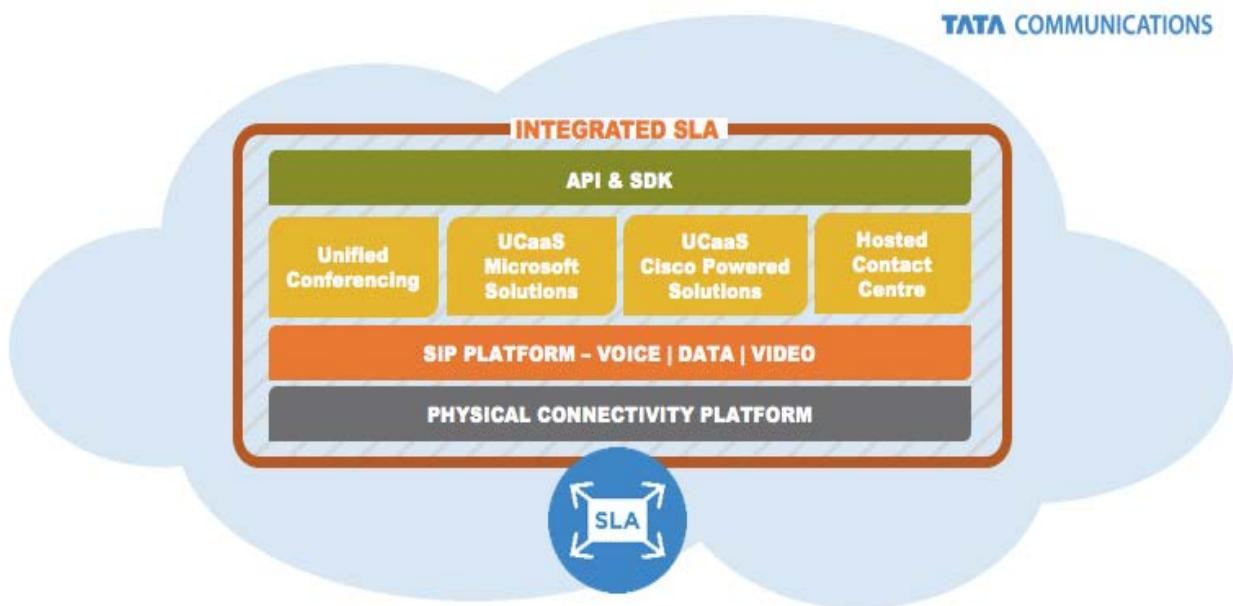

Figure 2 - Tata Communications End-to-End UC&C Platform

Stage Three: Integrated Enterprise

At this stage, the enterprise focuses on integrating various silos of communications – room and desktop video, conference scheduling, and presence across desktop, telephony and conferencing solutions. Many teams focus on establishing a SIP standard across voice and video solutions, and leveraging SIP trunks to gain access to external networks.

Integrated Enterprise	
Telephony	SIP-enabled IP PBXs are the focus, and IT works on providing soft-clients to enable mobile employees and home workers.
Audio Conferencing	Primary audio conferencing is still supplied by a service provider, and the enterprise has migrated as much of their traffic on-net as possible to reduce PSTN costs. Scheduling is done via integrated calendar plugins, and the audio provider is integrated with web and video conferencing services where possible.
Web Conferencing	Primary web conferencing is still sourced by a service provider, but is now tightly integrated with the enterprise's audio conferencing solution (often sourced by the same vendor), supporting PC-based VoIP as well as PSTN callers, and providing a unified roster. Integrated enterprises often experience a hybrid web conferencing environment, as enterprise IM solutions may allow for basic desktop and application sharing – end users likely begin experimenting with these services, using them primarily for ad-hoc collaboration, but continuing to use the primary web conferencing service for structured and schedule collaboration.
Video Conferencing	Integration between room and personal video solutions becomes a focus, often fueled by the popularity of personal video solutions. Personal video may expand rapidly, fueled by the video feature found in the selected IM solution – bringing with it a new set of network demands.
Presence and IM	Having validated the UC&C platform in the last phase, many enterprises elect to make the IM service available to the entire organization. As a result, IM quickly becomes a primary form of communication, and ideally reduces email volumes as a result.

At this stage, many enterprises begin to view collaboration as core to their business, and possibly a competitive differentiator – looking for ways to leverage groups to increase efficiencies and related profitability, reduce time to market, improve product development decisions, and boost employee engagement scores. Executive champions often emerge, working to leverage collaboration effectively across the organization.

At this stage, a central UC&C platform has been evaluated and identified. It's also time to complete the requisite infrastructure-related projects – network upgrades, peripherals deployed, mobile solutions identified, and training programs – to support a fully unified environment. In parallel, IT is working to enhance its chosen UC&C platform by adding PSTN access and trialing the platform internally in preparation for a larger rollout. In this stage many enterprises evaluate hosting partners in an effort to leverage cloud deployment in line with the enterprises hosted vs. premises-based service strategy.

Tata Communications' Take

Integrated enterprises find Tata's SIP-based backbone to be an effective foundation as telephony, video, audio and web conferencing solutions converge. As we help you position your enterprise for a fully unified user experience, the focus on converged networks and PC-based communications increases. Here's what we suggest you do:

Go multimodal with SIP trunking – as your use of video and voice increases, ensuring that your SIP trunks are ready to support both voice and video calling is key. This *first of its kind* service enables enterprises to transport voice, video and instant messaging over SIP trunks. It simplifies management of video bandwidth provisioning, increases video adoption through improved interoperability and offers optimal quality of experience on a pay-as-you-go model.

Unify your conferencing tools – You can achieve a truly integrated, cost effective, and high-quality conferencing experience by leveraging our IP network with WebEx Cloud Connected Audio (CCA). WebEx goes beyond your desk phone to support a fully converged experience on your PC, video conferencing system, or smart device of your choice – including wideband audio, HD video, white-boarding and content sharing.

Experience seamless interoperability – With our jamvee™ UC solution, you are able to bridge the highest quality video experience between rooms, desktops, mobile devices, and most industry leading platforms – allowing your users to collaborate from wherever they are, when they want, and from the device of their choice.

Go hybrid, connecting your premises to the cloud – Our UC&C service nodes, which support Microsoft Cloud Connector Edition and Cisco CCA, are deployed globally. This enables you to enhance and extend the functionality of existing voice services, and ultimately sweat key telecom assets longer.

Stage Four: Unified Enterprise

The Unified Enterprise is defined as an organization that has consolidated its communications – IM and Presence, telephony/voice, video, and web collaboration – into a platform that delivers a consistent user experience. As a result, every interaction may electively include any mix of text, audio, video, data sharing, and can easily include additional team members with no barriers. User adoption becomes the primary focus, and IT works to deliver access to every employee, ensuring they have the hardware, software, and training sufficient to leverage the UC&C platform to its fullest.

Unified Enterprise	
Telephony	The UC&C platform supports internal, peer-to-peer VoIP calls in addition to PSTN inbound and outbound calling. Calls are distributed to the appropriate UC&C client, on the device most appropriate for the user and the interaction – on the PC, mobile device, tablet, or desk phone.
Audio Conferencing	Primary audio conferencing is now supported by the UC&C platform, including internal VoIP attendees using the UC&C client, as well as external PSTN callers. While the mix will vary by enterprise, many Unified Enterprises report their audio conferences consist of 75% or more VoIP callers, with the remainder made up of PSTN or cell callers – and the most aggressive

	reported ratio has 95% of their audio conference attendees joining via VoIP. Those who boast a 90%+ ratio of VoIP to PSTN callers often make educating employees to use the UC&C client a priority (whether they are in the office, at home, or otherwise traveling), and have worked to create federated connections with their primary external partners where possible.
	Note: the critical element for enabling audio conferencing on a UC&C platform is a consistent workflow and user experience. Conferencing-enabled employees should have a consistent and integrated scheduling process (one click in calendar), consistent "join" process (one click from an invite, familiar dial-in and conference codes when needed), and the ability to manage all attendees via a universal roster. This said, there are several options to delivering PSTN integration – ex: deploying the equipment and required edge infrastructure or integrating with a compatible service provider.
Web Conferencing	Primary web conferencing is now delivered via the UC&C platform, allowing for real-time one-click data collaboration during each interaction. However, even the most unified of enterprises will likely find the need to maintain licenses with a third-party external web conferencing provider, depending on the unique needs within their user community – training teams, marketing, and others may have requirements that aren't fully covered by the UC&C platform, like streaming, moderated Q&A, etc. Understanding and catering to these unique requirements is a key to UC&C adoption, as today's users will often procure services that meet their needs on their own if not met by IT.
Video Conferencing	Personal video within the Unified Enterprise is supported fully by the UC&C platform. Room video, conversely, is often dependent on existing infrastructure, and may not fully converge onto the UC&C platform. Again, the ideal scenario focuses on convergence of workflow and user experience – users should be able to schedule both personal and room-based video within the same workflow, use the same process to start and join a video call across environments, and manage both group and personal video attendees from a consolidated roster. The infrastructure and architecture required for this unified experience will be unique to the vendor mix involved. Moreover, many UC&C platforms now have native room-based video options and supporting third party services that can help establish a bridge between environments.
Presence and IM	The Unified Enterprise has deployed IM and presence to all employees, across all devices – from desktop to mobile to tablet.

A common, if not universal, comment made by the ITDM responsible for a Unified Enterprise is "we knew there would be soft benefits beyond the obvious cost savings – we just didn't know what they would be before we started. Now that we've completed our rollout, we are most definitely experiencing these benefits." One of the most common quoted benefits involves an increase in the conferencing volume, with some ITDMs pointing to a 2x to 3x increase in group collaboration. This increase is often related to an increase in conferencing-enabled employees who, in turn, are using conferencing more organically – in both scheduled and ad-hoc scenarios.

With the all communications now enabled and supported by unified platform, the enterprise can turn its energy towards transformation efforts – identifying key workflows and business process for communications enablement. This is also the right time to determine what workflow integration can be delivered off the shelf, and what will require a third party expert to deliver.

Stage Five: Transformed Enterprise

The Transformed Enterprise positions employee collaboration as a core competency, using it to increase agility, improve customer experience, and increase employee retention. As key UC&C capabilities are integrated within key workflow and business process, they can fundamentally transform the way the enterprise conducts their business. While transformative results will vary by enterprise, a few common examples follow:

Transformed Enterprise	
Employee Lifecycle Provisioning	Many enterprises with distributed communications systems leverage a complicated mix of manual and automated processes to provision communication services. Done correctly, the Unified Enterprise can automate provisioning – and, as or more important, the disabling of phone numbers, conferencing host accounts, and personal video and web conferencing licenses. While a tactical example, automating the provisioning process can have a material impact on associated resources, costs, and security risks as employees enter and exit the business.

IM-Enabled Ticketing Approval	Most organizations have implemented an IT ticket tracking system and require a tiered approval process for certain activities. These approval processes often resemble an email-driven ping pong match, with the system requesting approval, the manager fielding the request, and responding as time permits. Integrating IM, presence, and persistence into the workflow can shorten an average approval process from weeks or days down to hours or less – approval is requested via an IM message with embedded one-click actions, allowing the manager to easily approve, deny, or request more information as appropriate.
Video-Enabled Welcome Kiosk	As guests arrive in a lobby, a video-enabled kiosk can provide quick access to the right employee. After registering, the guest can establish a video connection with the employee they are planning to meet – based on their presence, the connection will be established with the appropriate desktop, mobile, or room system, or fielded by the employee's delegate. Once approved, the kiosk prints out a badge and provides further instructions as needed.
Unified Contact Center	The benefits of a consistent Unified Communications platform do not need to be limited to internal users. A key element to transformation, in fact, is finding ways to extend these benefits outward to partners and customers alike. A UC-integrated Contact Center opens the door to a world of transformative possibilities – leveraging internal resources to support the occasional spike in business, expanding to home-based workers, decreasing ticket resolution times, and leveraging advanced analytics between customer-facing and internal support staff are just the beginning!

Tata Communications' Take

Though this is the ideal stage for most global enterprises, it is not the end of UC&C journey. True enterprise transformation occurs in this stage as the UC&C platform is integrated with business applications – all while leveraging the cloud for delivering globally consistent and accessible service to internal employees and external constituents including customers.

Enterprises at this stage are well placed to leverage their customer experience as the competitive edge. For such enterprises, our Cisco-powered InstaCC Global offering is a one-stop shop for all digital customer support needs. It is an omnichannel cloud contact centre solution built on our SIP backbone and delivers a consistent customer experience anytime, anywhere, and on any channel.

Tata Communications is well positioned to help you identify key business process and the correct APIs for effective and efficient integration. For those enterprises looking to take transformation past common off the shelf application integration, we have an established API/SDK suite that can be used to design and deliver customer use cases. We have direct experience leveraging these APIs to help create new and innovative collaboration-enabled business process solutions for your enterprise.

Current State of the Market

As shown in Figure 3, the average mid-to-large enterprise is well within the Integrated stage of the UC&C lifecycle. The primary drivers that have lead the market to this stage include a focus on cost savings and ease-of-use associated with a consistent, unified, digital communications experience. Adoption, however, is not universal, and is now a primary focus within many IT teams working towards a fully unified environment.
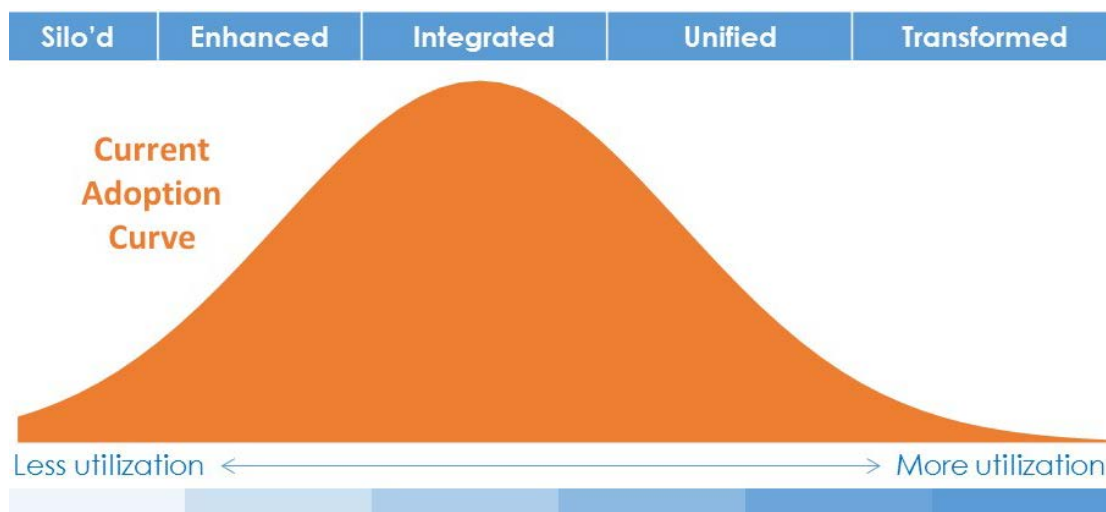

Figure 3 - Current UC&C Adoption Curve

Many enterprises have deployed IM to the majority of their users today. Telephony, however, is still supported by one or more PBXs outside of the UC&C platform. Audio and web conferencing is still primarily served by 3rd party service providers, although efforts have been made to integrate between the web and audio conferencing platforms. Personal video is rolling into the target UC&C platform, although not every employee has access as network impact continues to be a concern. Those enterprises who have delivered UC&C video to their users are likely to limit its use or availability, and are working to integrate with their room-based video infrastructure.

This snapshot provides a view of the average mid-to-large enterprise – and there are definitely organizations who are lagging and leading on each side of the bell curve. We regularly brief with enterprises who are struggling with a complex, multi-vendor environment, making a fully unified platform a long-term goal. On the other side, we observe enterprises who are already completely unified and are working aggressively on transformation efforts.

In order to determine the current state of the UC&C market, we reference a number of objective and subjective sources. Objectively, our last UC&C end-user survey (enterprises >250 employees, published July 2015), shows that approximately 75% of respondents use a UC&C solution at work capable of supporting IM at a minimum. However, only 66% of respondents are using an enterprise-class UC&C solution, capable of supporting a fully unified user-experience – the rest are using a consumer service like AOL or Yahoo Messenger. In addition, over 40% of UC&C-enabled users report they use two or more UC&C solutions – with some using four and even five different solutions for business communications. These enterprises need to select a single platform in order to be considered a fully Unified Enterprise.

Availability is half of the equation, with user adoption being the next relevant metric. Of those with access to a UC&C solution, almost 90% are using the IM feature at least occasionally. Audio,

video and web conferencing with three or more people, however, is reportedly used by 65% of UC&C-enabled users. When you take into account those who do not use a UC&C solution today, we're well below 50% of all potential users who are leveraging a UC&C platform as a conferencing solution.

> **Knowing Your Journey**
>
> Tata Communications is committed to helping global enterprises along their UC&C journey – as such, we feel the first step is understanding where your enterprise stands today. We have developed a short survey to help you do just that – **click here** to determine what stage of the UC&C lifecycle your enterprise is currently in and how you can move to the next stage.

The Future Adoption Curve

As noted previously, not every enterprise will – or can – implement a fully unified UC&C platform. As our current numbers show, roughly 25% of mid-to-large enterprises have chosen *not* to implement a UC&C solution. And while some enterprises will elect to deploy a UC&C solution in support of basic presence and messaging features, they may prefer to keep telephony and conferencing services outside of their UC&C platform.
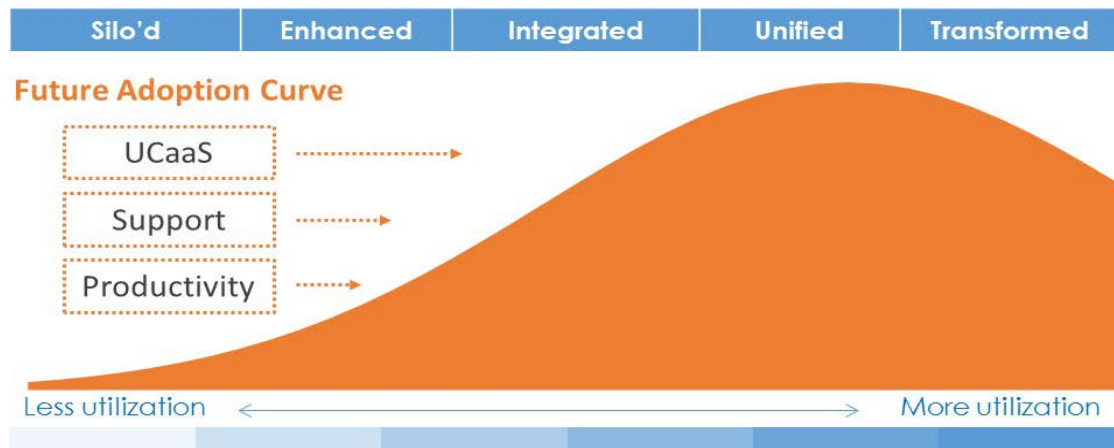

Figure 4 - Future Adoption Curve

Overall, we see the UC&C market maturing over time, with approximately 75% of mid-to-large enterprises deploying a fully unified platform (Figure 4). The pace of this shift is expected to increase, driven directly by a maturation in the hosted UCaaS service provider offers and the associated benefits of improved support models and productivity targets. It is also not a given that every enterprise will choose to transform their business by integrating UC&C into various elements of their business process – some will transform via separate applications, and some will simply choose not to invest in this level of integration.

Analysis

Over the last ten years WR has watched, listened, and participated directly in the debate for and against a fully unified communications and collaboration environment. If this experience has taught us anything, it's that there is no universally correct answer. Best-in-breed solutions will

continue to have their place, and many enterprises will continue to follow a non-UC&C strategy based on their unique environment and core business requirements.

This being said, the benefits that the average enterprise can achieve with a *well implemented* UC&C platform are undeniable. Lower support costs, increased collaboration, enhanced productivity, and improved cost models are all quoted as 'achieved benefits' by the fully unified enterprise. To be sure, a *well implemented* UC&C platform often requires a large amount of up-front due diligence and, often, investment. Network investment continues to be the primary area of focus for many IT teams as they work to converge real-time traffic onto their existing data network.

A final observation: the path to UC&C is a winding and enterprise-specific one, and can grow from any pillar of the communications platform. Every IP Telephony vendor, from Cisco to Avaya to Mitel to literally "everyone else" selling an IP PBX has invested in UC&C, and now provides desktop and mobile clients capable of supporting presence, IM, audio, video and web conferencing. Nonetheless, there are a limited number of enterprise messaging platforms competing for enterprise mindshare – Microsoft, IBM, and now Google are perhaps the most prominent here. Interestingly, the conferencing service providers in this discussion are also very active in the UC&C market, supporting a range of solutions from integration with their PSTN audio conferencing platforms, to hosted Cisco and Microsoft UC&C options, to advanced professional services and ongoing premises-based management support.
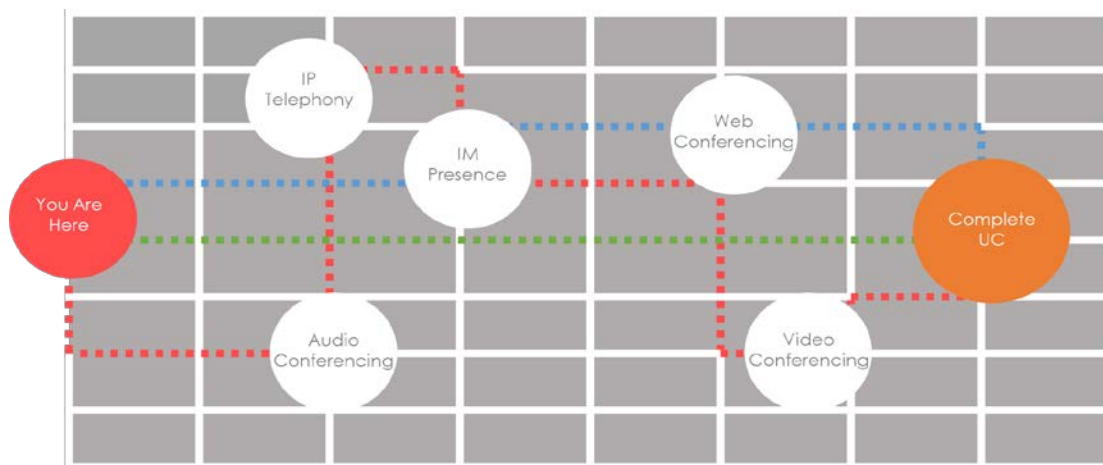

Figure 5 - Multiple Paths to UC&C

This multi-path environment is enabling more enterprises to realistically consider a fully unified platform. However, the increasing range of options can also slow down the decision making process within the enterprise – for example, a number of IT teams have slowed their traditional PBX purchasing process as they consider new solutions capable of supporting enterprise voice. Those IT teams who are on the leading edge of the UC&C adoption curve chose to select a platform, identify infrastructure requirements, and implement aggressively. On the other side, it is easy to find yourself caught in a boardroom taffy-pull, endlessly discussing the pros and cons of the core vendors included in this discussion. While due-diligence is always recommended, no enterprise benefits from analysis-paralysis.

Tata Communications takes a modular approach to supporting global enterprises as they evolve through the UC&C Lifecycle. Whether you are at the beginning of your journey, moving from outdated communications and network services, or truly transformed – we have the global reach, the experience and the right solutions to enable your journey.

Tata Communications understands today's enterprise needs and their every-day challenges in planning and deploying UC&C solutions. Our platform is holistic and built on a carrier-grade foundation, ensuring performance, global coverage, scalability, resiliency and disaster recovery.

Our carrier grade solutions are pervasive and align with your plans for globally accessible and globally consistent UCC deployment, delivered under an integrated SLA leveraging our tier 1 network and SIP backbone.

Our modular approach ensures you start where you can have the most immediate impact and chart a smooth journey without the need to worry about updating and replacing everything at once.
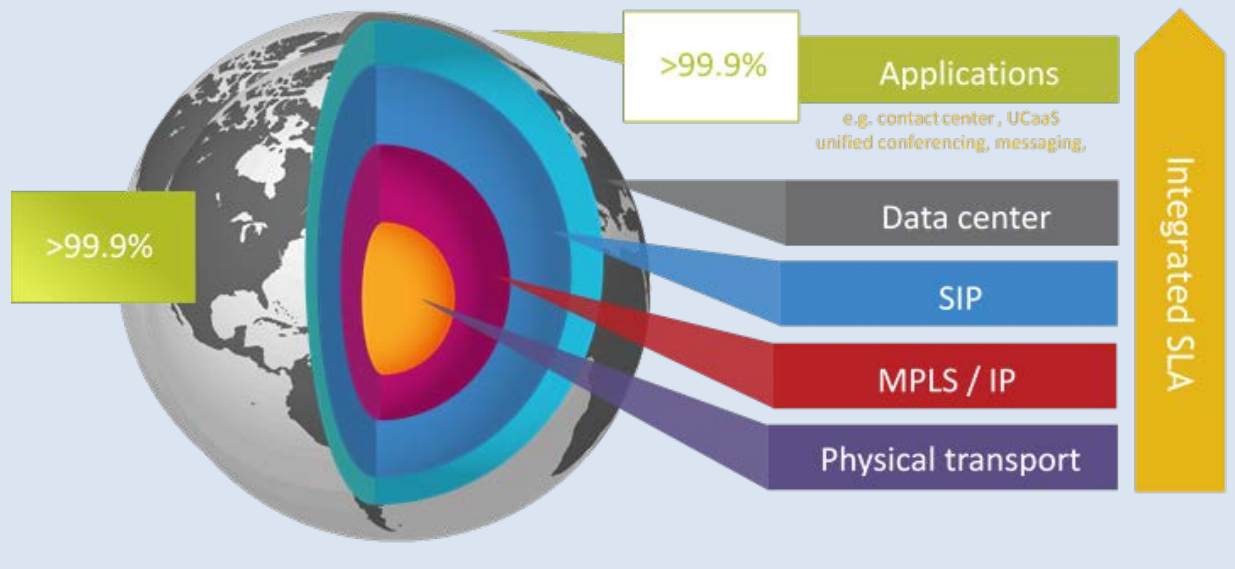
About the Authors:

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About Wainhouse Research: WR provides strategic guidance and insight on products and services for collaboration and conferencing applications within Unified Communications. Our global client base includes established and new technology suppliers and service providers, as well as enterprise users of voice, video, streaming, and web collaboration solutions. The company provides market research and consulting, produces conferences on technology trends and customer experiences, publishes a free newsletter, and speaks at client and industry events. More about WR.

About Tata Communications: Tata Communications is a leading global provider of New World Communications™ to multinational enterprises and service providers, including voice, data, network, collaboration and mobility solutions. Almost a quarter of the world's internet routes travel over the company's network. This 710,000km fibre network enables truly global unified communications. It also connects four out of the world's five mobile subscribers and carries 53 billion minutes of wholesale voice traffic annually. More than 300 of Fortune 500 companies use Tata Communications' state-of-the-art cloud, mobility, network services. Through Tata Communications' pioneering IZO cloud enablement platform, enterprises are able to connect to the giant clouds of Microsoft Azure, Google Cloud Platform, Amazon Web Services and Salesforce.com, who account for almost 50 per cent of cloud computing.

Tata Communications' systems integrate with 1,600 partners, 785 mobile operators and 700 VoIP (voice over internet protocol) operators. With connectivity to more than 240 countries and territories across 400 PoPs Tata Communications provides modular portfolio of unified communications solutions: global SIP; unified conferencing; managed services; UCaaS; cloud contact center; real time communication APIs.

For more information, please visit www.tatacommunications.com