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The Development of the Real-Time Contact Center

According to Gartner Inc., a leading information technology consulting company, a contact center is a multichannel and multipurpose (sales, marketing, and customer service) organization that serves a variety of constituents (customers, prospects, investors, and partners) in a logically consolidated but physically disaggregated setting. What differentiates a contact center from a call center is that the latter handles phone calls (answered by either agents or an interactive voice response [IVR] system) only, while the former involves all types of customer transactions including phone calls, e-mails, chat sessions, and web collaborations. Call centers were sufficient for satisfying customer needs until 1996, when the Internet began to alter the technical landscape and consumers began using e-mail to communicate with companies. Companies that want to satisfy their customers must now allow them to communicate in their channel of choice and provide the same consistently high level of service in all channels—a daunting challenge for most enterprises.

What Is a Real-Time Contact Center?

Practically speaking, all contact centers that handle live inquiries from customers, partners, investors, or prospects are real-time organizations and always have been. However, a real-time contact center is designed to take advantage of every customer-initiated transaction in real time or near-real time, either when the customer is on the line or immediately thereafter, within time frames established by the customer, to ensure a great experience and complete satisfaction. It's a service and sales environment

where, after the initial customer inquiry or sales request has been addressed, the agent or self-service system uses the information provided by the customer, in real time, to extend the relationship. This means that the contact center must hire and train agents who are as comfortable with selling as they are at servicing. It must have real-time systems that are able to spot and assess a customer opportunity while the customer is still on the line and supply the agent with one or more new revenue, retention, or loyalty-enhancing opportunities to present to the customer. The contact center must also be able to capture, track, analyze, and take action on competitive, operational, and policy issues identified during the customer interaction. Further, the contact center must have a method for sharing relevant aspects of this transaction with sales, marketing, operations, the executive suite, and the corporate data warehouse so that the results can be analyzed and acted upon.

How the Real-Time Contact Center Impacts the Corporation

Contact centers have always been real-time organizations. The difference now is that companies around the world recognize the significance and benefit of doing business in real time. Real-time transactions have the potential to reduce expenses, time delays, and redundant activities while increasing profits and enhancing customer satisfaction and loyalty. Since contact centers are already doing business in real time, unlike many other business units that would require retooling to do so, they are positioned to deliver some of these benefits immediately. Nevertheless, contact centers need new processes, staff, training, and systems to be positioned to optimize each and every customer contact.

From Call Router to Service Provider: The Expanding Role of the Real-Time Contact Center

Contact centers have matured rapidly, moving from primitive hardware-based call routers to sophisticated software-driven solution providers that add value to every customer transaction. Changes in process and people have accompanied each stage of the contact center's technological development.

Missed Calls: Automatic Call Distributor to the Rescue

The first contact center, called an automatic call distributor (ACD), was delivered in the mid-1970s to help the airline industry answer sales calls on a first-come, first-served basis. Airlines realized that every missed call represented lost sales and that the cost of the technology could quickly be offset by increased revenue. Early ACDs applied queuing theory to incoming phone calls and established an efficient method of managing customer inquiries. While the first ACDs were built for a sales function, it quickly became obvious that an ACD system could also be used to efficiently and cost-effectively manage the ever-increasing volume of customer service transactions. (See Figure 2.1.)

Operational Efficiency: The Phone Center Stage

By the mid-1980s, industry best practices had been put in place and new management applications, such as workforce management, were available to further improve the efficiency of increasingly sophisticated service and sales organizations. New vendors entered the ACD market and the phone center was introduced. A phone center differed from the classic ACD environment in several ways:

1. Its physical hardware footprint was significantly smaller.
2. It used software for processing and to reduce hardware requirements.
3. It was designed to be managed by end users instead of by the telecommunications group.
4. Its software orientation allowed for the introduction of complementary technology to further enhance operational efficiency, including computer telephony integration (CTI) and IVRs. Touch-tone IVRs were introduced to automate the handling of inquiries and keep them from escalating to expensive phone center agents. Computer telephony integration, in turn, was developed to automatically deliver the customer's account information to the agent's desktop at the same time as the call, so that an agent wouldn't have to spend time keying in the customer's account number, an activity that typically takes between 8 and 15 seconds.

Figure 2.1: Contact Centers: A Brief History

Contact Centers: A Brief History						
Phase	**PBX**	**ACD**	**Phone Center**	**Call Center**	**Contact Center**	**Real-Time Contact Center**
Technology	PBX, key systems, central office–based.	ACD, routing calls, work force management.	Conditional call routing, IVR, CTI, call logging, reporting.	"CRM suite" desktop, integration of front and back office systems, skill-based routing, call blending, speech recognition, QA.	Universal queue, IP, ERMS, chat, reporting, CEM.	Multichannel communications platform. Real-time analytics, text categorization of unstructured data, performance management, web services.
Strategy	Make customers go away.	Answer calls on first-come, first-served basis. Efficiency and cost containment.	Efficiently, productively and politely handle calls. Use IVR to automate calls. Increase first call resolution.	CRM Integrate front and back office systems to improve customer satisfaction and provide differentiated, cost-effective service.	Displace calls with web-based self-service technology. Use contact center to increase revenue.	Open contact center and customer data to enterprise decision makers. Integration of sales, marketing, and service activities. Convergence.
Management Issues	Lack of automation and standards for efficient customer service.	Need to develop and establish service culture, expertise, and best practices.	Balance enterprise needs for productivity with customer satisfaction.	Leveraging people, process, and technology to reduce calls to live agents.	Transition call center to multi-purpose/multi-channel support organization that is logically consolidated but physically dispersed. Multiskilled, flexible, and cost-effective agents.	Build processes and systems to capture, analyze, and use near-real-time data. Optimize contact center interactions. Engage customers.

Source: DMG Consulting LLC.

Increased Productivity: The Call Center

At the end of 1980s, the "phone center" name had given way to "call center," and with the change in terminology came further technological advancements and best practices. Leveraging people, process, and technology became essential, as it was understood that people-related expenses account for 70 to 80 percent of a call center's total costs. The mantra of the call center became "do more with less," as these organizations

struggled to contain the growing expenses associated with unprecedented increases in call volumes.

Enterprises invested in new applications, best practices, and training to improve the effectiveness of their call centers. New technologies were introduced, including customer relationship management (CRM) suites that integrated front and back office systems to improve the efficiency of call handling, and quality assurance (QA) to review how well agents adhere to internal policies and procedures.

Although presented as products to improve quality, QA tools were generally used to increase efficiency. Other innovations included skill-based routing to direct calls to the most qualified representative; call blending to make more efficient use of inbound/outbound sales and service agents; scripting to improve the delivery of sales and service pitches; and speech recognition to improve the efficiency of the IVR. While all of these applications improved quality, they were adopted because of their ability to increase productivity, either by reducing average talk time with better automation or by eliminating the need to speak to an expensive live agent.

Flexibility and Integration: Contact Centers and Customer Relationship Management

The CRM era began in the early to mid-1990s, between the call center and contact center phases. With it came CRM suites, another set of call center automation tools intended to improve the efficiency of call center agents. By 1998, CRM suites had taken on a life of their own and were considered the most important technology within the call center. For the first time in its short history, the ACD was no longer viewed as the primary infrastructure component of the service and sales call centers, but instead was being forced to make changes in order to integrate with CRM suites. (In the past, the call center vendors had dictated all of the integration requirements.)

While this phase lasted only 2 years (1998 to 2000), the impact was significant and lasting. Previously proprietary and often inflexible call center solutions and vendors were finally being forced to open up their systems and begin the migration to more standards-based and easily integratable platforms, the first step on the critical path to sharing call center activities, resources, and data with the rest of the enterprise.

New Channels for Service and Support: Rise of the Internet and E-Business

The Internet and e-business became hot in 1996–1997, at the same time as CRM, and were accompanied by new communication channels that drove the development of web-based customer service and self-service. It took a couple of years, but by 1998, companies realized that basic service and support needs were the same regardless of the channel. Contact centers (also known as *interaction centers*) were formed to address e-mail and chat inquiries in addition to phone calls.

The shift to contact centers that began in 1997 involved much more than a name change. As in the other phases, new technology was developed to make the service and support organization more productive. However, this time, the introduction of new channels forced a complete business process redesign and an overhaul of service and support organizations, including the ACD.

Although contact center infrastructure had shifted to a software orientation in the 1980s, the platforms were still hardware-based and could not easily be adapted to seamlessly incorporate the new internet-based, data-oriented channels. A goal of the contact center environment is to handle all channels equally—applying the same business rules and work flow and providing standardized reporting regardless of the channel through which transactions are processed. It was very difficult for most of the leading contact center vendors (also known as switch manufacturers) to deliver new technology to accomplish this goal. The demand for standardized service delivery thus forced a change in technology platforms and began the true shift to software-driven solutions.

Technological Innovation: Emergence of Internet Protocol Technology

By the mid-1990s, Internet protocol (IP) technology was capturing the attention of the marketplace. Internet protocol was introduced in the 1970s and standardized in 1981. By the late 1990s IP was being heralded as a more efficient method for moving calls and provided a technical foundation for a new generation of switches. Internet protocol switches were viewed as having the potential to replace the original time division multiplexer (TDM)–based switches. Internet protocol has the advantage of not

differentiating processing based on the type of transaction, whether voice or data. It is also a more efficient and cost-effective method of handling transactions among multiple sites, an important requirement for complex contact center environments.

It took until 2003 for IP to be accepted as a viable technology. Mainstream adoption of IP-based contact centers is expected to begin in 2005. As of the end of 2004, few contact centers are replacing their entire TDM-based systems with new IP-based solutions. However, end users are now hedging their investments by purchasing new switches that can handle both TDM- and IP-based processing, laying the foundation for a future cut over to IP.

Very significantly, to meet the needs of contact center and IP users, switch manufacturers have been forced to deliver new platforms that are more open and nonproprietary, although there is still much room for improvement in the continued migration to real standards-based processing.

Maximizing the Value of Each Contact: The Advent of Real-Time Contact Centers

Real-time contact centers are just beginning to come of age and represent another major shift in the market. The basic concept behind the real-time contact center is that it's an open environment (technically and physically) that facilitates sharing of customer information and opportunities with the rest of the enterprise on a timely basis. What this means practically is that there is going to be a shift away from managing transactions (calls, e-mails, chat sessions)—the historical emphasis of contact centers—to maximizing the value of each interaction. Building this type of organization will require significant enhancements to what is already a complex systems and operational infrastructure.

The real-time contact center has to be able to do everything it did in the past, but now it must have an infrastructure that is open and standards-based, facilitating information sharing between all enterprise constituents interested in customer behavior—sales, marketing, operations, research and development (R&D), finance, and the executive suite. Delivering a truly open contact center platform that can be integrated with existing enterprise applications (enterprise resource planning [ERP] or supply chain systems) is a massive task, and the vast majority of enterprises—more than

95 percent of end-user companies—are just beginning to address it. While doing the integration is challenging, the technologies to do the job exist and work.

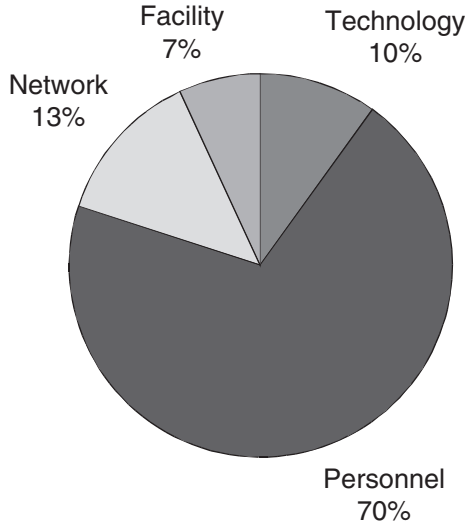
The more difficult challenge for enterprises is figuring out how to capture and structure the customer communications flowing through contact centers so that they can be mined for customer insights, intents, opportunities, and needs. Speech analytics and text-categorization technologies required to do the job are at least 3 to 5 years from maturity, although these solutions are already making contributions in leading-edge enterprises. In the meantime, enterprises can't afford to waste the highly valuable content included in customer interactions and are going to have to develop best practices to complement these existing but relatively immature technologies. Organizations that achieve this goal cost-effectively differentiate themselves and have a strategic advantage over those that continue with the original mission of contact centers—providing outstanding sales and service support—critical goals but increasingly only one component of the contact center mission.

Achieving Outstanding Service: Optimizing People, Process, and Technology

One person can provide outstanding customer service and sales support to a small group of customers without technology—paper, pencils, and Post-it® notes will do the job. But if a company wants to provide consistently outstanding service to a large group of customers, it must have a sophisticated servicing infrastructure that is fully integrated with its sales, marketing, and electronic commerce systems. Ideally, the servicing system should also be integrated with the ERP and supply-chain systems environments so that agents will have a complete view of each customer's relationship with the enterprise.

Contact centers are more than just the sum of their technology. The greatest technology cannot replace the impact of well-trained service representatives or salespeople, but it can surely improve their productivity, quality, and performance. And, while technology can automate and help standardize and institutionalize best practices, it can't create them. The best contact centers leverage people, process, and technology and constantly review their operating environments in search of new ideas and processes to improve performance.

Figure 2.2: Contact Center Cost Structure



Sources: Gartner Dataquest and other contact center benchmark studies.

Contact Center Cost Structure

Building a contact center for a medium to large-size enterprise today costs $1 million to $50 million just for systems and implementation, according to Gartner, Inc. Once the initial installation is done, equipment costs will comprise approximately 10 percent of ongoing expenses, the facility (rent and occupancy) 7 percent, and network charges 13 percent.

The overwhelming majority of ongoing costs are people related. (See Figure 2.2.) These expenses include hiring, training, salary, benefits, and attrition. While the numbers vary based on technological complexity, purpose, and size, the cost breakdown will be relatively similar for all United States–based contact centers. (Note that outsourced contact centers in places like India and the Philippines shift the cost structure and decrease agent-related expenses.)

As can be seen in Figure 2.2, people-related expenses account for 70 to 80 percent of the cost of a contact center. The number will lean toward 70 percent for a contact center handling mostly high-volume/low-touch transactions, like a bank, where the primary customer issue remains "What's my balance?" The 80 percent figure applies mostly to low-volume/high-touch contact centers, like help desks, where the typical inquiry lasts 8 to 15 minutes.

Contact Center Performance Management

Contact center performance management is a relatively new entrant in the contact center market. It is a method of measuring contact center adherence to internal and external performance standards. It uses a combination of best practices, tools, and applications intended to create scorecards and real-time dashboards to help align contact center key performance indicators (KPIs) and metrics with corporate goals. This transforms the contact center into an active contributor to the enterprise's profitability. (See Figure 2.3.) Contact center performance management is expected to be adopted by mainstream users during the next 3 years and should be a commonly accepted contact center practice by 2006.

Optimizing the Performance of Contact Center Agents

Because people related expenses account for such a large percentage of the overall cost structure, maximizing agent productivity is appropriately the highest priority in the majority of contact centers. However, it's a mistake when productivity becomes the only goal. While it's important to optimize the performance of contact center agents, it's critical to find a balance between productivity, performance, quality, and customer satisfaction. Contact centers that reward only productivity will find that quality and performance suffer, resulting in customer dissatisfaction and ultimately attrition. Therefore, it's essential for contact centers to find the right mix of the following components:

- *Productivity* (calls per hour, average talk time, e-mails per hour)
- *Performance* (save rates, closed sales)
- *Quality* (agent adherence to policies and procedures)
- *Customer Satisfaction*

Added Value of the Real-Time Contact Center to Sales and Marketing

Unfortunately, in most organizations, the service, sales, and marketing groups do not have great appreciation or respect for one another. Too often, marketing creates new programs in a vacuum without inviting input from

Figure 2.3: Contact Center Key Performance Indicators

Contact Center Key Performance Indicators		
Productivity	**Quality**	**Performance**
Calls handled/hour	Quality evaluation scores	Customer save rates
E-mails handled/hour	% of complaint calls	Sales rates
Chat sessions handled/hour	Customer survey results	Number of new leads collected and passed to sales
Average talk time	Adherence to policies and procedures	Number of up-sells/cross-sells
Average wrap time	E-learning test scores	Number of new customers acquired
Average work time	Customer stress level analysis	Identification of operational issues
First-contact resolution rate	Appropriate use of wrap-up system	Identification of competitive challenges
% of calls fully handled by IVR		
% of inquires resolved on web site		
Agent schedule adherence		
% of time agents are available		
Average speed of answer (ASA)		
% of calls answered within X seconds		
% of calls abandoned		

Source: DMG Consulting LLC.

the service department. The sales department often initiates a new campaign without notifying the contact center, which learns of the campaign only when customer complaint calls begin. The ideal situation would be for all customer-facing organizations to share the same corporate goals and for all three departments to share the responsibility for each other's failures and successes. Contact center performance management is a new structure that, if supported by senior management, may very well help to achieve this goal.

There are very practical reasons why sales and marketing organizations are finally reaching out to their contact center counterparts. Response rates from sales and marketing campaigns have been decreasing at an alarming rate. While there are always exceptions to the rule, response to an outbound campaign (even before the Do Not Call [DNC] legislation of 2003) is typically a dismal 1 to 3 percent. If this weren't bad enough, it

sounds even worse when the numbers are turned around: 97 to 99 percent of the sales and marketing dollars invested in most campaigns are being wasted. Poor performance is a great attention-getter, and this is what it took to motivate sales and marketing organizations to ask their contact centers for help in improving response and closure rates.

The information required to enhance the results of marketing campaigns and sales programs passes through contact centers daily. The challenge is to capture, structure, understand, and leverage this information for the benefit of the corporation *and* to do so before it's too late. A real-time contact center is designed to use customer information at the point of contact to realize the greatest return from each transaction while providing an outstanding experience to each customer.

Real-Time Contact Center Evaluation Checklist

Establishing a real-time contact center will differentiate you from your competitors. It positions your service infrastructure to offer proactive and engaging service that enhances your company's overall profitability and brand. The following checklist will help you determine your company's readiness for building a real-time contact center.

Yes	No	
❑	❑	Is your company leveraging its inbound customer interactions to increase sales?
❑	❑	Does your company have systems to capture and identify new revenue and customer retention opportunities hidden in customer transactions?
❑	❑	Does your contact center have a formal process for capturing and sharing customer insights and competitive information with sales, marketing, product development, operations, and senior management on a timely basis?
❑	❑	Are your contact center customer service agents effective at up-sell/cross-sell?
❑	❑	Have the success rates of your outbound sales campaigns improved during the past two years?
❑	❑	Have you developed new marketing strategies to minimize the impact of DNC legislation on your campaign response rates?

(*continues*)

- ❑ ❑ Do your sales, marketing, and customer service groups share common goals?
- ❑ ❑ Is your contact center respected by sales and marketing?
- ❑ ❑ Is your annual contact center agent attrition rate below 10 percent?
- ❑ ❑ Have your investments in contact center infrastructure and CRM initiatives realized the projected returns?

If you answered No to more than half of these questions, then you are well positioned to begin the migration to a real-time contact center that will streamline your operating environment, improve the performance of the call center, enhance customer satisfaction, and increase revenue and profitability.