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Communications & High Tech

## It's a networked world, after all

By Andy Zimmerman and Mattias Lewrén

Consumers everywhere are waiting for the communications, high-tech, and media and entertainment industries to make good on three promises: a seamless experience, a common platform and superior service. For companies competing for this business, customer-centric strategies, offerings and services are now essential to achieving high performance in a truly networked world.

The networked, digital world created by the Internet and advanced mobile communications is reshaping industries, global economies and the way people work and live. Indeed, technology change occurs so rapidly today and in such transformative ways that the average person might be forgiven a bit of bewilderment.

That being said, new Accenture research strongly suggests that a significant percentage of consumers in both the developed and developing worlds are anything but bewildered. Instead, they are embracing

the devices and networking technologies available today and are actually asking companies to take it all to the next level: *Make everything work together*—simply and powerfully—so that the vision of a fully networked world becomes a reality.

At the heart of this networked world, however, is a fundamental paradox. On the one hand, it's an environment where devices and gadgets are proliferating at an unprecedented pace—faster, in fact, than the global birthrate. Each second around the world, four people are born . . . and 36 mobile devices are sold.

On the other hand—the other side of the paradox—from a business standpoint, it's not really the devices that matter. "In terms of our device business, we realize that the phone itself is no longer the main value proposition to the consumer," acknowledges one senior executive for a major mobile handset manufacturer. "There has to be some other value—some larger picture of which the device itself is just a part."

How to get this new value proposition right, and then execute the best strategy to deliver that value, is the all-consuming question today for the various industry players vying for dominance in a communications, high-tech and media world that has come to be described by the word "convergence." Traditional boundaries between industry sectors are blurring. Internet search and software companies are creating wireless protocols and mobile phones. Wireless providers are going into the media and entertainment business. Entertainment companies look increasingly like service providers.

Our consumer-based research shows that the biggest technology users among consumers around the globe—early adopters that we term "tech-forwards"—are beginning to understand the rich possibilities of a networked world. And they have a pretty good idea of what they want companies to provide in terms of service, usability, capabilities and support. But our research also suggests that it's still very much a horse race when it comes to who will ultimately prevail in this business.

However, based on both our research and client experience, we have identified some of the distinctive capabilities of the companies in the communications, high-tech, and media and entertainment industries that will achieve and sustain high

performance in a networked digital world. The winners will:

- Provide a common platform enabling interoperability, centralized controls and a simplified user experience. Simply put, the mantra of the digital world must be, "Make everything work together."
- Design compelling services for consumers based not on the technologies, communications networks, or functions and features of a device but on a customer-centric viewpoint geared to people's real needs and goals.
- Deliver superior customer support that cuts across vendors and devices, helping people maximize the value they get from the networked world.

### **Trivergence**

Arguably, the most important current communications and technology development today is the growing capability of networking technologies to connect people not only with one another and with the universe of information but also increasingly with *things*—devices, appliances, cars and homes. Accenture calls this "trivergence": the coordination of three components—devices, data and controls—across a ubiquitous network.

This opens up the intriguing possibility of enabling people to manage and optimize more aspects of their lives, unfettered by time and location. But with that capability comes the challenge of managing the flow of information and the interconnectivity of all these networked devices—potentially a trillion of them in the next 15 to 20 years, according to David Clark, an MIT senior research scientist and one of the original architects of the Internet.

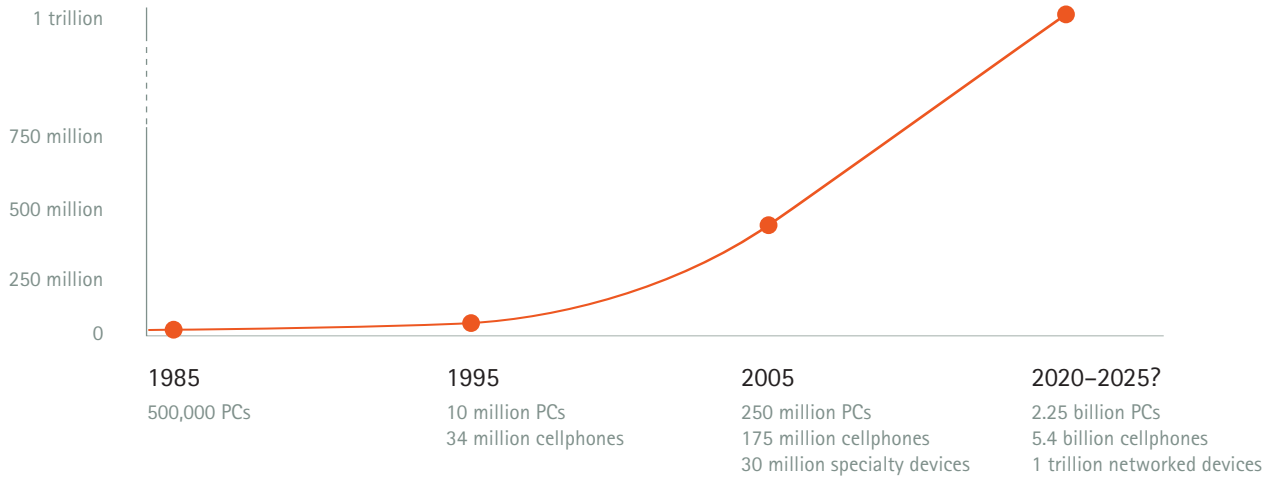
Recent comprehensive research conducted by Accenture's communi-

(Continued on page 4)

## The new complexity

The next decade will bring an explosion in the number of networked devices, and companies must be prepared to manage this complexity on behalf of consumers.

Number of networked devices



Source: Accenture analysis

## A force for good

Tech-forward consumers readily acknowledge the proposition that the networked world is a force for good. Consumers in developing countries are even more optimistic than their US and European counterparts.

Percent of consumers who agree that the trend toward networked devices will...



Source: Accenture analysis

(Continued from page 2)

cations, media and entertainment, and high tech industry groups has focused on this development from multiple perspectives.

In an initial phase of research, we spoke with executives of leading carriers, software providers and media/content companies. In the most recent phase, we wanted to see how the trivergent world looks from the vantage point of tech-forward consumers, early adopters who are already heavy users of digital devices, wireless communications and Internet services.

This research finds that tech-forward consumers have quickly grasped the importance of major technology trends, adopted new devices and services into their daily lives, and are waiting, not always patiently, for communications and technology companies to refine their offerings, resolve the network and platform issues and get the customer experience part of the equation right.

### **Savvy consumers**

The biggest message emerging from our research into trivergence, customer-centricity and networked devices is this: Tech-forward consumers get it, and they are a preview of things to come. Only 3 percent of those we spoke with didn't understand the concept and capabilities of this networked, trivergent world. And 87 percent either agree or strongly agree with the prediction that most digital devices for a home, car or individual will ultimately feature a network connection.

Tech-forward consumers also understand the value of this networked world. Almost 90 percent agree that trivergent capabilities will save them time. More than 80 percent affirm that trivergence will create more business opportunities for them. High percentages also believe that, in the

new networked world, their lives will be fuller and more enjoyable, and that they will be closer to their friends and family. Seventy-eight percent feel that trivergence can help them advance their careers.

The consumers in our study are also prepared to dream big about how a networked, digital world might change the way they work and live. For example, 93 percent can see trivergence enabling better home management, including more energy-efficient controls for things like lighting, heating and cooling. About 80 percent can envision network connectivity for their cars, as well as their refrigerators, ovens, dishwashers and even small appliances such as toasters and coffeemakers.

This is a world where, for example, your mobile device will be alerted if your home is broken into. Or where you can access your music or video library from a hotel room and push the content to a device of your choosing. Or where your car will have its own website, helping you monitor its location, gas gauge and service records.

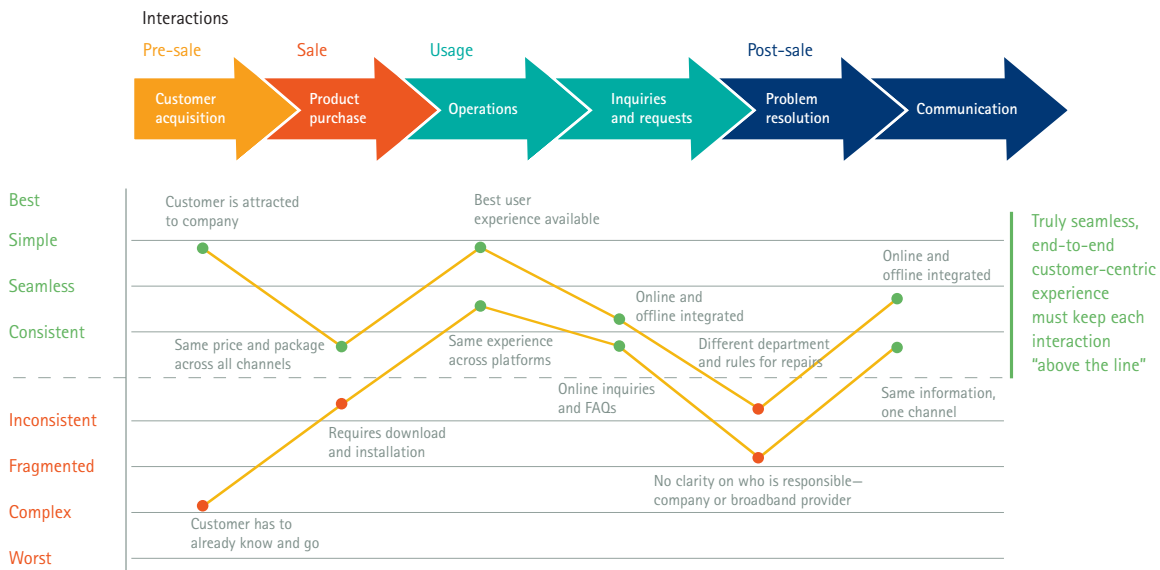
An important finding for all companies planning or currently offering services in the developing world is that consumers in emerging economies appear to understand at a deeper, and perhaps more personal, level how the networked world can positively influence their lives. Significantly higher percentages of consumers in Brazil, India and China believe that the trend toward networked devices will help them save time, create new business opportunities and advance their careers.

These consumers are also more forward thinking than those in developed nations about networked-device innovations. They are more likely, for example, to express strong interest in networked solutions for digital home management,

# The user experience

The chart below is a conceptual comparison between two communications products, based on their ability to deliver an acceptable user experience across the entire spectrum.

Experience assessment against customer-centric coverage criteria of:



Source: Accenture analysis

health care, entertainment and communications.

What does this all mean? In a multi-polar world, economic power is spread much more widely, while economic value flows in multiple directions. New consumers who embrace technology innovations are emerging everywhere, and they are willing to spend to acquire those innovations. These tech-forwards constitute a vanguard of consumers for companies interested in expanding their business into the developing world. They are forerunners of a broader market.

### A common platform

Consumers are already juggling multiple devices—phones, computers, digital cameras, music players and so forth. Most people expect the number of networked devices in the world to grow dramatically. Given the explosion in the number of these devices, interoperability and simplicity are keys to business success in these industries.

From the consumer perspective, one way to help simplify the use of rapidly multiplying devices and services is to give consumers the controls for personalizing their user experiences. Apple iTunes is an example of this technology and design strategy. The iTunes software manages a set of user devices and Web-resident data through controls that we call a “soft panel.”

The soft panel is what consumers see on their side of the network. On the industry side is the *platform*, which is what allows devices to attach to the network and interact with one another. It is also the means for managing traffic and content, and orchestrating user experiences.

The technical details of how such a common platform works are too complex for even the most knowledgeable consumers to understand. The tech-forwards in our study nevertheless have some preliminary opinions about how this platform should work. Almost half indicated

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a preference for an integrated, single website or soft panel to control all their devices and services.

The need to provide that kind of seamless delivery across platforms was also identified in an earlier phase of this Accenture study, which was based on in-depth, hour-long telephone interviews with executives representing carriers, software providers and media/content companies.

That research found that the communications and high-tech industries in general need interfacing technologies to work as transparently as possible from the standpoint of consumers and business customers.<sup>1</sup> The future world depicted by several of the executives we spoke with is one where consumers will expect to maintain an uninterrupted connection as they pick up the phone from their desk, walk out of their building and get into their car. Similarly, consumers will want access to information or portals wherever they are, free of the constraints of any one of the potentially trillion desktop computers, televisions, phones and other networked devices.

Too few companies have developed a set of well-considered responses to the implications inherent in helping consumers manage a world of a trillion networked devices. Concerns seem to be more tactically focused at this stage: Will more bandwidth be required? Will more databases be needed?

There is some recognition that greater network intelligence will be required for routing, billing and utilization of bandwidth. Carriers are already working to meet this challenge—as are content delivery networks, Internet service providers and device makers.

## Strategic shift

Accenture's discussions with industry executives underscore the critical importance of moving the communications and high-tech industries away from a device-centric or technology-centric approach to products and services and adopting, instead, a customer-centric development strategy.

As Peter Bithos of Virgin Mobile Australia puts it, "Removing frustration from the user, especially at the application front end, is essential for achieving success in the delivery of converged services. Currently everything is too complicated to actually put into practice." A senior executive with a major US consumer electronics company is even blunter: "Most companies are now forcing customers to be small-scale systems integrators, and most consumers are either turned off or overwhelmed by this."

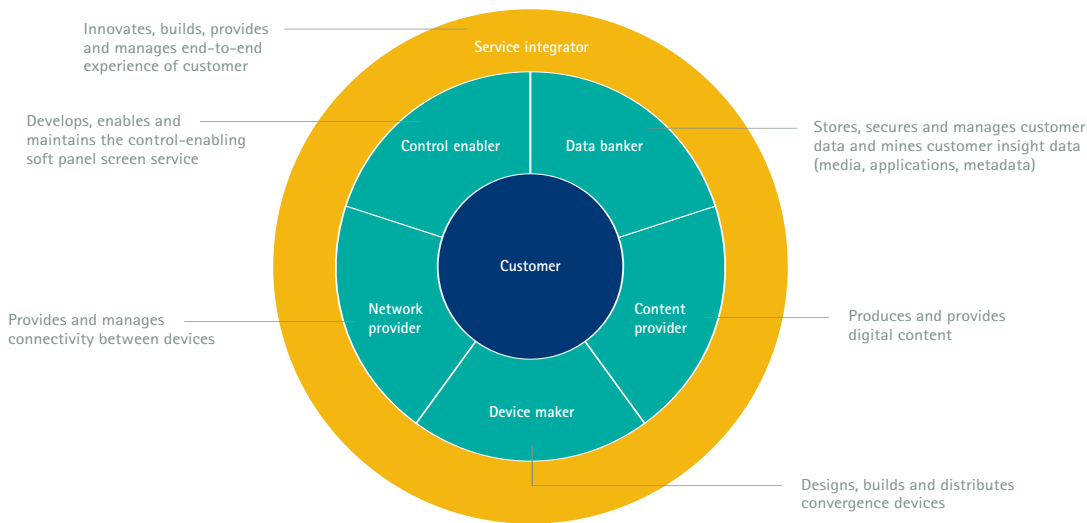
This executive's concern is well founded. Consumers who are indeed overwhelmed by complex products or devices that don't clearly meet their existing needs or awaken a new one are returning the hardware and canceling services.

The problem of usability is even more acute in the enterprise systems realm. For knowledgeable, tech-forward consumers, most of whom are young, user-friendliness is a given. "Young consumers are used to the drag-and-drop simplicity of online applications like Facebook," cautions James Bailey of BT Wholesale. "Compare that with a clunky expenses system in a corporate environment. At some point the Facebook generation grows up and becomes the strategic buyers, the future leaders of enterprise. So companies have to be creating products and services that meet or exceed the expectations of the Web 2.0 generation." (For a related article, see "Does your

# The Accenture Customer-Centric Converged Services Framework

Success in a networked world will be determined by the ability to meet the unique needs of each customer. The converged user experience is produced through the orchestration of devices, data and controls. These components can reside anywhere on the network and are often owned by disparate entities. The Accenture Customer-Centric Converged Services Framework delineates six

roles that typically come into play when engineering a customer-centric converged experience, along with the capabilities inherent in each role. Today, no one company has yet taken on all six roles. Many, however, are moving in this direction. Successful implementation of the Customer-Centric Converged Services Framework requires close collaboration among industry partners.



Source: Accenture analysis

company have an IT generation gap? *Outlook*, January 2009.)

The challenge of customer-centricity, however, is about much more than usability. It's about the customer's entire experience with a company and its products and services. Our research reveals the challenge of delivering seamlessly across at least six stages of the end-to-end customer experience—starting with acquisition and then proceeding through purchase, operations, inquiries, service and communications.

A company can excel in one or two of these dimensions—in marketing, for example, or the purchase experience—but then run aground in others—usability, for example, or support and service. Companies

need to strategize across the entire spectrum of the customer experience and then spend wisely.

## A superior experience

The fact that no clear winners have emerged in the race to become the dominant platform provider of trivergent devices and services was confirmed by our consumer study. When we asked survey participants what types of companies they would trust to ensure that everything in the trivergent ecosystem will work together smoothly (multiple answers were permitted), 58 percent cited Internet or software companies, while 48 percent named telecommunications, cable, satellite or media companies. Consumer electronics companies were cited by 46 percent of those surveyed. Retailers trailed the pack at 19 percent.

## No clear winners have emerged in the race to become the dominant platform provider of trivergent devices and services.

Even if companies capable of dominating the networked world have yet to emerge, the capabilities needed to achieve that success are clearer: providing a superior user experience and excellent customer support.

When respondents were asked what they are looking for in selecting a company that “makes everything work together,” customer support was the top answer, at 85 percent. High security and privacy standards was named by 80 percent of consumers. Other capabilities that ranked high were support for commercial standards, a trusted brand and a strong technology reputation.

Different kinds of companies need to step up in different ways to enable the trivergent devices that will increasingly dominate consumer technology. Usability enhancements are important, and plug-and-play features that would make networked devices easier to set up and manage need to improve. Companies must also be willing to offer the in-home set-up and maintenance services that would give customers the confidence they need to create their own home networks and connect their trivergent devices.

What are the key implications and imperatives gleaned from these Accenture research studies?

### 1. Collaborate to win

Successful players in the networked world will be those that can offer a seamless customer experience that integrates six essential business roles: service integrator, content provider, data banker, control enabler, device maker and network provider. (For more, see “The Accenture Customer-Centric Converged Services Framework,” page 7.)

At this point in the evolution of the industry, it is unrealistic to expect a single company to play all these roles. Accordingly, we believe that collaborative partnerships will be

essential. As one high-tech company executive told us, “We don’t want to have the customer set up an account with us so that we collect the money and then pay part of it back to the carrier. That is a lot more arduous than using the billing relationship that the carrier already has established. Anytime a company already has a good relationship with its customers, we try to leverage that.”

One challenge that companies face, however—especially many traditional industry leaders—is that they are poorly prepared for a competitive environment where the ability to seamlessly collaborate with other companies, even competitors, is a strategic priority. Whether in terms of organization, processes, policies or systems, companies are not set up to quickly form and dissolve the relationships needed to get new services to market quickly. “Collaboration agility” will become increasingly critical in the industry over the coming years.

Collaboration will also be essential to creating the capabilities needed to succeed in a convergent world. The marketplace has recently witnessed a flurry of global mergers and acquisitions focused on acquiring the capabilities companies need to fulfill new roles. Many of these transactions, however, have been far from successful. Our research indicates that in many cases, these companies probably would have been better off collaborating to create these capabilities rather than acquiring them through traditional approaches.

### 2. Develop a common platform for an integrated central control or soft panel.

For some time, companies have pursued customer portals—either online or mobile—as a means to grab and hold customers. With the proliferation of networked offerings, the company that provides a service enabling a consumer to control multiple devices

**Companies may need to provide 100 new services or more each month.**

and services across vendors from a single, simple, comprehensive soft panel will have attained the high ground in the never-ending battle for the consumer wallet.

Beyond the soft panel, companies must understand and map the customer experience they want to control or enable. As noted earlier, companies must plot their customer strategy across the entire spectrum of the customer experience—from purchase to use to inquiries to repairs. Customers expect each of those touchpoints to be a simple, consistent and flexible experience. Connecting a series of positive interactions defines the seamless, end-to-end customer experience.

### **3. Dramatically improve speed to market.**

Our research suggests that trivergence and the increased focus on customer-centricity will compel companies to offer more services targeted to more narrowly defined customer segments. Therefore, improving speed to market, while simultaneously driving down product development costs, will be critical. Companies may need to create 100 new services or more each month, and the executives we spoke with admitted they simply do not have that capability right now.

### **4. Provide superior customer service and support.**

The ability to deliver effective customer service and support is absolutely essential to establishing a winning

position as the controls provider in the networked world. And according to our research, the playing field is wide open when it comes to achieving dominance in this area, at least from a consumer perspective. When we asked the consumers in our study to rate specific companies that they felt could serve as trusted providers, they listed a variety of well-known global brands—ISPs, software companies and device makers—as well as carriers in the countries studied, which have national but rarely global brands.

One lesson was clear: Carriers especially need to act swiftly, since they generally appeared from the middle to the bottom of the lists of companies mentioned.

Each type of company has both strengths and weaknesses. Technology companies such as Microsoft, Google and Nokia have strong global brands, but customer support has not been, to date, one of their core capabilities. Outsourcing such a capability is certainly one strategy these companies should consider. Telephone companies have support resources, but lack global presence. Retailers such as Best Buy and Circuit City, which have done the most work to date in the area of premium customer service and support, do not come readily to consumers' minds as providers of unified network services. These companies could stand to become more aggressive in positioning themselves as major players in the networked world.

Accenture believes that today's clear trend toward networked devices is a revolutionary development—even in a technology environment regularly marked by significant advancements. If it is true that the future will bring with it a ubiquitous network connecting a trillion devices, then it becomes all the more important for companies to focus their efforts on ensuring that devices and services are interoperable and can be managed effectively.

A growing number of consumers in both developed and developing countries already know they're living in a networked, digital world and, as a result, they have very high expectations of the companies in these allied industries. If these companies want to sustain high performance in the long term, they must move quickly to meet those expectations.

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