

## Customers Want to Talk to You Wherever You Are

---

***With all this technology that we have, people still want to speak to people. Not voicemail. And, they want you to solve their problems yesterday. The neat thing is, you don't have to be stuck at the office to be in touch with the answers they demand.***

---

In the late 1980s, I was invited to speak to a number of organizations on the twin topics of demographic change and technological innovation. The talks I gave focused on how these two subjects would jointly impact society generally, and business specifically. I remember speaking to an organization not long after one of the tallest buildings in Indianapolis had been completed. I contrasted how these two trends would impact society by focusing on the desire of young mothers wishing to stay at home with their children while also having a career, and the coming technological explosion being created by the personal computer.

I suggested to the attendees present that instead of driving to work in a high-rise downtown office complex, they would someday work from their homes. They might have a small satellite office which they could share with other professionals. Such an "executive office suite" could easily be located in the suburbs where they could meet their clients (who would appreciate the commuting and parking convenience). My audience, consisting of financial planners, appreciated the increased flexibility they would have with their work schedules, as well as the fact that their commute time to and from work would be drastically reduced.

The skills required to work as a financial planner do not require someone to be located in a high-rise office building to perform them. Therefore, so long as the technological tools are present, people in this profession can work where they want, when they want. I concluded my address by pointing out that, within a few years, one could expect to see two things: First, the vacancy rate for high-rise office buildings would increase, and second, there would be an increase in the demand for "executive smart offices" located in the suburbs. And that's just what we've seen.

Today with the Internet, anyone can log on and obtain financial information. If your financial planner has older systems which prevent him from accessing market information in "real time," why pay his commission fees? I call this trend "I Want What I Want When I Want It." It is this trend which is pushing businesses to establish internal processes which

### Illustration

**Have you ever called to** order a pizza and had the person answering the phone say "Hello, Mr. Smith. I see the last time you called, you ordered a large sausage and mushroom pizza. Is that what you'd like to order today?" If so, the pizza place was using a "CTI" application with its call center.

**A CTI application combines** phone system technology, voice mail, computer software and database systems to send a call to the right person. Using caller ID, it can trigger a "screen pop" which automatically brings customer information up on a computer screen. Because of sophisticated phone system technology, the person taking the call can be located almost anywhere - including at home.

**Virtually any industry which** processes calls to look up customer information can use this type of application. Employees can work from home, if desired. *CTI is an example of how technology allows customers to speak to live people who can work where they want when they want.*

**Adapted from the book, Buying Technology: Understanding What You Need and Why You Need It, by David Lantz**

allow their computers to talk with their suppliers' computers. This push for increased data sharing means that companies need to respond rapidly to their customers - especially in the area of customer service. Therefore, the operation of the business needs to become transparent - both within the company for internal communication purposes, and to the outside customer.

But while we want our computers to talk to other people's computers, people want to talk to people. Not voicemail. Not the receptionist. They want to speak with the person who can resolve their problem or answer their questions. At the same time, the person taking the call doesn't want to be stuck in a "Dilbert Cube" all day long. They want to have control over where and when they work. So, if a customer needs to speak with somebody who can resolve their issues, we have one of several choices:

1. Send the call to the person with the answers and hope they're there and not busy so they can answer the phone.
2. Send the call to a group of people sitting in a room together between the hours of 9:00 and 5:00, each of whom is capable of answering the question. The first person to pick up the phone gets to answer the question.
3. Send the call to someone we know can answer the question and that we know is available *now*. Oh, and they happen to be working from home.

In an increasingly mobile society, employers are faced with two competing trends: Customers who wish to instantly speak with a live person to address their concerns, and employees who need to be free to leave the office.

---

## **Responding to Customer Needs With Technology: Computer - Telephony Integration**

---

Consider a fictional company we'll call Case Management Services, Inc. (CMS). CMS provides in-home medical services by coordinating nurse care for the elderly and disabled. They can also send social service case managers out to either the patient's home, to doctors' offices and to hospitals. CMS staff service a ten county area in central Indiana, and have seen a dramatic increase in the demand for their services.

For more information on **Buying Technology: Understanding What You Need and Why You Need It**, visit [www.buyingtechnology.com](http://www.buyingtechnology.com). Or, e-mail David Lantz at [dlantz@buyingtechnology.com](mailto:dlantz@buyingtechnology.com).

### Solution Overview

#### **Computer Telephony Integration (CTI)**

CTI is a broad term used to describe ways phone and computer systems work together. A call is received through the phone system, passed through a computer database to determine where the call should be sent, and then routes the call to a pre-programmed destination.

#### **Common Applications**

Process customer service inquiries, search for called party at one of several pre-programmed phone numbers, integrate with voice and e-mail applications, display customer information on a computer screen when the call is answered.

#### **Solution Requirements**

Advanced PBX, Caller ID, CTI software that integrates with existing business database (preferably ODBC compliant), integrated phone/voicemail system. Size phone and computer systems for the correct number of station ports, phone line ports and software workstation licenses.

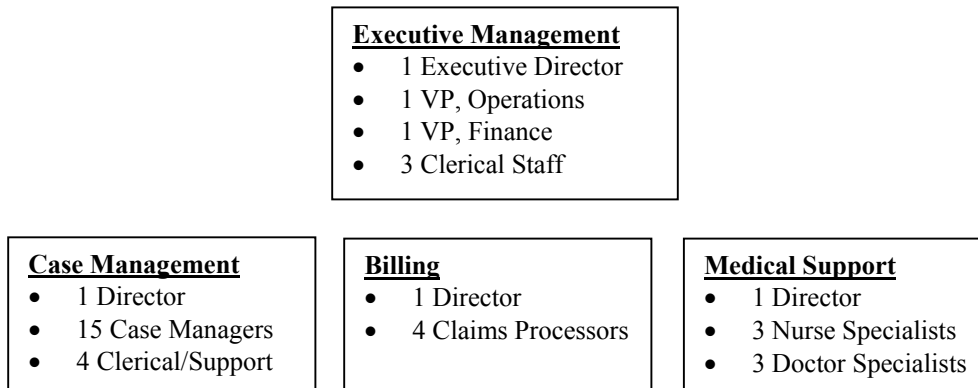
**Adapted from the book, Buying Technology: Understanding What You Need and Why You Need It, by David Lantz**

However, they have encountered two problems. First, because much of the funding to pay for their services comes through Medicaid and Medicare reimbursement, cashflow is critical to their operation. Anything which can reduce overhead expenses is very beneficial. Second, many of their caseworkers must come into the office to do paperwork, use the computers to log their reports, and process claims. Because some of these caseworkers live some distance from the office, the travel time needed to come into the office takes away from time that could be spent in the field, not to mention the added cost of mileage.

One step which CMS has taken to allow its caseworkers to process paperwork more quickly is to issue them laptops. While they can now complete their paperwork while in the field, the case managers must still come into the office to print reports, send e-mails, and transfer files to CMS's main computers.

Here is the flow chart of how CMS is organized, and its vision statement.

**Case Management Services, Inc.'s Organization Chart**



**Vision Statement:**

*Case Management Services (CMS) is a medical management company, setting standards of excellence in the home care industry. Our mission is to prevent or postpone unnecessary hospitalization or nursing home placement by offering comprehensive, quality, cost-effective Visiting Nurse, Home Health and Adult Medical Day Care services. CMS seeks to assist in the development and coordination of a comprehensive service plan to meet the unique individual needs of senior citizens, assisting families in identifying appropriate resources to realize the full potential of each individual.*

CMS has considered hiring additional staff. However, it lacks the necessary office space or the budget to allow a dramatic expansion of its

For more information on **Buying Technology: Understanding What You Need and Why You Need It**, visit [www.buyingtechnology.com](http://www.buyingtechnology.com). Or, e-mail David Lantz at [dlantz@buyingtechnology.com](mailto:dlantz@buyingtechnology.com).

**Get Ready for CTI**

**Voice and data applications are converging, making it possible for employees to work remotely. So:**

- ✓ Look at your computer as a communications tool - not just a data storage device. Ask yourself how it can be merged with your phone system.
- ✓ Re-examine how you use the Internet. Ask how you can send voice AND data between locations.
- ✓ Consider the needs of your mobile employees. Ask how they can connect to their computers and Internet while on the road.
- ✓ Evaluate how your customers contact key employees. Ask how they can be in touch from anywhere.

**You want to partner with vendors who see computers, phones, PDAs and cell phones as one unified communications tool. Given a choice, employees will chose to work with companies which provide a flexible work environment. CTI makes this possible.**

**Adapted from the book, *Buying Technology: Understanding What You Need and Why You Need It*, by David Lantz**

facilities. Faced with these constraints, corporate officials recognized the need to better utilize existing manpower.

Old Customer Interaction Process

In addition to providing its case management services, CMS also distributes medical prescriptions and some types of ancillary medical equipment (oxygen, wheel chairs, etc.). Officials at CMS recognized, however, that their system for sending calls received by the receptionist to staff members who could answer their questions, pull case files, or order supplies, was woefully inadequate. In fact, employee turnover among the clerical staff had begun to increase primarily because of both the number of client calls and the way they were being forced to handle them.

Here are some of the issues CMS officials uncovered in a review of their procedures.

1. The receptionist had the sole discretion as to whom she would transfer calls that did not ask for a specific employee. While she would attempt to send the call to the person best suited to answer the callers' question, this process depended on her always being available to take the call.
2. CMS had instituted a process of sending all calls to a group of clerical staff. The receptionist tracked forwarded inquiries to make sure calls were evenly distributed. This meant staff were called upon to answer questions about subjects for which they had little or no training.
3. Calls requiring the attention of a case manager or the medical supply division were logged by the person handling the call. That individual would then call the person responsible for addressing the question. If not present, they would leave a voice mail message and expect them to follow up on the client's inquiry.
4. Case managers rarely received accurate information left by their clients who called in, and orders for medical and equipment supplies were lost because of this process.
5. Whenever the case managers wished to transfer information about specific clients from their laptops to CMS's main system, they had to come into the office and hook up to the network.

**Adapted from the book, Buying Technology: Understanding What You Need and Why You Need It, by David Lantz**

A goal of Case Management Services, Inc. per its vision statement, was to develop and coordinate a comprehensive service plan for its clients. Based on this review, CMS management recognized that it was failing to achieve this goal.

New Customer Interaction Process Using CTI

In reviewing their communications strategy, Case Management Services realized that by upgrading its phone system and adapting a CTI application, it could accomplish two goals: Provide better service to its customers, and provide greater flexibility to its employees. In reviewing their needs, CMS decided to contract with United Telecommunications Systems (UTS) to provide a comprehensive telecommunications solution.

First, UTS recommended the AXXESS phone system made by Inter-Tel Technologies ([www.inter-tel.com](http://www.inter-tel.com)), a leader in phone system/CTI applications. UTS also suggested providing high speed internet access through DSL to the company's case managers in their home offices. This would allow the case managers to connect via a Wide Area Network to the computer server at CMS's headquarters. Using the AXXESS system Voice over IP solution, these case managers would be connected via the internet to the phone system there at company headquarters. Combined with Inter-Tel's Unified Communicator product, calls from clients to the main office can be automatically transferred to the case managers' home office or cell phone. In this way, they would not miss calls they needed to take. And, if unable to reach the case manager, the calling party would be able to leave a voicemail message which would light an indicator light on their phone alerting them to the missed message.

Second, UTS recommended that instead of plain old telephone (POT) lines, CMS have a Primary Rate Interface (PRI) for sending and receiving phone calls at their main location. Two key benefits of a PRI are that it allows both the ability to directly dial any individual phone station (Direct Inward Dial, or DID), and caller ID. The caller ID allows a particular CTI application called a "screen pop."

With the ability to transfer calls using Voice over IP to employees working from home, and the ability to send a screen pop to a person's computer, CMS was able to make the following changes to the way it processed phone calls from its customers:

**How Screen Pops Work**

1. Imagine a call coming into the phone system. The call is being sent to your phone. Caller ID (a feature of some types of phone lines) tells the phone system who is calling.
2. The phone system sends the phone number provided by caller ID on a short detour to a computer database.
3. The database looks up the record associated with that phone number. The phone system then sends the call to your phone.
4. When your phone rings, the record of the person calling you "pops" open on your computer screen. Not only do you know who is calling: You immediately have access to the notes you made when you last spoke with them, as well as any other pertinent information.
5. If the number is not in your database, or they have caller ID blocking, the phone system can prompt the caller to enter their customer number, phone number, or other identifier. Based on what commands have been given the CTI application, the call will then be sent where it needs to go.

**Adapted from the book, Buying Technology: Understanding What You Need and Why You Need It, by David Lantz**

1. Calls coming to CMS's main number were greeted with the following message: "If you are calling about your care plan, press 1. If you are an existing client and are calling to order medical supplies or medication, press 2. All other calls, press 3."
2. When a call is passed to a client service representative, their computer generates a "screen pop" with the calling party's account information. The CMS employee can take orders, track order status, and review ongoing case management plan. If necessary, she can transfer the call to the case manager or other CMS employee familiar with the client's needs.
3. Calls about a client's care plan or to order medical supplies are automatically routed to a group of people trained to answer questions on the respective subject. The people assigned to answer calls log into the phone system when they are ready to receive calls. There is no more arbitrary routing of calls to "somebody."
4. New clients pressing 3 are routed to a general response group that can set them up as a new client so that in the future, the system will recognize them and route them to the correct department or individual.
5. Clients who know who they wish to speak with may dial their direct inward dial number. The call is routed straight to their extension, popping a computer screen with their client information. Case Managers working from home can have the call routed to them there.
6. Because the system can route calls as well as data records about the callers' needs over an IP connection, Case Managers can work from home. This eliminates the need to drive to the office simply to do paperwork and suffer rush-hour traffic. It relieves pressure to expand the facilities, and greatly increases everyone's productivity.

## **Conclusion**

By instituting this process, CMS has increased client contact and reduced delays in providing services. It has seen an increase in orders for its ancillary medical equipment, and avoided the need to expand its facilities.

Just as importantly, employee morale has been improved. Caseworkers no longer have to commute to the office just to download information from their computers, and clerical staff are not bombarded by phone calls from upset clients.