



HINDSIGHT? INSIGHT? FORESIGHT? Three Tales of UC&C ANALYTICS ROI

Unified Communications began with the displacement of the traditional TDM Private Branch Exchanges (PBX) with VoIP centric call solutions which delivered the ability to leverage existing data networks for transport. This single transport profile for voice and data communications is the simplified foundation of unified communications.

Today, unified communications has significantly evolved into an integrated set of tools and applications designed to facilitate ubiquitous communications throughout organizations. The described term “unified communications” has also evolved to encapsulate complimentary tools that are more collaborative in nature. The widely accepted acronym is now UC&C (unified communications and collaboration) which encompasses applications such as Voice, Video, Contact Center, App Sharing, Presence, and Instant Messaging.

Although the concept of UC&C appear to be ingrained in most organization’s strategic plans, the practical growth and continued investments in UC&C require a clear path to Return on Investments (ROI).

Unified Communications & Collaboration

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Executive Summary

The two primary, yet theoretical, reasons that many organizations deploy UC&C components are: 1) Cost Savings and 2) Efficiency Gains. With these components as the over-arching drivers for UC&C deployments, the next step in determining continued investment is by answering the ensuing logical question: Did the theory of cost savings and increased efficiencies actually transpire with the deployment of these services?

Many experts believe that organizations that are not investing in UC&C will quickly fall behind due to the inability to leverage UC&C as a catalyst to transform and streamline business processes. In many cases the lure of organizational transformation and the streamlining of processes (which at a bare minimum point back to cost savings and efficiency gains) can fuel the decision to continue the investments in UC&C.

The introduction of analytics into the UC&C environment is the best course of action to equip organizations with the ability to confidently answer critical questions regarding how the *reality* of their deployments are tracking to initial theoretical justifications. Enabling organizations with the ability to measure, manage, model, predict, alert and present critical information associated with their UC&C ecosystem is a key component in supporting ROI.

Metrics like ROI are dire for any organization to understand. Why ask the business to fund a project that can't be financially justified? After UC&C deployments are funded and deployed, it becomes the responsibility of the stake-holder(s) to have access to key metrics to help articulate on-going ROI results. This is where the deployment of

UC&C Analytics play a critical role in delivering actionable data.

Each organization is different and the key metrics will vary so everyone will need to pick and choose the metric that applies to them. Regardless if the metric is ROI (Return on Investment), ROA (Return on Assets) or TTV (Time to Value), the one common thread is that every organization requires a firm business case to justify continued investments. Generally, hard dollar justifications reign supreme while soft dollar justifications are viewed as added or potential value.

According to a recent *Forbes Magazine* article, "The Road Blocks to Unified Communications" ⁽²⁾, the primary analyst shares, "the biggest problem plaguing UC is an inability to create clear expectations in both technology and business buyers minds..." The harsh reality is that even if this major problem of creating those clear expectations across the entire UC&C stack with both sets of buyers were achieved, the ability to validate those expectations would be nearly impossible without some form of analytics.

Organizations are quickly learning the value of deploying tools to assist in providing more visibility into the UC&C environment. But just as UC&C has challenges with scalability, inoperability and flexibility, so does the overwhelming majority of tools that provide visibility.

All Analytics solutions are not created equal, most struggle with delivering combined characteristics which can be summarized in three escalating words; HINDSIGHT, INSIGHT and FORESIGHT. The brief working definitions we will be using for each is as follows:

- **Hindsight** - provides information on what happened in the past.
- **Insight** - provides critical information on the present which helps understand “why” it happened.
- **Foresight** - provides a predictive glimpse into the future based on past and present events.



Understanding how these critical characteristics apply to some of the common approaches to delivering UC&C analytics are critical to maximize value and support ROI.

1. DO NOTHING

Many organizations view deployment of UC&C as another IT sponsored upgrade to the communications environment. These organizations generally fail to truly tie UC&C deployments to concrete business outcomes and improvements. It's not uncommon for this approach to drive more cost per deployment due to the inability to use analytic data to map and re-enforce business value. Having no visibility in such a complex environment makes it difficult to recognize how these services are being adopted and by whom. Understanding this basic yet critical piece allows organizations to thoughtfully roll-out pieces of the UC stack that makes the most business sense.

2. USE OF MULTIPLE MANUFACTURE SPECIFIC REPORTING TOOLS

Organizations using reporting tools have obviously graduated one-level up from the “Do Nothing” approach. They recognize the value of receiving “**hindsight**” into what’s transpired in their environment. Although some value can be derived from the approach, it comes with some major flaws. The **hindsight** centric **reporting** provides a barometer of what has happened in the past. An organization’s ability to take that data and correlate it to actionable information to drive tomorrow’s decisions (**foresight**) can be somewhat challenging. Furthermore, in the dubious event that the hindsight data can be used to drive future value, the next flaw introduces an exponential amount of complexity. The complexity is driven by the mixed flavor of tools and manufactures that make up the UC&C ecosystem in the vast majority of organizational deployments. The approach of leveraging existing assets by driving meshed integration points to deliver value is common. In this environment, each manufacturer provides some level of reporting for their silo which provides an instate that is difficult to decipher because siloed tools do not have the ability to cross correlate information. The final flaw revolves around the IT centric nature of manufacturer’s tools and how they fall short of providing value to business stakeholders. Manufactures like Cisco, Avaya, Polycom, Microsoft and others all follow this siloed approach of delivering **hindsight** information.

3. HOME-GROWN DATA MINING COUPLED WITH VISUALIZATION TOOLS

The next approach is the culmination of combining a basic old-age process with new-

age visualization tools like Tableau. Each component within the UC stack has the ability to output raw data. Depending upon the solution and deployment, this raw data can consist of a mixture of attributes that map to valuable session detail. At the genesis of UC, some companies took the raw data feeds from the UC components and placed them into spreadsheets and pivot tables in an effort to manipulate and sanitize the data. With the introduction of business centric data visualization tools, raw data from spreadsheets can be uploaded to provide visualization and correlation of activity within the environment. This holistic approach can provide overall visibility in somewhat of a unified nature. The main flaws are that these tool require effort in setting up things like field definitions, correlation points etc. and they are rooted in providing *hindsight* and a marginal amount of *insight* to help answer some questions around “why?”

4. DEPLOYMENT OF UNIVERSAL PREDICTIVE ANALYTICS

The next evolution or revolution in delivering value to organizations who are committed to mapping UC&C deployments to business outcome are delivering *hindsight*, *insight* and *foresight* from a universal perspective across any UC&C manufacture and/or component. The approach to unify the communications ecosystem should transcend to unifying your approach to delivering analytics in the same environment. One solution that is leading the charge in providing such characteristics is Predictive UC Analytics™ powered by TeleMate.Net Software. Predictive UC Analytics™ provides a powerful yet thoughtful approach to handling complex environments by delivering a role-based design to address the needs of both IT and business stake-holders within organizations. Predictive’s ability to

automatically and securely harvest data from any UC&C solution or manufactures provides an attractive method to gaining visibility into the entire UC&C ecosystem. The predictive nature of the platform delivers the ability to model future events based on intricate algorithms that take previous and present activities into account. The Predictive UC Analytics™ can provide information that assist in maximizing and streamlining the value of your UC&C deployment.



UC Analytics is the *Insight* into the UC&C Ecosystem. *Harvard Business Review* paper titled “Competing in the Insight Economy”⁽³⁾ “defines Insight as a clear understanding of an often complicated situation, opportunity or problem based on the analysis of a potential large volume and variety of data”. Highlights from this paper show:

- 71% are creating new forms of economic value from Insight
- 31% have monetized Insight
- 42% say data-driven Insight will be a significant contributor to the company revenue over the next three years.

When a clear path to actionable data exists, there are limitless opportunities to correlate and use the

data to drive efficiencies, cost savings and in some cases new streams of revenue.

UC&C Ecosystem

In most cases, the UC&C ecosystem is comprised of diverse systems and applications that are intended to integrate into a single platform. Integration in the ecosystem becomes much more feasible when components are supplied by a single vendor. The downside of the single vendor approach are two-fold; 1) usually requires a forklift approach and generally requires larger upfront investments, 2) each manufacturer has strengths and weaknesses based on systems and applications which generally suggests that a “best of breed” approach is less feasible in a single vendor ecosystem. The prospect of initially paying more for less is an unattractive proposition for most organizations. However, regardless of the approach, most experts agree that driving a consistent high-quality user experience and mapping deployments to business outcomes are the key catalysts for elevating adoption which drives ROI within the UC&C ecosystem.

Given the desire to integrate and deliver quality experiences across a multitude of manufactures, systems and applications, gaining visibility and actionable data to drive and support user experience and business outcome just became exponentially more difficult!

Traditional Voice

The transition from TDM based PBX's to VoIP centric solutions has been the most widely adopted first step that organizations have taken to initiate the foundation of their UC&C strategy. Admittedly, there are a host of business drivers including increase flexibility and mobility that continue to

fuel this transition. However the primary facilitator stack the majority of the chips on the side of organizational cost savings. **The elevated cost of maintaining a TDM based infrastructure and the staggering cost of transport are not sustainable given today's technology options.** PRI/T1 cost are swiftly being replaced with SIP trunking and other measures that facilitate the leveraging of existing IP networks.

In a recent *Unified Communications Insight* podcast titled “UC ROI”⁽²⁾, it was stated that clients were seeing significant savings, “20% and even as high as 60% just by eliminating PRIs and other legacy types of circuits”. Many replaced the legacy infrastructure with a fully redundant IP infrastructure and still experience this range of savings. Other significant savings can be achieved but will involve some level of business transformation. In the same podcast, one participant stated that 10%-30% of the extensions are going to softphone clients. Another participant had the percentage of softphone clients eclipsing 50%. A typical softphone client is in the range of \$20-\$30, where a traditional handset is in the ranges from \$200-\$400. The initial lure of the handset savings alone is significant, however you must factor in other costs that can cut into the initial savings; such as headsets or other peripheral devices for softphone users. Many organizations are leveraging IP based transport and softphone technologies as key supporters to encourage teleworking and agile workforces. Fostering teleworking and agile workforces can deliver a significant decrease in telephony cost but perhaps more importantly, allow organizations to reduce their real-estate foot print while delivering agility and flexibility to the work-life balance of employees. All of these points are significant contributors to benefiting the ROI calculation.

The value of transitioning voice communications is clear and widely adopted. However given the wide swath of communication methods that can be delivered across the UC&C stack, some organizations are noticing a substantial shift in how their employees elect to communicate.



Video

One method of communicating that is aggressively being adopted is Video Conferencing. It is a widely accepted premise that in-person interactions drive more favorable business outcomes due to the ability to read facial expressions and body language, as well as, gaining a general sense of the person allows for a better foundation to build rapport. The primary objective of video conferencing is to create a face to face experience that mirrors an in-person interaction. The value of a near face-to-face interaction without the associated travel expense is a key driver for organizations who adopted video conferencing.

Video conferencing has gone through a significant transformation over the past 10 years. The transformation has solidified video as a mainstream tool for communications in many organizations. At its inception in enterprises, room based video conferencing presented a host challenges that

stifled wide scale adoption. Barriers such as expensive dedicated equipment, strict bandwidth requirements, interoperability challenges, room/resource scheduling conflicts, user intimidation, and in some instances dedicated real-estate. In an effort to protect the weighty investments in room based video conferencing solutions, organizations deployed a series of tactical measures like adding expensive scheduling solutions, deploying managed services wraps that auto monitored endpoint status, as well as features that allowed automatic connection of scheduled calls. These tactics assisted with user comfort and minimize resource conflict but they also added additional layers of cost to an environment that was struggling with true wide-scale adoption.

The introduction of desktop video conferencing transformed the behavior and culture of many organizations. Consumer desktop video solutions that demonstrated themselves as easy to use and pervasive started to bleed into corporate environments. As major video manufacturers started to experience a decline in room based systems sales, most set their aim at producing desktop solutions that mirrored characteristics of available consumer solutions. Characteristics like supporting mobile devices and managing viable A/V experiences in low bandwidth/3G/4G environments. The last piece that required delivering was interoperability with existing video and telephony environments. The desktop video environment powered a more on-demand environment by where free-flowing video communications is based on an individual user's needs and not the availability of the resource.

As video conferencing continues its pervasiveness inside the walls of organizations for use cases such as training and live problem solving in manufacturing, many have chosen to elevate their efforts and the value of near face-to-face

interactions by offering video options in customer care environments, as well as, global HR interviewing. Well known organizations such as Bank of American and Hertz Car Rental have been models of success for these types of implementations. Industries such as healthcare are adopting video at a staggering rate to help leverage the availability of specialist which allows them to increase service while saving cost.

There are several places where video conferencing presents an enticing path to ROI, however organizations are hoping to get ROI and business value in the following areas:

- Increased Collaboration with Remote Teams
- Productivity Gains from Decreased Travel
- High Availability of Remote Experts to Speed Decision
- Remote Workforce to Drive Work/Life Balance and Decrease Real-estate Footprint
- Increased Customer Satisfaction and Brand Loyalty

IM / Presence

IM/P isn't like your grandmother's AOL messenger's attempt at speedy communications. Today IM/P, in many environments, is the gateway to initiate any and all communication sessions in the UC&C stack. IM/P solutions offer the ability to integrate compatible voice, video, email and app sharing solutions under one umbrella. This level of tight integration can deliver unrivaled power and flexibility to user communities by fostering a *check* and *escalate* environment. This type of environment enables users to check the available status (i.e., available, away, busy, offline, etc.) of a user, once the status is determined the user can initiate an IM session. Once engaged in the session,

users can decide to escalate to other levels of communications that better suits the user and situational requirements. After Voice, IM/P is the most widely adopted cog in the mighty UC&C engine.

Much like Video, organizations are providing B to C access to IM/P for customer care as well as the deployment of federation services to support the B to B use cases.



HINDSIGHT, INSIGHT, FORESIGHT

Multiple Vendors
Multiple Applications
Legacy Systems
Business Intelligence
Adoption
Planning
Business Justification
Business Outcome

Application / Screen Sharing

Traditional application sharing tools like the Cisco's WebEx and Microsoft's Live Meeting (boarding the "way-back" train) initially served a single function....static sharing of visual content with other users to better support presentations and to foster collaboration. Due to the initial nature of these applications, users relied heavily on third-party conferencing providers to close the gap by providing audio capabilities outside of the application sharing solution. Even though this initial approach was widely adopted, it came at a significant cost which include but not limited to application licensing and stiff per minute/per participant call rates accumulated for each session.

Today the evolution of application sharing technologies has blurred lines that were once clearly delineated it from other UC&C components. With implementations that allow organizations to leverage existing infrastructure, application sharing offers a multitude of communication options within a single framework. Solutions like Cisco Jabber is marketed as an "all-in-one" communications tool that allows users to see their contacts availability (presence) and based on need, escalate the session to other forms of communication such as video, voice calling, instant messaging or a full fledge conferencing experience with multiple participants with the ability to share applications across the group.

These powerful applications offer both on-premise and cloud based deployment models. However, the vast majority of users are utilizing these types of UC&C services from a cloud-based perspective.

It's critical for organizations to understand how and who are using them in order to continue to drive business value.

Summary

IT has been nudged in the direction of not dictating how and why employees communicate; their new job is to construct a solid foundation that permits users to work freely and across borders regardless of the device; providing them with stability, security and flexibility.

UC&C is here to stay.... at least for the foreseeable future. Integration points across applications are steadily improving and companies are taking advantage of their ability to choose best of breed pieces that sometimes cross manufacturer's borders. The increase ease of integration in some respects drives complexity when it comes to choosing a solution to deliver holistic UC&C analytics. The notion of being able to leverage existing assets while vetting out business cases that support continued investments is key for many organizations. Deploying a single analytic solution that embraces a universal approach to your environment is critical to supporting those business drivers.

Top 10 Business Reasons that companies use to justify UC&C deployments:

1. Improved process efficiency and greater business agility.
2. Scaling of valuable people assets and improved productivity.
3. Accelerated time-to-market.
4. More effective supply chain management.
5. Scaling knowledge and improving decision making.
6. Greater customer intimacy and retention.
7. Talent management – better work/life balance and attracting and retaining the best people.
8. Cost reduction and business consolidation.
9. Supporting corporate social responsibility.
10. Business continuity, including disaster recovery.

Without universal UC&C Analytics, were they able to map, correlate and predict actual usage to support these areas?

Are you?

About the Authors

Steve Tabaska and Reginald D. Pearson are in executive leadership positions at Telemate.Net Software. Both bring a long and celebrated history of successfully helping organizations drive business value in the unified communications and collaboration arena. Their collective future vision of UC&C analytics has been fueled by the culmination of passion, creativity and experience.

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