

EXECUTIVE

# THOUGHT LEADERSHIP

QUARTERLY V.3 ISSUE 3

## Experience the Network

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Consumers Select Content On Demand

### Personalized Customer Experiences Fuel Revenue Growth

Using the Network to Reach More Customers

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## Experience the Network By John Chambers



**One of the most interesting trends of today's business models is the empowerment of the consumer. Consumers are in the best position to take advantage of the underlying changes occurring in the network as data, voice, video, and mobility converge. If all forms of communications and IT move into the network as we predict, and the delivery of these services is transparent, consumers' expectations will continue to rise rapidly. Today's consumers want increased control over everything—entertainment content, product features, purchasing experience, and more—and rather than see this as an imposition, innovative organizations recognize this change as a huge opportunity.**

Personalization of goods and services will be the key differentiator in businesses, according to recent research by the Economist Intelligence Unit (EIU). The EIU expects personalization to be the fastest-growing priority across all market segments in the coming 15 years. Customers are looking for more than just quality goods and services at competitive prices; increasingly they seek an enhanced interaction—an experience—that is satisfying as well.

Information has always been a cornerstone of successful commerce, but never as much as it is today. The more information an organization can gather, and the more successfully it manages data and empowers knowledge workers, the better prepared an organization is to create satisfying interactions with customers. But, as the author Clarence Day wrote 85 years ago, "Information's pretty thin stuff unless mixed with experience." The network, and networked applications, are emerging as the platform to enable unique, personalized, and satisfying life experiences.

In this issue of the *Executive Thought Leadership Quarterly*, we offer perspectives on the user and customer experience, and on the value of the network platform as a nexus for communications, expression and, ultimately, experience.

**Rob Lloyd**, senior vice president, U.S. and Canada Operations, summarizes how customer-centric businesses can grow revenue by leading the customer experience.

**Marilyn Mersereau**, vice president, Corporate Marketing, talks about how marketing and branding must keep pace in a world of connected and empowered consumers.

**James McDonald**, CEO, Scientific Atlanta, presents a preview of the changing face of entertainment in the intelligent video network.

**Paul McNab**, vice president, Integrated Networks Systems Engineering, shares his perspective on the relationship between business and technical architectures.

**Roger Farnsworth**, executive editor, explores some less familiar yet important networking trends.

I hope you enjoy this issue and find it valuable in helping you to improve your business.

Sincerely,

A handwritten signature in black ink that reads "John J. Chambers". The signature is written in a cursive, flowing style.

John Chambers  
President and CEO, Cisco Systems



# Personalized Customer Experiences Fuel Revenue Growth

By Rob Lloyd, Senior Vice President, U.S. and Canada Operations



Revenue growth has become the primary gauge of a business executive's performance. It now trumps cost containment, an opportunity that has flattened, and commands higher priority than meeting compliance mandates, now that good corporate governance is largely assumed to be in place.

How can executives quickly transition to meet these revised expectations and accelerate revenue growth? Across industries, a strategy is unfolding to transform customer interactions into personalized experiences that are much more than today's automated customer-service transactions. In fact, in a recent survey by the Economist Intelligence Unit, CEOs ranked "personalization" as the customer preference that will increase the most in importance between 2005 and 2020, by a margin of 18%.

Transforming customer business interactions into personal experiences requires well-informed, consultative personnel. Those who can both interpret and provide information will empower corporations to compete on a new level for customers' hearts and minds. In the new competitive landscape, where a rival can copy a traditional manufactured product in a matter of months, experts largely become the "product."

Business executives enable this shift by making fundamental changes to business processes and training that take advantage of a ubiquitous, flexible network that operates as the business's primary services development and delivery platform. This service-oriented network enables *virtual* collaboration among personnel and their customers, wherever they are, using the method most useful at the time: a voice conversation, a video conference, an e-mail, an instant messaging chat, or a combination of methods. The network is aware of the user and can process information to match the communications form factor currently in use.

### How Businesses Put Customers First

The following are a few specific examples of how customer-centric businesses can help fuel revenue growth:

- A home-improvement company broadcasts "how-to" demonstrations of building projects, which can be recorded on set-top boxes. Using the education he receives, a customer configures a porch or deck virtually on the home store's Website. The Website generates a parts list and recommends equipment needed to complete the job. The customer gathers all the components in one trip, rather than repeatedly visiting a local retailer each time he discovers he needs another item.
- In the financial sector, banking customers bypass the scripted transaction at an automated teller machine by requesting the electronic services of a personal banker or "banking concierge." A real-time, interactive video experience with a professional who can consult specifically on that customer's account(s) leaves the customer feeling that a much more successful interaction has transpired.
- The gaming/casino industry collects real-time information about guest experiences. A casino might increase the complimentary amenities it offers a patron who loses some money at the gaming tables. Caviar in the guest room or a free meal reinforces the positive aspects of the guest's overall experience so that she will continue gambling or make a return visit.

## Customer Priorities in the Year 2020

Informed assessments of likely future trends are vital for organizations to create sustainable strategies, identify opportunities early, and proactively address business challenges. Sponsored by Cisco Systems and conducted by the Economist Intelligence Unit (EIU), the Foresight 2020 report assesses likely changes to the global economy, eight major industries, and corporate structures between now and 2020. Findings are based on research from the EIU's long-term economic forecasts, extensive executive surveys, and interviews with executives, analysts, and policymakers around the world. A global online survey of more than 1,600 respondents rounded out the research; nearly half of the respondents were C-level executives and 45% represented large companies.

Foresight 2020 revealed that the pursuit of competitive advantage will increasingly focus on three areas: improving the productivity and performance of knowledge workers, developing and maintaining more intimate relationships with customers and suppliers, and delivering unique value through specialized products and services. Above all, the research suggests that personalization of products and services will be the fastest-growing customer priority over the next 15 years—faster than price or quality concerns and brand values (see chart). Personalization also exhibited the largest increase in all of the eight industries in the study.

These changes will influence global companies in several ways. The focus of IT investments will expand beyond optimizing general infrastructure to improving collaboration and knowledge-worker performance. Organizations will outsource production as necessary to improve product quality and service value. And organizational structures are likely to become flatter as internal teams work across time zones and functions and as individuals become more mobile and inherit increased decision-making autonomy.

For more information, visit [www.cisco.com/go/foresight2020](http://www.cisco.com/go/foresight2020).

**"Which of the following is most important to your customers now, and which will be most important in 2020?"**

	2005	2020	Delta
Personalization	34%	52%	+18%
Brand Values	30%	32%	+2%
Quality of Product/Service	56%	55%	-1%
Quality of Customer Service	77%	75%	-2%
Personal Relationships	24%	20%	-4%
Price Competitiveness	71%	55%	-16%

Source: Economist Intelligence Unit



### Three Enabling Trends

Three primary IT trends support the new customer scenarios described.

- **The virtualization of consolidated data center resources:** Virtualizing IT resources across all locations allows businesses to better allocate resources dynamically, where they are needed, and to deliver a single set of consistent information and services regardless of an individual's location.

**People who can both interpret and provide information will help corporations compete on a new level for customers' hearts and minds. In the new competitive landscape, expertise rather than goods becomes the product.**

- **Collaboration technologies and services with personalized video interactions:** A relatively new phenomenon called "presence" reveals an individual's availability status across the network, telling collaborators the best method of contacting someone for a real-time response. Web logs (*blogs*) and on-demand distribution of media files to multimedia players (*podcasts*) impart information and instruction in ways that scale. A *wiki* is a

program that allows non-technical workers to easily edit all content on a Web site using an Internet browser. Such tools are fundamental to intracompany collaboration.

- **Using the network as the platform to touch far more customers:** Cisco in Canada, for example, is pushing to achieve one million customer interactions per month using a service-oriented network instead of airplane travel. For example, customers can schedule a personalized video Web-based seminar and attend a follow-up electronic Q&A with a panel of experts. This scales valuable business resources—the experts—to serve more customers.

### A New Competitive Advantage

Business differentiation among a generation of consumers raised on electronic commerce will be achieved by personalizing customer experiences. Using centralized information, virtual network access, and collaborative services enables the evolution to a customer-centric business that will drive the revenue growth demanded of today's and tomorrow's CEOs.

# The Changing World of Marketing

By Marilyn Mersereau, Vice President, Corporate Marketing



**The familiar world is always more comfortable than the new world. But change is a fact of life. Like it or not, the comfortable old marketing sofa is on the trash heap. The revolution in communications heralds a major shift in the world of marketing. The revered standards, laws, and models forged in post-war America are being taken over by changes in technology. Understanding and embracing the new marketing world will make the difference between success and failure for 21st-century companies.**

The archives of early television help us see the old marketing world being born. Red Skelton and Milton Berle did standup vaudeville routines in front of a passive, but receptive, home audience that hung on every word, then sang commercial jingles all the way to the grocery store. Based on the “interrupt” model, marketers caught their targets in front of the TV or on the pages of the daily newspaper, then held their interest with enough creativity to deliver the sales pitch.

“How do we get their attention?” was the focus that gave the world the *ad man* and the *creative department*. And creative they were: With few media venues and a virtually captive audience, the one-to-many broadcast model flourished from the 1950s well into the 1980s.



## How can marketers adapt to this new wave of communication? The simple answer is “give them what they want.” Marketing will have to move from selling to service.

But in today’s new world, that era looks like a world in slow motion, especially since the broadband boom. Our audience is no longer passive. The power has shifted from the marketer to the consumer. Prime-time television isn’t the magnet it used to be. Digital video recorders like TiVo allow ads to be skipped and scheduling to be customized. Commercials are becoming an annoyance, a theft of the viewer’s shrinking time. Consumers have become moving targets with plenty of options. So what are *our* options? How do we get and hold the attention of this fickle audience?

Consider paid search. The Google model of this offers advertisers a place of honor on their search pages, targeting customers who are predisposed to absorb their messages. The quarry can now choose whether or not to be caught. The phenomenon of audiences creating their own content is becoming the norm. You don’t need to look beyond Google Video, YouTube, and podcasting to see that the change has already happened.

But there is more. New media options crop up nearly every day. The choices seem endless: bluecasting, video-casting, videogames, text messaging, RSS, blogs, product placement, IPTV, and the list goes on. And distinctions are blurring: you can watch TV on your cell phone and get voice messages in your e-mail.

How do marketers adapt to this new wave of communication? The simple answer is “give them what they want.” Marketing will have to move from selling to service.

Now consumers, not marketers, decide what they want to hear and when they want to hear it. With so many new devices and channels to reach consumers, messages that are irrelevant in the moment are ignored or skipped altogether. Marketers don’t even have a chance to interrupt. But the silver lining is on the service side. When consumers *are* interested in your product category, you can make it easy for them to access your message. They are predisposed and motivated to buy.

The key is sophisticated targeting to find those most likely to be interested. Using analytics, you can gain insights into individual customer behaviors (Amazon.com’s system is a good example) and then target people who will be predisposed to accept your message. Customer relationship management software is proliferating based on the hard reality that what is extraneous data to most people is critical information to motivated shoppers. If you’re looking for a digital camera on Google, those ads are helpful, not intrusive. This does not mean that traditional media are dead. It just means that you pilot new ideas in the innovative media while keeping a solid presence in the traditional media. That is the paradigm for the future.

The law of adaptation has not changed, and the current version of technological evolution still supports it. This is an exciting time to be in marketing. New options open up each day, as do new ways to reach the customer and move into the winning position.





# The Intelligent Video Network

By James McDonald, CEO, Scientific Atlanta



**The confluence of two trends—rapidly changing video technology and increasing competition among network service providers—is enabling a variety of new services. Newly empowered consumers are demanding a more customized experience. They are getting it thanks to the intelligent video network.**

Consumers have a variety of choices for video services, including time-shifting, place-shifting, mobile video, and Web-delivered video. Increasingly, they select services that give them more control over what, when, and where they watch. The consumer's experience with each of these services is dependent on the capabilities of the intelligent video network.

## What You Get

Consider how the network determines the variety of content available. In broadcast delivery mechanisms such as satellite television networks, the amount of content available depends on the number of satellite transponders. In telephone or cable networks, however, operators employ a variety of switching technologies. In these networks, some or all of the content is delivered only to the homes that request it.

Video-on-demand is perhaps the best known example: U.S. households requested more than one billion video sessions last year. Recently, network operators have begun offering services that allow consumers to restart broadcast programs or to select which content is stored in the network.



**A typical home in the United States has three or more televisions, one or more PCs, and a variety of stereo, DVD, and video-game products. Ultimately, digital content will flow among these devices.**

Increasingly, cable and telephone companies are implementing IP video networks to facilitate the switching of even more content. For telephone companies that plan to offer video services over their DSL networks, switching is a requirement because there is enough bandwidth into the home to offer only a few channels at any one time. Cable operators discovered that efficiencies gained by switching can make bandwidth available for other applications, such as high-definition television or higher-speed data services.

The new availability of content has substantial implications. Any content available anywhere in the world could be switched to any consumer who requests it. Regional sports, like cricket, could be available to expatriates anywhere in the world. Foreign-language programming could be available to multilingual consumers.

#### **How It Looks and How It Feels**

High-definition programming requires approximately five times the bandwidth of a standard digital channel. Networks can carry more high-definition content using advanced encoding technologies. The latest of these use

less than half the bandwidth that the current digital video standard requires for high-definition programming. Deploying this new technology will make more high-definition programming available to consumers.

Efficiency can also advance if the intelligent video network knows what kind of device is attached to it. An iPod screen, for instance, can display an acceptable image with far less data than a large plasma television needs. Future intelligent video networks could tune the data rate to the requirements of the user, providing the best video experience.

Similarly, the level of interactivity is dictated by the network. Today's intelligent video networks allow consumers to select content on demand. Tomorrow's may allow them to burn a DVD of content they select from a library, view caller ID on the television, or use a mobile phone to view content stored on a digital video recorder.

#### **The Network Won't End at the Curb**

The set-top box has evolved from an outlet that delivered 75 channels of analog video to the television into a key component of the intelligent network. A typical home in the United States has three or more televisions, one or more PCs, and a variety of stereo, DVD, and video-game products. Ultimately, digital content will flow among these devices. The set-top box is becoming a hub for digital content, a gateway for digital services, and a distribution point for a wide range of video services.

The home terminal extends the "trusted domain" in which copyrighted content is protected and isolated from pernicious viruses, spam, and popups. This is important to most consumers, who want the highest quality entertainment from a trusted source. It is equally important to the creative companies that put their capital at risk to develop original content.

By expanding the power of the intelligent network and extending it in the home, we can improve the quality of experience for the consumer while helping network service providers create new revenue streams from new services.

# Success by Design: Architecting the Business of the Future

By Paul McNab, Vice President, Integrated Networks Systems Engineering



**The world is changing again. Large numbers of people are taking the fun new technology they are using to communicate and socialize, and they're bringing it with them to the mall and to the office. The lines between their worlds are blurring, and they are demanding that businesses respond, both as providers of goods and services and as employers.**

At the same time, the network is evolving into a primary services delivery platform, one that provides a flexible foundation for the kind of personalized experience these increasingly connected people prefer. The convergence of these trends offers incredible opportunities to businesses that adeptly embrace the new interactive way of communicating, and challenges to those that do not.



Since network connectivity is available today wherever people are and on whatever devices they are using, a new era of interactive social networking has been born. This phenomenon foreshadows a consumer-driven market for all businesses, regardless of size, target customer or industry alignment.

Instant messaging, or IM, has already caught on in businesses following its widespread adoption in the youth market. Today we not only see kids exchanging real-time text messages on their computers or phones, but IM is also improving interactions among internal workers and between support personnel and customers.

In the same way, personalized Website forums, blogs, video downloads, and mobile communications capabilities adopted en masse by today's youth will find creative applications in businesses. Because the consumers of the next generation have become comfortable with this lifestyle, they will demand the same conveniences in their business interactions.

It is commonplace for a member of MySpace—the popular social networking Website—to dynamically broadcast an alert about a party in progress to an IM buddy list and almost immediately double the size of the event. Consider the business potential of this capability. A similar service could bring shoppers to a last-minute retail store sale, quickly recruit nearby emergency and medical personnel, or serve any number of other business purposes still to be imagined.

**A new era of interactive social networking has been born. This phenomenon foreshadows a consumer-driven market for all businesses, regardless of size, target customer or industry alignment.**

### **Shaping Things to Come**

Telecommunications carriers and Internet service providers are rapidly adopting the interactive network services model and recognize its potential. Consider the possibilities of a mobile service provider hosting a music-recognition service, for instance. Customers who hear a song they like could use their mobile phones to dial the service and have the tune quickly identified—plus be given the option to purchase it as a ringtone, download it, or have the CD mailed to them. The whole

interaction would occur in a matter of minutes. A sales opportunity would be instantly created and fulfilled, resulting in a satisfied (and probably loyal) customer.

The simple, standardized nature of Web services lets customers decide how they want to conduct their business with an organization, rather than the other way around. Consumers will drive the experience and will have the flexibility to interact in person, over the phone, by video conference, in a Website chat, or some combination.

Because of this, enterprises are also starting to adopt services-centric networking. In this fast-paced information economy, competitive advantage is no longer restricted to physical product offerings (which can be copied) but increasingly on accommodating the needs of today's and tomorrow's customers. By establishing a services-based technology foundation and introducing Web services into the environment, for example, one can help keep business processes fluid.

### **Getting Ready**

Along with being flexible, tomorrow's network-centric business architecture must also be secure and reliable. One reason is compliance with corporate governance mandates. But security and reliability are also important for serving customers in a consistent, credible fashion that builds customer loyalty and, as a result, lowers churn and increases revenue.

Lastly, the future enterprise architecture should be built to foster creativity, reward innovation, and reinforce common business goals in creative ways. To help design it, organizations should consider hiring from the next generation, so the enterprise customers of tomorrow are working on the solutions today. They might not yet be able to articulate what they're seeking in proper business terms, but they can describe it well enough that their ideas can be translated into a business model.

In a large business it can take years to evaluate and implement business processes and architectures. Considering emerging trends today, and starting to plan for their impact now, will help provide the flexibility to support what you sell tomorrow.

# The Growth of Rural Networking

When most people hear John Chambers say “the network is emerging as the platform” and talk about silos, they immediately think of technology silos.

In my rural location, however, I think of something different—a grain silo. As both a technologist and a rancher, I have a unique perspective on the subject. Despite all of the innovation we’ve seen to date, in reality the network has just begun to transform our world, and it is interesting to contemplate how far the impact of the network’s emergence as a platform will penetrate into our society.

Last year, DSL service finally came to my town. Just a few years ago, rural areas like mine had half the percentage of broadband subscribers as urban and suburban areas. High-speed Internet access was often limited by distance or lack of infrastructure, and the only real alternative was a costly satellite system. But recent data indicate that the adoption gap has narrowed significantly and broadband has become accessible to a much larger rural audience. I might pay a bit more for broadband than my more city-dwelling co-workers, but reliable service and reasonable speeds are finally a reality.

And though access to broadband is a lifesaver for me in my role at Cisco, it also brings interesting benefits to my ranching life. Extension courses on pasture management, animal health, and agribusiness are now only a click away. While it may not be as fast or opinionated as the rumor mill at the local coffee shop, helpful community information is accessible online as well. The Internet is quickly being absorbed by a new demographic and propagating in nontraditional ways.

Urban and suburban Internet users take broadband access largely for granted. If away from the cable or DSL connection at home, a user can generally find a wireless access point only a short walk or drive away. I read daily about ambitious projects to create large wireless hotspots in busy metropolitan areas, such as San Francisco, and

the scale of these citywide efforts is amazing—until you compare it to some of the rural hotspot development projects. A recent project in Washington and Oregon created a hotspot that covers 1500 square miles; that’s more than 30 times larger than the entire city of San Francisco.

But it’s how the rural network is being used that is fascinating me. In typical fashion, these broadband and wireless networks are initially built and used to manage transactions—simple monitoring of equipment, e-mail correspondence, and Web access. But the initial proposed value of the network infrastructure is rapidly eclipsed when the network becomes a platform for interactions.

For example, channels for distributed collaboration are rapidly evolving. The National Plant Diagnostic Network is a distributed organization that uses the power of the network to help detect and prevent the spread of disease that could harm my pastures and forage. And the network helps me plan the management, harvest, and sale of my crops and livestock, because I’m part of an online community that shares information on weather, projected demand, market trends, and pricing.

As the network continues to emerge as a platform, I think it will be very interesting to see the other ways in which our experiences will be enriched.



Roger Farnsworth

Executive Editor

*Executive Thought Leadership Quarterly*

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