



Building the On-Demand Contact Center: Enabling Success and Improving Customer Relationships

CONTACT CENTERS ARE TRANSFORMING THE WAY COMPANIES
SUPPORT AND MANAGE CUSTOMER RELATIONSHIPS

Introduction

In recent years, contact centers have become major distribution channels for a wide variety of goods and services. In the process, they have evolved as a critical point of customer contact. Contact centers enable companies to learn more about purchasing habits, provide opportunities for cross-marketing and improve customer satisfaction. They also increase revenue. Organizations that want to succeed in an increasingly competitive and global marketplace must support customers with reliable, flexible and highly efficient contact centers or risk losing market share.

2	A New Era for Contact Centers
3	Challenges Facing the New Contact Center Environment
3	Maximum Uptime
4	Rapid Application Deployment
4	Dial-in and Remote Connectivity
4	Management and Integration
4	Mixed Desktop Platforms and Configurations
4	Legacy Desktops with New Applications
4	Customer Service Representative Training and Support
5	Citrix MetaFrame Access Suite — A Better Approach
5	Reach
5	Speed
5	Predictability
6	Citrix Solutions Meet the Challenges of Call Center Environments
6	Maximum Uptime
7	Rapid Application Deployment
7	Dial-in and Remote Connectivity
7	Management and Integration
7	Mixed Desktop Platforms and Configurations
8	Legacy Desktops with New Applications
8	Customer Service Representative Support and Training
9	The Conflict Between Application and Infrastructure Life Cycles
10	Contact Centers Find Success with Citrix
10	Hutchinson Essar Telecom
11	HearUSA
12	Conclusion

A New Era for Contact Centers

Contact centers have entered an era of unprecedented change. Once viewed as labor-intensive, back-office operations dedicated to niche markets, today's contact centers have been transformed into an essential business tool for companies across a broad range of industries. From home shopping to banking to overnight courier deliveries, business depends on contact centers to lower costs, deliver new services and, most importantly, solidify customer relationships.

The impact of technology on contact centers is perhaps best demonstrated in the growing number of remote contact centers, which are in a location separate from the main or home office, and "virtual" contact centers, where agents from different locations, including at-home offices, are all connected by a network (WAN, VPN, Internet or extranet). For both types, data and processes are shared across multiple sites to accomplish multiple tasks. Remote and virtual contact centers are gaining in popularity because of the flexibility they offer. Companies can leverage technology to reduce labor costs (by outsourcing agents or the entire contact center) and improve productivity through expert resources that might not be available locally.

Besides individual contact centers, technology is having a tremendous effect on the overall size and scope of contact center operations around the world. The dramatic growth of distributed and remote contact centers is leading to an increase in the total number of seats in North America and offshore, even as the number of large, single-site centers is leveling off.

In Europe, where contact centers are often smaller than their U.S. counterparts, market growth is strong, largely because the European business community invested heavily in technology that permits them to unite multiple small contact centers into a single large virtual contact center. This enables scalability without the need to relocate staff from country to country. According to market research firm Datamonitor, the number of call centers in EMEA will grow to approximately 44,200 by 2005, a 130% increase over the 19,200 centers existing in 1999.

The Asia Pacific contact center market is growing at an even faster rate than the one in EMEA. Datamonitor indicates that in 2003 there were approximately 8,600 call centers and 420,000 CSRs in Asia Pacific, and predicts that the number of CSRs will grow at a CAGR (compound annual growth rate) of 15.1% between 2003 and 2008 to reach nearly one million.

But success brings new challenges. As contact center operations continue to grow larger and more complicated, their support needs increase as well. This is especially true for the many organizations that have merged with or acquired companies in the past few years. Beyond having to manage larger contact centers, these organizations must also successfully integrate multiple diverse contact center environments that may span a number of countries — or even continents. And while contact centers were once dependent on limited proprietary technology, current information technology (IT) support and enabling options are more numerous and complex than ever.

In order to meet these new challenges, today's contact centers, both single-site and distributed, need comprehensive IT solutions that provide agents with immediate access to distributed information, whenever they need it, wherever they are. This must be accomplished in a way that ensures maximum uptime while also reducing the risk and uncertainty associated with supporting large, complex computing environments.

Challenges Facing the New Contact Center Environment

Today's contact centers are redefining how companies manage virtually every aspect of their customer relationships by providing a proactive means for retaining existing customers and winning new customers to generate increased revenue.

While the service and retail industries have traditionally relied on contact centers to supplement their sales organizations, new technologies have enabled businesses to market more efficiently and less expensively through contact centers than by using a large, dispersed sales force or costly branch offices. Because remote and virtual contact centers allow companies to use remote agents — located in markets where labor is less costly or home-based using Web-enabled PCs — multiple centers can be cost-effectively operated as a single center. This has made contact centers a much more attractive customer marketing and support option to industries such as utilities, telecommunications and financial services.

As call volume grows, companies are having to open — or outsource — additional contact centers, each complete with automatic call distributors (ACDs), interactive voice response (IVR) units, email servers, Web servers, predictive dialers, intelligent workstation applications and screen-pop servers. Each center must run business-critical applications to multiple stations across its own supporting infrastructure. Unfortunately, many of the technologies deployed within contact centers offer limited — if any — interoperability between systems. Without ready access to multiple systems, many contact centers may not be able to respond quickly to changing customer demands. Worse yet, systems can become overwhelmed with cross-platform, multiple application activity and risk shutting down.

For the purposes of this paper, we have categorized the primary IT challenges facing contact centers that adversely affect business into six specific areas:

- Maximum Uptime
- Rapid Application Deployment
- Dial-in and Remote Connectivity
- Management and Integration
- Mixed Desktop Platforms and Configurations
- Legacy Desktops with New Applications

MAXIMUM UPTIME

The primary mission of any contact center is to provide a positive, productive experience for customers, whether they are ordering goods or services, scheduling a flight or requesting additional information for a possible new purchase. There is no more certain way to anger and even lose customers than to have a contact center system shut down. That's why maximum uptime is so important. From lost revenue opportunities to driving customers to competitors, a contact center that crashes causes tremendous, potentially fatal, harm to any business.

RAPID APPLICATION DEPLOYMENT

In order to ensure that agents are fully prepared to meet the needs of customers, contact centers must be able to rapidly distribute vital information throughout the enterprise. From application upgrades and script changes to customer purchase histories and real-time inventory figures, it is critical that contact center agents get the data they need whenever they need it. Contact centers that cannot respond quickly to the needs of customers fail in their primary mission.

DIAL-IN AND REMOTE CONNECTIVITY

Contact center agents and their expert contacts are becoming more geographically dispersed and mobile. In response, contact centers need a fast, easy and reliable solution for connecting agents and other staff to information resources, wherever they happen to be.

MANAGEMENT AND INTEGRATION

In the past, on-site IT staff could support a large single-site contact center. But in today's remote and virtual contact center environments, it is physically impossible for IT administrators to "touch" every desktop. And, as the number of remote contact centers continues to grow, businesses need an effective means for remotely managing, integrating and supporting existing sites, as well as adding new sites.

MIXED DESKTOP PLATFORMS AND CONFIGURATIONS

Contact center functions are increasingly handled by organizations (both within and outside the enterprise) that use a variety of different hardware, software and operating systems. While one company's contact centers may equip agents with only PCs, it may merge with a second company whose agents use a mixture of desktops and appliances including old PCs, UNIX® workstations, network terminals and handheld devices. It is imperative that today's contact centers effectively operate and support a diverse, "mixed breed" computing environment — without hampering performance.

LEGACY DESKTOPS WITH NEW APPLICATIONS

Many contact centers are equipped with desktops that have been in service for years. Yet, to remain competitive, they must be able to run the latest applications and upgraded software. Companies need a flexible, cost-effective solution that enables contact centers to run new applications without having to invest in new desktop hardware every few years.

CUSTOMER SERVICE REPRESENTATIVE TRAINING AND SUPPORT

Contact center business challenges revolve around the customer's experience on the call. If the call is handled courteously and efficiently, the customer, the CSR and the company benefit. Contact center management needs to ensure that each CSR gets the training required and the right information at the right time in order to provide excellent service on every call. In addition, management needs a way to unobtrusively monitor CSR performance to uncover both good and substandard execution.

Citrix MetaFrame Access Suite — A Better Approach

The Citrix MetaFrame Access Suite for On-Demand Contact Centers enhances the productivity of every agent, regardless of location, network connection or desktop hardware. With Citrix access infrastructure solutions, contact center managers enjoy the flexibility of centralized management, and companies benefit from Citrix's established track record of reliability.

The MetaFrame Access Suite lowers operating costs and improves productivity within a contact center and allows CSRs to seamlessly and securely access enterprise applications and information. With Citrix, organizations can accelerate the deployment and extend the reach of business-critical applications, while reducing the total cost of application ownership. Administrators manage and support all enterprise applications from a single location. And companies can leverage all of their current computing infrastructure, from networks to desktop hardware.

The MetaFrame Access Suite solution for the On-Demand Contact Center fulfills the three greatest needs of organizations competing in the digital economy — reach, speed and predictability.

REACH

In order to compete globally, companies must have the reach and flexibility to serve an increasingly mobile, remote and extended group of users around the world, including suppliers, partners and customers. The MetaFrame Access Suite makes applications instantly available to any user, regardless of location, desktop hardware or network connection.

SPEED

The time it takes to deploy an application determines the time-to-impact on a company's ability to drive revenue, improve customer service and increase levels of knowledge and organizational productivity. The MetaFrame Access Suite enables enterprises to rapidly deploy new applications, set up or add new offices and integrate new systems in hours or days instead of months.

PREDICTABILITY

Failure to achieve assured performance levels represents one of the greatest risks to businesses. For enterprises to succeed, business-critical applications must achieve new levels of reliability and performance. The Citrix MetaFrame Access Suite is proven, with more than 120,000 customers worldwide, including 100 percent of the *Fortune* 500.

Citrix Solutions Meet the Challenges of Call Center Environments

The Citrix MetaFrame Access Suite is ideal for the On-Demand Contact Center because it provides companies with the ability to deliver business-critical applications to anyone, anywhere, anytime. This not only enhances the productivity of every user throughout the enterprise — regardless of location, operating system or desktop hardware — it's also the most effective way for organizations to leverage their contact center investments as strategic assets.

Put simply, the Citrix MetaFrame Access Suite increases performance and productivity while reducing uncertainty and risk.

Citrix's proven, cost-effective solution meets the specific business challenges of contact center environments.

MAXIMUM UPTIME

The MetaFrame Access Suite increases uptime in any contact center environment, from large single-site facilities to centers using distributed and virtual infrastructures, improving service levels across dozens or hundreds of servers while maintaining business-critical application performance and security.

Distributed contact centers can share applications and other resources, since agents — regardless of their location — can work in real time with critical databases, such as financial management or travel scheduling. While the applications execute on servers, they look, feel and perform as if they were running locally, enhancing agent productivity.

Citrix streamlines application management and facilitates technical support. This not only ensures maximum uptime, it also provides contact centers with substantial savings in administrative costs.

RAPID APPLICATION DEPLOYMENT

With the MetaFrame Access Suite, applications are installed once on a server and deployed quickly and easily to agent desktops across the enterprise.

This rapid application deployment dramatically reduces the rollout time of new and upgraded applications, saving organizations time, money and resources. Productivity and customer service are improved, since agents are always working with the latest applications and upgrades. And because applications are managed from a single site, contact center managers can selectively deploy them to a desktop or a browser according to an agent's needs and area of expertise.

DIAL-IN AND REMOTE CONNECTIVITY

The MetaFrame Access Suite enables the enterprise to deliver information to users anywhere in the world, extending the reach and broadening the range of applications. Agents can contact expert resources wherever they may be, inside or outside the company, regardless of their client hardware or network connectivity. Agents and other users can access contact center applications and database information through the Internet, corporate intranets, extranets, WANs, LANs, VPNs or remote access dial-up. Citrix also offers Web-enabled connectivity.

MANAGEMENT AND INTEGRATION

In a Citrix access infrastructure environment, all applications and data are managed, integrated, configured and supported from a single point. This provides contact center managers with an extremely flexible, scalable and secure contact center environment.

If a new application update is required for certain agents, the change is made once on the central server and the update will automatically be distributed to other servers across the enterprise. These, in turn, will distribute the update to every specified desktop. Additional contact centers (both servers and desktops) can be integrated into the system just as easily. There is never any need for special emulation software, changes in system configuration or application rewrites. Agent productivity is increased and training costs are reduced, since users work on their preferred desktop.

With Citrix, companies can remotely diagnose and resolve IT problems, saving time and money and freeing IT staff to address strategic corporate computing issues. Security is improved, since applications and data remain on the server instead of the desktop.

MIXED DESKTOP PLATFORMS AND CONFIGURATIONS

Today's contact centers are often comprised of a mix of desktop hardware, network connections and operating systems, making access to business-critical applications difficult and expensive. Citrix software supports application access on virtually any type of client device, including Intel® x86- and Pentium®-based PCs, as well as non-Intel processors, such as RISC, PowerPC® and MIPS. Other supported devices include Windows-based terminals, network computers and wireless devices, as well as clients running DOS, UNIX, OS/2® Warp and Java.™

LEGACY DESKTOPS WITH NEW APPLICATIONS

Since the Citrix MetaFrame Access Suite works with any desktop hardware, including legacy equipment such as 486 PCs and a wide variety of thin clients and network computers, companies can maximize their investment in the latest applications and upgrades while extending the life of their hardware investments. This "change resilience" helps organizations avoid the expense of investing in new desktops every few years. Citrix spares companies from the recurring hardware costs of keeping up with the application life cycle (see sidebar next page).

CUSTOMER SERVICE REPRESENTATIVE SUPPORT AND TRAINING

Citrix software enables contact center management to provide CSRs with unobtrusive support so they can focus on serving customers.

CSRs also benefit from capabilities in Citrix software that deliver discreet training for new and experienced employees. CSRs can participate in individual or group online meetings via a virtual "conference room," learning new applications or techniques and sharing information with colleagues, no matter where they're located. Managers can observe an individual CSR's progress using shadowing capabilities built into the MetaFrame Access Suite, or create role-play scenarios as a training tool. And, all e-conferencing, e-learning and shadowing can be done without a manager or a CSR ever leaving their desk.

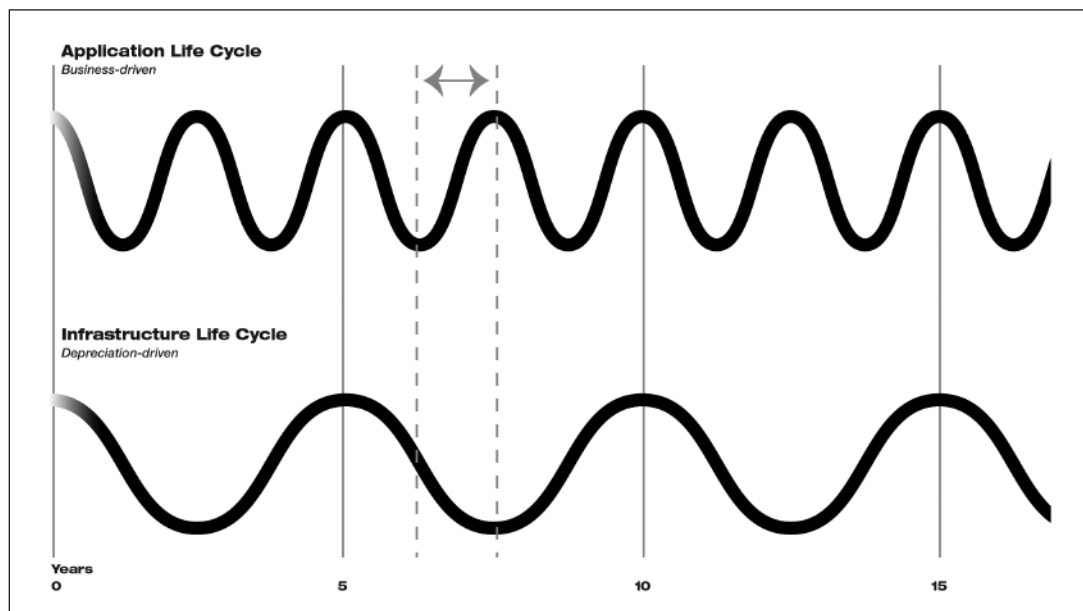
The Conflict Between Application and Infrastructure Life Cycles

There is an inherent conflict between the life cycles of applications and infrastructure. Applications must meet the rapidly changing demands of the competitive market. This makes the life cycle of applications relatively short.

On the other hand, the infrastructure life cycle is constrained by financial requirements (such as five-year depreciation cycles) and the speed at which new technology can be adopted.

In order for enterprises to compete, they must continually upgrade their infrastructure just to use the latest applications. This struggle to keep up with the newest technology costs money and, more importantly, takes time.

Citrix enables companies to break the costly conflict between application and hardware life cycles. With the Citrix MetaFrame Access Suite, the latest applications run at LAN-like speeds on any desktop hardware, including legacy PCs and older network terminals, Macintosh® systems and UNIX workstations. New desktop hardware can be phased in as time and budgets permit. As a result, organizations can achieve dramatic savings, specifically on a per-desktop basis.



Contact Centers Find Success with Citrix

HUTCHINSON ESSAR TELECOM

Begun in 1995, Hutchison Essar was the first mobile service operator in India. The company is currently an industry leader, with more than 3.5 million subscribers spread throughout the country.

Hutchinson services its customers in three ways — through its contact center, via outsourced third-party contact centers, and through a dealer network. As the contact centers served customers, they used a customer care application from Servion and a BSCS packaged billing solution centrally hosted and managed from Hutchison's data center in Delhi. Retail dealers accessed these systems by calling the Hutchison contact center in response to questions from walk-in customers.

Hutchison operates in a 24x7 mode, taking customer calls around-the-clock. To handle increased call load due to mobile subscriber growth, and to improve the average response time in attending a call, Hutchison decided to double the number of call center agents (CSAs) at its call center from 100 to 200. However, the company was concerned about the high costs of providing PCs for these additional CSAs.

At the same time, Hutchison was struggling with constraints posed by poor connectivity in areas surrounding Delhi being supported by their third-party centers, which made it difficult to establish reliable, speedy access to the customer service applications located in the data center. In addition, Hutchison wanted to extend connectivity to its data center for its dealers via a customized authorization application, so that they would be able to immediately activate new customer accounts via computer rather than call the contact center.

Hutchison sought a solution that could meet its many challenges cost-effectively and, at the same time, keep its business-critical applications up and running without interruption.

After careful evaluation and comparison, Hutchison chose to deploy its customer care, billing and connection authorization applications using Citrix® MetaFrame® Presentation Server, part of the Citrix MetaFrame Access Suite.

Explained Arvind Pandey, Vice President — Information Services, “Our key criteria were automatic failover, redundancy and load-sharing, in all of which Citrix scored much higher than the competition.” To minimize the costs of hardware upgrades at its Delhi call center, the company also decided to replace its desktop PCs with thin clients, which are supported in a Citrix environment. The implementation process, according to Pandey, was quite smooth and took only six weeks.

Using MetaFrame Presentation Server, Hutchison is now able to provide faster access to customer care, billing and connection authorization applications to the outsourced call centers and the dealers in the entire North region using dial-up connectivity. This has been made possible because Citrix's centralized access architecture keeps all application processing on Hutchison's servers at its data center in Delhi, while only minimal data — screen refreshes, mouse clicks and keystrokes — travel across the network between server and client. Therefore, application performance is high, even over low-bandwidth connections. Moreover, these applications are now available with no downtime.

MetaFrame Presentation Server has helped Hutchison meet its challenges of deploying applications very cost-effectively. With Citrix, Hutchison's savings on bandwidth costs have amounted to \$217,391 per annum. The company also realized immediate cost savings of \$108,695 by purchasing thin clients for its new CSAs instead of adding and upgrading its PCs.

Besides cost savings, Hutchison has enjoyed qualitative benefits that directly translate into improved customer service and added value for its dealer and call-center network. "With the use of Citrix MetaFrame Presentation Server, we are able to do load-balancing, automatic failover and many other management tasks critical to the smooth running of our operations," said Pandey.

Moreover, because customer data now loads faster on CSA's screens, response time has been improved and both Hutchinson's and the third-party data centers have become more efficient. For dealers, activating new customer accounts has become faster, since the application authorizing new connections is now available right on their computers.

Concluded Pandey, "The Citrix solution has proved an excellent return on investment for us — both qualitatively and quantitatively."

HEARUSA

HearUSA (AMEX:EAR), headquartered in West Palm Beach, Florida, provides hearing care to patients whose health insurance and managed care organizations have contracted with the company for such care, and to retail "self-pay" patients. More than 173 centers are located in California, Florida, New York, New Jersey, Massachusetts, Ohio, Michigan, Wisconsin, Minnesota, Missouri and Washington and the provinces of Ontario and Quebec, Canada.

HearUSA's corporate growth, planning capability and efficiency were hampered by a computing system based on a proprietary point-of-sale (POS) application called Center Management System (CMS) running locally at each retail center. Every evening, each site had to be dialed-up via modem to upload sales data into the accounting system database using batch processing, which delayed corporate reports until mid-morning the next day.

"The catalyst for moving to the next level of computing was the opening of our national call center," said Ken Schofield, vice president of IT. "Our telemarketers needed real-time, direct access to the database so they could set up hearing test appointments for customers at any of our centers. And our executive team needed faster access to data for better resource management. We knew it was time to jump into the next century."

Although the company initially considered rewriting the CMS application for Web-based deployment, that option was rejected because it would have required two to three developers working for six to eight months. Instead, the company deployed the application via Citrix® MetaFrame® Presentation Server with Microsoft® Windows NT® Server 4.0, Terminal Server Edition. Eight MetaFrame Presentation Servers spread across five regional centers give 300 users access to the CMS application via a Frame Relay WAN. Although physically separated, the servers are centrally administered using resource management services, load balancing features and other tools.

"Our MetaFrame Presentation Server implementation has really improved responsiveness and efficiency across the business," said Schofield. "Our call center can set up customer appointments at any retail center nationwide using the scheduling module of CMS. With real-time data on appointments, managers can shift scheduling efforts from one location to another. And employees who bill insurance companies can pull patient information directly from the system, instead of waiting for the information to be faxed in from the retail centers. In fact, everybody has access to everything."

The speed of that access has improved markedly. Before implementing Citrix MetaFrame Presentation Server, the CMS application had grown beyond the capability of HearUSA's older PCs. "The application ran very slowly on these devices," said Darrin Osmond, system administrator. "When we implemented MetaFrame Presentation Server, our sites saw a 30-percent increase in performance."

Another benefit of the solution is centralized deployment of application upgrades. "Previously, we often had to manually transmit insurance pricing changes and other CMS upgrades to each center when uploading didn't work," Osmond continued. "With MetaFrame Presentation Server, it takes about three minutes to roll out new versions, so users get the latest information fast. And if they have questions or problems, we use the session shadowing capability for real-time, remote support and training." As HearUSA looks toward expansion through mergers and acquisition, centralized application deployment will allow the company to bring new locations onto the system far more quickly.

Conclusion

The Citrix MetaFrame Access Suite can improve the performance of any contact center, large or small, single-site, remote or distributed, maximizing uptime and reducing the uncertainty of supporting complex computing environments. The net result is better service and stronger customer relationships.

With Citrix, contact centers benefit from rapid application deployment, centralized management of multiple servers, desktops and applications across platforms, and the ability to leverage existing investments in hardware and infrastructure for lower TCO.

For more information on Citrix software products and services, contact your nearest authorized Citrix Solution Advisor, or visit the Citrix website at **www.citrix.com**.



About Citrix: Citrix Systems, Inc. (Nasdaq:CTXS) is the global leader in access infrastructure solutions and the most trusted name in enterprise access. Citrix software enables people in businesses, government agencies, and educational institutions to securely, easily and instantly access the on-demand enterprise, from anywhere, anytime, using any device, over any connection. Nearly 50 million people in more than 120,000 organizations rely on the Citrix MetaFrame Access Suite to do their jobs. Citrix customers include 100% of the *Fortune* 100 companies, 99% of the *Fortune* 500, and 92% of the *Fortune* Global 500. Based in Fort Lauderdale, Florida, Citrix has offices in 26 countries, and more than 7,000 channel and alliance partners in more than 100 countries. For more information visit www.citrix.com.

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