

Perspectives

Cable operators are rapidly moving away from purely delivering television and movie channels to customers. They are shaking up the communications and media markets around the globe as they seek to improve their financial and operational performance by delivering broadband voice and data applications, owning and distributing unique and exclusive content, and becoming the provider of choice to more consumers.

In the following interviews, we hear from executives at three cable companies that represent differing markets and stages of evolution. Their opinions and outlooks offer some interesting insights as to where this market is headed.



An Interview with Steve Burke, Comcast Cable

Comcast Cable is the largest provider of cable services in the United States and one of the world's leading communications companies. The company offers digital voice, video, and data services and develops and delivers innovative programming. Here, Steve Burke, Comcast's COO and president, talks about the reality of competition with telcos, the importance of customer service, and how triple-play services and content will drive the company's growth.

Communications Review: Competition in the communications market is very intense. With traditional and nontraditional operators offering similar services—video, broadband, voice, mobile—boundaries are being blurred. Who do you see as your main competitors right now?

Burke: The cable industry in the United States has had robust competition from satellite for more than 10 years. EchoStar and DirecTV, in particular, are two well-financed, aggressive competitors of ours. What is new in the United States is the impending entrance into the market of the big regional telephone companies. The good news is we have some advantages that I think are going to prove to be beneficial over the next five years.

The first advantage is that in virtually all of our markets—we pass 45 million homes—we can offer the triple play of video, voice, and data. Our competition can offer all three products only to a very small number of homes in our markets. Specifically, fewer than a million of the homes that we currently pass can get all three products from a competitor. And it's going to take the regional Bell companies, in our estimation, a long time before they are in a position to do what we can do already.

The second reason why we are excited about the triple play is that offering all three products over the same infrastructure, installed by the same person with one consolidated bill, and doing it all for a very attractive price is a better value for our customers than buying it on an *a la carte* basis would be. Also, we can deliver very efficiently over a pipe that we have already invested in, we use our existing technical workforce, etc. So the triple play is what has really changed the US cable business over the last year or so.

Cable companies used to grow about 10% per year, and now most cable companies are growing up to 15% per year. When we were in the video business, we struggled to maintain the same number of subscribers every year. Now we are in a position where we are gaining a lot of telephone customers. This year we will gain about 1.5 million telephone customers and 1.5 million high-speed data customers, and our total customer accounts should grow because we are doing this. So we

look at the next five years as a chance for us to gain significant market share. That's not to say Verizon and AT&T won't take some of our video customers, but we think we will take a lot more of their phone customers.

The triple play is going to fuel all three of our businesses in a way that our competition can't really match in most of our footprint.

Communications Review: Competition in the US market is characterized as head-to-head across all of these markets and equal footing from a technology perspective. Is this the reality?

Burke: I think that a year ago people expected head-to-head competition everywhere, immediately. I think they ignored the challenges the Bells are going to have as they enter the video business, and they ignored the head start we have in getting into the phone business.

I believe that has changed now, although a lot of people still assume that the Bells are closer to having video than they are. There are two strategies. One is a strategy Verizon has that involves building out fiber. They are building out three million homes a year, so it's going to take them a long time to grow. Right now, they have five to six million homes to which they can offer FiOS [fiber optic service], or really high-speed Internet, immediately.

AT&T, BellSouth, and everyone else are using a technology called IPTV [Internet protocol television], which no one in the US has deployed at scale. IPTV has a lot of technical challenges, particularly in a country like the US where there are long geographies, large distances. The twisted pair, which has been around for over a hundred years, was designed for a point-to-point phone call—not for delivering TV.

It's not unreasonable to assume that over the next four or five years we will get 20% telephony penetration—which will be nine million customers of our 45 million homes. If we get 10 or 20 times as many telephone customers as the regional Bell companies get of our video customers, then it's all going to be positive.

In this process, what we are really trying to do is gain not only market share but also customers who have our Internet service, phone service, and video service. They

have their e-mail address, their telephone number, and everything they do regarding video with us. Once we get customers buying all three products, they are much less likely to leave.

Communications Review: Are you finding that churn rates are increasing in areas where the telcos have built fiber?

Burke: In terms of video, there are fewer than one million homes in our footprint to which the telephone companies could offer video. In these areas, we don't think the telephone companies have a significant number of subscribers. So, right now, video is not a relevant question. In terms of high-speed Internet, they do have some customers but a small number in comparison. We have 10 million high-speed data customers in our footprint, and they have fewer than 100,000 of our high-speed data customers.

A reality for us is that we have had head-to-head video competition with DirecTV and EchoStar for 10 years. Based on our experience and our thinking, when you have one supplier of a service, some percentage of the market—15%, 20%, 25%—will do anything to get a second supplier. Compared to our 10 or 15 years of competition from the satellite companies, the regional Bell companies had no competition for phone services until the cable companies showed up. We think it's been much easier for us because we are the second entrant into the phone business and the phone companies are the third or fourth entrants into the video business.

Communications Review: Can you talk a little bit about customer relationships and the role they play in competition?

Burke: That's our biggest challenge. Ten years ago, a cable company had only one product—analogue cable—and at the time people would pay \$20 a month to get 40 or 60 channels of TV. Today, the majority of our customers pay us more than \$80 a month and many pay us \$120 to \$125 per month; inevitably, people's service expectations are greater when they pay that much money.

We have 70,000 employees in the Cable Division, and we are growing revenue-generating units at a rate of 15% to 20%

a year. Every 18 months or so, we are introducing a new line of business. It's very hard to manage that growth and improve our service when we have a lot of employees who grew up in an environment where service wasn't as important as it is today.

How do we manage the growth, how do we stay competitive, and how do we keep our service or improve our service in the process? It's almost tempting to slow down and just concentrate on service, but our feeling is that we have a window here and we need to be aggressive on units while trying to improve the service at the same time.

Communications Review: Where is the next growth opportunity for Comcast?

Burke: One of the wonderful aspects of the cable business is that for the last 10 years there have been new growth initiatives. The business never has slowed down. We've had 24 consecutive quarters of double-digit growth. A lot of the growth for the last 10 quarters has been digital and high-speed data. We see the commercial, or corporate customer, segment as the next growth engine; it is bigger than our existing residential business. If we get 20% or 25% of that segment, that will be a great driver of growth.

We think that, if you look at our footprint, about \$20 billion worth of commercial business is done in the areas we serve. Somewhere around 70% of it is from small and medium-sized businesses, which we think are a better target for us because we have fiber very close to a lot of those businesses. Trying to compete to replace the regional Bell companies as the telephone provider at General Motors or IBM would be costly. That doesn't mean we won't do some large corporate business along the way, but it isn't our first target market.

In addition to the triple play, the second strategy we've been pursuing for a long time is to make sure that each of our three products is differentiated and is as good as or better than the competition. For instance, 10 years ago, satellite offered more channels and better picture quality than we did. Now that we've rolled out digital ubiquitously and are making changes to our infrastructure, we have as

many channels as satellite does. But we also have something that satellite doesn't have: video on demand. We are trying to be innovative with digital video recorders and high definition.

We are doing the same thing with high-speed data, where, in most markets, you can get DSL for a cheaper price, but we offer more speed. We have maintained a 50% market share with higher average revenue per subscriber because we offer progressively faster speeds.

The third strategy is to pursue converged services that offer the ability, once you have a triple play, to do things that cross all three products. The easiest example would be caller ID on your television set. Another example is accessing your voice mail via your high-speed data connection on your computer. We are trying to do more of those things that will give the consumer an innovative product and also encourage people to take all three products from us.

Communications Review: How does Comcast differentiate itself?

Burke: Right now, our biggest differentiation is that we can offer all three products and our competition can't. You want to make sure that you differentiate, I think, in terms of what products you offer. Our ability to localize our products is also a differentiation, and some of that is manifested through our channels. We try to do whatever we can because we tend to have more local management. We try to differentiate in terms of how we interact with the communities we are in.

Communications Review: Comcast has been focused on the local market, and now you have a product-driven model with execution by regional markets. How do you deal with the tension that those two components create?

Burke: We believe in decentralization, and that's always worked for cable. The larger you get in any human endeavor, the more you need to break up the work; otherwise, it's unmanageable. That having been said, right now a big percentage of our business comes from networked type services, whether in the high-speed data or the IP telephone business. As our business becomes increasingly IP-based and network-based, we need to be more centralized.

In a network-based business, you can have a service interruption for every single one of your customers. In a bad storm, a potential 200,000 customers could be out of business. If you make a major system-wide error on your high-speed data platform, 10 million people could be affected. Much work has been done to make sure we do everything you do when you are running very, very large networks—whether redundancy or policies and procedures—to make sure people don't interface with that network in a way that could bring it down.

Another thing that makes the business more centralized is that our world is getting more complicated. Whether it's new technologies or the ability to adopt the best practice in marketing telephone service, this is new to most of our employees. We would like to be able to say "Here's the way we think you should market telephone; adjust it for your local markets" without forcing hundreds and hundreds of people throughout the country to reinvent the wheel.

Communications Review: A debate that rages in the industry all the time concerns the question of the need for the content interplay. How much content do you have to own and manage and control?

Burke: For a variety of reasons, we wish we had control of more content. Our company right now is about 95% distribution and 5% content. We have a good-sized content business and it's growing nicely, but it's only 5% of our company.

We believe the histories of companies that have had content and distribution show that the two can be synergistic. In the United Kingdom, Rupert Murdoch has proven that with Sky; in the US, John Malone proved that with TCI and Liberty. Finally, in a world that's more competitive and in which we have more technical ability to offer innovative new products, you could argue that content is more valuable than ever for a big distributor.

Take our bid for Disney. The idea there was not that we wanted to get into the movie business or that we necessarily wanted to buy ESPN to make sure one of our big programming costs didn't go up too much. The idea was to give our cable subscribers and our high-speed data subscribers access to Disney movies and ESPN and ABC network on a time-shifted basis.

There are only a half dozen big entertainment companies in the US and none of those is for sale right now; and so I think it's likely this company will remain weighted toward distribution for the time being. The good news is that over the last 18 months the windows and the rights for content have shifted more than anyone predicted. Many entertainment companies are putting more content on the Internet, which we think is good for us. Apple has secured much content as well. So we think that—short of having to do a major acquisition—breaking down the windows is going to end up getting us content that is synergistic with our platform.

Communications Review: If one can get content on the Internet, many people would say that puts undue pressure on the traditional cable model. Some would argue that if you can get anything you want to watch through the Internet for free, why would anyone ever want to spend money for cable or satellite?

Burke: There are a number of flaws in that thinking. First, the Internet really wasn't built to transport large numbers of live streaming video. It just can't support, with any kind of reasonable quality, large numbers of video pieces. Second, the big entertainment companies get hundreds of millions of dollars a year from the cable and satellite providers, so it is not in their interest. For example, we pay the Walt Disney Company alone more than a billion dollars a year. I don't believe Disney is going to stream ESPN for free to consumers. We have language in most of our contracts saying that content providers who stream something over the Internet have to charge as much or more to others as they charge us. So we don't think the notion of an Internet bypass is a realistic threat.

We do think that people are going to consume more and more video on the Internet, and we look at that as being an opportunity for us because we have so many high-speed data customers. We have an advantage when people stream video on our platform versus DSL. We also have started a division called Comcast Interactive Media, or CIM, to develop more video-based Internet content as a new business.

So, as to whether the Internet is friend or foe, if we are aggressive and take advantage of developing some of these new businesses, I think we can make some money and support our platform. People are not going to disconnect their cable or satellite any time soon. Clearly, you can go to YouTube to watch user-generated videos, but I don't think you are going to be able to get CNN, ESPN, Nickelodeon, or the key channels that people want in their entirety any time soon on the Internet.

Communications Review: YouTube and MySpace are distribution channels for user-generated content. How do you commercialize these kinds of applications?

Burke: Well, we think the user-generated content field is very interesting, and, clearly, a lot of people are using it. There are a number of challenges. The first one is how do you monetize it? YouTube hasn't figured out the answer to this yet. Second, a lot of the content on YouTube is copyrighted content that they don't really have the right to use. It's one thing for an entrepreneurial company to be doing that; it's another thing for a big company such as ours to do that.

That having been said, we think it's a fascinating area and we like the idea of creating a Web site that would have a lot of user-generated content. YouTube is so far ahead of everyone else in the world, how is anyone else going to catch up? Our concept is that we can offer some of the ability to not only stream users' videos on the Internet, but also to get their videos to their television sets. One notion is that we would take a subset of the best Internet video and put it on video on demand. Any of our customers who have digital would get it. We even played around with the idea of taking the best of the best in creating a television show or even a channel. So if you are sitting at home and creating a video, why not—in addition to sending it to YouTube—send it to one of our sites, and then we can disseminate it? That's an idea we have in development inside CIM.

Communications Review: Is regulation going to have a major impact on your strategy?

Burke: Some aspects of our business are regulated; and when you are in a regulated

business, you never stop worrying about Washington. Every year there is a different set of issues, and I like to imagine that one year there will be no issues with Washington. It hasn't happened yet!

I can remember catch phrases that have come and gone. The current catch phrases are *net neutrality* and *a la carte*. Net[work] neutrality, we would say, is a solution for a problem that really doesn't exist. We, and every other cable company, have never advantaged or disadvantaged any Web site. Interestingly, Verizon did a study that said 91% of registered voters had never heard of net neutrality, because it is an issue inside the beltway in Washington but not necessarily an issue outside. [Editor's note: *A la carte* refers to customers selecting the individual cable channels they want as opposed to providers specifying subscription packages of channels. *Network neutrality* is a principle that, for all users, ensures the right to choose devices for connecting to the Internet, content and services to access, and applications to run; and that for the Internet's providers of networks, applications, services, and content, ensures open competition.]

I think the reality is that we will always worry about the effect regulation could have on our business, but that we will continue to be successful and it won't have as big an impact on us if we do our jobs well.

Communications Review: Is there any likelihood that the cable companies or the Bells will be required to resell some of your network to other service providers? In countries like the Netherlands, they are certainly thinking about it for their cable industry.

Burke: We have spent \$25 billion rebuilding our network, and that money was entrepreneurial risk capital. It's hard for me to imagine that that investment would be, in effect, taken away from us. It's not impossible, but it would be hard for me to imagine. I think that in the US, the regulators tried to make sure there was robust competition. We want to encourage the telephone companies to come into the video business, we want to encourage cable companies to get into the telephone business, and that's the way we are going to best serve our customers.

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Communications Review: What are your thoughts on outsourcing? Does it become a necessary consideration, as competition heats up, to keep costs low?

Burke: A fairly large percentage of our telephone calls are handled by other companies. Now we are in the mode of growing revenue and getting more market share. We answer more than 200 million phone calls per year, and there is an advantage to answering a lot of those phone calls locally.

Communications Review: Final question. What industry are you in?

Burke: I don't think the term cable accurately describes our company. I think we are in the communications and entertainment business. Without getting too technical, we have a very large pipe into people's homes and deliver video, data, or voice bits that are repurposed in the home. When AT&T was in the cable business, they called themselves AT&T Broadband; we looked at changing our name from Comcast Cable to Comcast Broadband, and that probably is a better way to describe what we really are.

Steve Burke is the COO and president of Comcast Cable. Since joining Comcast Cable in June 1998, he has been a driving force in the company's growth from a cable industry leader to a world-class communications company. Mr. Burke dedicates his time and expertise to numerous initiatives in the cable industry, including service on the C-SPAN executive committee and membership on the Cable in the Classroom advisory board. He also serves on the board of directors of JPMorgan Chase. Before joining Comcast, Burke served with The Walt Disney Company as president of ABC Broadcasting, responsible for the 10 ABC-owned television stations; the ABC Radio Group, consisting of 27 radio stations and eight radio networks; and Buena Vista Television, the company's domestic syndication arm.

For more information, visit the company's Web site at www.comcast.com.



An Interview with Georg Hofer, Kabel BW

Kabel BW is the first German operator to introduce triple-play services—digital cable television, broadband Internet, and telephony services—on a single platform. Today, the company has more than 2.3 million subscribers, making it one of the largest cable operators in Germany and Europe. We spoke with Kabel BW CEO Georg Hofer to get his perspectives on what German cable operators need to do to compete in the communications market and on how regulation, technology, and competition influence what his company will do to survive.

Communications Review: Can you provide our readers with a brief overview of the German cable market and the positioning of Kabel BW therein?

Hofer: The German cable market was created by the disposal of these businesses from Deutsche Telekom. After some consolidation, three large network operators were formed: Kabel Deutschland, Unity Media, and Kabel BW. A fourth player, ewt, emerged recently, which consolidated the networks that, historically, were owned and installed by residential housing associations.

In terms of revenues, we are presently fourth in the market, but third in terms of earnings. We position ourselves as an innovator at the forefront in Germany with new products such as broadband Internet, VoIP, and pay-TV. On a global level, however, Kabel BW is an early follower. We realize that we have a lot of ground to make up in the German cable market, which is why we are trying to switch over to new products quickly.

Communications Review: How do you meet current market demands?

Hofer: Our capital expenditure is between 35% and 40% of our revenues over the next two to three years to close the demand gap. We hope that by then all of our networks will be interactive and will be upgraded to Hybrid Fiber Coax (HFC), providing very high broadband connections.

We also have to change from being a provider of products to a customer-oriented organization. We are investing more and more in marketing, becoming increasingly a marketing and distribution organization. Since 2003, we have consistently doubled our marketing budget and will do so again in the coming year.

Finally, we must accept that convergence is taking place. Offering triple-play service is a must, and quadruple play will become a strategic imperative within a couple of years. Therefore, we need to operate more as a service provider for customers in the media and communications sector and less as a cable network operator.

Communications Review: Competition in the communications market is very intense, with traditional and new operators offering similar products. Product boundaries blur (among video, broadband, fixed network, and mobile communications). Whom do you currently consider your toughest competitor?

Hofer: We have very diverse markets in Germany. We have the toughest satellite TV, free-to-air market in the world due to the size and the advertising revenues of the broadcasters. In Germany, households receive free-to-air programs, either through cable or satellite, which are financed via advertising. Consumers can watch hundreds of TV channels free of charge because the broadcasters pay the satellite providers for the transmission. We consider satellite to be our strongest competitor, especially because of its price advantage. Broadcasting via satellite without the customer having to pay anything—free-to-air across Europe without basic encoding, without addressability—is hardly imaginable anywhere in the world. This is one of the peculiarities of the German market, and it is possible through a dominant satellite provider. Pay-TV has not developed quickly in Germany because free-to-air is so strong.

In the broadband Internet sector, we consider DSL providers, especially infrastructure providers, to be tough competitors—and even tougher considering their relationships with mobile providers. Germany currently has four major mobile network operators: Vodafone Group, which has ARCOR as a DSL provider; Deutsche Telekom, with its T-Mobile and T-Com; Telefonica, with O2, which will be a very strong competitor in the future; and E-plus, which currently has no fixed network connection. We imagine that, as in the United States, the cable network operators will become strategic partners with these mobile communications providers.

Communications Review: How does Kabel BW differ from its competitors?

Hofer: In the television sector, we have adopted a diversification strategy whereby we look for content from 34 satellites that can be reached from Central Europe. We have agreements with the content providers to feed free-to-air into cable so that, today, we have a variety of content targeted at new German customers. We also offer many international and niche programs. This provides us with an advantage over some of our competitors who do not provide this level of choice.

We also provide a great amount of content for cable customers in Baden-Württemberg exclusively. In part, this is true premium content, but it is also regionally and locally focused. Towns and cities create their own content, like in Holland, which is our role model in this respect.

Customers get the view of the “global village” but at the same time have their regional roots. Given that Baden-Württemberg is a very traditional state that tends to be conservative and communicative, with a lot of societies and associations, and that has a great deal of state pride, we are able to use the strong municipal components to distinguish ourselves from the competition.

In the pay-TV sector, we are also very diversified and pursue an open strategy. We position ourselves as a content-neutral or pay-TV, package-neutral cable network operator and, naturally, use all kinds of content. In contrast to other cable network operators that acquire content themselves, we do not compete with providers such as Premiere, KDG, Unity Media, RTL, Pro 7, or SAT 1; and we try to get virtually all content equally onto our cable network. This is possible due to our positioning in the market: We position ourselves quite clearly as a broadband cable provider. We upgraded all our networks consistently to 862 megahertz (MHz) and have the bandwidths necessary for offering a great deal of content on the network and also providing Internet access.

We are undergoing a strong wave of digitalization. We now have more than 600 digital programs on cable, and we are attracting a great number of customers as a result. Today, more than one-third of our customers watch digital television, which is a great achievement for a cable operator, even by international comparison. Our position is clear: To pursue a very strong broadband-based strategy and to offer high bandwidths at fair prices. We consider ourselves—having a very lean team—to be the price leader for television, Internet, telephony, and VoIP. Kabel BW has only 540 employees. We believe that in the long term, just like is the case with television, Internet and telephony will be regarded as mere commodities and that, therefore, cost leadership is desirable.

Communications Review: Cable network operators are pushing ahead with modernization of their own networks and are strengthening their portfolios in relation to triple play. What strategy is Kabel BW pursuing in this context?

Hofer: I think it is very important to pursue a clear platform strategy. Similar to the US, some markets in Europe will change from states’ granting of licenses to a platform granting of licenses. For example,

today if you purchase films from a content provider somewhere in Hollywood, then you are usually buying them for Germany, Austria, France, or the United Kingdom. In the future, however, platforms will be purchased on a regional basis.

For this reason, we need a strong platform from which we can reach virtually all of our customers; we need fiber optics throughout our access networks. We are pushing ahead with connections in our own fiber optics, with dark fibers, in order to be able to guarantee a quality of service. We do not want to have a closed network just for the television sector but rather a network that will also support Internet and IT. Other cable network operators, such as Telenet Flanders and many in the US, have done it this way.

The market needs to move away from satellite provision. The BBC has initiated a strategy for moving away from satellite provision toward fiber optic provision. I believe that FTTx is the fundamental requirement for providing maximum content, maximum bandwidth, and a maximum level of service and quality.

Communications Review: Do you see in the future an increased risk from packages provided by wireless broadband providers?

Hofer: We have analyzed wireless broadband. Due to the major infrastructure work that has already been performed, especially in Germany with 96% to 98% market coverage, entering this sector as a new, fifth provider would be difficult. The current providers, optimally, will use the additional frequencies coming onto the market. From a cost/benefit perspective, it would make no sense for a new entrant to operate regionally, locally, or marginally. Instead, we may cover this complementary technology through a partnership with one or more of the major providers.

However, we do not believe that wireless can easily cover the basic needs of a household. The 25 to 30 Mbps minimum bandwidth required by the household of the future to best utilize the entire range of television and interactive services simply cannot be met by wireless. Wireless is, and remains, a mobile matter. Sticking to our strategy, we will continue to concentrate on the coax fiber optic infrastructure and to develop it further in cooperation with our partners. Out of 1,111 municipalities, we have already made some 740 accessible. We plan to continue this development work,

frankly, because in the long term this is where we see our unique selling point.

Communications Review: What role does technology play in being a market leader?

Hofer: I don't think technology itself plays any role in being a market leader. I think the decisive factor results from choosing the right engineering, mature and ready for the market. We are not a global player, not a market leader in America, Asia, or Europe. Our strategy is simply to purchase the right engineering at the right time.

We believe, generally speaking, that the technology for coax cable must be developed further. There we see clear tasks for the Cabel Europe organization, formerly ECCA, or CableLabs in the US. In the technology sector, we are working together on a global level to best utilize the coax cable. For this reason, yes, technology is relevant; but for a provider such as Kabel BW, the focus is on engineering, where technology is processed and ready for series manufacturing.

Communications Review: Customer service is essential for customer loyalty, while customer loyalty declines as the range of products and competition increases. What do you do to minimize churn?

Hofer: We try to cope with the increasing number of customer contacts. In 2003, Kabel BW started with 30,000 customer contacts per month and we're now at 300,000. If these contacts are not managed perfectly, churn results. We counter churn through a targeted bundling strategy.

Our basis is always the cable connection, which customers must select in order to obtain further products such as pay-TV, Internet, VoIP, or video on demand over IP. Through this bundling strategy, the customer has a single contact, that is, the customer speaks with one of our customer support representatives about all products and all packages.

We reduced our net churn rate from more than 6% in 2002 to 3.9% last year. Despite the increase in new services, I believe that this bundling strategy, combined with competent and highly qualified customer support, is well received in our market.

The heterogeneous product landscape in our environment—separate DSL, separate mobile communications, separate media—helps in this respect, naturally. Other providers in Germany offer only a few

converged bundles, which is why we are undoubtedly a pioneer by virtue of offering everything under one roof. I believe that we can keep the churn level very low if we continue to be the pioneer.

Communications Review: It is often said that content is king. Do you believe that you have to own content in order to acquire customers?

Hofer: I do not believe in owning content, nor do I believe that cable network operators must have their own content. That might be necessary in other markets, but for regulatory, legal, political, and historical reasons, the German market has a clear separation between infrastructure providers and content providers. It is important for us to have all relevant content on the network, but we do not have to own it ourselves because we would become dependent and virtually begin to compete with our customers.

Today, the German market is clearly structured: Content, content production, and content rights are closely aligned with television stations and public institutions. This means that anyone can put content on our network, and we develop a commercial partnership in which we create a win/win situation and have all rights and all pay-TV packages on the market. Kabel BW—because of our strategy of not acquiring content—can offer on our platform the greatest variety of pay-TV packages and free TV packages on the German market.

Communications Review: What is your opinion of outsourcing? Does it represent a way for you to reduce costs?

Hofer: Outsourcing is a central issue for us. The German market is very expensive in terms of personnel. Since we are a personnel-intensive company with regard to customer service, we have to establish where we outsource, how we outsource, and with what quality we outsource. Baden-Württemberg is known for its strong dialect, and outsourcing oral customer service outside Baden-Württemberg is difficult for this reason. Due to our origin and history, we have a lot of old problems—involving agreements with unions, the works council, and shop agreements—that don't allow us to operate effective, efficient customer service within the company.

We outsource the entire first level of customer service to regionally located specialists, who perform the first level

customer contact handling for us on-site. We have defined core areas of expertise that we do not wish to outsource, such as network operations and second level customer service and field service.

We consider outsourcing to be something that we can and do control, to a relatively large extent, ourselves. For example, our executives in the outsourcing companies report directly to the organization and are, to some extent, executives within the company. Our margins and growth ambitions permit this, and so we do not have to outsource everything to India or Estonia or Lithuania. We have reduced per-contact costs by 50% since 2003 through outsourcing our first level customer service. We have reduced our IT costs by 60% through insourcing in the IT division.

Communications Review: What are the growth opportunities for Kabel BW?

Hofer: We see growth opportunities in further utilizing our infrastructure and in the broadband Internet sector, which we believe we can increase by multiples. We also expect good growth in the VoIP sector. Mobility is another area of opportunity, with MVNOs [mobile virtual network operators]. In the classic television sector, the market has been fairly exhausted. No doubt there are one or two other niche opportunities for pay-TV, but otherwise I believe we have reached the limit with digitalization.

Communications Review: Cable network operators in Germany are limited in using their networks by must-carry rules. Do you consider this a problem for Kabel BW?

Hofer: Must-carry regulation is a problem that was born from the flawed market of analog television. In Germany, regulation lies in the hands of the federal states and the 15 state media institutions. In Baden-Württemberg, the media institution prescribes approximately 50% of programming; in other German federal states, that figure can be up to 100%. For this reason, the European Union has commenced proceedings against these states. We believe that must-carry rules generally limit development.

The second issue is that must-carry forces unattractive programming on us. For example, there is now a must-carry regulation for tele-shopping. Customers churn when a film channel is replaced by a tele-shopping channel. Another issue is that these must-carry slots must be awarded at regulated prices. The regional

broadcasters, however, limit themselves to only six programming hours and sublease the rest at twice or three times what we can obtain at a regulated price.

Therefore, in July 2006 in Brussels, we submitted a complaint about must-carry that covers this and other points. We believe that the EU and the Competition Commission will address this issue, and if must-carry remains in the digital sector, we feel all other infrastructures should be covered by it. A cable network operator should not be subject to a must-carry regulation that a DSL provider, mobile communications provider, or DVB-T provider is not. Infrastructure neutrality is required here, and a technology-neutral regulation should be implemented.

Communications Review: Compared to those in other countries, cable network operators in Germany are lagging behind. How do you see the chances of cable network operators in Germany becoming successful?

Hofer: First, it is necessary to get rid of all the old problems, all the legacies. These include the must-carry regulation, which would lay the foundation for cable network operators to start converting to digital. Second, all the copyright laws need to relate not only to cable but also to other infrastructure. Third, we require investment security. I believe the ownership structure that has now been created will lead to an investment mode that will be implemented by 2008 or 2009.

We are still far too influenced by free-to-air, effectively by satellite, and are not offering the customer the best package in the media sector. As a result of all the free-to-air, a superficial content strategy has developed and there has been less niche development. We have to make sure that we, as cable network operators, use our platform to tailor ourselves to the customer's expectations by addressing the customer in a more targeted manner. This is not possible if I do only free-to-air. I believe these are the four major aspects we have to deal with in Germany—then everything will no doubt prosper as well.

Communications Review: Let's come back to competition. Who do you think will be your competitors in five years? Who will still be around?

Hofer: I believe there will be fewer competitors in the infrastructure sector than

there are today. Consolidation will continue, particularly in the DSL market. We will face competition from mobile communications providers, who combine a strong fixed network infrastructure and IP-based infrastructure. Anyone who can keep pace with the growth in interactivity, who can adapt to the needs of new customers, or who can grow the interactivity of SMS will be able to compete. The extent to which satellite achieves all this undoubtedly will be determined by the regulatory authorities.

Due to the high investments necessary both in the mobile communications sector and in the fixed network sector, I don't think new players will enter the market. If any do, they will be only regional and local players who might spend a lot of money for FTTH and FTTx. I think that, more likely, consolidation will reduce the number of providers.

I believe that Vodafone, Arcor, Deutsche Telekom, and Telefonica will remain in the market. It is perfectly clear that cable network operators have a very good infrastructure that has to be connected with fiber optics. Once the HFC solution is rolled out in the German market—by 2008 the rollout will be 90% complete—the cable network operators will play a much greater role than they do today.

Georg Hofer is the chief executive officer and chief operating officer at Kabel BW. Prior to joining the company in January 2003, he was managing director at Colt Telecom GmbH and COO for Colt Central Region (Germany, Switzerland, Austria). Between 1993 and 2001, Mr. Hofer was the founder, CEO, and senior advisor of TelePassport GmbH. Prior to that, he held various R&D and project quality management positions at Siemens AG.

For more information, visit the company's Web site at www.kabelbw.de.



An Interview with Michael Lee, Rogers Communications

Rogers Communications is a diversified Canadian communications and media company engaged in four primary lines of business: wireless, cable, media, and telecoms. With all these assets under one roof, the company is poised to drive new, convergent services and to compete against incumbents in many segments. Rogers' Chief Strategy Officer Michael Lee talks with *Communications Review* about the company's plans to leverage its assets and the challenges and opportunities therein.

Communications Review: Rogers is somewhat unique in the industry, as the largest national cable and wireless company in Canada. What are some of the key cross-leverage opportunities, and how quickly do you see them coming into play?

Lee: The opportunities come into play in a phased approach, in part due to the evolution of technology and in part due to the evolution of the customer. Customer relationships in our wireless and cable bases provide us with incremental leverage and efficiency because we can have multiple-product customers. What's going on in parallel is that the network systems are starting to mature and to migrate to a common platform, whether that is IP or a common OSS/BSS-type platform. Within the road maps of the individual companies, we will have common investments across differing infrastructures so that we can leverage the investment of one company in a certain area to benefit other operating divisions.

Another opportunity is that we have scale in wireless and cable. When you are providing triple- or quadruple-play services and you are a new entrant in one of those markets, you don't bring scale. We are going through an innovation phase of evolution in terms of integrating wired and wireless services. Scale affords us the ability to continue to invest in the innovation. We can sell new products, features, and services to a much broader base of customers than can someone who is trying to enter a market and is struggling to get the economics right on a single product.

Take, for example, single product companies like Skype or Vonage or a telecom company who offers data and wants to get into the television business. They have to contemplate both being innovative in television and securing rights in television, and then spread the cost of that over a few thousand people. A lot of times, economies of scale are necessary to even contemplate doing innovative things in the marketplace.

Communications Review: At what point do you see cost through integration giving you a significant advantage in the market? Right now, you have bundled services, but a loose bundle of services.

Lee: Right now, we have a financial bundle of services as opposed to a

product-integrated bundle of services. We are going through product integration to a degree now, and we have services that are bundled at a theme level, if you will. For instance, when we did the World Cup sponsorship this year, we had special broadcast rights, exclusive wireless rights, video-on-demand rights, and broadband rights. If you were a fan of the World Cup, the best holistic experience would have been to be a Rogers customer across multiple lines of business. By providing a unique experience that's not available from other carriers, we can create differentiated value for customers.

Over the next 12 to 18 months, you will start to see meaningful product-integration bundles, where technically we will have common features across products. So, not only will an existing Rogers customer who purchases a second product in the bundle get the benefit of a multiple product discount—which customers expect—but also, the features of the second product will make the product the customer already has a better experience. For example, on wireless and wireline integration of voice services, a wireline customer who decides to get the complementary offer in wireless will immediately have certain features that work across platforms or that are simply better integrated in a way that makes life easier.

Communications Review: How important is integration at the product level going to be from a retention strategy?

Lee: That's a challenging question to answer. The integration of wireline and wireless services is still in its infancy. We have a very small set of customers who are motivated to have it, but we are not at mass penetration/mass demand. The more integration you have across products—essentially, the tighter the customer relationship you have—the greater the loyalty the customers have to the product. Customers move from seeing just a product, like voice, to seeing the product as integrated to the way they work and operate and live their lives. By asking a customer to make an investment in a product, you create a higher barrier for churn because leaving would interrupt a number of things the customer is doing.

Communications Review: Many people say that content is king. More recently, some have said that context is king, that is, the ability to know what particular customers

want, when they want it, and how they would like it delivered. What are your thoughts on this?

Lee: I think context will become increasingly important. In a traditional world—last year—you had separate distribution and separate programming, with most content businesses in highly regulated environments. Leverage was difficult to execute, at least in the Canadian marketplace.

Going forward, the pervasiveness of IP platforms creates greater flexibility in terms of what you can do with content. IP distribution doesn't sit within that highly regulated environment, so what you end up with is that customers always gravitate to what the experience is. And the experience is usually driven by content. Content can be traditional—printed word, audio, video—or it can be applications and services built around certain themes. To provide an optimized experience, you have to take the content assets you own and your expertise in identifying what customers want and marry those two with an intimate knowledge of how the technology works.

Communications Review: What about unique content? Do you just keep it to yourself? Do you sell it to a competitor?

Lee: In a regulated environment like Canada, you cannot provide any preference. Programmers must provide access to a program to all distribution. Generally in the media business, there is no intention to restrict rights; you want broad distribution because your reach, ultimately, is how you measure your addressable base and your revenue opportunity.

But as you start to integrate with different distribution channels that are not regulated, this changes. We acquired incremental rights in wireless, broadband, and video on demand so that we could provide a preferred experience for our customers for the World Cup content. The exclusivity that exists today is available because we are still talking about a relatively limited universe. Once that universe broadens, it's not going to be easy, as the owner of rights, to make a business case to simply distribute to one provider.

Those who have more integration of media and technology will be able to provide an optimized experience. So even if you are not restricting access to certain media or content experiences as a rights holder,

you may have more intimate relationships with certain distributors because they decided that for strategic or financial reasons they want to invest more heavily in the way they create a customer experience. Going forward, form is going to be very important. The way in which you describe and offer a media experience will be intimately tied to the type of device and the way that device and the network operate.

Communications Review: What advantages do you gain from the ownership of media and entertainment assets, including your professional baseball team, magazines, and television channels? Is it necessary to own this content in order to compete?

Lee: Owning content outright always creates more flexibility than being in a sponsorship licensing arrangement does. Our interest in sports is driven by three things.

First, we want to be associated with what customers are extremely passionate about and sports clearly is one of the categories. Second, technologies are influencing the way people watch television and consume media, enabling people to watch less advertising. The types of content that are important and will deliver more value are those that are not consumed in real time. Sports is one of those categories where you don't want to PVR it and watch it tomorrow. So, we want to be associated with categories of content that can preserve their value in the marketplace, independent of the technology. Third, in a market that's becoming increasingly global and commoditized, you have to support local activity.

Communications Review: As consumers gain the ability to influence the creation and the delivery of content, how will Rogers' role in the industry change?

Lee: We have a role, but we don't know exactly how that role will play out. The ability for the customer to have a more personalized method of consuming content is important. It's a by-product of everything being digitized. To most people, digital means higher-quality audio and video and a more consistent user experience. But consumers also associate it with choice and the ability to consume things in smaller units than they have in the past. Video on demand, PVR, different content experiences in wireless—those are the trends and content behaviors that we

want to be sure we stay on top of and are open-minded about the technology being deployed to meet that demand.

Another phenomenon is that broadcast, one source distributed to many end points, has become point-to-point, such that every individual can become a creator and a distributor of content. If people are creating compelling content, there always will be a role for a distributor—particularly, direct access through television and trying to integrate some of that content for people on their TVs through a set-top box, video on demand, or a direct data pipe.

The role that user-generated content will play in the overall media consumption of a customer is still unclear. The great thing is that consumers use our networks to distribute content, so that makes our service, at its core, perceived as more valuable. The one device that truly is about user generation and personalization is the wireless handset, because it is ultimately an embodiment of “who I am.” As we transition to third-generation networks, the device becomes that much more powerful with its ability to support a higher-quality audio and video experience.

We are very excited about the future of wireless, not just from straight-line-penetration growth within the existing marketplace, but also in terms of the ancillary services and the benefits that customers get as a result of data becoming a more robust component of a wireless relationship.

Communications Review: What are your thoughts on outsourcing and offshoring? Do those approaches become necessary considerations in keeping costs low as competition heats up?

Lee: We don't offshore. We do outsource things today to deal with peaks in capacity, primarily in the service or the development side of the business. Our focus right now is to ensure that we provide a high-quality customer experience. We will continue to outsource to meet capacity demand, and as services evolve we'll decide if there are other opportunities for outsourcing.

Communications Review: Whom do you see as your main competitor(s) right now?

Lee: We are in a market now with strong facilities-based competitors in television and telephone, and we have direct com-

petition from wireless-based competitors. All of our markets are highly competitive from the perspectives of product feature innovation and pricing.

We will continue to see significant competition from traditional providers of these services because, at the end of the day, regardless of how much innovation they seek in their lives, consumers will continue to have a limitation in the way they consume services. Complexity is still a barrier to the adoption of a wide range of services. Multiple product providers like us need to focus on the way we bill and serve customers. Simple things like that will continue to be central to how people value their providers.

There are going to be third parties entering the market who provide similar services, maybe not feature-for-feature equivalent services, but similar services. For instance, a lot of people use Skype, primarily because many of their friends are on PCs and they want to do PC-to-PC communications. But also they want to use it as a way to arbitrage our voice rates. Right now that's not a directly competitive service; customers would not disconnect their home telephone service and replace it entirely with Skype. But, over time, that may happen, so we have to watch and ensure that we broaden our core services to appeal to customers who want more innovation and flexibility. We need to make it simple for them to consume and pay for the service and feel that they are getting a good value.

I think we will see some diversification in the marketplace; we definitely will see third-party providers from foreign markets and from within Canada who are competing directly against us. Overall, I think people want to consume more; they are actually consuming incrementally as opposed to purely substituting.

Communications Review: Do you see anybody new coming into the fray and, in spite of traditionally not having played in this space, taking control of a certain market, like the home?

Lee: It is not so much about control. I think customers are exercising their rights to resist control at this point. There will be other parties who will have a different relationship with our customers, at a brand

level or a service level, and who will provide services that may be complementary to what we provide.

Every time I open the newspaper in the morning and read the trades, I wonder who is going to do what next. But at the end of the day, customers value not just technology innovation; they value the simple things about how they consume products. You have to do all the fundamental, simple things well to get permission to offer services. I think we have been doing all those simple things—and we continue to focus on doing them exceptionally well.

Communications Review: As IP takes hold and as consumers focus more closely on service delivery than on the network that delivers the services, how important to competitive advantage will network ownership be?

Lee: I don't believe network ownership is a necessity for competing. I do believe that through owning the network you can provide better services.

In the early days, services are offered in a no-guarantee environment, meaning that you click on a link for a video and it may come through uninterrupted or you may have some interruption with no clear indication of where that service interruption was created. It's a *caveat emptor* environment for new services online. Early adopters are willing to live with inconsistencies in delivery because the benefit created outweighs the inconvenience.

We're in that phase of innovation at this point. Once we move into mass adoption, there will be bigger stakes and service delivery will become very critical. It is difficult for most of us to imagine turning on the TV and the screen going snowy for two or three minutes, unless we are satellite customers in a rain storm. It is important to ensure service delivery, and the only way to do so is to work more closely with the networks delivering that service and be able to monitor and repair on a real-time basis. So, integration of network elements is going to be very important.

You can make the same argument in the gaming space right now. If you are an avid gamer, you are chasing a high-performance network at any cost because you want an absolute guarantee of low latency

performance so that your game experiences are consistent and of high quality. As you start to move that into the masses, people will demand that your networks perform at low latency. The fact that you can deliver video over an Internet or wireless connection is of sufficient value to some customers that they are willing to forego the quality element. But as you reach the masses, quality becomes king and you have to be an integrated network to get that.

Communications Review: What is the biggest issue facing Rogers going forward?

Lee: There are two challenges. The first is that of going to work with a common mission in a very large organization and delivering our core services to our customers well. This is a challenge we step up to on a daily basis. When you do transactions at the rate at which we do them, any error rate, no matter how small it is, manifests itself in a group of customers. We need to ensure that we deliver our core video, data, voice, and wireless services in a high-value, high-quality way.

The second challenge is that, in a world where innovation is critical and the market is sub-segmenting, we are near the last of the mass value services. We don't see services on the horizon that have the characteristics that 60% to 70% of customers will take. For instance, with video they will buy in sub-segments: 5% will take it this way, 10% that way, and 1% another way. As we start getting into the sub-markets, how do we respond in a timely fashion with an organization that is designed to deliver services to the masses? Everything becomes a custom order. How do we adapt the cost structure, the marketing, and the technology and innovation environments to appeal to those sub-segments of the market and be relevant to all of our customers—but at the same time be relevant to the one specific customer? It will require a combination of understanding at a high level and at a detail level what customers want and marrying that understanding with flexible technology on the back end to deliver the products.

Change is moving at a pace that is sustainable. The last time we moved at this pace, change was unsustainable because there were not enough customers. With 50% to 60% data penetration on broadband,

a billion broadband users worldwide, and two billion wireless users worldwide, the market is large enough that these models will find revenue sustainability. And as more customers increasingly drive to have a greater share of their media spending online, the revenue will follow.

Michael Lee is chief strategy officer for Rogers Communications Inc. Mr. Lee is responsible for strategy development, business development, and strategic partner management for the Rogers Communications' group of companies, which includes Rogers Cable, Rogers Wireless, and Rogers Media. Previously, Mr. Lee held the role of vice president, strategy and development, for Rogers Cable, where he managed the development of new businesses and services for video, high-speed Internet, and telephony.

For more information, visit the company's Web site at www.rogers.com.