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Lane F. Cooper

# **TELECOM TRENDS 2008- 2009 REVIEW AND OUTLOOK**

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By  
Lane F. Cooper  
Editorial Director  
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### Introduction:

While 2008 went down in the books as the worst global financial crisis since the Great Depression...let's face it...2001 hurt the telecom industry a heck of a lot more. It is true that a big concern about 2008 revolves around how much capital was lost in the telecom financial markets, and the potential impact this could have on the industry's ability to invest on innovation. But beyond that, 2008, from a telecom transformation perspective, was in fact one to build on.

The kind of pain that the rest of the economy is going through has created the foundation for transformation that will make it a lot easier for technologists to introduce – and end-users to adopt – new, more efficient business models and technology platforms in 2009. But only those who deliver both (new biz models and platforms) will win. The rest will be hangers on who will gradually perish or be subsumed by the innovators of the industry.

The history of digital communications is on the side of innovators. Offerings are getting faster, smaller, cheaper, and easier to use. And this comes as financial services institutions, manufacturers, retailers, healthcare providers...and consumers...continue their eternal quest to do more with less. One would be hard pressed to think of value-propositions in either the public or private sectors today that do not have major digital communications components associated with them.

As every other sector of the economy seeks to establish tighter links with consumers (B2C) and other businesses (B2B) on a global scale, communications becomes more than the mortar that binds us; it is the very core of how value is delivered.

So what does this mean for the communications industry...particularly in the B2B context?

Well, for one thing, it is incumbent upon industry leadership to think beyond its own vertical environment. We are beginning to see more of this. Infrastructure companies in particular have made great strides in positioning themselves as “thought leaders” on how “other” industries work and change in response to technology developments and competitive dynamics. The rise of the “communications technology” imperative as a “business issue” has given the telecom industry permission to encroach on the territory of systems integrators and management consultants...if they have the pluck to do so.

Cisco's Internet Business Solutions Group, for instance, has demonstrated how to get into organizations super early in the business assessment process to define the parameters for a technology discussion that is actually relevant to executives with profit-and-loss responsibilities.

By the time a competitive “request for proposal” is sent out for bid, their knowledge of the “real” issues inform how to present technology solutions.

This approach will be especially useful in 2009 as network equipment manufacturers and service providers continue to roll out:

- Unified Communications
- Mobility
- Wireless WANs
- Next Generation Infrastructures
- Enterprise 2.0
- And more...

While each of these technology and communication concepts operate similarly in different environments – which would thus seem to make them ideal horizontal offerings – they are often purchased with different purposes by various verticals.

In other words, different drivers stimulate similar purchases. Presenting technology options with these shifting contexts in mind will therefore be an increasingly important success factor for telecom players throughout the value chain for the rest of the decade and beyond.

### **...Understanding the Uneven Outlook**

While the economy is undoubtedly hampering the short- (and even mid-) term outlook for all aspects of the telecom market, overall growth in the market over the long-term remains solid. Nowhere is this truer than in the broadband mobile eco-system that is made up of developing 3G networks, the evolving 4G environment, and the plethora of innovative handsets that have been stimulated by super-heated competition among the top mobile manufacturers.

A study out from researchers at NPRG ([www.nprg.com](http://www.nprg.com)) reports that a "perfect storm" of rising subscriber demand and limited network capacity has created unique opportunities for service providers to cash in on the broadband mobile environment – if they can just make it through the current down-turn. But more than just tread water and batten-down the hatches, analysts at NPRG contend that now is the ideal time for competitive local exchange carriers (CLECs), cable multiple system operators (MSOs) and fiber network operators to carve out their own section of the incumbent-dominated backhaul arena through key strategic investments. (Really, if organizations have the cash, the heart, and the confidence in the long-run, good deals are to be had in infrastructure technology).

After all, consumer enthusiasm for mobile web services and rich media applications is accelerating, and will continue to do so as 4G services like WiMAX and LTE become widespread. But given the physical limitations of legacy time division multiplexing (TDM) access circuits, wireless carriers have got to take a hard look at backhaul alternatives to meet projected demand.

### **...Smartphone Sales Hit Lowest Growth Rate With 11.5 Percent Increase in Q3**

This is important to keep in mind as we look at the news on the hand-held front. For even while Gartner ([www.gartner.com](http://www.gartner.com)) reports that the global smartphone market reached its weakest year-on-year growth in years, it is still perking right along at double digit rates (in this case 11.5

percent). Worldwide smartphone sales to end-users hit 36.5 million units in the third quarter of 2008.

"The current economic climate is negatively impacting sales of higher end devices," says Roberta Cozza, principal analyst at Gartner. "Going forward, we should expect the smartphone device market to continue to grow but at a slower pace. Although leading mobile operators are subsidising more smartphones, to reach lower prices they tie the device to two year contracts with monthly data plan rates which remain too expensive for the mainstream user."

### **...Interesting Shifts on the Mobile OS Front**

According to Gartner, the Symbian operating system (OS) commanded 49.8 percent of the global market in the third quarter of 2008. For the first time its share went below the 50 percent mark. Nokia's decline in smartphone sales during the quarter, and continued weakness of the Japanese mobile device market, have impacted Symbian's share. Gartner expects Symbian share to continue to erode next year but maintain its leading position in the market.

The success of iPhone 3G sales in the third quarter of 2008 propelled the Mac OS X to the No. 3 position in the global OS provider rankings. For the first time, iPhone sales exceeded sales of Microsoft Windows Mobile devices worldwide and in North America. In the shorter term, open-source initiatives like Android and Symbian Foundation will challenge Windows Mobile's licensing model. In addition, the lack of a competitive user interface will continue to limit Microsoft's mobile device usability when facing competitive consumer smartphones.

On a regional level, North America was the fastest growing market, with a 68 percent increase in the third quarter of 2008. RIM and Apple did particularly well in the region with both vendors accounting for more than 70 percent of the smartphone market in the third quarter of 2008.

Apple regained second position behind RIM with 25.4 percent market share. Smartphone sales in Europe, the Middle East and Africa (EMEA) increased 14 percent year-on-year. The region saw Nokia's share decline nearly 8 percentage points in the third quarter of 2008 but still maintaining its leading position and saw Apple gain the No. 2 spot with 15.6 percent share, moving in front of HTC and RIM.

### **...In North America the Battle Between RIM and Apple Heats Up**

Looking back, Apple really did help itself last summer with its 3G version of the iPhone. Over the summer, a ChangeWave ([www.changewave.com](http://www.changewave.com)) consumer survey showed the 3G iPhone catapulting Apple into the lead in terms of planned consumer smartphone purchases.

Even though RIM remains the leader among current smartphone owners in the consumer market, and holds a huge lead in the corporate market, the Canadian firm acted on multiple fronts to counter Apple's momentum among consumers with the new product releases (including the Bold and its own touch screen product the Storm).

*"The real losers in this smartphone battle will most likely be the second-tier players, who could find themselves increasingly pushed to the sidelines as the two Goliaths battle for market dominance." -- ChangeWave*

The survey found that current RIM customers are two-to-three times more likely to buy the new RIM models than the customers of other manufacturers. The survey also found that the new

RIM releases have a significant potential to lure away customers from other manufacturers -- with Palm, Motorola and Samsung the most vulnerable. Apple customers, on the other hand, appear least likely to buy any of the new RIM phones.

The figures confirm that this sector is slowing down. While the global economy is responsible for much of this trend, emerging economies are also experiencing maturation. However, the industry will likely pull itself out of the doldrums by 2010.

### **...Conflicting Projections on Enterprise and Unified Communication**

According to analysts at IDC ([www.idc.com](http://www.idc.com)), the global economic crisis will contribute to a dip in total mobile phone volumes of 1.9 percent in 2009 compared to 2008 levels. This represents the first downturn in annual shipment volumes since 2001 when shipments declined 2.3 percent. Over the past several years, the mobile phone market has enjoyed double-digit annual growth due to an increased emphasis on emerging markets. However, emerging market growth has been steadily slowing as these markets mature. IDC now expects worldwide growth to be just 7.1 percent in 2008 before slipping into negative growth in 2009.

"Nokia's announcement [in 2008] was the first sign of troubles to come," says Ryan Reith, senior analyst with IDC's Mobile Phone Tracker. "However, the real concerns set in with announcements from the chipset vendors who supply the industry. Qualcomm, Texas Instruments, and MediaTek are among some of the suppliers announcing reductions in manufacturing for the upcoming year. There is a lot of uncertainty about how the markets will fare and inventory levels will be more of a focus point than ever before."

IDC does not expect the downturn in mobile phone shipments to stretch past 2009. By 2010, the worldwide mobile phone market will show signs of improvement as economic recovery plans will have taken effect. With more disposable income in hand, consumers should feel more comfortable buying a new handset, especially if the opportunity to purchase was delayed. Beyond that, further growth is expected, but at a slower pace compared to the strong double-digit growth experienced in the years prior to the decline.

"Converged mobile devices remain a much sought-after option for many consumers," notes Ramon Llamas, senior analyst, Mobile Devices Technology and Trends at IDC. "Users have come to realize what these devices can do beyond voice telephony, especially when it comes to running applications. Take a look at how gaming, mapping and location, entertainment, news, and social networking applications for converged mobile devices have taken off, allowing users to do much more than just make phone calls. In response, handset vendors have been building their product and applications portfolios to catch this wave of opportunity."

Lower prices are also making converged mobile devices an attractive choice for consumers. It was not long ago that these devices cost well above the \$200 price point with a two year contract. As prices have come down in recent quarters, these devices have become competitive alternatives to traditional mobile phones.

Faced with the option of purchasing a converged mobile device at roughly the same price as a traditional mobile phone, consumers will be strongly tempted by the fully featured smartphone. Continued high demand and lower prices will keep this category growing, even as the overall market struggles.

### **...But Is It Enough to Bailout the Semiconductor Sector? Yes...in 2010**

When the economy affects telecom it attacks semiconductors first. However, much better business fundamentals have positioned this sector to pull out of the mess. According to Gartner, the semiconductor industry experienced revenue declines in back-to-back years. This will occur in 2009 as worldwide semiconductor revenue is forecast to total \$219.2 billion, a 16.3 percent decline from 2008 revenue. Gartner's preliminary 2008 market share results show 2008 revenue reached \$261.9 billion, a 4.4 percent decline from 2007.

Gartner's official forecast issued in mid-November expected 2008 worldwide semiconductor revenue to grow 0.2 percent and for the market to decline 2.2 percent in 2009. However, the financial crisis had an unprecedented negative impact on fourth quarter 2008 sales and profits. Gartner expects semiconductor sales in the fourth quarter of 2008 to show a record quarter-on-quarter decline of 24.4 percent, surpassing the 20 percent decline record set in the second quarter of 2001.

"While many executives may try to compare this downturn to the 2001 tech bubble, this downturn is different in many ways," says Bryan Lewis, research vice president at Gartner. "This downturn is broad-based, not limited to only technology, has a much different growth profile before the downturn, and has far less inventory buildup. Inventory levels this time have been monitored and more tightly controlled throughout the entire food chain, and this will help the market come back more quickly than in 2001."

In 2001, the semiconductor industry experienced its worst revenue downturn in history, with sales declining 32.5 percent from the previous year. However, that collapse was following two strong revenue growth years in 1999 and 2000 when revenue grew 22 percent and 34 percent, respectively.

Gartner analysts believe the wild card for the semiconductor industry in 2009 is demand for dynamic random access memory (DRAM). The DRAM industry has been in a downturn for 18 months and losses are now approaching \$12 billion.

"The DRAM market is so bad that suppliers must either significantly scale back supply, or the weaker players will be forced into mergers or bankruptcy. Either way, we are expecting DRAM pricing to firm during the second half of 2009, and this has the potential to moderate the decline in 2009 semiconductor revenue," says Andrew Norwood, research vice president at Gartner. "Only widespread government support for the ailing DRAM vendors could avert this supply rationalization, and that would be a disaster for the industry as it would just prolong the current downturn."

Nevertheless, Gartner expects the semiconductor industry to bounce back in 2010 and 2011, with worldwide semiconductor revenue reaching \$251.2 billion in 2010, a 14.6 percent increase from 2009, and in 2011 revenue reaching \$274.9 billion, a 9.4 percent increase from the previous year.

### **...A Long-Term Silver Lining**

While the current financial crisis has shaken everybody's confidence, folks in the telecom industry can take some solace in knowing that long-term demand for communications services is holding steady. Unless a service provider continues to bank its future on wireline voice, the outlook for telecom is actually quite bright.

A couple of studies from the good folks at Insight Research ([www.insight-corp.com](http://www.insight-corp.com)) indicate that corporate America is doing its part to keep the data flowing over global telecom networks. U.S. businesses on wired and cellular calling will reach nearly \$140 billion a year by the close of 2009, with mobile voice traffic accounting for just over 41 percent of the corporate phone bill for telecommunication services in 2009.

This will remain the fastest growing line item on the corporate communications balance sheet for the foreseeable future. Wireless service revenues will grow at a compounded rate of nearly 16 percent annually from 2008 to 2013, while growth in wired services remains essentially flat.

"Even without the current recession, revenue growth in wireline services was not forecasted," says Insight President, Robert Rosenberg. "It is continued demand for wireless services that is keeping the telecom industry in the black, though that demand is going to be uneven across the various business sectors," Rosenberg says.

On a global basis, the telecommunications industry is expected to continue expanding over the next five years as continuing growth of wireless services in emerging markets offsets the spending slowdown in the advanced economies. Insight expects overall telecommunications services revenues to grow at a compounded rate of nearly 10.3 percent over the next few years, reaching \$2.7 trillion by 2013.

"The worldwide economy is in turmoil...but over the long haul we expect the telecommunications industry to continue growing," says Rosenberg. "Telecom is as necessary to development as roads and bridges, so we expect it to fare much better than other economic segments that may take longer to return to normalcy," Rosenberg concludes.

But you don't have to just take Rosenberg's word for it. Frost & Sullivan's ([www.frost.com](http://www.frost.com)) principal analyst, Sharifah Amirah, agrees that telecom is one of the few industries which has a "strong leg to stand on and is likely to gain from the downturn" in the economy.

"Enterprises will be looking to minimize risk and improve operational efficiency." This, he contends, will cause organizations to focus on core competencies and reducing operational costs and then open doors for IT and telecommunication service providers.

But cashing in on strong demand will not be automatic. There will be significant changes in how and what consumers and businesses buy. So while telecom spending will grow, revenue will not flow through in the usual manner. Rising unemployment rates and falling GDP growth, for instance are forcing end users to spend less money on entertainment and digital communication. "In light of reduced consumer spending, pricing is a short term priority for service providers to address effectively. In the mid-term, value added services and innovative distribution models will be key to growth. While focus will be very much on surviving the next couple of years, sights on further horizons should still be retained. In the longer term three key themes will prevail – mobility, content and bandwidth".

Sharifah Amirah foresees the industry moving towards "divestment, consolidation, collaboration and greater investments in research & development". Service providers with strong fundamentals will survive the storm and transform into more streamlined entities. Sharing business risk and securing more immediate returns on investments will offer a basis for both vendors and service providers to monetize on new opportunities.

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