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# The Thought Leader Interview: Didier Lombard

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BY ART KLEINER AND PIERRE PÉLADEAU

# The Thought Leader

## Interview: Didier Lombard

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**A** formidable transformation is taking place in the global telecommunications industry. Over the past few years, the operating margins for many telecom companies have shrunk rapidly, as mobile phone service has overtaken fixed-line service, data traffic has outpaced voice traffic, and the old bread-and-butter phone service has become commoditized. Meanwhile, global demand for data services has increased massively, especially with the emergence of video streaming and downloading on the Internet.

This “data tsunami,” as it’s been called, has grown in intensity with the proliferation of data-enabled smartphones. Cisco Systems Inc. estimates that the total volume of data circulating on mobile networks will grow from 0.09 exabytes (97 million gigabytes) per month in 2009 to 3.6 exabytes (3.9 billion gigabytes) in 2014, roughly doubling every year. Even with new technologies for compressing data, the ability of mobile networks to absorb this traffic remains limited. The net result is a major challenge for telecommuni-

cations companies: finding the capital to build all the networks needed to handle this data while still maintaining the loyalty of customers and the goodwill of regulators, and fending off new Internet-based competitors such as Google, Skype, and Facebook.

In Europe, one major telecommunications company facing this challenge is France Télécom SA. Known for its Orange brand, it offers voice, Internet, and mobile services. France Télécom is the third-largest European telco (after Deutsche Telekom AG and Telefónica SA), with about 193 million customers worldwide in 2010 and approximately 180,000 employees (roughly half of them located outside France). Its annual revenues are about US\$80 billion, of which it invests more than 10 percent in building new infrastructure.

Didier Lombard, the chairman of France Télécom since 2005 (and CEO from 2005 to 2010), has championed a vision that might have seemed unthinkable several years ago: Large, incumbent telephone companies as pioneers of digital enterprise. In his years leading the company, he has stepped up innovation in services and content de-

velopment, expanded service into eastern Europe and Africa, and created Orange Labs, a global network of R&D facilities. These all represented dramatic moves for a company that had been a government-controlled organization before 1998, and part of the French postal, telephone, and telegraph ministry before 1990.

To some observers, they were also unusual moves because Lombard had spent most of his career in the French government. Having

pay-for-access Internet services, including various forms of video on demand; it will also mean new applications in healthcare, financial services, and many other industries as digital telecommunications inupdate them. It will almost certainly mean new types of partnerships with other technology companies; for example, France Télécom recently began selling the Apple iPad in its retail stores.

Lombard's stance has landed him in the middle of the debate over

economic transition, and we are exactly in the year zero of this new era. The pivotal moment is not last year or next year; it's right now. The explosion of data on the networks, and especially in mobile applications, has multiplied by 200 to 300 percent since 2009. In that time, most people have begun to use their mobile phones and the Internet in a completely different way in their day-to-day life.

Previously, voice communications represented the majority of telecom usage. Data use was marginal. Now, some telcos — in Asia, for instance — have seen the proportion of voice drop to 20 percent of the traffic. The rest is data. All sectors that use telecommunications, which in fact means all economic sectors, will have to transform their business model. Some have already been drastically affected: for example, music, video, and publishing. But this change will be more widespread.

**S+B:** Is this shift really that much more drastic than the changes we've already seen over the past decade?

**LOMBARD:** Each time in the past, the change was focused on one sector, it took a reasonably long time to shift, and it was not as disturbing as it is now. This time, the transition will be very rapid. This time, incumbent telco players will have to adapt, because the new players are not waiting. And the transformation of the business model will be painful for many of us. The old business principles will no longer work in the new context.

Many people tend to consider the future as a continuation of the past. They believe, for example, that the new generation of networks will simply bring more capacity online

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## “All sectors that use telecom will have to transform. Some have already been drastically affected: video, music, and publishing.”

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started in 1967 at France Télécom as an engineer, he moved in 1988 to the French Ministry of Research and Technology, where he became scientific and technical director. In 1991, he took a post as managing director of industrial strategy at the Ministry of the Economy, Finance, and Industry; in 1999, he became the founding chair of the French Agency for International Investments, making him in effect the government's chief ambassador to potential investors in his country. He rejoined France Télécom as a senior vice president in 2003, became CEO and chairman of the board in 2005, and was succeeded by Stéphane Richard as CEO in 2010. (Lombard remains chairman.)

Lombard, who is 68, believes that telecommunications companies will have to cope with the data tsunami by finding new business models. In some cases, this will mean

Net neutrality — the idea that Internet access providers must offer equal access to all sites, without favoring them on the basis of either the type of content or the business relationship. Although he acknowledges the importance of open access for Internet users, he is also a leading proponent of value-added businesses, which he says are needed to generate revenues to pay for the continuing rollout of new infrastructure. In 2008, his book *The Second Life of Networks* (coauthored with Georges Nahon and Gabriel Sidhom) was published by Odile Jacob, in French and English editions. Lombard met with *strategy+business* in New York last autumn.

**S+B:** What are the essential issues confronting information and communications companies right now?

**LOMBARD:** I think we are living through an exceptional period of

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within each of the existing infrastructures. But in fact, the impact of this explosion is not only felt in the amount of high-speed data traffic. It is also causing a rapid, permanent change in the ways people are interconnected through broadband integrated networks.

**Transforming Every Sector**

**S+B:** How does this affect telecom providers like Orange [France Télécom's brand]?

**LOMBARD:** In two ways. First, it forces us to expand capacity. At Christmastime 2008, there was a major crash in networks in New York and London, because the traffic had increased so quickly. We had no problem at Orange, because we had anticipated that we would need the capacity and we had invested in it. But the explosion in demand will continue, and we have to take care of it.

The main part of the investment to serve mobile phones, paradoxically, must be in the fixed network. Even the mobile networks with the best coverage require capacity behind their transmitters, or they fail. Some countries have installed 3G networks where custom-

ers can't reach any servers, because there is too little capacity on the trunk lines. We will need a huge investment in fiber optics. We also probably have to accelerate our "long-term evolution" [LTE] and fourth-generation mobile service rollout. [LTE/4G is a mobile data platform that will be launched in many countries in 2011.]

The second impact is in customer behavior. Customers will use their mobiles almost exactly as they use personal computers, and in other ways that change the business model for a lot of activities. For example, when they read books on their iPads, that puts pressure on publishers to change their business models. France Télécom has to get involved in more aspects of the media business, or else we become merely the provider of capacity on our channels — a utility company. And that doesn't give us enough margin to build out the new-generation networks.

The best response is to adapt: to try to understand the situation, invent new business models, and create new activities. That's why the traditional media providers are a little bit afraid. The publishing people are transferring their activity to elec-

tronic books, but they're not sure they can continue to conduct the same kind of business. The same is true for motion picture producers. And companies in our industry as well. My outlook on this is optimistic. If you take steps now to move, you can be very successful.

**S+B:** What other sectors besides media will have to transform?

**LOMBARD:** Healthcare is one. Healthcare expenses are increasing every year because the population is living longer. But the insurance system, which in our country is managed by the public sector, can no longer afford to pay all the healthcare costs of elderly people. Developing powerful IT systems for medical information saves a lot of expense and leads to better healthcare. For the time being, people think this healthcare IT business is marginal. But it will not be marginal forever. In the end, telecom revenues from healthcare will be higher than those from video.

Having Internet access to government services and documents is another example. Still another is retail. Already, the success of electronic commerce is very high. In Europe, more than 10 percent of the turn-

over of goods and services is realized through e-commerce, and almost 5 percent of all the purchases made by French households take place on the Internet.

**S+B:** The majority of the new traffic is video, isn't it?

**LOMBARD:** So far, yes, but not just the type of video we've carried in the past on cable TV. Two or three years ago, the quality and accessibility of amateur-produced videos changed; they are now downloaded or viewed as much as professional videos. This was observed first in California, but now it's valid almost everywhere. People video their lives and broadcast the videos to their friends. Meanwhile, they have access to all the professional videos produced worldwide — and to college courses, concerts, sports events, and everything else. The demand for this is growing exponentially, and the interconnections among mobile devices, TV screens, and computers introduce more and more possibilities.

In Shanghai, for example, a customer can have one service, delivered by the telcos, with videos plus games plus cable channels plus the Internet, all on the same screen, with a flexible way to navigate among them. In Eu-

rope, the growth of connected TV services will explode in 2011. In this world of abundance, someone will create a search engine applicable to videos, and that will change everything further — and create a very good situation for the company that does it.

### A Balanced Business Model

**S+B:** How do you pay for the bandwidth investment?

**LOMBARD:** The costs, for the territories we serve, are more than €3 billion [\$4 billion] annually. And of course we need to find the appropriate revenues to fund it. If we don't invest, the quality will decline.

In the past, telecom economics were based on voice. The subscriber paid for each hour of voice traffic, and the data traffic — including the Internet and video — was considered marginal. We offered it more or less free of charge. Now it represents a much larger percentage of our total traffic. One of the problems we have with Skype or Google Voice is that it is billed as free, but the subsidy is artificial. We cannot go on with this version when voice becomes a minority of the traffic and data costs and usage are no longer marginal. We have to reshape the tariff; data cannot continue to be marginal in price.

The problem is of course to persuade consumers to accept this change. One move toward a solution was made in mid-2010 with the Google/Verizon joint venture agreement [to offer premium content and services over a separate managed network]. For Google, this is a fundamental step: It recognizes that in using a majority of the capacity, the company has to participate in the cost. If we follow this direction, the

problem may be solved — provided that we can manage the rules precisely. In the end, there will be both managed services and an open Internet, and we will have to take care that everyone finds what they are looking for in this context.

**S+B:** How does that square with the demand for Net neutrality?

**LOMBARD:** The basic issue is not Net neutrality, but making possible the accommodation of all the signals that are needed in the future world. To do that, we must restructure our business model. Of course we are ready to guarantee equal access to all the Internet players on our networks; we have no intention of filtering anybody. At the same time, we have to find a way to finance everything. And this means that our approach has to be balanced. We cannot make everything free of charge, and stay on the old model with free data. And I think a lot of people are starting to understand that.

**S+B:** What is your view of the business model of a telecom operator down the line? After a few years, how will the distinction between managed services and the open Internet be handled?

**LOMBARD:** Of course, we are at the very beginning of the examination of this new equilibrium. We know we will need to draw revenues from the broadband connection itself, and we will need to participate in some of the services that are delivered on it, in partnership with the content providers. In the end, we will need a revenue model that balances what we get from the open Internet with what we get from more managed services.

Our major asset right now is our link to the customers. Orange

has more than 190 million customers worldwide. We know them, and they trust us because we don't disclose information about them, and we can block most types of irritants and cybercrime. If we don't give our customers everything they want — ease of use, protection against irritants, trust, and access to the entire Internet — they will be tempted to move to other platforms.

### The Role of Government

**S+B:** Talk a bit about the trajectory of your own career, from the French government to leading France Télécom, and now being a spokesman for the evolution of the digital world.

**LOMBARD:** I have had a very fortunate career, with a rich variety of experiences over the years. I was very lucky to start out as a young engineer at the France Télécom labs, which was one of the top three laboratories in the world (along with Bell Labs in the U.S. and NTT Labs in Japan) in my field. There, I was involved in some of the major technology changes in the telecom industry — such as satellite communications, fiber optics, and the Global System for Mobile Communications (GSM).

When I moved to the French Ministry of Research and Technology in the mid-1980s, I became engaged with many other industries, such as health, transportation, and energy. Today, these same industries are confronting the same issues that we face in telecom; they all have to integrate into the new Internet world. Then in 1998, through another posting as the ambassador in charge of foreign investment, I had a great opportunity to experience the economic and industrial stakes of national commercial policy at

an international level.

In 2002, when Thierry Breton was appointed CEO of France Télécom, he asked me to help him build the strategy of the company. So after a 20-year absence, I returned to the company where I had started my career. When Thierry Breton left the

**LOMBARD:** Yes. Even in France, there is always a debate about the interference of the state with the economy. My own view is that the government can make many legitimate moves to help the economy, but it cannot substitute its planning for market choices.

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**“Our major asset is our link to the customers. They want ease of use, protection against irritants, trust, and access to the entire Internet.”**

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company to become the French minister of finance, in 2005, I succeeded him as CEO of France Télécom for the next four years.

**S+B:** What did you try to accomplish during that time?

**LOMBARD:** It was a fascinating period because I understood how much our business was changing. Previously, we had separate businesses for fixed lines, mobile phones, and the Internet. I had to persuade our managers to integrate them. We also set out to increase the number of subscribers for France Télécom, and they went up by 50 million. Then, in 2010, we separated the functions of CEO and chairman. Stéphane Richard is now the CEO and, as chairman, I am no longer involved in day-to-day operations but can focus on the company's major strategic issues.

**S+B:** As head of industrial affairs, you must have learned a great deal about the role of the state in governing the private sector. Does that influence your views on regulation and digitization now?

When government works with entrepreneurs who have skills, ability, and a reasonable goal, but who need some help, it works. A good example is what the French government did with STMicroelectronics [a French–Italian semiconductor and computer component manufacturer headquartered in Geneva]. In the 1990s, I was persuaded that if we didn't help this company, it would disappear, and there would be no more microelectronics industry in Europe.

Therefore we decided to recapitalize STM, to help it fund R&D and so forth, and the company survived. Today, it is the fifth-largest microelectronics company worldwide. Not every case worked as well, but this showed us that intervention can be effective, as long as it is in line with the market.

In the telecommunications sector, the best model of industrial policy is China. China has systematically covered the steps for establishing a new economy, including subsidizing R&D and universities. Now it is subsidizing large companies to win market share in Africa

and Europe. In the past, China produced low-cost products. Now, the best equipment available on the market — not always, but most of the time — is Chinese. That type of systematic industrial policy is the way to approach a changing infrastructure technology.

**S+B:** What would be the optimal form of regulation for the telecom and media industries?

**LOMBARD:** It would be oriented to global competition and rapid adaptation. Most regulation, by its nature, is old-fashioned, because it takes years to move from the initial discussions to defining the rules to hiring the commissioners who will enforce it. Then, when major changes like digitization and convergence occur, the regulations don't take them into account.

For example, in Europe we have 27 national regulators, plus one for the European Union, and the rules have been established by, let's say, old-world thinking. Regulations governing television, publishing, and copyright are often designed to protect the local media players. In general, they're focused on separate markets. But the new digital system has no national borders; the Internet is worldwide. No country can protect its media from global change and competition. Google, Apple, and Facebook will all be global media players. Facebook has 500 million subscribers, which is much larger than our subscriber base. Regulators have not incorporated this reality into the design of their regime. I sometimes think that if we had had our current regulatory regime at the beginning of the world, we would have a perfect market in flint. But we'd never have gotten to the Bronze Age, because it would

have been forbidden to merge different types of metals.

I think we will go through a crisis of some sort before we find a solution to this. Meanwhile, telecommunications companies will innovate as much as they can within the parameters of the regulations.

### The Innovative Telco

**S+B:** What kinds of innovations do you see as critical for telecom companies to experiment with?

**LOMBARD:** Let's start with Quadruple Play, which is our response to convergence. During the past 15 years, we had to split up the services we delivered — between the fixed line, Internet, and the various mobile lines. It was a nightmare for customers; they pay different rates and have different contracts for each service. In France, regulation did not allow us to link these services, because that was perceived as an unfair competitive advantage.

Now we are on our way to consolidating all these services. Soon, our customers will get packages that incorporate everything in a flexible way. They will carry their Internet access from office to home to a house they're visiting, and to pay for all their family mobile and landline calls with a single arrangement. It will be simpler and cheaper for them, and for us it will be better, because we can optimize the network. Any voice call may travel on mobile lines or conventional landlines; sometimes on Wi-Fi; and sometimes on some more advanced system that we haven't yet established.

This in itself will solve much of our capacity problem, because in each situation people will use the most efficient system. The present situation, where people use mo-

bile phones at home, is stupid. It uses up the wireless phone frequencies, while the fixed line remains empty. If you want to optimize, you would rather be flexible, connecting through Wi-Fi and packet switching [Internet protocols], where the quality is better.

**S+B:** What other innovations are significant?

**LOMBARD:** We introduced our own content with our sports channel. Of course, this is expensive, but we can provide a lot of new services. For example, if customers want to focus on some part of a game or to rewind, they can do it themselves. We also offer a channel broadcast in 3-D.

We have not publicized our business-to-business service, but we have targeted big corporations more aggressively than the individual consumer. Voice over IP was operational with all our big networks five years ago. Videoconferencing is in our package for corporations.

We have made many efforts in the health sector. Innovation here is complex, because there cannot be any failure in the system. Very simple systems must be used by medical people, who are not necessarily technicians. There must be a lot of R&D behind this. We have worked with a manufacturer of terminals to introduce electronic terminals near hospital beds, on which patients can watch TV, but the most important part is the data it shows about the patient: medical imaging, the health records, and so on. The medical staff don't have to go to another part

of the hospital to look at the data. It took two years to develop and stabilize this system, incorporating experience from early users.

**S+B:** What role will France Télécom play in providing more fundamental Internet B2B services? Will you be competing with Google and Microsoft on this?

**LOMBARD:** We are proposing cloud computing services, which we developed with another company on our network for the big corporations.

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## In the future, “any voice call may travel on mobile lines, on conventional landlines, or on Wi-Fi.”

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This puts us already in competition with the companies you mentioned. Yet the sort of computing proposed by all the different players is very different. We have tried first to understand the basic needs of our big corporate customers, to create very simple services that clearly improve day-to-day operations. We are not going after sophisticated systems at the beginning because the leading customers are afraid of our expanding too quickly in this area.

**S+B:** A number of telecom companies are seeking to expand their mobile footprint. In the past, you declared that Africa is a priority. Where do you see the greatest global opportunities today?

**LOMBARD:** We are currently present in western and eastern Europe, Africa, and the Middle East. Our expansion, for the time being, will be mainly in Africa, because this continent will be a big player in the new digital economy. The first wave of

activity there, with the mobile telephone, is widely recognized. But there will also be a rapid second wave. As soon as you put up a 3G network, people can use the Internet. And the African population is very smart at this.

**S+B:** They're ahead in mobile banking, for example.

**LOMBARD:** We have installed mobile banking in the Ivory Coast, Egypt, Kenya, Uganda, and many other countries — both French- and

English-speaking. We will continue our expansion in Africa because the market's growth rate is high. And we are participating in laying digital cables on both sides of the African continent. This doesn't mean we will ignore opportunities in other parts of the world, but from an operational point of view, it's better to have our territories near one another, because we can introduce local roaming and keep costs down.

### After the Transition

**S+B:** There has been a great deal of consolidation in the telecom industry. Do you see more major mergers and acquisitions coming?

**LOMBARD:** Right now, there is not much opportunity for large-scale consolidation. And as always, big consolidation is a big challenge because the synergies must be realized in a very short term. We have been very prudent.

We have developed partnerships

with other companies to share networks, develop parts of the Internet, and rationalize day-to-day operations. It's a way to gain some of the advantages of restructuring while remaining efficient.

**S+B:** How do you manage the shifting partnerships and alliances?

**LOMBARD:** Everybody in this industry is working cooperatively, with a genuine attitude of partnership. Nobody wants to build a cathedral all alone, because if you try to do everything yourself, it will take too long.

We cooperate with many players, and we disclose all alliances. With each, sometimes we compete and sometimes we collaborate. For example, we use Google's search engine on our network, and both companies make a lot of money from it. At the same time, we compete with some of their services.

**S+B:** Say something about the future of your company. Do you think that France Télécom is ready for the challenges you have described?

**LOMBARD:** France Télécom has already demonstrated its capability to anticipate and respond to change — for example, in facing market deregulation in France, in our precursory move to build a convergent operations model, and in anticipating the disruption of voice over the Internet. I am highly confident in the capacity of our company to respond to future challenges in the same way. +

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