Executive Summary

This white paper is intended for executives and decision makers who have already identified the need to move away from their existing closed, proprietary communications infrastructure — to a modern, multi-channel Contact Center featuring an easily integrated, SIP-based approach. This transition from traditional digital switching platforms to an IP-centric solution extends beyond the initial telephony cost savings. The key is to drive greater business value and improve agent productivity, virtualize agent resources, reduce infrastructure costs and — above all — improve the customer experience. Without the necessary implementation blueprints, best practice and integration guidelines — including scaling, site surveys, network and system stress testing — many modernization projects can face delays that impact business. Unfortunately, that impact may not only be financial — but also something that affects the customer experience and damages the brand behind it.

The adoption of SIP (Session Initiation Protocol) as an open standard has sped the growth of IP-based Contact Center solutions — simultaneously delivering compelling business benefits as well as opportunities to provide an outstanding customer experience. Through the power and flexibility of a SIP-enabled communication solution, companies have the freedom to choose non-proprietary, best-in-class hardware and software solutions. This helps them fully realize multimedia — as well as multi-channel — customer service and customer experience as the centerpiece of their brand. This can bring significant cost savings with efficient new communications channels and resourcing.

For many companies, the transition to a SIP/IP-based environment can be a rough ride, due to the lack of a solid foundation on which to base new integration. While many vendors offer assurances, few vendors can actually deliver the level of skill and experience needed to perform a seamless Contact Center Automated Call Distribution (ACD) replacement.

Replacing Legacy ACDs is the First Step to Improving the Contact Center Experience

Many organizations find their growth hampered by the technology investments and decisions made years — sometimes decades — ago. While many of those investments and decisions were based on the best available information at the time, they came at such a sizable cost and were a necessary requirement that organizations built huge departments, services and even business units around them. One such technology investment in the 80’s and 90’s (prior to the explosion of open standards initiatives seen today) was the proprietary Time Division Multiple (TDM) infrastructure, using an ACD and Private Branch Exchange (PBX).
When it first emerged, PBX technology was groundbreaking for many industries and quickly became a central strategy for many, with call center performance becoming a focal point to ad-hoc measurement of overall business improvement. As other technology and commerce evolved to become Internet centric, old school proprietary TDM systems of the call center world continued to offer limited functionality that was primarily hardware based, expensive to purchase and difficult to implement. Built for brick and mortar business processes of three decades ago, the legacy PBX infrastructure became limited to the functionality of the ACD and lacked extensibility of users. In addition, the use of complex, proprietary signaling to connect to other legacy infrastructure PBXs hampered interoperability and upgradability that made the decision to move to SIP easier for projects such as call center consolidation and modernization.

Today, open standards-based SIP/IP telephony solutions are relatively lower in cost, more feature rich, and highly customizable to meet the stringent business requirements of many companies and brands today.

**Is Change Justified? A Detailed Approach to ROI Analysis**

To understand the financial impact of a project of this size, there should be a rigorous analysis or financial “inventory” completed as part of a comprehensive business case. When considering a Contact Center Modernization project, Return on Investment (ROI), cost savings and business benefits are critical factors when making the decision to invest. The ROI process provides a quantified assessment of the anticipated value added from the initiative, and reflects cost implications with analysis typically performed over a period of three to five years using a company’s corporate weighted cost of capital.

When building ROI models for Contact Center modernization, it is often advisable to create two or three scenarios to add validity to the analysis. These additional scenarios lend credibility to the most likely scenario by allowing senior management to view the high and low end expectations to become more comfortable with their decision. Since assumptions are simply that, sensitivity analysis is critical for validating the range of impact the modernization project may produce.

ROI analysis typically takes into account three levels of benefits — hard-dollar benefits, soft benefits, and strategic or operational benefits. Hard-dollar benefits tend to be the easiest to determine and factor into your business case. These are actual dollars spent or saved by implementing a new solution.

Soft benefits on the other hand require a lot more documentation and research and require assumptions to determine. For example, implementing new communication channels should allow for a potential increase in up-selling or cross-selling benefits to a sales organization. Determining the exact level of that benefit requires far more work than simply documenting the maintenance charge for a particular piece of software.

Strategic or operational benefits in ROI calculations tend to be as important as either hard or soft benefits — but are often treated only as an attractive requirement or enhancement.

In addition to ROI, the new, modernized Contact Center will also reduce the Total Cost of Ownership (TCO) of the customer service infrastructure. It supports simplification of the telephony environment through the convergence of data and voice into the multi-channel customer service platform, delivering against the existing architecture strategy — whether in the data center, a hosted environment, or a cloud computing strategy. Combined, ROI and TCO calculations provide powerful insight into many different aspects of a modernization project. These need to be clearly defined in scope and use valid financial figures, resource and performance data to generate a true, accurate representation of cost.
Modernization — It’s About Cost Savings and Improving Customer Experience

Many executives view convergence projects as a great opportunity to streamline and optimize their networks and reduce costs. As companies have grown, typically so has the complexity of their network, resulting in inefficient, underutilized network capacity and a confusing mess of network architecture. A voice/data convergence project creates an ideal opportunity to produce a next-generation highly efficient and optimized data network capable of running all voice and data across an enterprise.

One of the major cost savings attributed to a SIP-enabled IP Contact Center is the projected savings on the telecom budget. Major areas of focus for potential cost savings include:

- Inbound toll free (800 services) and long distance charges
- Network access and feature charges
- Inter-site, outbound and inbound trunking
- Interoffice conference calling
- Local PSTN, MPLS and WAN costs

Overall companies have seen savings between 25 and 60 percent when they merge their voice and data networks to SIP. These savings take into account trunks savings, network optimization, long distance usage, feature charges, and audio/video services.

Another area of major cost savings to consider is consolidation. While it is typically not considered in a business case, reduction of vendors across the enterprise can help reduce administration and the amount of time and expense it takes a company to manage many different vendors. This area for cost savings is typically forgotten or at least given very little attention, but can have a significant long term benefit the larger and more distributed an enterprise environment is.

Ultimately, the modernization of the Contact Center can enhance the customer experience by improving call routing to achieve customer segmentation using skills-based or context-aware routing — as well as reducing the reliance on human agent interaction by introducing self-help speech automation and other Internet communication technologies. The overall benefits of modernization lead to better forecasting, staffing and scheduling of call center resources to reduce the total cost per transaction combined with a back-office component that continually improves people, processes and technologies throughout the Contact Center environment.

It’s Not Just About Cost Savings, It’s About Resources, Too

While costs are important, a typical distributed TDM environment may have multiple support organizations in place to support voice, data, applications and development functions. Will the company need to support voice applications the same way they did in the past with the same number and type of people they did previously?

When working on the cost justification of a Contact Center Modernization initiative, it is valuable to understand the major areas of operational and financial impact for personnel — including ACD/PBX support staff, Contact Center application support staff, application development resources, help desk resources and IT/security/SLA monitoring resources.

While the easy answer is that it will change and likely produce solid efficiencies, the challenge lies in the skills the organization needs, including how many, where and what types are required. With SIP-based solutions, those human resources may be outdated or need to shift to support new and different types of technologies. This is just one example of many soft impacts to an organization when implementing a project of this significance.
Resources also cover the wide spectrum of voice and help desk support, additions, changes, application security, development and maintenance. Internal resources tend to handle many different tasks in their daily activities and the true impact is not entirely clear. While it is generally not difficult to identify the current costs in support and maintenance, the challenge comes in accurately identifying the impact to resource requirements — not only during migration, but after the project implementation as well.

Proactive Planning to Minimize Delays and Cost Overruns

When modifying or replacing legacy ACD technology with a SIP-based architecture, it is critical to consider all the business ramifications associated with those decisions. The initial rollout phase is critical — not just from the financial loss aspect — but could also affect other departments within the company and impact the overall customer experience and the brand behind it.

It is a fact that companies that invest in proactive testing prior to and during deployment phase are less likely to fall victim of budget overruns. Problems can boost the overall cost of the project when updating or rolling out new technologies. The bottom line is that poor project management can quadruple the cost, as compared with Contact Centers that apply best practices in their management of technology rollouts.

Separating the ACD from the PBX

A SIP-enabled Contact Center solution makes IP transformation feasible and enables IP ACD services independent of the telephony switching environment. Contact Centers that have already invested in PBX infrastructure can still leverage the existing Exchange, while also implementing open standards-based IP components to introduce innovative Contact Center functionality. For Contact Centers not requiring advanced enterprise telephony (such as personal voicemail), they have the option of replacing the hardware switch entirely with a software-based switch for call control, routing and management capabilities. In this case, Contact Centers save costs on hardware and maintenance by eliminating the proprietary hardware, and simplifying the management of the IT and telephony environment as a whole.

New Interaction Channels and Virtualization Help Drive SIP/IP Adoption

The premise of a legacy ACD system is centered on routing large numbers of calls to a pool of agent resources. As the number of customer interaction channels increased due to Internet adoption (such as chat, email, etc.) each new interaction channel was added and handled separately — frequently by different pools of agent resources. Today, we can see organizations that continue to treat digital channels as independent interaction points are often at a significant competitive disadvantage — especially compared to organizations that leverage software to integrate and merge multiple communication channels as part of the customer service strategy. This merging of channels allows businesses to holistically understand the customer journey and provide an outstanding, efficient and cohesive service to meet the customer need.

In addition to channels, replacing the legacy ACD with a SIP-enabled Contact Center allows organizations to virtualize human resources across the customer service chain. Unlike legacy call centers where traditional ACD and PBX hardware must be located near the agents who deliver the service, IP Contact Center solutions can be consolidated into a data center or private cloud. This can include the front office, back office and branches, in addition to outsourced resources. The virtualized approach to a Contact Center deployment allows key resources to be shared across more customers, providing a flexible path to maximize efficiencies and incrementally improve Contact Center performance. This can reflect the ebb and flow of the business and its day-to-day requirements.
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Best Practices and Gold Standards for Legacy ACD Replacement

At the very highest level, a Contact Center Modernization project can be split into four distinct phases — define, design, develop and deploy. It is usually in the initial stages of a Contact Center Modernization deployment process that many organizations find themselves lacking in expertise. The cost justifications have been analyzed and functionality and feature sets have been defined and mapped to the business requirements. The RFI and RFP responses have been completed and reviewed, and the choices for the vendor have been made. Now is the time to have one final review and ask the question: “How do we guarantee success?”

Guaranteeing success can best be achieved by looking at a number of factors prior to choosing a vendor above and beyond the subtle differences in technology and the RFI/RFP responses. The vendor selection process can be a very complicated and emotional, but there can be some clear distinction between vendors and what they offer to simplify the selection process.

One method that helps to identify a strong vendor is the ability to clearly demonstrate an understanding of relevant best practices and industry standards. Using project blueprints (including third-party configurations), repeatable “gold standards” speed the implementation process without cutting corners and 24/7 mission critical support allows vendors to stand out from the crowd. This type of support and implementation offering usually indicates the maturity of an organization and often attests to their experience in technology implementation across a wide range of diverse customer environments. For example, one important aspect of implementation that is often overlooked is testing for network readiness. Many vendors fail to accurately size their customer’s networks prior to the rollout of new Contact Center technologies. They also fail to stress test these new systems and how they will stand up to different worst case network traffic congestion scenarios.

Building testing into the project plan throughout the modernization project shows that a vendor has the proper attention to detail and an organizational commitment to minimize delays and cost overruns.

Making the Choice Between Hosted or Premises-based Solutions

Maintaining the traditional TDM architecture limits future business growth and leaves organizations unable to take full advantage of any future datacenter or cloud computing strategy. With software-driven IP technology, the Contact Center equipment, software, and applications can be located in a data center separate from agent locations as either a hosted or on-premises solution.

The choice between a hosted and an on-premises solution invariably depends upon the size of an organization, the type of data stored (from a regulatory perspective), the number and location of agents, and the different types and volume of customer interactions predicted. Whatever the decision, IP-based Contact Centers increase the options available to companies employing Contact Center technology. This dramatically simplifies infrastructure requirements, enhancing Contact Center operations to include branch office expansion, home agents, service hosting, outsourcing, high availability, and disaster recovery options.
Investment Protection: Maintenance and Support Programs

Today, system availability is not simply a strategic advantage — it is a business-critical necessity. An organization that requires 24/7 availability understands the importance of uptime and the impact and cost of outages to the business. In part, this means ensuring that the investments made in the Contact Center Modernization project are protected with the highest level of maintenance and support and include the following key support and maintenance programs;

**Platform Stabilization** — Involves the evaluation of the solution’s performance, availability and resiliency to proactively detect and prevent catastrophic problems before they impact the business.

**Risk Mitigation** — Active involvement in strategic changes such as major release upgrades, architecture changes, or evaluation of new features provides contextually relevant recommendations, impact assessment, and best practices regarding planned changes.

**Solution Optimization** — Ensures service results are mapped to both business and technical objectives, lowers total cost of ownership, and delivers maximum value from the solution.

**Change Management** — Active involvement in strategic changes through a review and analysis process that provides relevant recommendations, impact assessment, and best practices.

**Proactive Analysis** — Execution of regular platform health reviews that evaluate and analyze performance, identify risks and issues, provide fixes, make recommendations to improve service availability and system performance and increase the operational effectiveness.

The success of the modernization project also depends on having the right resources — both within the company itself and with the trusted partner to help achieve exceptional business results. This includes access to resources that are both visionary and technically adept to minimize risks, maximize returns and achieve value realization.
Summary

The ACD is no longer a core component in the contact center and has become a costly technology that is difficult to manage in a distributed enterprise environment. With call routing based on the traditional queue concepts versus resource skill sets or other variables deemed important by the contact center, the legacy ACD had limitations that were perceived to hinder rather than enhance the overall customer experience.

As IP-based telephony technology has clearly reached a level of maturity capable of sustaining contact center traffic, companies now have options for reducing or replacing the “big iron” PBXs and ACDs. These options provide a fundamental shift in architecture and administration models while providing an evolutionary vehicle for new applications and services. IP soft switches, ACD as a software application layer, and SIP enablement are the catalyst components in this evolution.

While technology plays a key role in the modernization process, the smooth transition from legacy TDM architecture to a SIP/IP-based environment requires through preparation, implementation and best practices to minimize delays, cost overruns and outages. Once deployed, the solution needs to be backed by a world-class support organization with programs and infrastructure to meet the challenges faced by global brands, and provide the necessary expertise to keep the contact center smoothly running 24/7.

Genesys has a history of providing mission critical communications solutions for the Fortune 1000. Genesys SIP technology has been tested and proven in multiple deployments globally. These deployments have been fully documented and used as blueprints to ensure that new customers receive the same level of success — guaranteed.

About Genesys

Genesys is a leading provider of multi-channel customer experience and contact center solutions. With over 3,500 customers in 80 countries, Genesys orchestrates more than 100 million customer interactions every day across the contact center and back office. Genesys helps customers power optimal customer experiences that deliver consistent, seamless and personalized experiences across all touchpoints, channels and interactions.

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