

# Enhancing Call Center Efficiency with Screen Pops

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*The Path to Improved Customer Service*

Consumers routinely complain about the time and effort required to have their questions answered or problems resolved when they interact with call centers.

A careful implementation of Screen Pops can improve customer satisfaction while simultaneously reducing call processing costs.



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# Executive Summary

## → Overview

Recently a national radio talk show host angrily complained that few call centers these days understand customer service. “Why is it,” he questioned, “that when I call a customer service center and enter my account number into their automated system that I’m asked for the very same information when I’m transferred to a customer service representative? That’s not customer service! That’s customer non-service!”

He’s right, of course. Few things anger callers more than having to repeatedly identify themselves as their calls are transferred within a call center. But beyond caller frustration, call processing costs are significantly higher when valuable time is taken to re-validate callers. Screen Pop technology, built around Computer Telephony Integration (CTI), provides a proven solution. Once callers are identified, their account information can be transferred with their calls throughout the call center. An appropriate screen

of data, pre-populated with the caller’s information, is displayed on the Customer Services Representative’s desktop each time a new call is received.

Though Screen Pop solutions have been widely available for a number of years, implementation costs have often placed Screen Pops out of the reach of most small and mid-sized call centers. Today, however, affordable Screen Pop solutions provide demonstrable ROI, with payback periods generally measured in less than 12 months.

***"With little or no training required, benefits like reduced talk time and better customer service were almost immediate. According to CSRs, the customers' surprised reactions to 'I already have your loan number' have had a very positive effect."***

**Ann L. Holland  
Assistant VP  
Customer Service**



# Why Screen Pops?

## → Reduced Average Length of Call

Often unnoticed in call centers is the amount of time wasted in repeatedly asking callers for identifying information such as account numbers. In most call centers, agents take 15-20 seconds to greet the caller, ask for the caller's account number, key it into their workstation, and receive a screen with the caller's information.

The cost savings of recovering those 15-20 seconds per call can be very significant. Measuring the savings is simple.

For example, assume a call center with 100 agents, each handling 100 calls per day. That's a total of 10,000 calls per day. Saving 15 seconds per call represents total agent time of 2,500 minutes per day. Assuming 300 work days per year and an average loaded hourly cost of \$20 per agent, the annual cost savings with Screen Pops totals approximately \$250,000!

*"Because of the time saved with each call, Screen Pops have become mission critical."*

John Scott  
Vice President



Use the Cost Savings Worksheet (Fig. 1) below to determine the potential cost savings from implementing Screen Pops in your call center.

## → Increased Customer Satisfaction

Improving Customer Satisfaction levels is critical to improving the overall efficiency of any call center. The higher the level of dissatisfaction among your callers, the longer the average length of call as callers take time to air their frustrations. Call centers using Screen Pops eliminate one of the most common consumer complaints and demonstrate a high level of interest in serving their customers.

Screen Pops help to break the dangerous cycle of customer frustration which breeds declining levels of customer service. Agents who must frequently bear the brunt of caller frustration often grow discouraged, and their performance suffers.

### → Improved Agent Performance

Quality service breeds quality service. When agents know their call center is committed to a higher level of customer service, their own performance tends to rise to the higher expectation. The result? Increased levels of customer retention and increased follow-on sales.

Fig. 1: Cost Savings Worksheet		
	Sample Numbers	Your Numbers
1 Total calls handled daily by your call center agents	<b>10,000</b>	
2 Multiply #1 by 15 to get minimum number of seconds wasted each day	<b>150,000</b>	
3 Divide #2 by 3600 seconds/hour to get the number of hours wasted each day	<b>41.67</b>	
4 Your loaded hourly agent cost	<b>\$20.00</b>	
5 Multiply #3 by #4 to see how much you would save each day with Screen Pops	<b>\$833.40</b>	
6 Your number of workdays per year	<b>300</b>	
7 Multiply #5 by #6 to see your total annualized savings	<b>\$250,020</b>	

# Screen Pops Technology

## ➔ Technology Overview

Typical call centers make use of a variety of technologies, typically from several different vendors. These include the telephone switch, ACD, IVR (interactive voice response) system, desktop phones, and PC workstations using local or hosted software applications. The challenge of a successful Screen Pops implementation is to communicate with these disparate systems and consistently link caller account information with each call.

A CTI (Computer Telephony Integration) server manages the behind-the-scenes communications. The CTI Server:

- ➔ Interfacing with the phone switch, tracks the movement of calls throughout the call center.
- ➔ Where appropriate, associates ANI or DNIS with the call.
- ➔ Where appropriate, receives identifying data from the IVR system (account number, job number, etc.) and associates that data with the call.
- ➔ Provides necessary caller data to the CSR workstation to allow a screen to pop when a new call is received by the CSR.

# Phone Switch Interfaces

## ➔ CTI Compatibility

Most recent model phone switches are designed to support CTI interfaces using industry standard communications protocols. Increasing industry support of Computer Supported Telecommunications Application (CSTA) protocols ensure stable and consistent CTI interfaces.

In some cases, the installed switch may require a software upgrade to support CTI connectivity.

*See Figure 2 for a list of common switches that readily support CTI interfaces.*

**Figure 2 - Commonly Supported Switches**

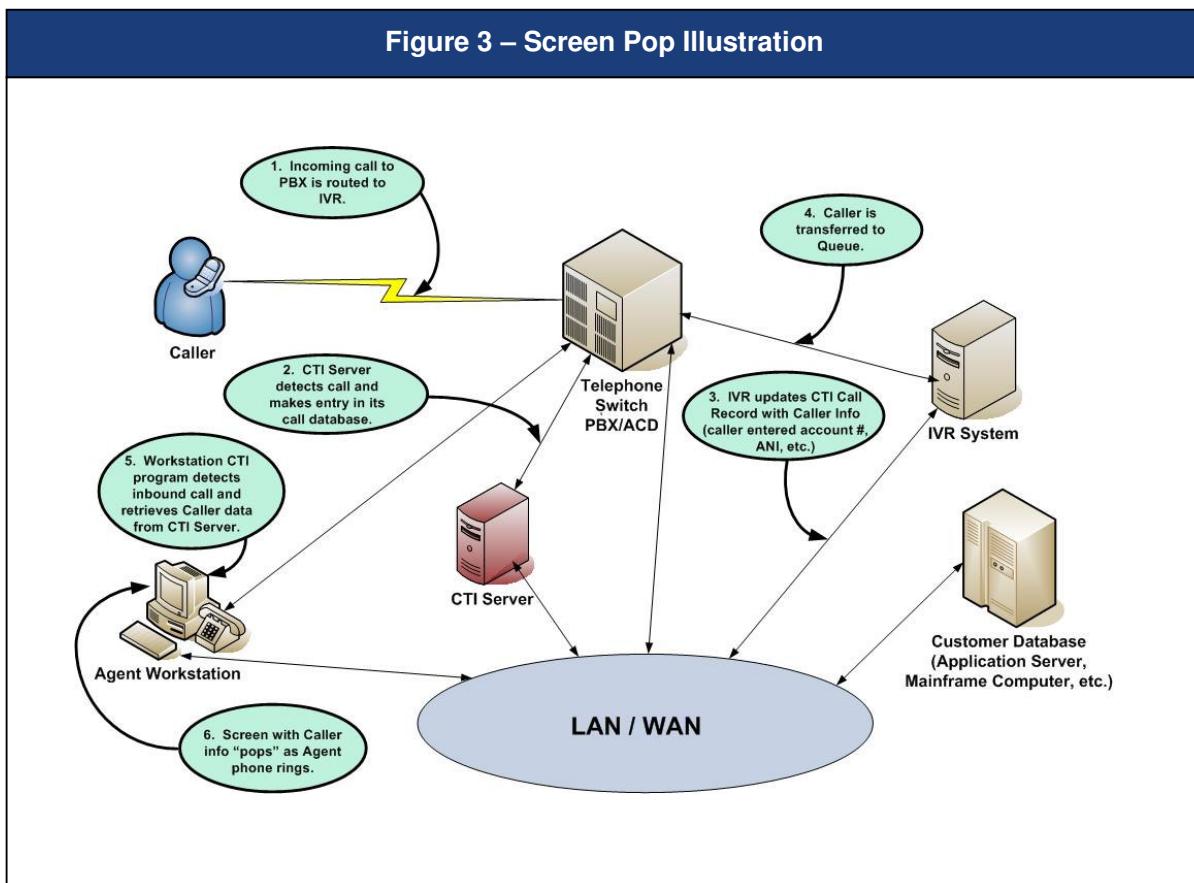
Alcatel OmniPCX 4400	Mitel SX-2000 Lite
Avaya DEFINITY G3	NEC 2000 & NEC 2400 NEAX IM
Avaya S8700 ECLIPS IP	Nortel Meridian
Avaya INDeX	Nortel DMS100/SL-10
Avaya Tenovis Integral 33X	Nortel Matra MC 650
Cisco IPCC	Philips SOPHO iS3000
Comdial DXP/DXP Plus	Rockwell Spectrum
Coral ISBX	Rockwell Transcend
Deutsche Telecom Octopus	Siemens HICOM 300E
EADS Intercom Telecom M6500	Siemens HICOM 150 E Office
Ericsson MD110	Siemens HICOM 150H
Inter-Tel Axxess	Siemens Hipath 3000, 4000 series
Inter-Tel Eclipse	Other CSTA-compliant switches

# Screen Pops in Action

## → Overview

A successful Screen Pops implementation builds on the Call Center's existing infrastructure, interfacing with the existing phone switch, ACD, IVR system, host computer system(s), and agent workstations. In most cases, only minor changes to an existing IVR application are required to associate caller data captured by the IVR or from carrier signalling (e.g. ANI, DNIS) with each call.

*Figure 3 illustrates typical call processes in a Screen Pop enabled call center.*



## → Agent Desktop Software

At the agent desktop, a small software application triggers the Screen Pop when a call arrives at the agent's phone. This workstation software can often be modified in an endless variety of ways to meet the specific needs of the call center and individual agents.

For example, the screen that is popped on the arrival of a call may be defined separately for each agent (as well as defined by caller criteria). Softphone capabilities may be included, allowing agents to transfer calls to queues or extensions with a mouse click.

In the implementation of agent workstation software, consideration should always be given to real world work flow issues. For example, if a call is received while an agent is entering wrap up comments from the previous call, a Screen Pop could disrupt the agent's work. Instead, the agent should be notified that a Screen Pop is available when the agent chooses (with a mouse click) to receive it.

# Maintenance Considerations

## ➔ Software and Configuration Management

Once in place, Screen Pop implementations tend to be easy for IT groups to maintain. Like other servers, your CTI Screen Pop server should always be protected by anti-virus software. Likewise, operating system service packs should be kept up to date.

From time to time, changes in the IVR application, the switch configuration, or agent workstation applications may necessitate changes to the Screen Pops application. As changes to elements of your Call Center architecture are planned, be sure to consider the impact on your Screen Pops application. Generally, these changes require only minor adjustments to the Screen Pops application. However, if you fail to include your Screen Pops application in your planning, your agents may lose Screen Pops functionality until necessary changes are implemented.

# Advanced Call Center Implementations

With Screen Pops implemented in a Call Center, advanced CTI modules may be readily added. Building on the CTI infrastructure, these modules can further increase call center efficiency and improve customer satisfaction.

## ➔ IVR PassBack™

Sometimes referred to as a reverse Screen Pop, IVR PassBack™ allows agents to gracefully return callers to the IVR to complete self service functions.

For example, if a caller asks an agent to process an ACH payment, the agent may inform the caller that that service will cost \$15 if processed by an agent, but only \$12 if processed by the IVR. If the caller elects to use the IVR, the agent can select “IVR – ACH payment” from a pull down menu and transfer the call. When the call arrives at the IVR system, the system is able to retrieve the caller’s account number, the desired function, and other pertinent caller information from the CTI server. The caller is immediately directed to the appropriate place in the IVR application without having to re-enter his account number or select “ACH payment” from a menu of choices. Self-service utilization and caller satisfaction rise rapidly with judicious use of IVR PassBack™.

Implementation of IVR PassBack requires modification of both the IVR application and the agent workstation software.

## ➔ Call Recording

Increasingly, call centers seek to record some portion of their calls for quality control or other purposes. Call Recording solutions often take advantage of the CTI infrastructure to trigger call recording and associate recorded audio with call specific data (date, time, agent, caller account number, caller phone number, etc.).

## ➔ Multi-site Call Centers

Multi-site Call Centers sometimes face additional challenges when calls must be transferred from one center to another. Frequently, switches, ACDs and IVR systems from different vendors are installed in the various call centers. Enterprise CTI implementations can unify disparate components of the telephony infrastructure, yielding an otherwise unattainable level of operational efficiency.

## ➔ Enhanced Call Center Reporting

Some switches and ACDs deliver limited management reports restricting the ability of call center managers to fully analyze the performance of workgroups and individual agents. Because the CTI server monitors call activity throughout the call center, advance reporting is often available. Data on each call is saved to a central database and standardized or custom reports can be readily generated.

## ➔ Real-time Call Center Views

As with Enhanced Call Center Reporting, CTI supported Real-time Call Center Views can often provide enhanced functionality that some switches or ACD are unable to deliver. Typically, this type of enhanced CTI functionality provides supervisors a graphical view of all agents in a call center or workgroup. Supervisor displays can include a variety of data, including agent status, length of time in current status, number of calls processed, average length of call and other important data.

# About TeleVoice

TeleVoice is a premier provider of customized IVR and CTI applications. Since 1986, TeleVoice systems have served the needs of hundreds of companies throughout North America. From Fortune 500 giants to small businesses, TeleVoice has delivered customized solutions that get the most out of today's powerful telephony technologies.

The TeleVoice team of experienced consultants, programmers, developers, and installers are the best in the business. Our experience and innovation combine to produce real results for you. On time and within your budget.

Whether you need an enterprise-wide CTI implementation to provide Screen Pops to multiple call centers or a customized IVR solution that's designed around industry best practices, TeleVoice is the answer. Blend our experience and innovation with your knowledge of your business, and we'll have you on the path to improved service levels.

## Contact TeleVoice

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