The Transformation of the Contact Center

Building a Dynamic Contact Center to Deliver Greater Value to the Organization—Ensuring Customer and Agent Satisfaction

January 2007

Empirix helps organizations adopt complex communication solutions with confidence. We combine the industry's deepest telecom and self-service applications expertise with award-winning testing and monitoring solutions to ensure our customers realize the promise of new technologies.

For over a decade, thousands of network equipment manufacturers, service providers and enterprises worldwide have trusted Empirix.

Introduction

To accommodate evolving business requirements and changing customer demands, organizations are faced with a critical, and sometimes painful challenge: transform the contact center into a more dynamic contributor to the organization or risk declining customer and agent satisfaction—or the loss of some customers and agents altogether.

Originally, call centers were designed to meet a single business objective: to handle a maximum number of calls at the lowest possible cost. The focus was on ensuring efficient call handling and little consideration was given to increasing customer satisfaction, gaining new customers, or building customer loyalty, which often ebbed and flowed as a result.

The single-minded emphasis on answering increasing numbers of calls with the fewest agents possible, while keeping costs down, has done little to improve business processes, leverage technology resources, or even generate revenue. As business objectives changed, the approach to servicing customers needed to change as well.

The transition from "call" centers to "contact" centers gave customers alternative ways to do business. Simultaneously many organizations began to recognize the importance of maintaining high customer satisfaction levels, ensuring a positive customer quality of experience, and building customer loyalty. Managing these value factors in the new multi-channel customer contact center has introduced complexities that the organization has to adapt to.

Also, for many organizations, as cost remained the primary driver of business decisions, a heavy reliance on technology left little room to cultivate the role of the contact center agent. This problem was compounded by the fact that operational managers were often so overwhelmed by day-to-day responsibilities that it was a challenge to find time to coach their teams.

As a result, customer and agent satisfaction levels remained stagnant or continued to decline.

Customers Drive Change; Voice-over-IP Enables a Transformation

With the explosion in the number of choices with whom to do business, customers are now in the driver's seat. For enterprises, ensuring high levels of customer satisfaction is no longer optional—it is a primary objective. Voice-over-IP (VoIP) technology holds the promise of giving organizations better ways to architect their contact centers and serve the user community, improving both agent and customer satisfaction.

Differential labor rates have motivated organizations to locate contact centers anywhere in the world, but this brings with it the challenge of managing a dispersed infrastructure. Thanks to VoIP, while contact centers can be located anywhere, the technology that supports them does not have to be. By centralizing contact center technologies—including PBX/ACD, IVR, speech recognition servers, CRM applications, and quality monitoring equipment—into one or two data centers, an organization can make the contact center less complicated to support and more cost effective to operate while still enjoying the benefits of geographic flexibility. Consolidating the voice infrastructure in a single data center can enable an organization to optimize bandwidth utilization, for example, significantly reducing operating costs.

At the same time, by consolidating contact center technology into a single location, organizations can standardize equipment and software versioning and even optimize accessibility/availability of skilled support resources no matter where they are located. This standardization can lead to configurations and support mechanisms that are truly best of breed. Plus, organizations can even standardize the way decisions are made about how each customer is serviced. Centralized CRM data can align customer needs with subject matter experts, and real-time decision making can pinpoint who the customer is and what the customer needs, and then make appropriate routing decisions to ensure that each call gets to the appropriate agent. For many organizations, the transition to a new centralized infrastructure is made even more cost effective as new, upgraded technology replaces depreciated systems.

In addition to enabling organizations to realize the operational and financial benefits of centralized contact center technologies, distributed or virtual contact centers allow organizations to locate agents around the globe, providing new levels of flexibility to accommodate customer requirements 24x7, operate within different cost structures, and respond to regional requirements and customs. As an added benefit, virtual contact centers help organizations assure business continuity, enabling ongoing service even if natural or man-made events force the closure of a contact center in one part of the world.

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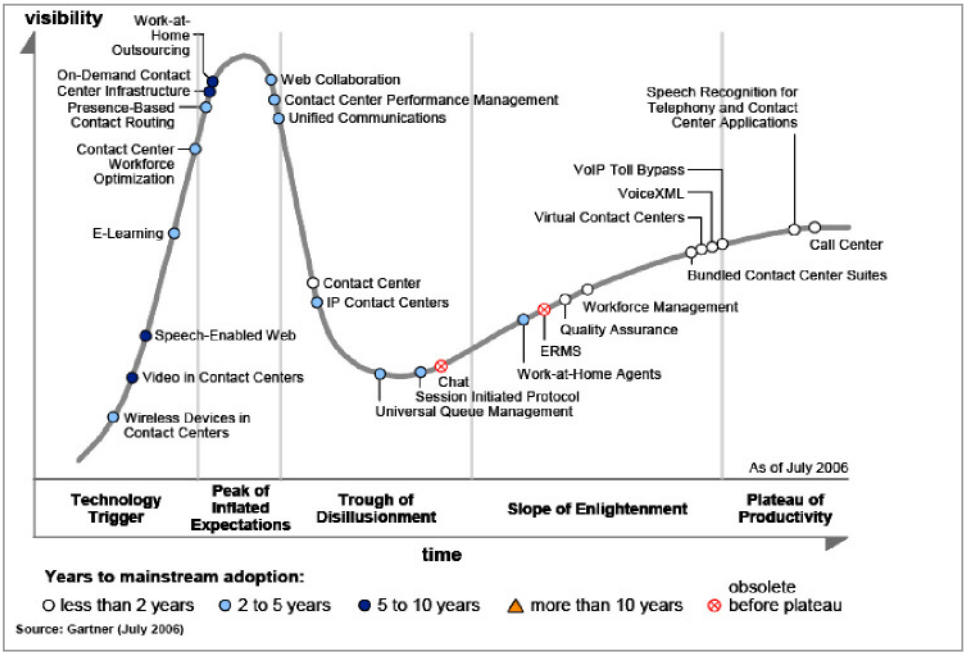

Figure 1. Gartner Hype Cycle for Contact Center Infrastructure, 2006.

Contact center virtualization can eliminate virtual "walls" of the contact center, providing a powerful opportunity to tap into remote agents who work in branch offices, at home, or from the road, or to look to agents or even outsourced personnel who are experts in their fields. Through this environment customers can receive service from the appropriate agent each time they contact an organization. According to the July 2006 "Gartner Hype Cycle for Contact Center Infrastructure, 2006" (Figure 1), mainstream adoption of virtual contact centers will occur in less than two years.

Achieving a "Transformed" Contact Center

To fully transform the contact center into a dynamic part of the organization, organizations must move through four distinct phases. Figure 2 illustrates that many contact centers in North America and Europe are preparing for just such a change. In the next three years, organizations will be bringing in new technology to support the phases described below.

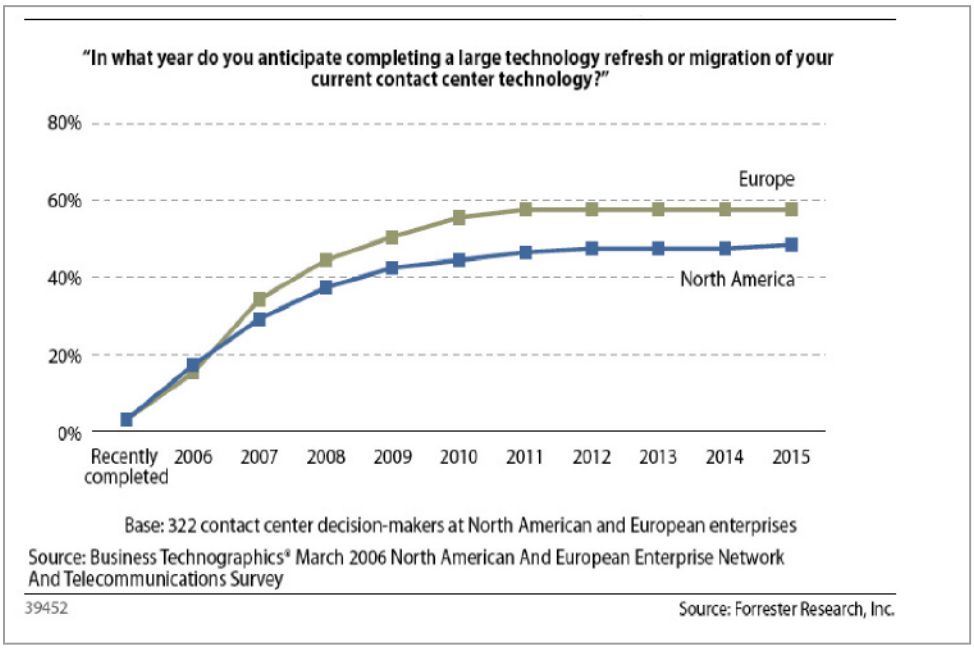

Figure 2. Preparing for Contact Center technology upgrades. (*Enterprise Contact Center Plans* 2006, Forrester Research, Inc., June 2006)

Phase 1: Data Center Centralization

Many organizations have begun the first phase in the transformation process—the migration of data centers—by consolidating all contact center technology including customer-facing hardware, software, applications, and infrastructures into centralized data centers and away from agent sites. In doing so, organizations will align technology and support resources, reducing costs.

The most significant challenge for organizations moving through this phase is to do so while keeping a production environment operating, ensuring continuous customer interaction, and avoiding infrastructure downtime.

As part of this phase, legacy TDM equipment must be upgraded to accommodate the new IP framework, including the redesign of voice applications. Because IP-based equipment is typically less expensive than traditional TDM equipment, the transformation can have some cost advantages. IP technology is also inherently more flexible to operate.

There are also a number of challenges, however. First, although IP makes it feasible to assemble best of breed elements into an optimal solution, interoperability remains a challenge in multi-vendor environments. New standards are announced frequently and IP telephony is still an evolving technology that depends on the underlying infrastructure far more than traditional telephony does.

In addition, while an IP architecture's inherent flexibility means that changes can be made quickly, it also means that change control can be a problem and may be difficult to support.

Phase 2: Basic Virtualization—Virtualization of Contact "Centers"

The transformation of the contact center is a process, and part of the second phase relies on the successful completion of the first. Centralized infrastructure is a necessary foundation for the ultimate goal of managing distributed contact center locations as one large center. In this phase, enhancements of existing CTI frameworks move an organization from simply load balancing to "customer" and "agent skill" balancing across virtual "centers." This phase also represents the start of another important transition for the contact center: from "cost" center to "revenue" center.

During this phase, calls will be answered more quickly and will be more accurately directed to the right person, but as the virtual contact center relies on a shared communication infrastructure many organizations may still be unable to deliver voice and data dynamically and consistently. In addition, an inaccurate reporting of resource "presence" may lead to incorrect call treatment such as delivering an interaction to an agent who isn't prepared to handle it at that time.

Phase 3: Advanced Virtualization—Virtualization of Agent Skill Groups

During this phase, the contact center environment becomes more dynamic as "subject experts" from throughout the enterprise complement agents in the contact center. Calls are consistently directed to the appropriate person in any location—whether an agent, other enterprise resource, or outsourced personnel—often in a single touch. The contact center of a rental car agency could route a customer to the branch office familiar with a specific region, for example, or a financial services firm could connect a caller to a knowledgeable mortgage expert who speaks fluent Spanish.

The primary IT challenge during this phase is ensuring consistent performance of desktop CRM applications across the enterprise resource pool. This must be done while not losing focus on the voice and data communications changes highlighted in Phase 1 and 2. An added challenge is ensuring that managers have the new skills of managing at-home agents, multi-site queues, outsourced personnel and more.

Phase 4: Next-Generation Multimedia Blended Queue

The fourth, and final, phase of contact center transformation is to develop the capability to service customers through a variety of "channels"—over the telephone or through email, web chat, or others means of communication. The traditional call center was purely telephony based and the move to multi-channel customer communication and the contact center model has been eased with the advent of VoIP technologies.

With VoIP and the drive toward advanced virtualization, the ultimate goal is to achieve a "blended" queue in which agents can be perfectly matched with customers using a variety of interaction methods depending on where resources are needed most. Using intelligent, skills-based routing, a call may be routed to a specially trained agent who typically responds to email, for example, if wait times in the contact center exceed a certain threshold. With this approach, calls can still be answered quickly and by the right resource.

It is important to note that many organizations may not achieve this phase, nor may they need to.

Challenges to Achieving a Transformed Contact Center

While organizations may face specific challenges during each phase of transformation, some challenges are likely to be confronted throughout the process.

- **Increased Capacity**. Consolidating an organization's data center resources into a single location requires an enabling infrastructure that can support significantly greater voice and data traffic then a traditional enterprise data network. For example, a centralized voice self-service platform will need to have an order of magnitude more capacity to process speech and serve up prompts as did the multiple, decentralized systems it replaces. Organizations will need to ensure consistent access and availability under load as well as the responsiveness of key applications.
- **Enormous Complexity**. The transformed contact center is a new concept to everyone—including technology vendors—and because no one vendor will have strengths in all aspects of the process, organizations will need to deploy a web of multi-vendor, multi-technology solutions, which will pose interoperability challenges. Organizations may also confront situations where vendors who ordinarily compete have to work together, which can lead to finger pointing when issues arise.
- **New IP Standards.** IP standards are announced frequently and tend to be initially incomplete. Also, as these standards are evolving rapidly, it makes complying with industry standards a moving target. It is difficult for vendors to agree to interoperate when standards are in flux. In addition, the number of applications, including self-service, CTI, CRM, outbound, etc.; protocols, such as SIP, H323, Avaya H323, SCCP, etc.; and interfaces, such as SQL, 3270, VXML, Web Services, etc., an organization relies on will add to the complexity. Many applications will have to be rewritten for the IP environment, for example, and in many cases, protocols and interfaces will never have been used in legacy systems or supported by IT organizations before.
- **Assuring Quality**. In all phases of the voice infrastructure transformation from decentralized TDM to centralized IP it is critical to ensure availability, reliability, and voice quality—from the first prompt a customer hears to the screen pop an agent sees. The benefits of leveraging an IP infrastructure for voice bring with them challenges inherent in the fact that the internet was not designed for real-time applications. An over-stressed centralized data center may degrade in performance. Further, as contact centers become virtual, agents will be "farther" away (both literally and in terms of network hops) and it will be an increasing challenge to ensure the quality of speech from end to end.
- **Increasing Customer Expectations.** In a time when organizations are evolving to ensure customer satisfaction and loyalty, this may be the greatest challenge of all. As customers come to understand the benefits of the transformed contact center, their expectations are likely to grow, including things like first call resolution of a contact.
- **Increasing Agent Expectations**. Like customers, agents are likely to expect more from a transformed contact center—that the right calls will consistently be routed to the right place with the right customer information—so that they can do their jobs more efficiently and effectively.

Leveraging Best Practices

Through each step of the contact center transformation, a consistent focus on quality will be critical. To address infrastructure and application capacity and complexity concerns, standards ambiguity issues, and the increased expectations of customers, an organization must start with a clearly defined migration plan. From data center centralization to the multimedia blended queue, each step in the transformation process builds upon the prior steps, so an organization must establish an overall direction for the contact center—including the technology direction—and then define priorities and timeframes for completion.

Planning for contact center transformation should include evaluation of applications as well as the organizational structure. An organization should determine if their structure provides appropriate support for the technology changes that will be implemented, then managed and maintained. They should also consider the business changes that will be required to ensure the technology is applied effectively throughout the organization, and feel confident that the business and IT sides of the organization can collaborate through all steps to ensure success. Another part of the planning phase may be to evaluate or baseline current applications. Understanding current application performance will help you assess the success of the new or enhanced application in the VoIP environment.

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Assessment of the current environment should take into account not only the network assessment but load testing of the applications as well. Network assessment will lay the groundwork for the transformation process, and organizations should begin with quantifiable, objective data that describes the contact center as it is today, including baseline performance metrics. Load testing your applications, using different transactions in volume will emulate a worst case and ensure application objectives are met. You'll want your test vendor partnered with the vendor providing this solution.

During the roll-out, you'll need a monitoring system that incorporates simulated transactions as well as infrastructure monitoring. Along with traditional vendor monitoring tools, you'll need to test transactions through the new application. Transaction testing tools that are optimized for contact center applications give you a comprehensive view in a multi vendor environment unlike generic application testing tools that do not test for each caller transaction in the application. Monitoring solutions can evaluate the performance of all contact center applications and systems from the customer's and agent's perspective—focusing on the total Quality of Experience.

Finally, ongoing testing and monitoring, which emulates the experiences of customers and agents, should be used to ensure the consistency and performance of voice applications and systems. For example, automated regression, feature/function, and performance load testing can be used in all phases of development and deployment to assess the availability, reliability, and voice quality of new contact center applications and systems while under load. Also, as you make changes to the contact center applications, you can use these same tools to ensure consistency in application performance.

By leveraging best practices throughout the transformation process, organizations can detect, isolate, prioritize, and diagnose problems before customers or agents are affected. The result will be a dynamic contact center environment that delivers measurable value to the organization by ensuring customer and agent satisfaction and building customer loyalty.

To learn more, contact your Empirix sales representative or your authorized reseller, call +1 781.266.3200, or email info@empirix.com. Or, visit us on the web at www.empirix.com.

Transaction testing tools that are optimized for contact center applications give you a comprehensive view in a multi vendor environment unlike generic application testing tools that do not test for each caller transaction in the application.

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