

ICT INSIGHTS

Huawei Enterprise
Business Group

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ISSUE 2

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Many enterprises have started to consider unified communications as enterprise's development strategy for the future. Then what are the keys to a successful enterprise's unified communications strategy?

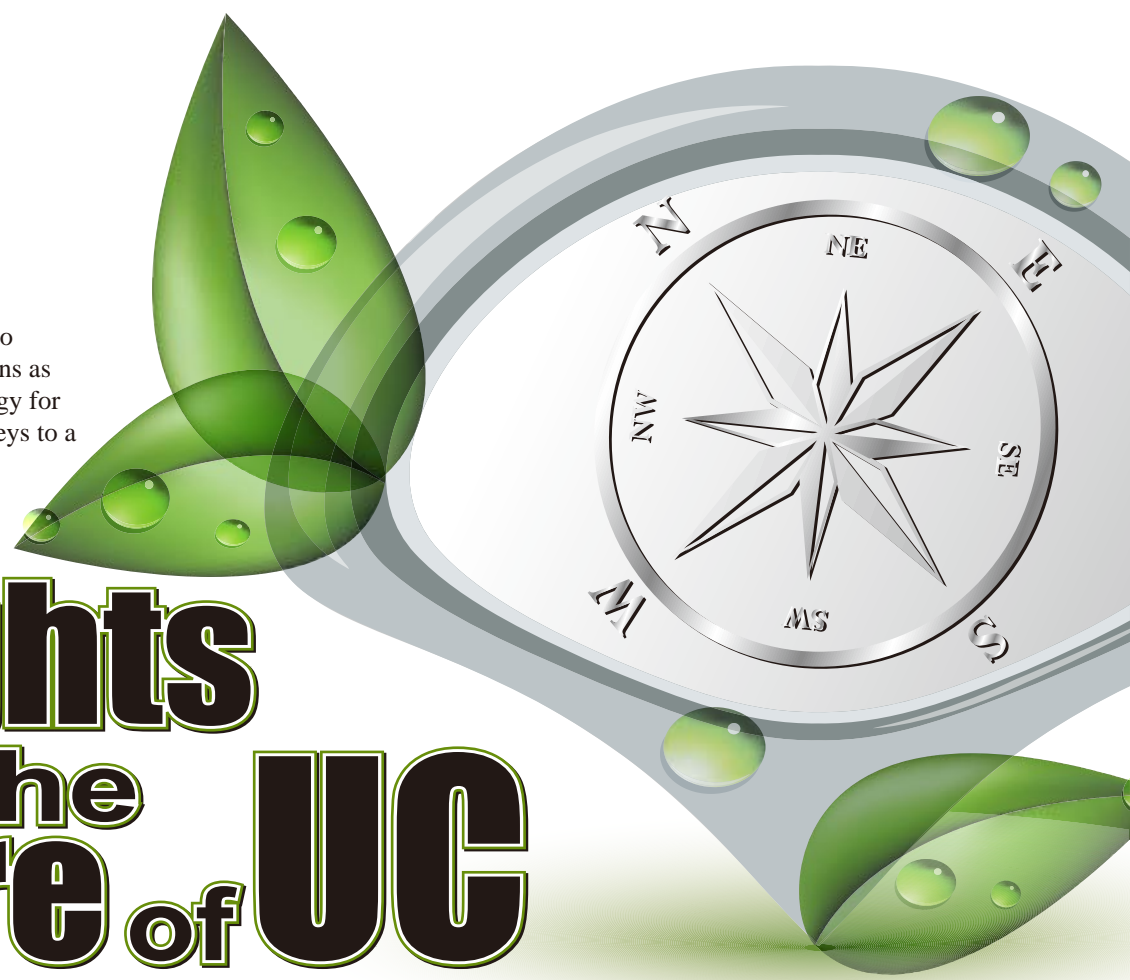
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The ICT Approach to a Smarter Enterprise

| By *John Roese, Senior Vice President, Huawei NA R&D Center*

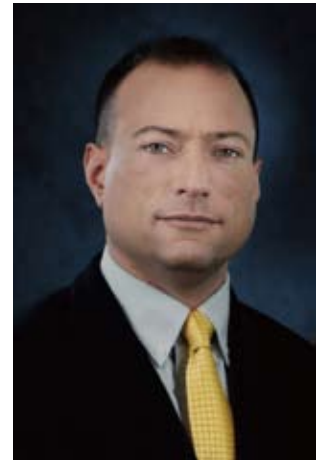
Consumer technologies and Internet services are rapidly evolving and enterprise end users have found that they are increasingly getting more innovative technologies and solutions at home than they are at work. End users are forcing consumer technology into the enterprise and IT groups are struggling to support them while maintaining their security and compliance commitments.

This tension between different technology worlds is driving a transformation called ICT. We are seeing a blurring of technology between carrier, enterprise, and consumer where pieces from all three ecosystems are coming together to be used by end users both inside and outside the enterprise. We are headed toward a point where there will no longer be "enterprise" or "consumer" technology, there will be only one big ICT ecosystem. This ecosystem is very different from the current enterprise ecosystem.

Here is an example. Many people use an iPhone or Android phone or a tablet to run business applications like email on that device. That is an example of an ICT solution. The device is a consumer technology, the network is a carrier technology and the application is an enterprise technology. Interestingly, nobody built that solution for you. You constructed it yourself. You figured out that the best device with the right network and your enterprise application, when put together was extremely valuable.

Enterprise problems are also changing. Five years ago the problems were upgrading a LAN from 100 Meg to 1 Gig or replacing one router with another. Today's challenges are much more complex. How do we build a distributed enterprise that can scale not just for the number of employees but also for the number of customers? How do we support a federated enterprise where the network extends beyond the borders of the enterprise to the entire supply chain for value added networks, Unified Communications and Telepresence? How do we support a more intuitive enterprise? The consumer world has taught us that a better user experience is important – how do we bring this to the enterprise? These are not problems related to just routers and switches – these are ICT problems.

We are now on the cusp of a profound transformation where we can no longer just think about solving enterprise problems by using enterprise technology. What we are going to see over the next few years is more and more creative thinking that pulls together technology and solutions from the three ecosystems – carrier, enterprise, and consumer – to deliver creative and valuable solutions for end users. Huawei has advanced core technologies and rich application experience in the telecom, enterprise, and consumer markets. Huawei's innovative solutions will help enterprises accelerate their ICT transformation. ▲



A handwritten signature in black ink, appearing to read 'John Roese', written in a cursive style.



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Enterprise News and Announcements in Q1 2012



2012
Mar 30

Huawei announced that ten of its enterprise network products earned Performance Verified Certifications from Miercom, an authoritative testing laboratory in North America. These certifications show the third-party organization's full recognition for the functionality, forwarding performance, compatibility, environmental protection, and energy conservation features of Huawei's enterprise network products. These certified products include seven switches (S9300, S7700, S6700-EI, S5700-EI, S5700-LI, S2700-EI, and S1700 SNMP) and three AR G3 enterprise routers (AR1220VW, AR3260, and AR207V-P).

2012
Mar 20

Huawei Enterprise BG unveiled its innovative digital energy solutions at the 12th China International Petroleum & Petrochemical Technology and Equipment Exhibition (CIPPE), the largest event of its kind in the petroleum industry. Intent on understanding and satisfying customer needs, the Enterprise BG provides ICT solutions and services for customers in the petroleum and natural gas industries to fuel productivity and information-based development.

2012
Mar 14

Huawei and Tencent held an opening ceremony for the Tencent-Huawei Joint Innovation Center. The two companies will cooperate and share their expertise in Openflow, Software Defined Network (SDNs), and other network technologies to achieve win-win results.

2012
Mar 8

At CeBIT 2012, Huawei demonstrated a variety of wireless modules and solutions that show its strengths in wireless devices and initiatives for entering the Machine-to-Machine (M2M) solution field. These modules and solutions include Consumer Electronics (CE) modules, M2M modules, MU733 & MU739 (the world's thinnest and smallest modules for personal computers and consumer electronics), GPS-capable EM820W modules, and communication hubs for automated metering infrastructures.

2012
Mar 7

Huawei launched new channel partnership projects to drive business development. Huawei also announced the most comprehensive ICT training and certification projects that the industry has to offer. Xu Wenwei, CEO of Huawei Enterprise BG said, "We have been and will always be committed to providing high-quality ICT solutions for enterprise customers. To this end, we place a sound channel partner ecosystem at the core of our business development strategies and plans. We will join hands with channel partners to continuously innovate based on customer needs and provide high-quality services to help enterprise customers address new challenges and opportunities in the ICT era."

2012
Mar 7

Huawei launched multiple enterprise network products at CeBIT 2012 in Hannover, Germany. These launches show Huawei's commitment to pursuing customer-centric innovations and

leveraging new portfolios to suit ever-changing enterprise ICT requirements all over the world. These portfolios include three S9700 series high-end switches, eight S5700 series mid-range switches, seven AR200/150 enterprise access routers, seven WLAN AC and AP products, Open Service Platforms (OSPs), and six Tecal V2 series servers powered by Intel Xeon E5 processors.

2012
Mar 6-10

At CeBIT 2012, Huawei showed its full-view telepresence system, a next-generation three-screen telepresence system that follows Huawei's second-generation TP3106 telepresence product. The new system leverages integrated full-view display technologies that allow users to easily see the entire screen. Also, this system boasts an extremely narrow screen gap, which is as small as 5.5 mm, or 1/20 that of previous models. By displaying true-to-life full-size images, the system opens a new chapter for telepresence systems in which full views are possible during immersive video communications. This full-view telepresence system is scheduled for global release in Q4 2012.

2012
Feb 29

In a media interview at Mobile World Congress (MWC) 2012, Xu Wenwei, CEO of Huawei Enterprise BG, said that Huawei's revenue in 2011 exceeded US\$32 billion, a year-on-year increase of 11%. The Enterprise BG's sales orders totaled US\$3.8 billion, accounting for 12% of Huawei's revenue in 2011. The Enterprise BG's contract sales are planned to reach US\$15 billion to US\$20 billion by 2015, which Huawei anticipates will account for approximately 20% of its total revenue.

2012
Feb 27

Huawei Enterprise BG demonstrated several new solutions to carriers at MWC 2012 in Barcelona. These solutions are designed for distance education, mobile offices, intelligent video surveillance, cloud call centers, and enterprise networks. By adopting these solutions, carriers can leverage existing network resources to open new areas for growth in the enterprise business field.

2012
Feb 22

Huawei announced that the China Education and Research Network (CERNET) awarded Huawei the contract for the phase-3 construction project of China's 211 Project. In this project, Huawei and CERNET will use cutting-edge coherent 100G technologies and Optical Transport Network (OTN) equipment to complete hybrid transmission of new 100G services and existing 10G services. This project will mark an important milestone for commercial use of 100G networks.

2012
Feb 16

Huawei announced that 45,000 Huawei engineers began to enjoy a cloud-based office experience made possible by Huawei's desktop cloud solutions. This initiative is the largest desktop cloud project in the world. As Huawei continues to go global, its IT infrastructures have provided IT services for both internal and external users. Huawei's desktop cloud solutions have been deployed in more than 30 countries and serve over 100,000 users from healthcare, education, telecom, finance, government, and other industries.

2012
Jan 18

The 6th Annual Offshore Production Technology Summit 2012, held in the Lancaster London Hotel, London, UK, attracted senior executives seeking to focus on results rather than theory by using case-study-driven content to identify how peers would overcome real challenges in the global offshore E&P industry.

2012
Jan 16

Huawei announced it will exhibit for the first time at the 2012 Offshore Technology Conference in Houston, USA. During the conference, Huawei will display solutions for upstream, midstream, and downstream segments of the oil and gas industry. ▲



Zeus Kerravala
The Principal analyst of ZK Research, former Yankee Group's senior vice president in charge of enterprise research, columnist of US "Network World" weekly IT publication.

Many enterprises have started to consider unified communications as enterprise's development strategy for the future. Then what are the keys to a successful enterprise's unified communications strategy? When interviewed, Zeus Kerravala, Principal analyst of ZK Research, gives his professional analysis.>>

Insights into the Future of UC

Interview with Zeus Kerravala, Principle Analyst with ZK Research



ICT Insights: *In the past 5 years, we have seen significant growth in the Unified Communications (UC) space all over the world, but many enterprises are just starting to develop a strategy. What do you think are the keys to a successful enterprise unified communications strategy?*

Kerravala: A successful UC strategy can mean different things to different companies, so we need to be clear on what success should be before we discuss how to identify it. Many companies I have worked with are looking for ways to use UC to lower the overall cost of communications. While UC does have many cost saving benefits through the use of VoIP, conferencing and unified messaging, it's only a small part of the overall value. A truly successful UC deployment will lead to companies being able to streamline or create new business processes. In other words, can the organization do things post-deployment that they could not do before? By this definition, the keys to a successful UC strategy should revolve around finding business processes with high amounts of human latency. The call center is typically a good place to start.

ICT Insights: *Video is becoming an increasingly important component of unified communications. What should enterprises be thinking about when trying to add more video into their unified communications mix?*

Kerravala: Video is increasingly more important because it creates a much richer, almost in-person experience. When deploying video solutions, companies need to think about network design, bandwidth utilization, and ease of use for the end user. Companies also should think about which processes would best benefit from the visual element. Training, customer service, and relationship building are some that come to mind. Successful deployments depend on identifying the right processes to video enable. A good way to fund video is through the reduction of travel budgets in conjunction with the deployment.

ICT Insights: *How do you think smart phone and tablet computing are changing the way users communicate? How can enterprises better support mobility in their unified communications strategies?*

Kerravala: Mobility is critical to UC. In fact, mobile UC has a bigger "bang for the buck" than desktop UC. Users can navigate around disparate environments on the desktop. It's not ideal, but it is possible. When in mobile state doing this is extremely difficult, if not impossible. Mobile UC can be the application that ties the communications together on tablets and smart phones. To support this, enterprises should look for a vendor that supports all the leading mobile OSs and a network solution that provides unified

wired and wireless management in a single pane of glass. Also, network security becomes more important as many of the devices are consumer first.

ICT Insights: *What do you see as the biggest challenges that enterprises are currently facing around unified communications?*

Kerravala: However, there are many challenges around UC that enterprises are currently facing.

First, there's definitely a skills gap with UC. Most network managers have never dealt with real-time applications like voice and video before. Also, there are some significant operational hurdles to overcome. Who owns UC? Should it be the network manager, the Exchange administrator, or the voice operations? Somehow companies must find a way to get these groups to work better together. I would suggest an overlay group that uses resources from the other IT departments when needed.

Another significant challenge is interoperability. Most of the leading vendors use proprietary extensions to the standards to create advanced features. This creates a huge interoperability problem forcing customers to either choose a single vendor solution or to limit the feature set they deploy.

Lastly, the business case for UC is often difficult to put together. The wide variety of UC applications means they can impact different end users in different ways. Measuring the benefit of a UC solution across the company requires doing a detailed analysis of several business processes and then measuring the impact on a per-user basis. I always recommend starting with a group of users where the productivity is easy to measure, like a sales force, then creating some simple KPIs to measure against.

ICT Insights: *Can you share with us some of your predictions for the future of unified communications? What can enterprises expect to see in the next 5 years?*

Kerravala: The UC market currently is still changing quickly and developing at a high speed. The enterprises can expect to see some following realities in the next 5 years.

- Look for the industry to continue to consolidate. The UC industry already has the "Big Three" of Cisco, Microsoft, and Avaya and with other vendors such as IBM trying to re-establish itself and Huawei entering the market, there simply isn't enough market to support the number of vendors, so that will lead to some M&A activity.

- Social media will become a bigger part of UC, lead primarily in contact centers today.

- Video will be a mainstream business tool within three years.

- UC will continue to shift to the cloud. Within five years, cloud UC will be on par with premise based UC. ▲



Francis Kurupacheril

Only Integrated UC is truly "anytime, anywhere"

| By Francis Kurupacheril, Product Marketing, US Enterprise UC&C, Huawei

The Problem: Communications and Applications Exist Separately

Today most business applications are independent of a UC infrastructure. This lack of integration between business applications and the communications infrastructure can give rise to several problems including:

Lack of context awareness: For commonly used tools like ERP, users' context is not used to make related decisions. For example, a supplier's ERP application is unaware of the purchaser's communication status. Similarly the purchaser's application is only connected to its peer ERP metadata. Application specific decision logic can be added to these systems if they are made user context aware and share this context information between themselves (are "federated") – resulting in cost savings and increased productivity. Another example, a supplier's ERP system recognizing a potential delivery delay can immediately connect the purchaser to an available representative of the supplier, choosing a representative based on availability. Another instance is Jobvite and Taleo, which are two commonly used recruiting tools. As much as they are integrated into social media, they are hardly tied into the underlying UC infrastructure.



A Unified Communications (UC) suite by itself is not sufficient to deliver the value that integrated communications can bring to an enterprise. To realize the full potential of a UC suite, it must be integrated with business applications to provide multi-modal communications within the context of business processes. The resulting communication enabled business processes can greatly improve the day-to-day operations of any business.>>



The Future

In the future we will increasingly be talking about unified systems and applications. IP Telephony will disappear along with closed, hardware-dependent vendor solutions. Users will define their own business applications. Only handhels and tablets will survive – desktops are gone. Vendors who have refused to open their solutions for agnostic development will perish. Wi-Fi is as ubiquitous as electricity and terminals and gateways will be commoditized. Enterprises will use third party developers to customize applications to suit their business needs. Most applications will be cloud-based, and in-house IT is virtually non-existent.

Huawei's Unified Communications

Product Suite

Huawei's UC product suite is built around its flagship "anytime anywhere" eSpace UC architecture, which integrates voice, video, and data and is designed to be securely used by applications in any vertical market. Huawei's architecture is designed to support application integration and will continue to evolve to support increasing business productivity and efficiency.

Huawei's UC product line includes integrated UC solutions, IP PBX's for small and large enterprises, access gateways, a comprehensive suite of IP-phones, and desktop and handheld eSpace Softphone clients. ▲

Lack of integration: Contact center applications are currently only integrated to provide customer resolution information. But if the "end of call" screen data can be integrated with UC call specific information to incorporate larger system and company statistics, then there is direct benefit from the integration.

Lack of intelligent automation: Most business processes involve a certain degree of routine activities that are typically disconnected from the UC infrastructure. For example, sales and account managers send regular prospecting emails and make phone calls to follow up on leads. These activities are done outside the business process and depend on the principals to remember to "follow up" on their action items. Such tasks can be automated by configuring an intelligent communication infrastructure to send out these notifications.

The Solution: Tight Integration Between Applications and Communications

UC architectures will have to become deeply integrated with business applications and processes:

Business application integration: At the basic level, associating user profiles between the application and the UC system is the first step towards complete integration. Single Sign On (SSO) based solutions take a step toward this but do not address profile access by the application in real-time to exploit the data encapsulated in the communications layer. Out-of-the box integration is now commonplace and 3rd party development is already a well-established paradigm to exploit openness and market interoperability. If applications communicate with one another using contextual user information, then there is a direct increase in productivity.

Management of business applications: Unified architectures can effectively manage applications based on the communication data that supports their usage. For example, sending automated email to relevant parties based on this data is one such management application. This data can be rolled into system-wide statistics to help make business decisions. By communicating directly with workflows, enterprises can support processes to alleviate delays and remove process errors.

Profile extensibility: UC architectures can become self-learning systems, which provide dynamic communication profile information to applications that can then use it efficiently. The profile at the UC layer can be extensible to incorporate application specific entries exposed in API's and SDK's allowing applications to extend their user context decisions and actions. For example, in a CRM scenario, the UC user profile can learn about "frequent sales workflows" and extend the user context profile with that information. This data can then be processed by other related users in the same CRM ecosystem through the UC architecture irrespective of the business application status of the owner depending on access privileges.



John Roese

ICT: The Convergence of Consumer, Enterprise, and Carrier Technologies

| By John Roese, Senior Vice President, Huawei NA R&D Center

Consumer Technology forces its way into the enterprise. The tension between different technology worlds is driving the transformation called ICT. We are headed toward a point where we will no longer have "enterprise" or "consumer" technology, where we will have only one big ICT ecosystem.>>



If you have been in the enterprise IT industry for more than 10 years, you remember that it used to be the most exciting place in technology. 10 years ago we went to work to use the most captivating technologies. The Internet speeds in the office were much faster than those we could get at home. The computers in the office were much more powerful than our home systems. Mobility was supported at work in ways it was not at home, and the devices were much more advanced. Those of us who have been in this industry a long time remember the first smart phones that could access corporate email and applications. Our friends who only had consumer-grade mobile phones envied our access to advanced technology.

Then the world changed.

Consumer Technology Forces its Way into the Enterprise

The dot-com bubble burst, and investment in disruptive enterprise technology dried up. At the same time, enterprises became the targets of malicious activities. We saw the first appearance of threats such as Code Red, Nimda, and Denial-of-Service (DoS) attacks. The corporate IT world began to focus on protection from attacks rather than on building open, high-performance networks.

At the same time, IT became highly regulated. New industry regulations such as HIPAA in healthcare and BASIL II in financial services started to control how IT groups operated. Many CIOs have since seen their budgets being split, with about 50% allocated to supporting what they already have, 49% spent on supporting industry regulations, and only about 1% left over to support real innovation.

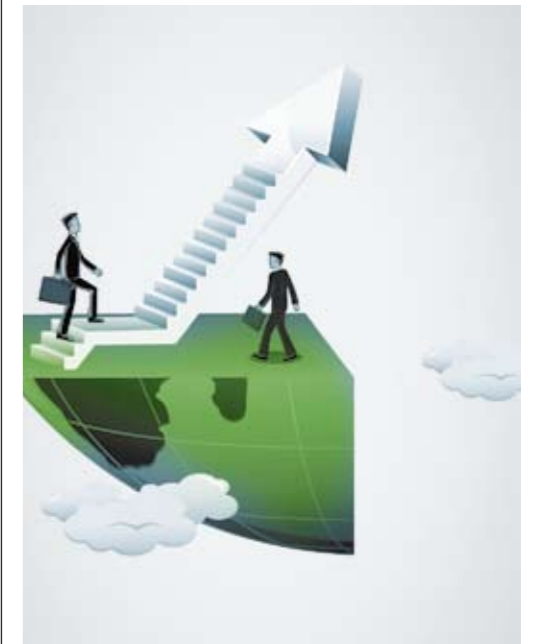
Another aspect of the changing IT world was a dramatic shift in the enterprise vendor landscape. Even though overall spending in enterprise IT continued to grow and is much larger than it was 10 years ago, the number of vendors serving this market has fallen dramatically. Heavy consolidation in the enterprise vendor landscape left enterprises with an increasingly small number of vendors to choose from. As competition faded in this large, growing market, vendors decreased their investment in innovation. Solutions stagnated.

While many dramatic changes were putting pressure on enterprise IT, events were shifting in a very different way in the consumer technology space. Social networking emerged and expanded rapidly, while consumer mobility grew by leaps and bounds. New vendors became massive companies seemingly overnight, including Facebook, Skype, Google, and Twitter.

Enterprise end users were suddenly getting more innovative technologies and solutions at home than they were getting at work. Enterprise IT groups became the department of "No", desperately trying to keep out consumer technology that threatened their security and compliance policies. Nonetheless, end users were increasingly demanding the ease of use, performance, and functionality that they had come to expect outside the enterprise.

The ICT Transformation and Two Examples

This tension between different technology worlds is driving the transformation



While many dramatic changes were putting pressure on enterprise IT, events were shifting in a very different way in the consumer technology space. Enterprise end users were suddenly getting more innovative technologies and solutions at home than they were getting at work.>>

called ICT. We are seeing a blurring of technology between carrier, enterprise, and consumer, where aspects of all three ecosystems are coming together for use both inside and outside the enterprise. We are headed toward a point where we will no longer have "enterprise" or "consumer" technology, where we will have only one big ICT ecosystem. This ecosystem is very different from the current enterprise ecosystem.

●Education

Many enterprise vendors have been delivering online education solutions for years. These solutions include highly connected campus networks that support messaging and mass notifications. Huawei has been delivering telepresence and interactive whiteboards to classrooms to help make the education experience more interactive. These are the classic approaches to online education solutions.

We can also re-think online education from an ICT perspective that embraces enterprise technology as well as technology from the carrier and consumer ecosystems. For example, we can expand the vision of education beyond the walls of the school to bring classroom content to mobile devices, intelligent TVs, and set top boxes. Content can now be streamed anywhere – in the park, on the bus, and at home. Taking this perspective a step further, if we embrace interactivity and polling, students can interact with the teacher and other students to give feedback and collaborate, even when they are outside the classroom.

We face two big issues when we think about delivering this ICT-enabled education experience. First, it is difficult if not impossible to do using only enterprise technologies. Second, implementing the solution is not affordable inside a traditional enterprise data center. If we look beyond enterprise technology, however, the picture changes considerably. Leveraging cloud technology can dramatically reduce storage costs, and using a content delivery network can reduce the complexities of transcoding and video processing. By taking advantage of carrier and consumer technology, the solution is both achievable and affordable.

●Healthcare

The healthcare industry has heavily adopted enterprise IT technology. For example, today radiology is done across the globe in real time. We are seeing automatic response to patients using Unified Communications and interactive voice response systems. We are also seeing aggressive tablet adoption in health care facilities.

If we look forward to the future with an ICT perspective, we can extend this vision to the homes of both doctors and patients. Doctors can have telepresence to communicate with patients. Patients can interact with doctors from their homes using web cameras or other technology coming from the consumer ecosystem.

Then we can take the next step from healthcare to wellness. We can have devices that monitor a patient's adherence to an exercise program or diet. That feedback can go back to the healthcare providers to improve service to the patient.

This vision of the future is achievable but requires technology from the carrier,



consumer, and enterprise ecosystems.

Major Considerations for ICT Transformation

Transformations are never easy. The good news from an enterprise perspective is that we have changed many times before. In networking we moved from mainframes to distributed computing. When the Internet emerged, we learned how to deal with that. We are now on the verge of another profound transformation, where we can no longer think about solving enterprise problems using only enterprise technology.

This transformation will require us to change our thinking in several key areas:

●Security

Current enterprise IT security models are based on ownership, where we have to control the physical devices. We now need to look at exactly what we are trying to protect. It is clearly not the physical device. Is it the session? The people? The data? The services? The end-to-end experience? Clarifying this issue will help us develop a security approach that is more appropriate for this new ICT ecosystem.

●Costs

Traditionally, we have focused on capital expenses or the costs of the equipment itself. As we shift to ICT, we will also shift our focus to operational expenses such as costs for staff, implementation, deployment, and ongoing maintenance. Enterprises will shift away from heavily customized solutions and look for more pre-integrated solutions to help keep operational costs under control.

●Compliance

We need to understand how regulatory frameworks apply in this new environment. Enterprises will need to take a broader view of regulations and understand that regulations do not apply to any specific technology, only to the actions that each technology enables.

●Availability

We are all in the business of high availability. Increasingly, CIOs will be pushed to find new ways to achieve high availability. For example, CIOs recognize that most cloud architectures are not infinitely reliable, so enterprises must learn how to adopt the cloud in diverse ways to handle cloud failures.

●Risk

Enterprise IT departments are experts at using risk as an excuse for not adopting new technology. To move forward with ICT, we need to figure out how to embrace new technologies by bringing them in and learning more about them. We navigated the risks of adopting the Internet by becoming Internet-literate. Enterprise IT groups need to improve their expertise with consumer and carrier technologies to adopt these technologies in ways that mitigate risks.

We are on the verge of a great opportunity for enterprise IT. CIOs who quickly embrace this new technology ecosystem will find themselves far ahead of those who resist the inevitable change. ▲



Yi Chang

Social media presents a way for brands to both address customer issues quickly but also to foster relationships with customers in a way traditional customer service channels cannot. For companies with a focus on customer service, social media has become an important communication channel that cannot be ignored.>>

The Impact of Social Media on Customer Service

| By Yi Chang, Product Marketing, US Enterprise UC&C, Huawei



Social media adoption among consumers has exploded in the past 5 years. Facebook has more than 500 million users and continues to grow. The largest micro-blog site in China, Weibo, has 250 million users in China, and is planning to expand globally. For enterprises, the rapid adoption of social media by their customers presents both opportunities and challenges.

Social media has become a powerful communication channel for consumers to share their experiences and frequently those experiences involve brands. In the past several years we have seen many examples about brand experiences that have quickly circulated through social media and have

Social media has become a powerful communication channel for consumers to share their experiences and frequently those experiences involve brands. Enterprises can no longer control discussions about their brands or contain them to their own digital spaces.>>

Integrating social media within a traditional contact center presents a set of unique challenges. Firstly enterprises need to determine what they need to monitor. Secondly the data needs to be filtered and analyzed to derive customer insight. Thirdly this data needs to be integrated with the customer service solution and presented to agents to take action when appropriate.>>

had a direct impact on the brand's perception in the market place and in some cases, their stock prices. For example, a rock band traveling on a United Airlines flight witnessed a baggage handler damage one of their guitars. They wrote a song detailing the customer service experience that followed and posted a music video on YouTube. The video "United Breaks Guitars" was rapidly shared across social media sites and quickly amassed millions of views. The damage to the United Airlines brand was swift and a 10% drop in their stock price at that time (representing a loss of \$180M in shareholder value) was attributed to the negative publicity surrounding the incident.

One of the important lessons enterprises can take from the above example is that conversations are taking place about brands on social media sites regardless of whether or not brands choose to actively participate. Enterprises can no longer control

discussions about their brands or contain them to their own digital spaces. For companies with a focus on customer service, social media has become an important communication channel that cannot be ignored.

For a company who has traditional customer service channels like contact centers, incorporating social media requires a shift in thinking. The traditional customer service channels including contact centers, email, chat, and web support, allow customers to reach out and interact with companies. Social media is different in that it requires that companies actively monitor and engage with their customer base in a way that is much more than two way and interactive. Social media presents a way for brands to both address customer issues quickly but also to foster relationships with customers in a way traditional customer service channels cannot.

Integrating social media within a traditional contact center presents a set of unique challenges. Firstly, enterprises need to determine what they need to monitor. This will include decisions around which social networks are important for them and what data or keywords they need to monitor. Secondly, once the data is collected, then it needs to be filtered and analyzed to derive customer insight. Thirdly, this data needs to be integrated with the customer service solution and presented to agents to take action when appropriate. What action to take and when to take it requires workflows to be defined and implemented.

Huawei has been a leading provider of contact center solutions for over 10 years. Our solutions support not only the traditional channels like voice and email, but also chat, instant messaging, and social media. We are committed to rapidly evolving our solutions to help enterprises take full advantage of social media in this new and rapidly changing market landscape. ▲



April Dunford

Many CEOs still worry about the risks in adopting social media widely in their organizations. There are some best practices that enterprises can do to help ensure that they gain the rewards of social media while mitigating the risks.>>

Social Media: Best Practices for Enterprise Adoption

| By April Dunford, VP Marketing, Enterprise Global Competency Center, Huawei

The benefits of social media have become more and more obvious for enterprises. Using social media both inside and outside of their corporations, enterprises can increase exposure for their businesses, traffic to their web sites, subscription rates, and generate more qualified leads.

However, recent studies have shown that many CEOs still worry about the risks in adopting social media widely in their organizations. Are there things that enterprises can do to help ensure that they gain the rewards of social media while mitigating the risks?



As social media continues to mature as an enterprise communications tool, enterprises will have to ensure that they are embracing it in the same way that they have embraced other new communications methods.>>

Here are some best practices that enterprises can learn from:

- **Define Social Media Guidelines** – For many enterprises, controlling how their employees individually use social media is almost impossible. What enterprises can do, however, is to provide their employees with a set of guidelines for appropriately using social media. These guidelines should cover the purpose of social media and its importance for the business, that employees need to exercise good judgment in their online communications just as they do offline, and remind them that they need to respect confidential information and copyrights.

- **Establish Business Processes Across Departments** – Customers will not understand your internal organization and will often expect that anyone "representing the company" in a public way should be able to help them with an issue. Marketing, Sales, Customer Service, and the Executive team should have well-defined rules for how to interact with customers with specific types of requests or concerns. These processes should be supported by the relevant enterprise business systems used by those groups.

- **Ensure that IT and Lines of Business are Working Together** – As groups like Marketing and Customer Support are diving into social media to improve the way that they serve and communicate with customers, it is important that your IT groups work with them to understand their goals and requirements. IT should be looking at any new platform and tool purchases with an eye toward how those new products support the social media objectives of the company. IT should also be involved in working with Line of Business executives to make sure that they understand the compliance and governance rules related to their social media use and help them ensure that they are abiding by those rules.

- **Integrate Social Media with Other Corporate Communication Technology** – As social media becomes an important way for employees and customers to interact, it is important that enterprises think about how to integrate social media into their existing communications infrastructure. Ideal social media should be supported in enterprise communications applications such as Call Center, CRM, IM, Email, and other applications. These social media-enabled business applications need to be configured and deployed in such a way that they fully support the processes, goals, and constraints that both the Line of Business and IT executives have agreed upon.

As social media continues to mature as an enterprise communications tool, enterprises will have to ensure that they are embracing it in the same way that they have embraced other new communication methods such as IM and Videoconferencing. By focusing on enhancing the benefits of social media while containing the risks, enterprises will maximize the benefits they derive from these new tools. ▲

It seemed to be the norm that "CeBIT always comes with snow". But this year's show in Hanover, Germany, was a welcome change for those in the ICT field, who found a breath of spring inside the exhibition halls as well as outside.

Magnificent exhibitions filled the halls where the lively "Little Bee" emblem representing Huawei Enterprise Business Group (BG) and the bright red Huawei logo were common fixtures. From March 6 to March 10, Huawei Enterprise BG had a strong presence at CeBIT 2012, the world's largest ICT exhibition. The Enterprise BG's exhibition booth covered 1,000 square meters (more than 10,000 square feet) and showcased a variety of innovative ICT products and solutions for the enterprise market.

Huawei: A Shining Star at CeBIT 2012

| By Li Zhipeng and Wang Lun



Innovative Products

Huawei Enterprise BG showed a series of enterprise market products, including routers, switches, and servers. During the exhibition, the company released many new products, including the S9700 series of highend switches (three new models), the S5700 series of mid-range switches (eight new models), and the AR200/150 series of enterprise access routers (seven new models). The BG also released seven new Access Controller (AC) and Access Point (AP) models in its WLAN product series.

Additionally, the BG unveiled new Open Service Platforms (OSPs), six new models of Tecal V2 servers based on Intel Xeon E5 processors, and the next generation of full-view telepresence solutions featuring threescreen displays.



Comprehensive Solutions

Cloud computing, data center technology, unified communications and collaboration, HD videoconferencing, and video monitoring were among the main exhibits at CeBIT 2012. Encompassing these areas, Huawei Enterprise BG demonstrated innovative solutions designed to meet customer needs. These offerings include desktop cloud solutions, media cloud solutions, modular data centers, containerized data centers, HD telepresence systems, eSpace unified communications, eSpace cloud contact centers, remote banking, intelligent transportation systems, and an array of industry-specific solutions.



With Partners

However valuable an offering may seem, the proof is in the actual application – often realized through close collaboration among technology partners. With these ideas in mind, Huawei invited 12 solution partners to show their solutions in Huawei's exhibition booth. The partners included Oracle, Ernst & Young, Intel, and BMC. The solutions ranged from the Siebel CRM application, cloud lifecycle management to call center workforce management.



Lively Activities

Huawei Enterprise BG participated in a series of events during CeBIT 2012. As part of the opening ceremony, John Roese, Senior Vice President of Huawei North America R&D Center, spoke about the new conditions that enterprises face in the trend towards "Consumerization of IT". At an ICT Transition and Innovation Seminar attended by several hundreds people, executives from Huawei Enterprise BG, industry experts, and well-known industry analysts discussed the trends taking place in the ICT industry. Huawei announced its latest channel policies, strategies, and performance forecasts to its channel partners during the Channel Salon Session.

Press conferences and interviews helped members of the media from different corners of the world become more familiar with the dynamics of Huawei Enterprise BG. In a series of speeches and technology workshops, Huawei experts gave their views on customer-centric solutions for ubiquitous wireless broadband, cloud computing, enterprise networking, and green smart cities in the "Internet of Things" era.

Huge Turnout

Hundreds of thousands of attendees and members of the media visited Huawei Enterprise BG's booth during the five-day exhibition. Notable events at the booth included an interview by Zweites Deutsches Fernsehen (ZDF) – the largest TV broadcaster in Europe, and a visit from Nicolas Charbonnier – a widely read European technology blogger who wears a head-mounted computer with voice recognition technology. 📍



Huawei People at CeBIT

Huawei has been committed to establishing a global family for more than 20 years. Today, Huawei has become home to employees from 150 countries and regions; outside of China, 72% of our employees are local. 📍



A Snapshot of CeBIT 2012

As the world's largest ICT event, CeBIT 2012 attracted more than 4,240 firms and 312,000 visitors from 70 countries. Many heads of state and industry leaders including German Chancellor Angela Merkel, Brazilian President Dilma Rosoff, Google Executive Chairman Eric Schmidt, and Microsoft COO Kevin Turner attended the event to discuss the ICT industry developments. The event was divided into four sections: digital commerce (CeBIT Pro), digital government (CeBIT Gov), digital laboratory (CeBIT Lab), and digital life (CeBIT Life). Hot topics included cloud computing, 3D technology, mobility, intelligent networks, as well as applications of information technologies in medical care, transportation, and other sectors.

"Managing Trust" was the keynote theme at CeBIT 2012. Nearly 1,500 speeches and seminars centered around topics such as ICT convergence. More than 5,000 reporters conducted interviews and broadcasts on the event.



➤ Dell showcasing a variety of commercial enterprise devices.

➤ Intel exhibiting the latest series of Ultrabook laptops produced along with its partners.

➤ Occupying more than half the space of Hall 2, IBM's exhibit was themed "Smarter Planet" and showed solutions in cloud technology, smart computing, smart business, smart mobility, and big data security.

➤ Microsoft showing its latest research results in virtualization as well as its newly-released Windows 8 Consumer Preview.



➤ Fujitsu highlighting its "green" initiatives with a new generation of high-security data centers that boast advanced energy-saving modules, and help enterprise customers solve security problems in data storage. ▲



Chen Xuejun

Huawei UC solutions are building a competitive edge centered on mobility. These solutions allow use of any device, anywhere while delivering a consistent user experience.>>

Unleashing the Potential of Enterprise Communications

Huawei's Three Unified Communications Strategies

| By Chen Xuejun, Director of Unified Communications Solutions for Huawei Enterprise BG

Unified Communications (UC) is one of the key strategic segments for Huawei Enterprise BG. Huawei leverages its research into enterprise communications trends to help enterprises fully unleash the potential of their communications systems that integrate mobility, video capabilities, and cloud collaboration.

Mobility Support

Mobility will become a top priority in the development of collaborative application architectures for enterprises. Huawei UC solutions are building a competitive edge centered on mobility. These solutions allow use of any device, anywhere while delivering a consistent user experience.

"Any device" means support for multi-device collaboration across platforms. Devices include

smart phones running mainstream mobile operating systems, such as iOS and Android that are readily available in the marketplace. Huawei will also focus on building tablet-based mobile office applications for the enterprise market. The management platforms for solutions commonly seen in the marketplace primarily focus on system platforms. This approach no longer meets the requirements that enterprise customers have for IP-based, smart, and diversified mobile devices.



Huawei's management platform manages any type of device included in UC solutions in a unified manner and focuses on strengthening the security control and management of mobile devices.

"Anywhere" means the availability of efficient service processing, collaboration, and communication within the company, on the road, or at home. To accomplish this, Huawei will develop UC solutions that enable:

- Dual-mode and multi-mode mobile devices to support a variety of mobile UC applications;
- UC services to support any mobile network (such as WLAN, UMTS, 3G, and LTE);
- Mobile smart devices to support multimedia conferencing and telepresence systems;
- Devices to support appropriate security channels and encryption technologies under different network conditions.

Huawei will ensure:

- Ease of use for devices while maximizing interface consistency and delivering a uniform user experience;
- Consistency of cross-platform device capabilities, such as voice, messaging, and data capabilities.

By improving consistency among devices and through better Fixed-Mobile Convergence (FMC), we help realize seamless switchover of communications among desktop IP devices that include hardware phones and software clients; WLAN-enabled mobile device clients such as smart phones and tablets; and conventional mobile phones. In this way, service continuity for users can be maintained when users' network environments or devices change, thereby enhancing the consistency of the mobile office experience.

Video Integration

Video will become a mainstream means of communication for enterprises. Video technologies will gradually converge to better integrate into enterprise applications. Solution providers must attach strategic importance to developing comprehensive video integration



Enterprise collaboration based on cloud architectures will be the future of UC. Huawei is positioned as an enabler in the cloud collaboration ecosystem by providing cloud collaboration solutions to system integrators, content service providers, and other partners while providing private cloud or hybrid cloud solutions to key customers.>>

capabilities.

As one of the few vendors in the industry to offer end-to-end video integration capabilities, Huawei will focus on the following key aspects:

1. Any to Any

Huawei will eliminate differences in device types, media formats, and network access modes to ensure that contents can be displayed on any device and that devices can interact with one another. We will achieve collaboration and enable switchover between multiple devices, such as mobile phones, tablets, PCs, IP phones, videoconferencing systems, and telepresence systems.

2. Convergence

Huawei will enable:

- Convergence of voice, data, and video;
- Convergence of videoconferencing systems and streaming media;
- Convergence of video and Social Networking Services (SNSs) as well as video and enterprise business processes.

3. Intelligence

Huawei will deliver intelligent recognition, analysis, storage, and retrieval systems.

4. Technological Innovation

Huawei will deliver innovations such as high-definition images delivered at low bandwidth; next-generation coding technologies such as H.264HP, H.264 SVC, and H.265; and 3D/holographic technologies.

Cloud Collaboration Enabler

As cloud computing develops, enterprise collaboration based on cloud architectures will be the future of UC.

Huawei is positioned as an enabler in the cloud collaboration ecosystem by providing cloud collaboration solutions to system integrators, content service providers, and other partners while providing private cloud or hybrid



Huawei attaches enormous importance to user experience. Huawei's product development strategy is to "leverage experience to guide design" and develop specific implementation guidelines.>>

cloud solutions to key customers. Huawei's solutions will incorporate the following features:

1. Architecture Integrated with IMS Technology

Cloud collaboration for enterprises requires a basic communications architecture that integrates the Internet, fixed networks, and mobile networks. Huawei's expertise in IP Multimedia Subsystem (IMS) technology helps enterprise customers build a basic communications platform that integrates this technology. With this platform, Huawei provides an all-IP network architecture, full-service control and operations, access via all devices, security and quality assurance, and unified open standards.

Huawei is building a new infrastructure specific to the enterprise cloud that is integrated with IMS technology. With this infrastructure, Huawei and its customers can build an unified cloud-based software and hardware platform for UC, contact centers, and enterprise collaboration.

On the service application layer, Huawei will steadily move forward with cloud-based developments in core UC services and enterprise applications to fulfill the requirements of enterprise customers.

2. Openness

Openness is vital to enterprise communications. Openness includes utilizing existing communications systems and integrating communications and business processes. Huawei has years of experience in traditional Time Division Multiplexing (TDM) and Session Initiation Protocol (SIP) standards integrated with IMS technology. Huawei also offers mainstream open interfaces in the enterprise applications field. These interfaces, such as the Simple Objective Access Protocol (SOAP), are used by enterprises or Independent Software Vendors (ISV) to integrate UC solutions and enterprise business processes. The open interfaces are compatible with

enterprise application systems such as Microsoft Office and Active Directory in addition to IBM's Lotus System while also supporting interconnections with Private Branch Exchange (PBX)/IP PBX, UC, and videoconferencing systems provided by other vendors.

3. Enterprise SNS

The emergence of enterprise SNS extends the scope of enterprise collaboration and is set to become one of the main communication models for enterprises. According to a Gartner report, the enterprise SNS software market will grow by as much as 15% in 2012, and the revenue from this market will exceed US\$1 billion. An enterprise SNS platform helps enterprises share information and collaborate more efficiently.

Huawei will build a global service experience center on cloud collaboration. This center will deliver Huawei's latest innovations in cloud collaboration to customers efficiently. At this center, Huawei can also share expertise gained through operations with its partners. Huawei has selected web conferencing and collaboration as its first two pilot fields.

Experience-Guided Design

Huawei attaches enormous importance to user experience. Huawei's product development strategy is to "leverage experience to guide design" and develop specific implementation guidelines. Huawei carries out strategic cooperation with world-famous user experience research and design institutions. In this cooperative effort, Huawei surveys enterprises and device users and researches enterprise office communications.

The Five general trends in enterprise office communications are:

1. Experience-oriented Enterprise Deployment

In solutions, more attention must be paid to the application scenarios of enterprises. User participation and experience in deployment will

play an important role in effectively applying UC to enterprises. This is a point in the process that we cannot afford to ignore. Huawei's UC products are constantly enhanced and optimized through deployment and improvements discovered through day-to-day use of the solutions by more than 100,000 users (including internal employees and business partners).

2. Convergence

Unifying and integrating the interfaces for enterprise application tools, that were once isolated, will become a mainstream practice. Information communication centers that deliver more powerful address books and history records need to be built to free users from cumbersome communication methods. Users will have a consistent experience across different platforms and devices through the selection of intelligent communications channels as well as through alignment and switchover of device capabilities.

3. Segmentation of Enterprise Products

Huawei will further divide the requirements of enterprise users by considering the impact of the communication environment (personal desks, meeting rooms, mobile offices, etc.),

hierarchical differences, diversified communication targets, positional differences, as well as industry and enterprise preferences (including app-earance, functionality, and reliability).

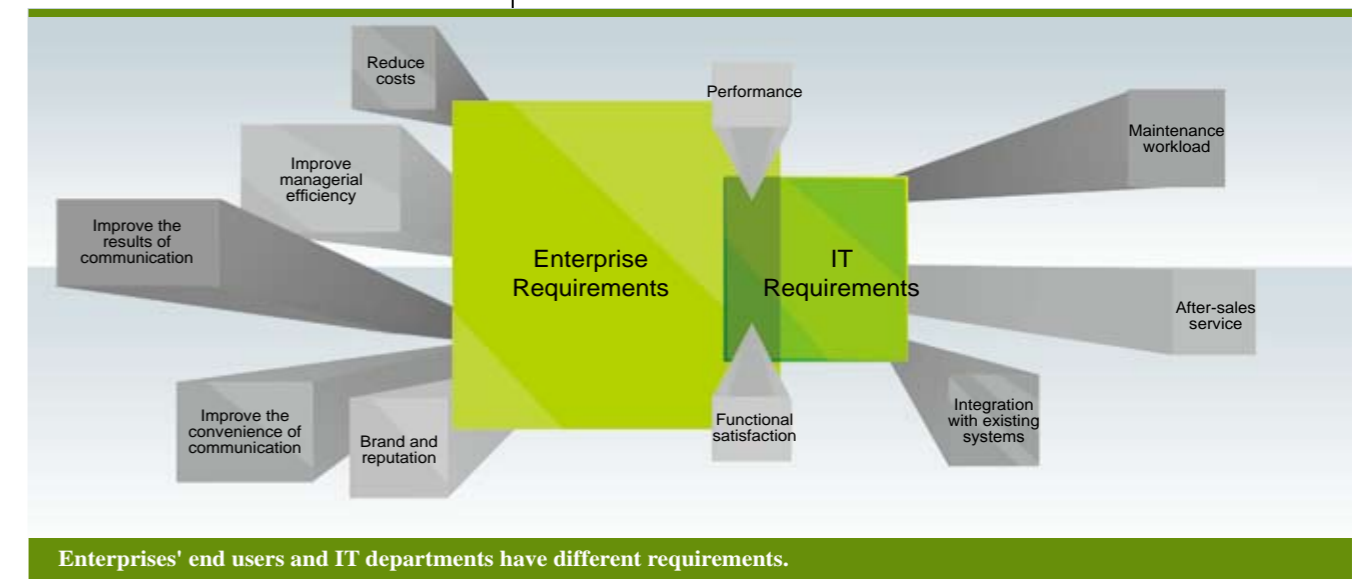
4. Emotional Touch

Enterprise UC is thought of as a cold technological tool, but it does not have to be this way. Almost everyone has had a stack of unread emails that they need to deal with or experienced instant message notifications that went unacknowledged, not to mention sending personal messages to the wrong recipient. It seems that we always have more to do, and we are always trying to multitask through everything. What people need are intelligent solutions that can perceive emotions and offer considerate services.

5. Consumerization

More and more enterprises are adopting the Bring-Your-Own-Device (BYOD) practice, which increasingly consumerizes the communications system for enterprises. Huawei will adapt to this trend by building capabilities for mainstream device platforms and providing a knowledge management platform for enterprise SNS.

Huawei is well positioned to help its customers and partners maximize their competitiveness through continuous technological innovation as well as rich user experiences, thereby achieving effective applications of UC solutions. ▲





Li Dong

Evolving technologies and innovative application scenarios give videoconferencing renewed vitality. There are three trends driving videoconferencing technologies forward: lifelike experiences, widespread use, and industry-specific applications.>>

Three Trends Driving Videoconferencing Technologies Forward

| By Li Dong, Director of the Marketing Execution Dept for Telepresence, UC&C Product Line, Huawei Enterprise BG



*Kevin Kelly, a renowned technology advocate, introduces a brand new view about technology in his latest book, **What Technology Wants: "Technology has become the seventh kingdom of life." He believes that technology as a whole is not a jumble of wires and metal but a living, evolving organism that has its own unconscious needs and tendencies. He startles us with his claim that technology is an extension of the human body. Like human beings, technology wants to evolve, wants order, wants sustainability, and wants a bright future full of vitality. Kelly's philosophical explorations provide a totally new perspective through which videoconferencing vendors can see and judge technologies and make technological innovations. >>***

The quasi-4G era is taking shape as network technologies are upgraded and triple play services become more prevalent. The migration from standard definition technologies to high-definition technologies is under way, and the H.264 standard is being superseded by H.264HP and H.265. All these developments create potential for videoconferencing technologies.

Unified communications products and services are widely available to enterprise customers, and the application of IP Multimedia Subsystem solutions has been accelerated in the telecom industry. Videoconferencing has evolved from being high-end applications specific to select industries to being deployed in enterprises of all sizes and across numerous industries, and is making its way into people's everyday life. Gartner points out in its report, The Top 10 Strategic Technologies for 2011, that now is a good time to incorporate videoconferencing strategies into

business processes. By doing so, enterprises can inject new vitality into their business and work processes.

According to estimates from Wainhouse Research, call agent positions will be reduced by approximately 2.1 million by the end of 2012 as more videoconferencing services become more leveraged. The research organization went on to speculate that by the year 2015 nearly 200 million people around the world would be collaborating through videoconferencing systems.

Evolving technologies and innovative application scenarios have enabled videoconferencing to gain renewed vitality. There are three trends driving videoconferencing technologies forward: lifelike experiences, widespread use, and industry-specific applications. Only those videoconferencing vendors that stay current with these trends and seek a better understanding of ever-changing customer needs will be able to maintain technical competitiveness and vitality.

Huawei's research and development in videoconferencing technologies dates back to as early as 1993. After years of continuous development, Huawei has gained considerable expertise in the videoconferencing field. Our innovative technologies demonstrate our desire to maintain vitality in technologies that are in step with industry trends.

Trend One: Lifelike Experiences

Creating a lifelike experience is an "unconscious need and tendency" of videoconferencing technology. Delivering these experiences depends largely on audio/video restoration capabilities and utilization of intelligent technologies that are well suited to human societies.

Video technologies are moving towards seamless wide-view video capturing and display along with 3D video capturing. Because 3D technologies have yet to be extensively applied to videoconferencing, seamless full-view display has become the major focus for the time being. Therefore, a vendor's ability to outperform other competitors depends on the quality of their video cameras, image stitching algorithms, and video display technologies.

In the audio field, precise multi-directional stereo capturing has become the trend. Low-latency and lip-synchronization, high-fidelity audio quality, and spatial positioning are three major factors that determine the audio experience. Of these, positioning technologies are the major determining factor in differentiating vendors.

Behavior recognition, face recognition, character recognition, voice recognition, and other intelligent technologies are maturing. When these technologies are applied to videoconferencing, the human-computer interaction experience will improve significantly, and the sense that distance separates the participants will seemingly be reduced. Telecommunications will then allow users to feel as if the conference is actually held "face to face".

Intelligent meeting rooms are coming to the forefront of intelligent technologies. Intelligent meeting rooms of the future will come complete with touch screens for easier operation that will enable individual or whole control of the audio and video equipments in the meeting room. These added benefits will allow users to create a meeting environment that best suits their agendas. Not long from now, intelligent meeting rooms will provide a

Delivering lifelike experiences depends largely on audio/video restoration capabilities and utilization of intelligent technologies that are well suited to human societies.>>

convenient means of communication. They will also enhance environments where the subtleties of non-verbal messages can be conveyed.

Huawei telepresence products have always had a technological edge over other vendors by providing users with lifelike experiences. In July 2011, Huawei launched TP3106 in Beijing, its second-generation telepresence product. This is the first 1080p 60fps full HD telepresence system in the world. It offers life-size, lifelike remote meeting participation, and direct, natural eye contact with CD-quality, HD sound, and lip-sync capabilities.

In March 2012, Huawei unveiled a full-view telepresence solution at CeBIT. Leveraging its unique three-screen dynamic synchronization processing design and the world's first 1080p full-view three-eye camera system, Huawei became the first vendor in the world to enable 48:9 ultra-wide screen stitching. The full-view telepresence system also adopts user-friendly smart technologies. Based on a wireless touch system developed on the Android platform, a touch of a finger allows users to operate the wide-screen display system, hidden full-view cameras, the high-fidelity three-channel audio system, the whole telepresence infrastructure, and the lighting system. Additionally, the overall energy consumption, size, and bandwidth requirements of the full-view telepresence

system are 30% lower than the industry average, setting a new benchmark for the industry in terms of energy efficiency and reduced carbon emissions.

Trend Two: Widespread Use of Technology

With optical fibers replacing copper in network construction and the accelerating spread of low-cost and high-speed data services, telepresence technology is becoming more widely available. To meet the requirements of this trend, telepresence technology must be able to support access to various types of equipments and the different customer set-ups and system components. The integration of videoconferencing with UC systems will support flexible access scenarios through fixed networks, mobile networks, radios, televisions, and satellites. This integration will also realize the unified communications of audio, video, and data that can be applied to various terminals, such as meeting rooms, desktops, and 3G mobile phones.

To satisfy these increasingly diverse needs, Huawei offers products that include devices, Media Control Units (MCU), and telepresence systems for different types of customers. Huawei offers three types of devices: high-end HD videoconferencing devices, economical SD videoconferencing devices, and desktop HD videoconferencing devices with imbedded MCUs. For integrated media switching platforms, Huawei provides a complete range of products – from 1000-port MCUs to universal transcoding MCUs that facilitate video system deployments for small- and medium-sized businesses as well as carriers and large- and medium-sized businesses. In addition, Huawei provides a full array of telepresence products, including immersive telepresence, multi-function telepresence, personal telepresence, and desktop telepresence solutions.

Huawei provides open and interoperable UC integration solutions that can be completely integrated with soft terminals, such as Microsoft UC system and Huawei eSpace. With these solutions, customers can enjoy IM, audio, video, and data communication through mobile terminals, desktop terminals, professional conference rooms, and e-presentations. Moreover, Huawei's telepresence offerings support network access methods,



Telepresence technology is becoming more widely available. To meet the requirements of this trend, telepresence technology must be able to support access to various types of equipments and the different customer set-ups and system components.>>

such as IP, PSTN, 3G, radio, and mobile satellites. By providing customers with convenient ways to access networks, Huawei's telepresence solutions help customers experience face-to-face videoconferencing and cooperation anytime and anywhere.

Trend Three: Industry-specific Applications

Every industry is undergoing a transformation in information technology. With the maturity of high-definition technologies, telepresence systems have been widely deployed in different industries and are playing a vital role in this transformation. A number of innovative applications have been created in areas such as emergency command, e-health, online education, and e-court. Industry-specific telepresence applications are the third major trend for telepresence technologies.

With these applications, the purpose of videoconferencing has extended from meeting conference requirements to integrating business processes as well as supporting IT transformations in the business world. One of the top priorities in developing telepresence systems is combining the telepresence system with the current operational tools of industries. By staying true to its principle of "providing products and solutions that can be integrated" and through extensive research into the specific needs of its targeted industries, Huawei has incorporated telepresence technology into industry solutions, such as emergency command, medical services, education, and public security.

Traditional forms of face-to-face medical consultations can barely meet the needs of the medical services industry. These traditional approaches limit the abilities of professionals to share medical resources or cooperate in diagnosis or treatment processes – not to mention the prolonged gap that occurs between the discovery and teaching of a new breakthrough and the time that it is actually put into practice. Based on the telepresence system, Huawei TeleMedicine Solution enables hospitals to share their information systems and delivers clear HD audio and videoconferencing and complete medical data. With this solution, patients can gain convenient access to e-consultations from specialists and experts, professionals can observe and offer

guidance during surgeries, and medical students and professors can interact during educational courses. These examples are just a few of the ways in which Huawei has helped improve the processes of the medical care industry to better serve medical practitioners and their patients.

When it comes to emergency command, traditional operations are characterized by "information islands", which pose a real hindrance to improved effectiveness in handling emergency situations. Often, command center response speed is less than ideal. Personnel at different sites cannot communicate quickly due to a lack of complete information collected about the incident and ineffective communication where updates or deployed resources are not relayed in an optimized manner. To help resolve these problems, Huawei has developed the TeleCommand Solution in which all-digital integration technology is applied to a video conference and monitoring system. This solution enables multiple command centers in different locations to cooperate and engage resources through remote communications and provides multi-level visualized command and control. It also provides convenient access for telepresence emergency command vehicles, 3G mobile devices, and individual interactive video equipment. Huawei helps customers enhance mobile emergency command operations by providing an all-around, easily accessible information exchange bridge for all functional departments. In addition, to meet the specific needs of emergency command operations, the operational process can be recorded and played on multiple screens.

The customized remote video dinner system that Huawei developed for Haidilao, a famous hot pot restaurant, has been in the spotlight in 2012. In this solution, Huawei deployed a high-end immersive videoconferencing system in the restaurant that helps operators in the restaurant control oil splatter, excessive exhaust, and smoke that often occur in a hot pot dining experience. Experts in the industry praised Huawei for opening up a new field of application for videoconferencing and promoting consumerized IT-like transformations. Wang Xiangjiong, Marketing Director for the Telepresence Domain of Huawei Enterprise BG, referred to these types of applications as "solutions that are full of vitality".

From videoconferences to industry-specific applications, videoconferencing is now primed to embark on a new chapter. Based on customer needs, Huawei develops innovative applications and opens up even wider markets for the development and application of telepresence technology.

Green: The Color of Videoconferencing Technology

Lowering carbon emissions and improving environmental pro-



Green is the color of videoconferencing technology. The environmental benefits which videoconferencing delivers will become a significant indicator for assessing the vitality of this technology. >>

tection are also top priorities in the development of video-conferencing technology. Reducing travel costs, improving communication efficiency, and accelerating accurate decision-making have always been the key benefits of deploying videoconferencing systems. Energy conservation and emissions reduction are undeniable social responsibilities of the videoconferencing industry. According to the Global e-Sustainability Initiative (GeSI), initiatives in the ICT industry can reduce the emissions by nearly 7.8 billion metric tons of carbon dioxide equivalents by 2020. Considering the Business-as-Usual (BAU) assumption, this reduction is equivalent to 15% of the total projected emissions in 2020.

Some vendors have turned the provision of low-carbon, green videoconferencing services into a competitive advantage. To improve its competitiveness, Huawei has initiated its "Green Huawei, Green Communications, Green World" strategy. In 2008, Huawei joined GeSI, the most influential environmental protection organization in the ICT industry, and became the only company in Asia that joined the organization.

Green is the color of videoconferencing technology. The environmental benefits which videoconferencing delivers will become a significant indicator for assessing the vitality of this technology.▲



Pan Jian

Cloud technologies can transform traditional call centers into contact centers that provide value-added services. By transforming call centers, enterprises turn an overhead expense into a key profit center.>>

Connecting the World Through Cloud-based Contact Centers

Building Next-Generation Contact Centers

| By Pan Jian, Product Director of the Contact Center for Huawei Enterprise BG

As an important channel through which enterprises interact with their customers, contact centers can now help enterprises with marketing promotion, crisis management, and providing value-added services instead of merely offering troubleshooting advice and after-sales services. These value offerings are turning call centers into profit centers, customer care centers, and marketing centers. Contact centers have become an integral part of modern enterprises' interaction with their customers.

With rapid developments in ICT, today's enterprises have entered the cloud era characterized by cloud computing, broadband connections, multimedia collaboration, and mobile smart devices.



Thanks to the rapid development of mobile communications, the Internet, and cloud computing technologies, people communicate and collaborate with each other more frequently through channels such as video, Twitter and Weibo (the Chinese equivalent to Twitter), Social Networking Services (SNS), and instant communications in addition to traditional media such as voice, Short Message Services (SMS), and email. With continuous innovation, people will have access to an even wider variety of communication channels in the future. Many people now use mobile smart devices, mobile broadband Internet, and social media for communication. This trend has become a revolutionary driving force for the development of contact centers. A top priority for contact centers is to communicate and collaborate with customers in a more efficient, personalized, and cost-effective way in the cloud era. Next-generation contact centers will fully leverage technologies and applications of the cloud-based era.

Global consulting firm Gartner conducted an in-depth analysis of the technological trends of contact centers.

According to Gartner's analysis, technologies such as virtualized applications, web, social media, expert agents, mobile devices, and intelligent voice and text analysis will be widely used in contact centers within the next two to five years.

Cloud Solutions Simplify Deployment and Maintenance

Traditional contact center systems are complex and difficult to install, maintain, upgrade, expand, and migrate. Cloud computing technology can solve these problems. CPUs, memory, and storage resources can be virtualized as needed. Enterprises can install contact center software on these virtual resources and dynamically adjust the configurations to adapt to changes in resource demands. Enterprises only need to replace virtual machines while expanding, upgrading, or migrating their systems. Cloud computing resources provide scalability, high availability, and expandability. These attributes allow enterprises to build their professional marketing and service centers efficiently while reducing management and maintenance costs.

1. Virtualized Deployment

Enterprises that apply resource virtualization techniques based on cloud computing platforms can virtualize computing, storage, and other resources into independent resource pools (virtual machines). Each virtual machine has independent resources and operates independently.

Virtualized deployment delivers the following benefits:

- Available online system installation, upgrades, maintenance, backup, and migration without turning off or powering off servers;
- Dynamic adjustment of computing and storage resources to suit business needs;
- Real-time disaster recovery for quick data recovery in the event of a failure.



Cloud computing resources provide scalability, high availability, and expandability. These attributes allow enterprises to build their professional marketing and service centers efficiently while reducing management and maintenance costs.>>

This list is by no means exhaustive. We interviewed agents at several large contact centers. The following list is a summary of the major limitations of traditional PC agent terminals:

- Cumbersome PC configurations and time-consuming software installations;
- Unavailable remote desktop applications;
- The need to spend hours or even days to restore systems due to frequent virus attacks and failures;
- The difficulty of ensuring customer information security. If customers' private information is stolen, an economic loss will be incurred, the enterprise's brand will suffer, and the customers will lose their trust in the enterprise;
- Noise and slow performance from aging PCs which affect the mood of the agents in the call center and the quality of the service they provide;
- Increased energy consumption and operation cost from having to constantly upgrade PC performance, and increased negative environmental impact;
- Connection cables that clutter limited office space.

How can we solve the problems with the traditional PC agents? Cloud contact centers plus green agent terminals provide a viable solution.

2. Green Agent Solutions

Green agent solutions replace traditional PC office systems with virtual desktop systems and green agent terminals (thin clients). This green approach reduces software and hardware purchase costs by 40%, IT system operation and maintenance costs by 29%, and downtime by 88%. At the same time, the green approach improves IT productivity by 78%. Green agent solutions achieve these improvements by providing the following advantages:

- Reduced construction and maintenance costs; low power consumption (20W); reduced heat generation; compact design;



Video contact centers can create more value.

minimal cost per unit;

- Reduced management and maintenance costs as services are centrally maintained and no application software needs to be installed;
- Up to 99.999% reliability;
- One tenth the maintenance personnel required to operate the green agents, compared to traditional systems;
- Ensured information security. Devices are separated from information. Desktop configurations and data are centrally stored and processed at the back end. Functions such as protection against Distributed Denial-of-Service (DDoS) attacks, corpse network monitoring, and maintenance of firewalls, Intrusion Prevention Systems (IPSs), and device security management ensure network and data security;
- Available remote applications allowing use of mobile agents. A plug-and-play function allows hot-swapping of devices while data and desktops are running and data is stored on servers. Users have access to their desktops any time from different office locations as well as at home;
- Environment-friendly and ergonomic solutions, helping improve work environments by eliminating hard disks and fans.

According to Gartner's forecast, from 2009 to 2013 the global delivery of thin clients will maintain a growth rate of 51% each year and will reach 24 million in 2012.

Multi-Channel Communication and Collaboration

According to the Gartner study, 40% of consumers prefer to access services in non-traditional ways, such as instant chatting and forums on the Internet, social networking, Twitter/Weibo, and email. The soaring number of social media and Twitter/Weibo users also points to this development trend, which has had a tremendous impact on traditional

contact centers that rely almost solely on voice and SMS.

The increasing number of public relation crises on the Internet indicates that if we fail to promptly respond to negative coverage on the Internet that spread like wildfire through word-of-mouth and other channels, these types of often-unfounded claims and disinformation, if not promptly addressed, may disasters to enterprises, deliver tremendous economic blows and seriously blemish the reputation of any brand, the impacts of which cannot be reversed in a short time. Of course, we can also benefit from social media. We can build a proactive marketing platform on the Internet based on social media to promote products and services more accurately and effectively by taking advantage of the word-of-mouth effect and interactions among customers. Therefore, social media has become an important marketing and service channel.

By applying social media, enterprises can expand the channels used by contact centers to contact customers, handle Internet crises in a more timely and effective manner, greatly improve their Internet-based marketing capabilities,

Contact centers built on the basis of social media and UC capabilities can provide services any time the customer requires. They can also become interactive centers through which enterprises collaborate with their customers and allow customers to collaborate with one another.>>

By using video, contact centers can transmit information much more effectively, better interact with customers, enhance customers' self-service abilities, improve customers' service experience, and increase customer loyalty.>>

and effectively manage and control Internet channels. These approaches help inject vitality into contact centers. Platforms built on the basis of social media not only enable enterprises to interact with customers, but also allow customers to interact with one another. In this way, highly loyal customers can help enterprises or other customers solve conflicts and problems, which alleviates some of the pressure on contact centers.

For e-commerce or online services, instant messaging, click to dial, document transfer, email, desktop sharing, and similar methods can be integrated into web pages. This integration provides customers with more personalized services, boosts one-stop shopping and service capabilities, and improves customer experience.

Deployments of Unified Communications (UC) platforms for enterprises are accelerating, and enterprise demands for integrating UC platforms with contact centers are becoming clearer. Contact centers built on the basis of social media and UC capabilities can of course provide services any time the customer requires. More importantly, they can also become interactive centers through which enterprises collaborate with their customers and allow customers to collaborate with one another.

Mobility

According to forecasts, mobile phones shipped globally will exceed 452 million units in 2012, while tablets will reach 380

million units in 2017. Many people will prefer mobile smart devices to fixed devices for shopping, entertainment, and work needs. The integration of contact centers with mobile smart devices will dramatically change the way contact centers provide services and promote offerings. Contact centers can offer services anytime and anywhere. This integration will also change the way contact centers are managed.

The contact center management platform can be a Web-based design. No matter where users are, they can operate, maintain, and manage the platform remotely via their mobile smart devices, as long as they have access to the Internet and can set up a safe data communications channel. Consider after-sales service for home appliances as an example. With the mobility offered by integrating mobile smart devices with contact centers, after-sales service personnel can give customers instructions on how to use the appliances or help them troubleshoot or locate faults right from the showroom floor. In this way, problems can be located precisely and resolved rapidly, and customer satisfaction can be improved.

Highly Efficient Video Services

Most people consider video as the most efficient way to transmit information. Research indicates that people make sense of 13% of the information they hear and 83% of the information they see. By using video, contact centers can transmit information much more effectively, better interact with customers, enhance customers' self-service abilities, improve customers' service experience, and increase customer loyalty. In addition, the demand that customers make on agent-provided services can decrease, overall service costs can be reduced, and new revenue streams and value can be created through video advertisements.

Currently, video contact centers can transfer video images based on the 3G Circuit-Switched (CS) domain and IP Packet-Switched (PS) domain.

The video contact center solutions based on 3G CS domain support video encoding formats such as H.263, H.263+, MPEG-4, and 3GPP, as well as image formats such as CIF and QCIF. The 3G CS domain-based video solutions have both advantages and disadvantages. The advantages include:

- Easy-to-use communication network that supports video calling;
- Enhanced information security during the transmission of audio and image data.

The video contact center solutions based on IP PS domain enable video calling by means of high-bandwidth mobile or fixed Internet connections. Developments in mobile communications and fixed broadband make high-definition (1080P and 720P) or standard-definition (lower than 720P) video calls possible. By using video call software or plug-ins, contact centers can integrate the video communications capability on smart devices or web pages. IP PS domain-based video contact centers enable smart phone users to enjoy vivid high-definition images and operate on smart phones more easily by fully leveraging the touch screen function.

As a global leader in the communications industry, Huawei will fully leverage its technological advantages in the ICT field and continuously deliver innovations for contact centers. These approaches will help Huawei build next-generation multimedia contact center solutions for enterprises that are centered on the core concept of cloud, collaboration, mobility, and video. Huawei will work with enterprises to build interactive centers that offer higher communication efficiency and lower collaboration costs. ▲



China Best Bank Award-winning Service with Multi-Center Contact Platform from Huawei

The 95555 Telephone Banking Center of China Merchants Bank (CMB) deployed Huawei's IPCC solution to establish a multicenter contact platform that significantly improved its personalized customer service capabilities and core competitive strengths. Known simply as 95555, the banking center won the "China's Best Contact Center" award five times in a row from 2005 to 2009.>>

With the rapid development of the finance industry and the entry of international financial institutions, competition in China's financial market has intensified. Because banks offer similar banking products, the quality of customer service has become a key factor in establishing a differentiated advantage in the market. Finding ways to increase revenue continuously by providing innovative and personalized customer service has become a top priority of every major banking facility.

Critical Need to Upgrade CMB's Contact Center

CMB's launch of wide-range value-added services and products saw demand for customer service grow dramatically. The inability of CMB's distributed telephone banking system to accommodate these requirements posed several roadblocks for central management.

The limitations of CMB's previous telephone banking system included scattered resources, heavy system workload, inefficient use of information, lack of marketing functions, poor scalability, simplistic functions, and simplistic access modes.

CMB's decision-makers realized that the expansion of branches alone could never fully meet customer requirements. To improve the customer service quality and customer satisfaction, the bank needed to expand remote customer service channels with advanced communications technologies and build a customer service system that is accessible 24 hours a day.

Helping CMB Provide Superior Customer Service

After carefully comparing and testing the functional indexes such as service processing capabilities, management systems, outbound voice services, payment via telephone, and personal banking services of a large number of mainstream call center products, CMB chose Huawei as its strategic partner in building a new telephone banking center.

Capitalizing on its rich service experience in the financial sector, Huawei provided CMB with a customized financial IP call center solution consisting of platform devices such as ticket dispensers and voice loggers, and software such as Computer Telephony Integration (CTI) and Interactive Voice Response (IVR) solutions. These customized offerings coupled with a multi-center contact platform significantly enhanced CMB's personalized customer service capabilities.

Deploying the Huawei's IPCC solution delivered the following benefits to CMB:

- Integrated resources allowing for easy data sharing and flexible expansion;
- Reduced operational risks through the use of a multi-center contact platform;
- Support for real-time synchronization of customer data, thereby improving customer satisfaction;
- Accommodation of diverse customer requirements through personalized service offerings.

The Huawei's IPCC solution contributed significantly to CMB's effort in establishing a future-proof, differentiated advantage in the financial market fueling continuous business growth. ▲

Analyst Comments

By building an industry-leading telephone banking center with the Huawei's IPCC solution, CMB has established a competitive edge in the financial market. Superior customer experience and powerful marketing tools provided by the new contact center have substantially improved customer satisfaction and helped CMB leverage its customer resources.



Banco do Nordeste Communication Efficiency Enables Superior Service Delivery

By deploying Huawei's Unified Communications (UC) solution, Banco do Nordeste do Brasil (BNB) raise the efficiency of its internal communications and further improve its reputation while helping to ensure the operational security. The UC solution provides managed services to help BNB focus more on its core financial services, thereby enabling the bank to improve its competitiveness and provide the general public with better services.

BNB's Service Development Requirements

BNB recognizes that outsourcing and improving managed services can significantly increase its ability to deliver superior core financial services. BNB is confident that Huawei's IP network-based enterprise UC solution will help reduce internal communications costs, improve working efficiency, enhance the bank's reputation, and better serve its customers. The bank's communications network was based on legacy TDM architectures, which lacked scalability. As a result, BNB needed technology and network equipment that could better serve its internal and external communication requirements and create an optimized customer service business model.

Through customized features for banking services, the UC managed services project ensures highly secure and reliable banking services while also enhancing communications and work efficiency between the bank's headquarters and local branches. The project uses distributed deployment scenarios, including 197 core systems (serving 11,575 users) and a call center (IPCC) with 450 agents. These systems provide reliable connectivity between BNB's headquarters in Fortaleza, Ceara, and dozens of its local branches. Huawei's UC solution seamlessly integrates existing office software to offer end-to-end visualized management while providing real-time instant messaging, videoconferencing, and unified messaging services. This solution enables customer service agents to resolve on-site issues within two hours.

Huawei's UC Solution Improves BNB's Operational Effectiveness

After a series of bids and network performance tests, BNB selected the Huawei's UC solution for its high performance and quick response to customer demands. Huawei leverages years of service development experience in producing its end-to-end UC solution. The solution offers robust security policies and a completely open, flexible, and compatible platform. This integrated solution includes a unified network management system embedded with SoftCo call control servers, UC servers (enterprise

About BNB

Banco do Nordeste is one of Brazil's largest federal banks and ranks among the top 10 domestically funded banks. BNB has a network of branches spread throughout the nine states of Northeast Brazil. The bank employs more than 10,000 people. BNB's mission is to foster continuous and sustainable economic growth in the Northeast by providing long-term low-interest credit to companies of all sizes and sectors. The bank is focused on improving its offerings while finding ways to enhance its cost-effectiveness and competitiveness.

directory, instant messaging, and status indicators), multimedia conference systems, Smart Call UMS systems, security solutions, voice recording solutions, PC/Web/mobile phone clients, billing and reporting systems. Huawei will provide BNB with five years of managed services and consultation support to make the bank more competitive in the financial market and help ensure that the bank meets its delivery targets for core services.

Huawei's call center system deployed with the UC solution has optimized BNB's customer service processing, helped build up its brand presence, and facilitated a smooth transition in the bank's main service offerings.

Rapid deployment of Huawei's UC solution enables BNB to better serve the public in Northeastern Brazil. The solution's overall robustness coupled with Huawei's ability to deliver localized services make it a viable choice for the financial industry. Huawei has shown its determination by quickly responding to the market. This project for BNB further declares that Huawei has the potential to become a major player in the field. ▲



State Grid Corporation of China Scalable, Reliable Call Center Ready for Increasing Service Offerings

By using Huawei's Multimedia Contact Center Platform, the service hotline 95598 covers 1206 transformer stations in 13 cities of Jiangsu Province, providing high-quality, stable, and convenient power-related services to 31 million urban and rural customers of SGCC Jiangsu Electric Power Company.>>



The 95598 service hotline of the Jiangsu Electric Power Company under the State Grid Corporation of China (SGCC) went live at the end of December 2010, marking the first successful commercial use of SGCC's multimedia pilot program.

Soft switch SIP trunks and Huawei's Multimedia Contact Center Platform were used to create the customer service hotline. The service covers 1,206 transformer stations in 13 cities across Jiangsu Province, providing high-quality, stable, and accessible power-related services to 31 million urban and rural customers.

Huawei Partners with SGCC for the Jiangsu Centralized Customer Service Pilot Program

Before Jiangsu Electric Power Company's centralized pilot program was established, each province operated several customer service call center systems, which hindered SGCC's level of service quality and management efficiency. To help accelerate the system's response and improve its customer service capabilities, SGCC launched its 95598 network service hotline in 2010. SGCC wanted this hotline to provide customers with better services by fully integrating service resources, optimizing service processes, and improving service functions.

Jiangsu Electric Power Company is the first among SGCC's provincial branches to successfully construct

a centralized power supply service platform for its service business model.

Jiangsu Electric Power Company recognized the importance of deploying the 95598-hotline system. After extensive comparisons of telecom carriers and vendors, Jiangsu Electric Power Company selected Huawei's solution because of the strong product capabilities, excellent service handling, and years of experience in network construction and operation.

The power industry's customer service system experience high call volumes during cold winter days, hot summer days, and adverse weather conditions such as strong winds, snowstorms, thunderstorms, and heavy rain. Challenges in handling such high call volumes must be considered when constructing modern call centers. Call centers that

still use traditional E1 trunks have a hard time dynamically adjusting the number of trunks based on the call traffic volume. Jiangsu Electric Power Company was the first in the power industry inside China to adopt SIP trunks, which are easy to allocate. These trunks allow for dynamic adjustment of the number of trunks based on the traffic volume. SIP trunk access solves call traffic overflow and has become the preferred choice when constructing customer service systems.

Dynamic Bandwidth Adjustment for Customer Service Systems

Huawei's solution includes two call center platforms that are located in different districts of Nanjing. Huawei's Network Intelligent Routing Center (NIRC) system manages the two platforms and implements disaster recovery, resource sharing, and load sharing. In addition, the solution improves the processing capability, network security, and service flexibility of the customer service center system. All calls made to the 95598 service hotline are sent to the customer service platform in Nanjing through a Next Generation Network (NGN). The customer service system interconnects with the NGN through SIP trunks.

Cutover to the 95598 service platform started on December 4, 2010 and was completed on December 29, 2010. This centralized

customer service system offers reliable services 24 hours a day, 7 days a week, 365 days a year. By simply dialing 95598 from anywhere in Jiangsu Province, electric power customers can inquire about services, report power outages, voice complaints, pay bills, and obtain information on power safety and tips to save energy. Based on Huawei's advanced multimedia contact center platform, the centralized customer service platform provides Jiangsu's electric power customers with comprehensive, intelligent, and interaction services. Huawei's unique dual-call-center network architecture is able to handle traffic surges during peak hours and provides remote disaster recovery in the event that a single call center system shuts down. This network architecture ensures reliability of the 95598-hotline system.

Huawei Brings Electric Power Customer Service into the Electronic Era

Upgrading Jiangsu Electric Power Company's customer service system has significantly improved the quality of the company's voice services. In addition, the system offers online customer service and remote call agent options along with engaging multimedia services, such as Web, SMS, and e-mail services.

As 3G technologies and video phones become widely used, Huawei will continue to help Jiangsu Electric Power Company provide new services, such as self-help functions with video agent-assistance and video IVR integration, to keep up with the changing trends and demands. These services will further enhance user experience and provide practical alternatives to those with vision or hearing impairments, which traditional systems cannot fully provide. ▲

Voice of the Customer

A representative from the Jiangsu Electric Power Company mentioned that the newly upgraded customer service system applies "Three Intensities and Five Economies of Scale" in its implementation approach. This three-five combination entails intensive management of human resources, financials, and materials while leveraging the benefits of scaled planning, construction, operation, maintenance, and marketing. With these mechanisms in place, the system has seamlessly integrated and enhanced the marketing and service resources of Jiangsu Electric Power Company, strengthened its management capability, and laid the foundation for deployment of a large-scale marketing system.

Huawei Quotes

Supported by the company's strong R&D and overall technological capabilities, Huawei Enterprise Business Group (BG) continues to produce innovative solutions and has become Huawei's fastest growing segment. The Enterprise BG is one of the major business segments at Huawei – it is also the focus of development for the company this year. In 2012, Huawei Enterprise BG will remain focused on the ICT field, with its top emphasis placed on developing its cloud computing portfolio while continually innovating based on customer's needs. In this new field, Huawei will continue to make concerted efforts to develop cloud computing-related products and solutions that are easy to sell, customize, install, and maintain.

Huawei: Making Business Innovations and Opening Up New Areas for Development, February 3, 2012, The Economic Daily

When the Internet bubble burst in 2000, Huawei was not yet an international company. It was exactly this limited degree of internationalization that helped Huawei survive the crisis and gain a firm foothold in the international market. Today, Huawei has a high degree of internationalization, closely linking its development to the fluctuations of the world economy.

Guo Ping, Deputy Chairman of Huawei's Board of Directors, detailed Huawei's road to internationalization in the past 20-plus years, and said frankly that Huawei has gone through drastic changes for the better in terms of overseas expansion. According to Guo Ping, Huawei's overseas development is characterized by three stages: Going Out, Going International, Going Global.

Guo Ping Views on Huawei's Road to Overseas Expansion: Going Out, Going International, Going Global, January 13, 2012, www.yicai.com

Even more interestingly, since Huawei has said it expects to get 40% of its business from China and that is a market where HP/3Com subsidiary H3C has been extremely strong, it seems likely that Huawei's full re-entry into the enterprise market will have a rather dramatic effect on HP. This is not only because 10,000 to 30,000 people is a lot of competition, but also because most of the 4,800 H3C employees came from Huawei in the first place and though HP may have managed to tie many of the key engineers down with rich contracts it is difficult to believe that now Huawei is outside the 'do not compete' period there will not be a wholesale movement of employees back to probably very senior positions in the much larger Huawei organisation.

Around 50% of the H3C business is in China and in general HP has failed in its strategy to build up its market share outside China using the H3C products. At a guess, 50% of HP business in China could revert to Huawei over the next three years.

Looking at the numbers, Cisco and Huawei now on 100% collision course over next five years, March12, 2012, Optical Networks Daily(UK)

"Huawei – it's going to be a tough one," Chambers said. "Those first three [Juniper, HP and Avaya], I think we have a good chance of completely distancing them and leaving them behind, and I measure our success on whether we do that or not. Huawei is going to be a very tough long-term competitor."

Cisco CEO Chambers: Huawei a Bigger Rival Than HP, Juniper, April 4, 2012, eweek.com

If Huawei's US\$30 billion sales revenue is considered a remarkable achievement in its 20-plus-year history, the target of US\$80 billion by 2015 signifies Huawei's ambition to rise to the top in the cloud computing age.

As the world's second largest telecom equipment provider, Huawei has just about to hit the proverbial ceiling in the carrier business. For that reason, Huawei has set its sights on cloud computing as a new engine to drive its global revenue. When interviewed, Huawei Deputy Chairman Xu Zhijun, said: "Huawei is willing to work hard over the next decade to assert an important position in cloud computing."

Huawei's Expansion to Cloud Computing With a Revenue Target of US\$80 Billion, January 2012, Economy

Huawei Enterprise aims to accredit a large army of foot soldiers after taking the covers off a channel programme and IT pro training camp. The Chinese manufacturer has added more meat around its expansion plans with the long-awaited, obligatory two-tier dealer framework.

The firm recruited 700 heads across the region last year, snapping up former Sun exec Simon Culmer as UK veep, former HP channel stalwart Dave Poskett as enterprise channel director and Cisco bigwig Dominique Vanhamme to run Euro channels.

It also bagged two disties in the UK – Micro P and Specialist Distribution Group (SDG) – to spearhead reseller recruitment.

Huawei erects channel flag in Europe, March8, 2012, www.channelregister.co.uk

"From the beginning of 2010 through mid-2011, router sales grew more than 20% each quarter, but started to decelerate last summer," said Shin Umeda, Vice President at Dell'Oro Group. "We think this is a temporary lull that will carry into the middle of this year, and we expect the market growth to accelerate in the second half of the year," added Umeda.

The top five Service Provider Router vendors for 4Q11, in ranking order were Cisco, Juniper, Alcatel-Lucent, Huawei, and Ericsson.

Service Provider Router Market Contracted in the Fourth Quarter, According to Dell'Oro Group, March1,2012,PR Newswire (U.S.)

Huawei's US\$32 billion of sales revenue in 2011, while impressive, is still trailing behind Cisco's US\$43.2 billion for the same year. What worries John Chambers, CEO of Cisco, however, is that things are changing. In 2011, Huawei restructured its business and set up the Enterprise BG, targeting Cisco's market share in this specific field. According to the Enterprise BG's business strategy, this BG is expected to achieve US\$15 billion sales revenue by 2015. It bears mentioning that this figure is less than half of that earned by Cisco at the present time.

It is not difficult to understand Mr. Chambers' worry if we consider that the US\$15 billion means Huawei will gradually edge in Cisco's existing market share. Huawei displayed a calm and confident demeanor when asked to comment on Chambers' remarks. He Dabing, Global Marketing President of Huawei Enterprise BG, said that Chambers' statement about Huawei being Cisco's toughest competitor is not an exaggeration.

Significantly Narrower Technological Gap between Huawei and Cisco: Cisco Might Find Itself Disadvantaged in the Future, April 12, 2012, China Business News



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To be an informative and inspiring magazine, ICT Insights needs your continual contributions and feedback. Please feel free to submit contributions for publication and give your suggestions and comments. The editors greatly value your input.

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