



Communications Platform Yesterday, Today & Tomorrow

The Roadmap For Your Evolving Business

Business Perspective

When you take a look at the essence of what it means to be in business you will often see a fundamental definition; *Business* is a process of reaching goals. Additionally, you will find that communication is what makes it possible. Case in point: An individual stranded on a deserted island cannot conduct business. Why? Two key elements are missing: The first is the lack of having another individual or group to do business with. The second is the inability to communicate with that entity. However, if this individual does know of a source to do business with, then the level of communication available between them will determine the effectiveness of that relationship. Obviously a cell phone and an Internet connection would empower this relationship more so than the proverbial message in a bottle.

How is this relevant to you? Well, the communications tools you provide your organization will dictate the potential effectiveness of reaching your organization's goals. Communication with your customers, employees, suppliers, distributors, etc. is an integral component of your core business. As you improve your ability to communicate, you fundamentally improve on your business's ability to succeed.

Think back to your work environment ten years ago. If you were using email, you were part of a select few, and the World Wide Web probably had nothing to do with your business. Today, most businesses have become dependent on one or both of these things. Why? Because of productivity gains. These gains help improve your business and keep you up to par with your competitors. Are you done? Do you have all of the technology you need? Is your organization working as efficient as possible? Probably not. As the technology and business worlds continue to evolve, each will continue to put new demands on the other, forcing decision makers to constantly monitor both in order to keep them in proper balance. Wouldn't it be nice to know that you had the power to turn this potential burden into a business opportunity? Inter-Tel thinks so.

What are you looking for next in your communications solution? Do your expectations revolve around cost reduction? How about increased mobility? Maybe productivity and efficiency gains? If you answered yes to any of these, you are not alone. Most businesses today expect more out of their solutions than what they currently have, or are capable of having. These expectations stem from changing business needs and as well as from the advancements proposed by new technologies. This is where Inter-Tel comes into the picture.

For over thirty years, Inter-Tel has been helping businesses succeed through better communication. Inter-Tel's experience and understanding of customer needs transcends into every aspect of its business. From product development to integrated services, you will see that Inter-Tel understands that providing an effective solution means more than just building a superior product. Your business needs come first, which is why Inter-Tel is so committed to designing total solutions around your changing functional, financial, technical, and support needs. Inter-Tel's success stems from its ability to build long-term customer relationships on its commitment to those customers and technology alike, which is reflected in its history.

In order to understand what it truly means to be a technology leader, you do not have to look any further than Inter-Tel's recent history. Over the last ten years, Inter-Tel has been building on a platform designed for change. The milestones along the way not only reflect a commitment to new technology, but also illustrate how migration really looks.

Inter-Tel understands the value of long-term customer relationships. Development strategies of the past, present, and future revolve around technology migration and investment protection. Since most businesses don't change overnight, neither do their infrastructures. This is why Inter-Tel builds solutions around the pace of business. By staying ahead of technology and building solutions on a common platform, Inter-Tel's customers are able to leverage advancements at the right pace for them, fast or slow, without concern for the technology required to make it happen.

Within the last decade alone, Inter-Tel has proven time after time to be committed to emerging technologies that provide *real* benefit to you. Early adoption of new technology means that, as a customer, you get the benefits of new technology in a timely fashion, without abandoning your prior investments.

This flexible core provides the framework on which to build your solutions, which is where the benefits of ownership present themselves. From day one, the platform has been an open, software-based model for development and customization. The history of this platform shows how well it can evolve and change over time. If you are looking for security in your investment with the flexibility that technology and business needs demand, then your search will end with Inter-Tel.

Yesterday

Inter-Tel's Proven Track Record

Over the last ten years, Inter-Tel has introduced many enhancements into its existing platform while other manufacturers were forced to build new platforms to do the same. Many of Inter-Tel's customers have forgotten all about the distraction and disruption that comes with forklift changes.

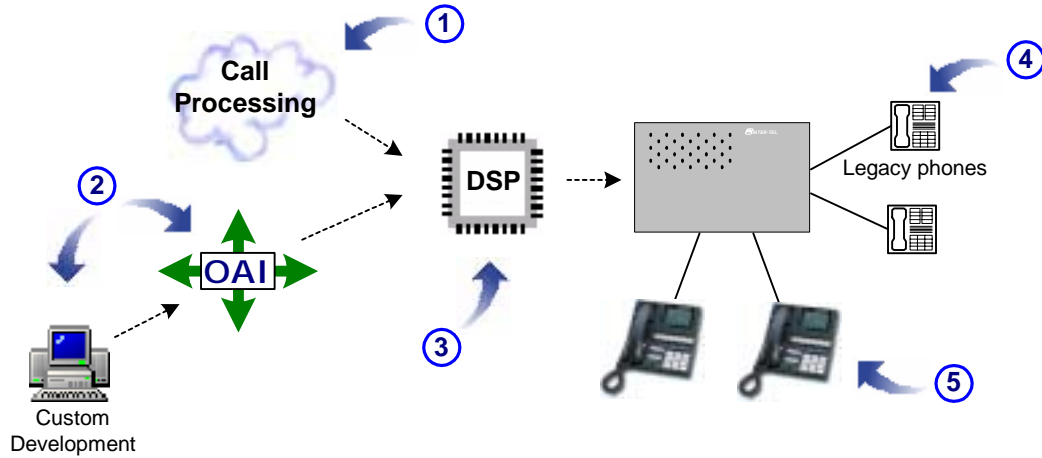
The success of Inter-Tel's current communications platform began in the early 1990s with the creation of a software development model. Written with the open, modular language of C++, this model allowed for advanced programming in rapid development time. It is on this model, that the Call Processing development began. In addition, a programming connection known as the Open Architecture Interface (OAI) was introduced. This interface provides the mechanism by which software customization can occur. Time has proven this to be one of the most significant capabilities of the system. Not only does Inter-Tel use the OAI to create tightly integrated applications in and around Call Processing, but the interface is also made available to customers and third party application developers.

Unlike other "open" development interfaces, Inter-Tel's OAI comes with a complete toolkit to tell you how to write software for the system. In addition, this kit is made available to everyone for only a few hundred dollars. This open design has given birth to many of the most advanced computer telephony (CTI) applications in the industry (see page eight). Additionally, if you want the system to do something it doesn't already do, the OAI will allow you to do your own customization, or allow you to leverage external resources, such as 3rd party CTI vendors, contract developers, or Inter-Tel's own custom development teams.

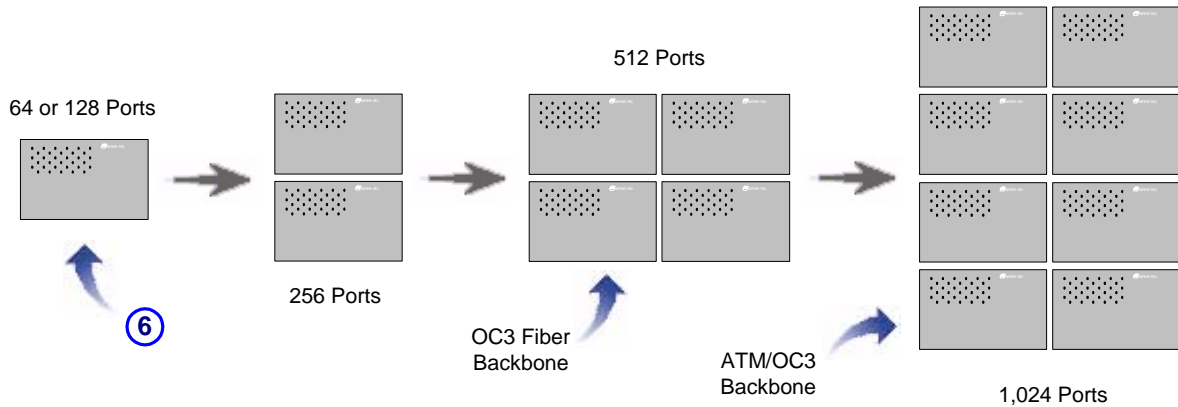
Over time, the system grew to take on many new capabilities. Thanks to the flexible foundation, the unforeseen changes required along the way, no matter how potentially disruptive they were, have not kept the platform from changing with business and technology. The highlights of the recent years show that the Inter-Tel platform is perhaps the most flexible, proven platform in the market. These include:

1. **Call Processing** – The advancements in features have taken customers from the feature set of the legacy Key systems (Hold, Transfer, Conference, etc.), to a level of PBX functionality seldom matched by other manufacturers, even today (i.e. multi-location ACD groups, advanced DND and forwarding options, plus paging, call recording, messaging, etc.).
2. **Open Architecture Interface (OAI)** – This created an extensive line up of integrated applications that, even today, some competitors can only achieve in an IP-only solution.
3. **Adoption of the Digital Signal Processor (DSP)** – The implementation of programmable DSPs was the foundation for the hardware side of the system. The extensive use was not only ahead of its time in 1993 (when the microprocessor was king), but continues to be a distinct advantage today because it allows hardware functionality to change via software upgrades.

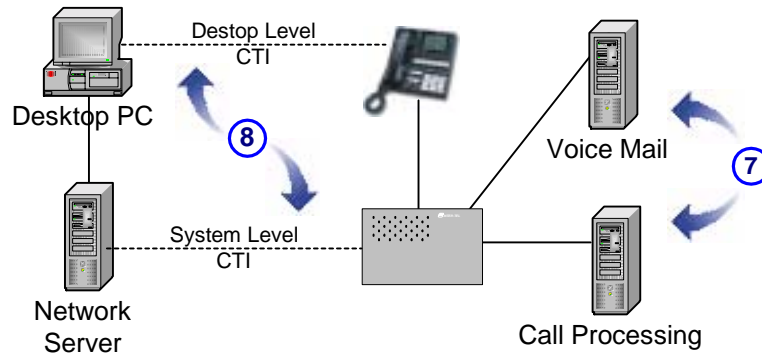
4. **Support for legacy phones** – Although the PBX platform was designed from birth to be much more than a key system, it did not abandon the customers' investments in the phones themselves. The architecture of the digital platform was completely new, but the protection of existing customer investments remained.
5. **Digital phones** – The new digital model gave birth to a family of digital phones, bringing advanced features, programmable keys, large LCD screens, and accessory interfaces to the desktop.



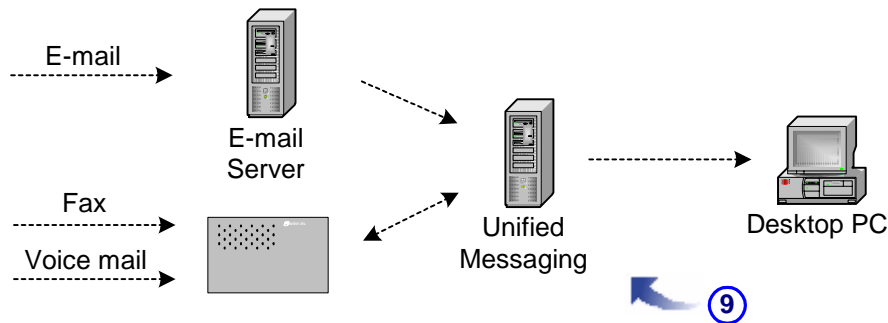
6. **Station capacity** – The system grew by adding cabinets as needed to increase the station capacity limits. The original 112-station design grew to 256, to 512, and then to 1,024 station sizes, as well as down to 64 stations or less for the smaller offices. Some of these growth options leveraged carrier technologies, such as OC3 fiber and ATM to improve capacity and distance between cabinets. While competitors usually replace the systems to introduce this type of growth, a mere CPU upgrade unlocks this potential for the Inter-Tel customer.



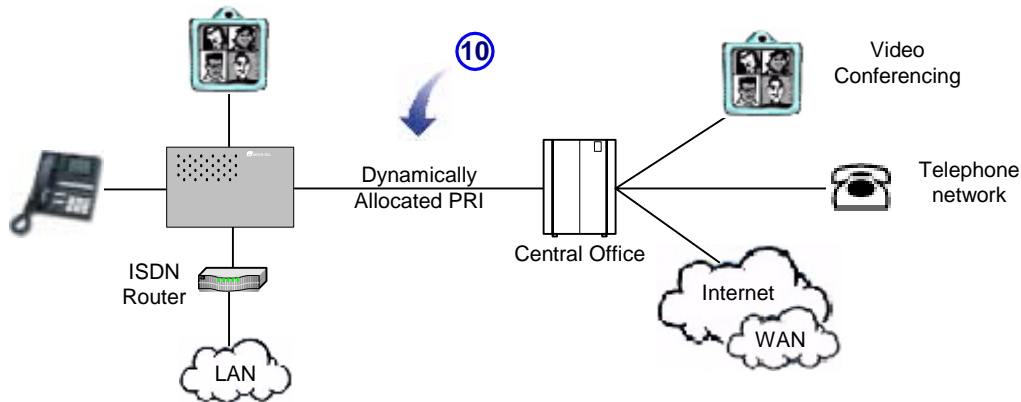
7. **PCs and Servers** – Along with the introduction of the platform itself, Inter-Tel created a tightly integrated, PC-based voice mail solution. This design delivered complete voice mail control from any phone using voice prompts and a touch-tone keypad, or by using the context-sensitive menus on the LCD displays of the digital office phones. This level of integration still stands out in today's market. Next to follow was the implementation of server-based Call Processing for increased power and expanded application performance. As operating systems evolved over the years to offer new functionality and reliability, the PC-based products migrated their operating systems as well, including OS/2, Windows NT, and Windows 2000.
8. **Computer Telephony** – The OAI created a foundation for many of the industry's most innovative applications. These began with desktop level integration by way of a direct phone-to-PC connection. Later, it evolved to system level integration where network-based servers would connect directly to the PBX. Computer telephony brought the voice and data world together at the application layer. This allows for new functionality to exist that was otherwise impossible. This spawned a whole generation of custom applications, specific to individual businesses, and mainstream products such as intelligent database queries to match callers with database records, advanced call routing, and the introduction of Unified Messaging. Computer Telephony is more powerful today than ever, due to the convergence at the network layer. This is making the foundation (OAI) more and more powerful as time progresses.



9. **Unified Messaging** – With Unified Messaging integrated with the email, fax and voice mail systems, users were given a unified interface for managing these three different types of communication. Within a single application, users can manage voice messages and faxes from their E-mail inbox. Two-way integration allows voice messages to be attached in an E-mail, streamed over the network, organized, deleted and replied to directly from within the E-mail client, and the voice mail system stays synchronized as these changes occur.

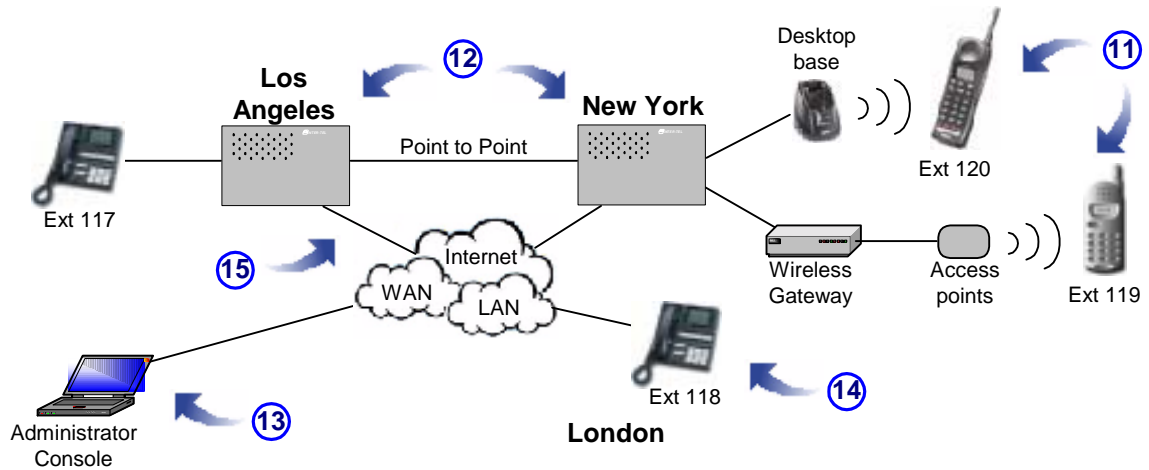


10. **Data/Video** – To further leverage Primary Rate (PRI) circuits, a Basic Rate (BRI) interface was added to the PBX cabinet. This allowed PRI circuits to be used normally by the phones, in addition to supplying BRI/ISDN devices with dynamic use of channels on the PRI circuit. Devices such as routers, video conferencing units, ISDN modems, etc., could now have an “on demand” connection to the public telephone network.

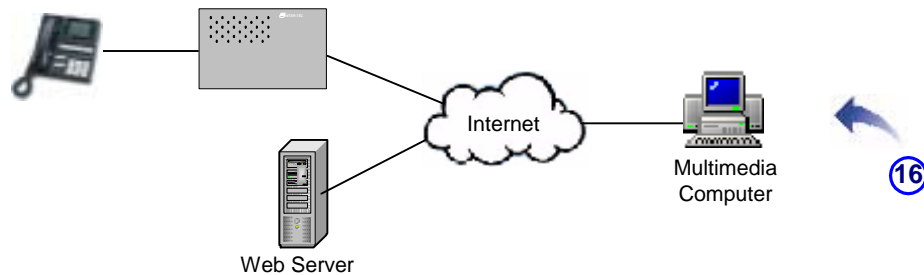


11. **Wireless and Cordless** – The addition of wireless phones came easy and provided users with the functionality of a standard digital phone and the freedom to roam the office building(s) across standard wireless access points. For the users moving within shorter distances, the integrated cordless phones were added to allow users the accessibility similar to their cordless home phone, but with the PBX functionality of the standard digital phone.
12. **Distributed architecture** – The true flexibility of the platform was realized when stand-alone systems could be upgraded through software to become part of a distributed architecture. This fundamental transition was introduced without compromising the feature set of the system. Now, multi-location customers could function seamlessly as though they were physically united in a single location, including such things as centralized voice mail and call center applications and a unified OAI for the entire system.
13. **Enhanced System Management** – Once the platform grew to become a distributed system across multiple locations, the needs for administration changed. The advancements in this area allowed the administrators to perform their tasks from the network, which meant they were free to work from any location the data network would reach. In order to simplify some of the common tasks of system management, a Windows Explorer format was used to configure the system in a familiar and easy to use format. Coupled with centralized alarms and call accounting, the total management environment allowed administrators to have mobile access and centralized control over the portions of the system that they preferred to manage themselves.
14. **Voice over IP to the desktop** – The flexibility was once again put to the test with Voice over IP (VoIP), which is perhaps the most disruptive technology to be introduced into the communications environment. While the disruption is significant enough to affect two entire industries (telecommunications and data networking), Inter-Tel successfully achieved a graceful strategy of implementation so its customers can leverage its benefits without experiencing a high level of disruption in their own environment. While many manufacturers were forced to start over and build new platforms, based solely on IP, Inter-Tel simply “added it in.” The new IP phones could be mixed in with all the other phones without feature compromise. In addition to using the private IP networks to deploy phones, customers were given the opportunity to connect phones over the Internet without special hardware or software. This functionality leapfrogged the competition and began providing customers a unique ability to have plug and play connectivity over the Internet.
15. **Voice over IP Networking** – Expanding on the distributed model, system-level transparency was enhanced using VoIP. Not only was the distributed model and the seamless connectivity maintained, but the platform also gained the benefits of toll bypass, increased routing efficiency

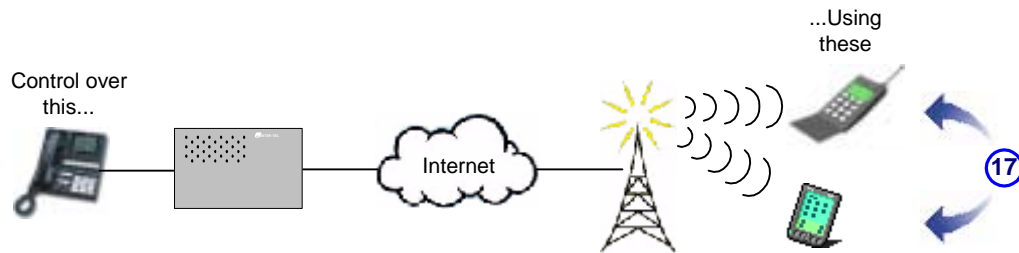
and increased fault tolerance. By giving each system a direct connection to the IP network, calls could go directly from site to site, without concern for circuit paths, or centralized dependencies. The inefficiency of point-to-point circuits was eliminated. Additional features reduced bandwidth utilization and allowed for alternate virtual connections to be programmed in the event of a WAN failure at the destination. This increased the number of routing options and improved on the fault tolerance of the networked environment.



16. **Voice on the Web** – The next introduction of VoIP brought Web calls into the phone system. By using “softphone” technology, Web surfers could turn their multimedia PCs into phones by clicking a link on a Web page. The link established a voice call with the phone system and connected the Web surfer with any of the phones on the phone system. With Inter-Tel’s Talk to Agent e-commerce software, web calls could be directed to system ACD groups and routed and managed along with traditional calls into the call center. As collaboration needs increased, chat and Web page sharing was introduced to further enhance the customer experience and provide call center agents with better tools to use with online business activities.



17. **Cellular/PDA** – The introduction of the Internet has allowed several industries to converge. By using the Wireless Application Protocol (WAP), Inter-Tel created a new way to control the desktop environment. By porting desktop phone control to the WAP-enabled cell phone or wireless PDA (Personal Data Assistant), users gained the ability to control their environment from virtually anywhere, using a simple handheld device. This new technology gives mobile users access to things such as centralized contacts, messages, availability status, and call routing options.



Today

How Inter-Tel is Bringing Technology Together

With so many technologies integrated within one platform, Inter-Tel offers you the widest range of flexibility. The modular platform can be tailored around the way your organization does business with the flexibility to modify the solution at any time. For example, you will not have to lock yourself into an IP-only solution just to reap the benefits of IP technology. The converged platform provides you with all of the proven core technologies so you can focus on answering a more important question, “What do I want the system to do for my business?”

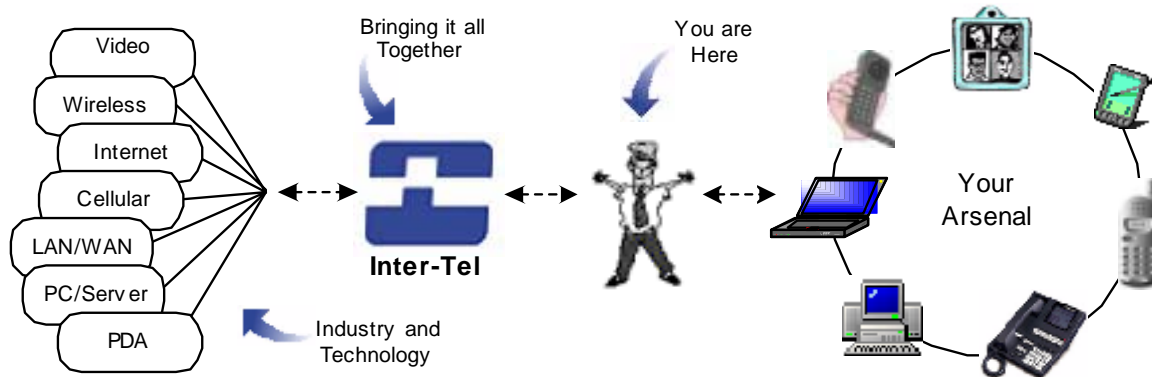
Today, Inter-Tel’s telephone system is already a next-generation communications platform. The core technology alone combines the best of many worlds into a single, unified system consisting of the following:

- Analog phones and telephone lines
- Digital phones and telephone lines
- PSTN and Web-based call centers
- Wireless and cordless phones
- Voice over IP phones and “soft” phones
- Centralized and/or distributed phone systems
- Circuit and/or packet-based seamless networking
- Circuit and/or packet-based voice transport to the desktop
- Embedded or server-based call processing

In addition to the core technology, the total product offering is much more broad. The platform is designed to allow your business to reap the benefits of convergence. But what does that mean? Some would consider “convergence” to be the transport of voice over a data network. Inter-Tel sees convergence from a different perspective. *Convergence* is the seamless blending of elements that were once independent and distinctly unique. Examples of dissimilar elements that are converging include:

- Hardware and software
- Voice, data and video
- Analog, digital, wireless and VoIP
- Embedded and server-based applications
- Private (LAN/WAN) and public (Internet) data networks

- Circuit-switched and packet switched telephone systems
- Cellular and PSTN networks
- Web sites and call centers
- Computers and phones
- Premise-based and hosted solutions
- Legacy features and next generation features
- Internal and external maintenance and service
- Telecom and IT infrastructures
- The list goes on...



The primary design goal of a converged solution is to allow all of these pieces to come together in a way that increases the effectiveness of your business. In order to increase the value of the solution, a proper convergence solution must deliver on the “best of both worlds” approach by properly blending potentially opposite elements together with as little sacrifice as possible. You should not have to throw away existing products and technology that continues to provide you benefit, nor should you have to cause unreasonable disruption to your business in order to implement new capabilities. New products and technologies should be an addition, not a replacement, to your communications environment.

The Inter-Tel platform is built to address the unknown requirements that arise when different technologies converge. This flexible foundation has given way to many new capabilities and options for your business. Some of the highlights are included below:

- Station growth – grow from several phones to tens of thousands, without throwing away phones, systems or applications.
- Core technology options – leverage analog, digital, wireless, and VoIP as you see fit, at a pace that works for your business
- Integrated applications – make use of integral applications, such as advanced call center products, unified messaging, and tightly integrated voice mail
- Third-party customization – use CTI applications to solve specific business needs, such as attendant applications for exceptional control of call handling, database screen-pop applications that actually “learn” as you go, proactive system alarm notification for faster recovery and prevention, or even pager support for on-call employees
- Remote connectivity – use different technologies to function properly while away from the office, so your mobile and remote workers can be just as enabled as those in the office

With such a wide range of technical diversity integrated within one platform, Inter-Tel offers the flexibility to meet the many needs of your organization. When you own an Inter-Tel platform, you are given the ultimate choice over which type of technology to implement. In addition, you maintain control over the technology by exercising the freedom to decide where and when to implement it.

Tomorrow

Inter-Tel's Vision for the Future

Changes in the industry and in the platform will certainly continue year after year. There is always something new to explore, evaluate and deliver to businesses to help increase the power of communications. This can include new technology, new products, enhancements to existing products, and new levels of integration. Over the next few years, Inter-Tel will be focused on continuous improvement and refinement of existing solutions while actively pursuing new ideas. The convergence will continue to occur and Inter-Tel will help businesses take advantage of the benefits along the way.

Some of the areas Inter-Tel will continue to focus on for research, refinement and innovation are listed below.

- Voice Recognition
- Text to Speech
- Web-based user consoles
- Unified administration across products
- Unified diagnostics and proactive alarm notification
- SIP, MGCP and other standards for interoperability
- Third-party, standards-based phones
- Third-party PBX interoperability
- Dynamic allocation of circuit-based hardware
- Enhanced desktop devices
- Find me/follow me
- LDAP directory integration
- Enhanced cellular/PDA integration
- Increased system capacity for IP solutions
- Multimedia contact centers
- Cost reduction

To further elaborate on this list, each item is summarized below. As Inter-Tel evaluates these areas of continued interest, the development goals will continue to revolve around your needs and focus on ways to make the platform more valuable to your business.

Voice Recognition – Your voice can be a powerful tool. By talking to the system, you can execute tasks and access features with greater ease. You can use your voice to issue commands that would otherwise require access from specific system devices. This can include dialing, voice mail access and control, changing call routing rules and location management, and quick access to system features. Voice command allows you to do these types of things from virtually any normal phone or voice-enabled device, inside or outside your office.

Text to Speech – When your system can read text, you have a way to access and manipulate documents by phone. This can allow your employees to access things like email, system directories, and files from simple audio devices such as cell phones. When combined with voice recognition, you have an interactive environment designed to respond to the most common form of communication – speech.

Web-based user consoles – The Web browser is making its way to more than just desktop PCs. Access to the user environment through a browser allows end users to have control from almost any browser-enabled device. Users gain control over areas such as contacts, availability, routing rules, system features, messaging, and status monitoring of workgroup members. The unified interface makes it easier for end users to leverage the system and increase the derived value it brings to them. The browser-based model allows this access from virtually anywhere while eliminating the need for another installed desktop application to manage.

Centralized administration across products – As technology is added to the communications environment, new complexities are added as well. Administrative components need to be more sophisticated to counteract this trend. Convergence brings opportunity to unify and the administration of the complete environment so fewer components will need to be managed separately.

Unified diagnostics and proactive alarm notification – Similar to the administrative components, the diagnostic information will become more unified as well. Quite often, alarms in various types of products are generated, but seldom reported well. With different products come different types of messages and different ways to view and/or deliver them. The Inter-Tel platform will help to close this gap and unify the diagnostic side of your environment. System technicians will benefit from compiled diagnostics and uniform methods of notification. Just as administration needs to stay ahead of technology to simplify configuration in an increasingly complex environment, so must the diagnostics improve to keep the system running healthy and free of disruption.

SIP, MGCP and other standards for interoperability – There are several protocols, existing and emerging, which will allow components from different manufacturers to work together. Inter-Tel is adopting the Session Initiation Protocol (SIP) as the primary standard for interoperability to be used alongside other standards such as MGCP. The goal is to add more flexibility to your environment. As SIP matures and its feature set increases, more and more features will be available to third party devices. This will provide you with a wider range of purchasing options from various vendors who specialize in particular areas.

Third-party, standards-based phones – Through standards such as SIP, the phone system will adopt the capability to add SIP-compatible phones. This will allow you to leverage a wider range of phones for your environment. Whether you choose to buy SIP phones from another source, or perhaps inherit them through company mergers and acquisitions, you will have the ability to add those phones to the Inter-Tel platform and leverage the SIP-based features.

Third-party PBX interoperability – You may already be aware of a very popular standard used in the PBX world called Q.SIG. This standard has allowed switches to communicate in the circuit-switch world, but it does not address the new functionality expected in the blended world of converged platforms. New protocols, such as SIP, provide better foundations for future interoperability between various call processing products and integrated applications.

Dynamic allocation of circuit-based hardware – As your adoption of IP-based technology increases, you will find yourself with more of a system designed around software than hardware. The IP model reduces some of the hardware requirements typically found in telecom platforms. Inter-Tel's platform takes this change into consideration by designing hardware that can become more flexible with time. By leveraging new hardware and DSP technology, Inter-Tel has begun to develop hardware that is more flexible. You may implement a hardware card today for an interface to IP phones, but later down the road, use that same card as a bridging point for seamless networking or access to conferencing resources. Resources that start out dedicated to particular functions become more sharable among the system and used "on demand" through simple software upgrades.

Enhanced desktop devices – Newer advancements in adjacent industries are making their way into the business telephone system. Various technologies that will have an impact in one form or another include such things as color touch screen displays, integrated applications and data content delivered right to the phone, and increased wireless support for accessories and network connectivity. Many technologies coming from the cellular, PDA, and PC markets will continue to influence the form and function of the desktop phone as these technologies prove their value in tomorrow's business environment.

Find me/follow me – As the business environment becomes more mobile and more physically disparate, the need for increased control over end user locations and call routing rules become apparent. The end users will be given this control as they find themselves able to set up advanced call screening, routing and messaging options on a per caller or calendar basis. They will be able to identify possible locations in advance and tell the phone system the best way to proactively find them if they have moved without notification. They will find themselves able to keep the phone system within constant reach while moving across various communications devices such as the office phone, cell phone, pager, home phone, PC-based softphone, PDA, multimedia Internet terminal, etc. Additionally, they will be able to participate in your communications environment properly and leverage system features and applications from a multitude of ubiquitous endpoints.

LDAP directory integration – The Lightweight Directory Access Protocol (LDAP) provides you with a way to “centralize” and integrate your voice, data and video directories. This protocol can be used to unify and integrate directories from various components and manufacturers. It will be used to increase data access, such as telephone directory lookup via an Internet search engine, and will provide a framework for better administration and policy management.

Enhanced cellular/PDA integration – The cellular market is changing its foundation to allow data content delivery and integration. Already, the industry has provided access to the Internet through cellular phones and has spurred the convergence of the cell phone and the PDA. Additionally, certain providers are offering enhanced services, such as email access and information lookup, driven solely by voice. The cellular networks and the cell phones will evolve, and end users will have faster data throughput, better user interface and tighter integration between voice and data services. As these technologies evolve, Inter-Tel will leverage these opportunities to extend system functionality through the cellular networks for even greater transparency in communications.

Increased system capacity for IP solutions – Voice over IP continues the shift toward a more software-based system. In a pure circuit switched solution, a dedicated path is required for each endpoint, which requires dedicated central hardware for all endpoints. In a packet switched system, the paths are shared along with the hardware that connects the IP endpoints to the circuit switched world. Dynamic allocation of shared hardware means you can deploy endpoints with fewer hardware resources, and as new technology allows, higher density hardware means lower cost growth. This allows the system to increase its capacity faster since more of the growth is through software rather than hardware. System growth becomes less dependent on hardware growth, and therefore, can scale more rapidly with lower incremental hardware costs.

Multimedia contact centers – The introduction of voice over the Web has increased overall customer care. By merging your Web initiative with your phone system, you can help bridge the gap between live customer care and automated Web presence. This merger can help you increase your overall customer care in areas such as online shopping carts, technical support, and sales. This trend will continue with enhancements that help to bring additional value to the calling experience. Customers can now call you from their PC and share Web pages and chat as an additional option for communicating. Moving forward, other forms of media will be treated similar to regular phone calls, allowing Web calls, online collaboration, faxes and email to work together in a cohesive environment. This will allow your contact center to manage traffic flow from varying media types, and give your administrators the ability to monitor and report on all of the activity in a uniform fashion. As you begin to use this more and more, you will find

the need to track the activity and report on the statistics. As an extension of your call center, you will find the additional capabilities of the Web a true benefit while your customers are treated with a higher level of service.

Cost reduction – As with any new technology, the costs reduce over time as overall usage increases. Newer additions to the platform, such as Voice over IP or wireless devices will drop in price as the technology becomes more readily available and less expensive to produce. This means that over time, you will be able to shorten the return on your investments, and future additions will become easier and require lower capital investments.

Connection to the Future

The face of telecommunications has changed, and it will continue to do so for many years to come. New technologies and the promise of convergence between voice and data have given way to many new dynamics in the industry. Although it is somewhat difficult and premature to predict what the future will hold, there are a few things that are known to be true.

With Inter-Tel's intention to build and maintain long-term relationships, you can be assured of the following commitments:

- Inter-Tel will embrace new technologies
- Inter-Tel will protect your investments
- Inter-Tel will provide you with a smooth migration path

Yesterday's innovations introduced Open Architecture Interfaces, LAN-based applications and server technology. This brought voice and data applications together. Today's new technology is Voice over IP and converged networks, bringing the media and transport together. What will tomorrow bring?

As we have seen in the past, Inter-Tel is committed to adopting and nurturing new technologies. As new and unforeseeable developments emerge, Inter-Tel will seek to embrace that which is valuable to you and that which truly offers an enhancement to the way your organization communicates and does business. Inter-Tel's commitment to you will continue to remain steady in an ever-changing environment. Inter-Tel is your connection to the future, today and tomorrow.