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Call it the anytime, anywhere future:

Telecommunications in the next 10 years

It is critical that employees understand the shape of things to come in the next 10 years. To help with this, BellSouth Magazine developed the following article from information provided by Dr. Jagdish Sheth for the 10th anniversary issue.

Sheth (pictured at right) is one of the world's foremost experts of marketing, competition, strategic thinking and other business issues. He is currently the Charles H. Kellstadt Professor of Marketing in Emory University's Business School, a post he holds following service on the faculties at the University of Southern California, the University of Illinois, Columbia University and the Massachusetts Institute of Technology.

Sheth is the founder of the Center For Telecommunications Management at the University of Southern California and has done extensive research and analysis in the telecommunications industry since 1968.



Dr. Jagdish Sheth

If you think the changes in the telecommunications industry in the 10 years since divestiture have been

pretty amazing, better hold onto your hardhats and headsets. You haven't seen anything yet.

Technologies used in the traditional telecommunications industry have begun to converge with those

used in other industries, such as computers, cable TV and consumer electronics. As a result, in 10 years it is likely that you will be able to talk to friends, watch movies of your choice, shop for goods and services, educate yourself on selected topics, and play games with friends in different cities – at any time – using one network. Thanks to both wireline and wireless connections, you'll be able to use this network at your home or wherever else you happen to be.

“Advanced new services will first be offered in and between ‘hub’ cities, like New York, Los Angeles, and Atlanta,” says Dr. Jagdish Sheth. “Then they'll go their way outward into suburban and rural areas, much the way telephone service did in the 1920s and '30s.”

As entire industries converge, it should be no surprise that companies within industries are converging, too. The recent BellSouth and Prime Management Co. alliance is a good example. Look at AT&T and McCaw, Time Warner and U S WEST, Bell Atlantic and TCI. In 10 years, you might not even recognize some of the most familiar players today.

Global alliances will also reshape things, as groups of companies converge to offer customers the ultimate in service. You'll also see the emergence of companies that never saw themselves in the past as utilities. Whether global or local, though, much of the work will involve storing, processing and transporting information for “multimedia” use. Basically, this means information – as voice, text, music, images or video –

LOOKING AHEAD

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will be available to customers in an easy-to-use combination of forms.

Where are the growth opportunities in the next decade?

"Smart telephone companies in the next decade will look for growth and investment opportunities *within* the communications industry," says Sheth. "They'll concentrate on improving what brought them success in the first place – their core capabilities, their networks and operations."

Most likely, an acquisition that isn't a good fit with the core business will be a distraction, and any distraction during the next decade will be unwelcome. The hurly-burly, changing telecommunications business will demand all the focus a company can muster. Every available ounce of brainpower and energy will need to be concentrated on customers and what they want.

Here are areas where the industry will grow in the coming decade:

■ SHORT TERM: *Wireless will be wild*

"Wireless communications is where you can expect to see the most short-term action," says Sheth. "Every piece of this market is either already growing rapidly, as with cellular services, or is projected to grow enormously, as with personal communication services, or PCS. Even wireless technologies around for a long time, such as one-way paging, are booming."



Cellular subscribers in the United States already number 13 million, with 30-40 percent growth yearly. PCS may attract 60 million U.S. customers in the first decade. Demand for mobile data services, though small today, is expected to explode in coming years. These services will likely be put to use by the 40 million or so mobile workers in the country.

Experts in the industry estimate that 70 new wireless networks will be established globally in the next few years – a huge opportunity for a global-minded company like BellSouth. Eventually, these wireless systems, combined with wireline ones, will be able to offer customers at the beach or in an office the same things they can get in their homes – just as if they have an invisible fiber-optic cable with them wherever they go.

■ MEDIUM TERM: *Video is clearly in the picture*

In a few years, Sheth says, telecommunications companies will be able to provide a number of "video-on-demand" services – video services available by TV or computer to customers when and how they want them. You'll see at least six common uses:

■ **Video entertainment:** Companies will find this a major source of revenue. Customers will be able to decide what, where and when they want to see virtually anything produced in a video format.

■ **Video advertising:** A huge amount of advertising will shift from local newspapers to video, adding at least \$20 billion a year to the industry's bottom line. Both the classified advertising business of newspapers and the directory business of telephone companies will be making the change.

■ **Video shopping:** In an increasingly time-pressured society, interactive video shopping will grow rapidly, as customers become more comfortable ordering goods from their living rooms.

■ **Video education:** There are already more than 60 corporate video-education networks. This trend will speed up, as publishers begin to develop multimedia education materials that are easy to buy and use.

■ **Teleworking:** Work today often doesn't require a worker to be stuck in a single location. Teleworking – working from a remote location by phone line, modem, computer and other technology – will greatly boost the use of the network. Workers won't lose much away from the office; technology can now provide "virtual telepresence," a fancy term for the information available at a work site, plus access to coworkers there or anywhere else.

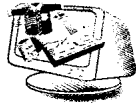
■ **Telemedicine:** Telemedicine, the electronic sharing of diagnostic information, records, charts, X-rays and other health-care information, is already on the rise. The use of telemedicine will increase rapidly as the cost of health care continues to be an issue.

■ **LONG TERM: Opportunities emerge as nations emerge**

For long-term growth, telecommunications companies in the developed world will have to target emerging nations, according to Sheth.

"In the 19th century, the world economy grew as Europe grew. In the 20th century, the United States and Canada served as the engines of global economic growth. In the next century, the huge emerging nations of Asia and Latin America, along with other developing countries, will offer the greatest economic opportunities," Sheth explains.

How big are these markets? Staggering. It is estimated that fewer than 50 percent of all the people in the world have ever made a single phone call. Only about 500 million of the 5 billion people in the world even have phones. Obviously, a large market is waiting, and countries are eager to leap into the Information Age.



"Most developing nations now place an equal, if not higher, priority on creating a telecommunications infrastructure as they do on roads, bridges and electricity," says Sheth. "The World Bank is stepping up its lending for telecommunications projects, and it is likely that a new development bank will be created just to fund such initiatives. China alone is expected to add 20 million access lines a year for years to come. The India market could match China's."

Obviously, opportunities are waiting for companies able to act on a global scale.



■ **BellSouth is ready to explore its advantages.**

BellSouth is in the right place at the right time, ideally positioned today to capitalize on some of the biggest growth opportunities in telecommunications.

Sheth feels factors in its favor are:

■ **Location:** BellSouth's wireline territory is entirely in the Sunbelt, the fastest-growing region of the U.S. The Census Bureau forecasts a continuing healthy growth rate here in the next decade.

■ **An emerging north-south "trade axis":** With passage of the North American Free Trade Agreement (NAFTA) and other treaties, a north-south trade axis in the Western Hemisphere has become very important. More and more, a flow of goods, services, money and information will occur along this axis. BellSouth is geographically situated near some of the emerging Latin American nations, and the company already boasts a strong wireless presence in Latin America.

WHAT BELL SOUTH MUST DO.

One key concern must guide the actions of BellSouth during its second decade – creating shareholder value. This can be done best, according to Sheth, with a two-pronged approach: Strategies positioning for the future and more cash flow from efficient operations. Here's what Sheth feels BellSouth must do to increase its cash flow:

■ **REDUCE COSTS**

BellSouth must improve productivity, swap the traditional "you've got a job for life" employment arrangement in favor of one based on performance, and reengineer to streamline and focus business processes.

■ **FOCUS ON THE CUSTOMER**

A relentless focus on the customer and the delivery of superior services will be essential.

■ **MARKET MORE EFFECTIVELY**

Companies will have to make better use of marketing to generate greater revenue.

■ **IMPROVE THE REGULATORY PROCESS**

When markets open up to true competition, the opportunity increases for all the players – and for customers.

■ **Current position:** BellSouth, as one of the largest cellular players and part owner of RAM Mobile Data, is a leader in wireless services.

■ **The "box" stops here.**

Dr. Sheth feels strongly that new ways of looking at problems – so that they look a lot like opportunities – are vital for success in the next decade.

"*Stilus quo* management will not allow companies to take advantage of opportunities," Sheth says. "They will have to think out of the box – to anticipate where the technology and the market are going, and to aggressively position themselves to prosper in the future."