viewed as separate and distinct services and industries. Today, the number of customers who utilize the previously exclusive "copper wire "telephone system represents a rapidly declining percentage of the market for telephone services. (Verizon Communications, for example, has lost approximately 45 percent of its wire line customers over the past five years.) Today, many customers access voice services exclusively through mobile cellular (wireless) phones, a technology that became commercially viable in the mid- to late-1980s. In addition, the advent of cable-based phone service has sped the decline in copper-based services.

This transformation in the telephone sector of pre-1982 to today has not been smooth or easy. Significant capital investment has been made to develop new technologies and related infrastructure—it is estimated of that more than \$300 billion has been deployed to build out new telephone infrastructure. New entrants have experienced booms and busts as the supply of capacity outstripped demand, leading to bankruptcies and mergers. The original AT&T, the seven Baby Bells, and several large independent monopolies (e.g., GTE, Citizens, United Telephone and Alltel) have merged into four independent companies. The sector today is dominated by wireless and cable-based technologies.

Exhibit 5
Verizon Stock Price vs. S&P500 from 2000 to 2012



There are important lessons to be learned from the history of the telephone industry. First, at the onset of the restructuring of the Bell System, there was no vision that the changes to come would be so radical in terms of the services to be provided and the technologies to be deployed. Second, the telephone players acted boldly to consolidate to gain scale and then take action to utilize their market position to expand into new services on a national scale. Finally, and most important, if telephone providers had not pursued new technologies and the transformation of their business model, they would not have been able to survive as viable businesses today. So, while the sector has underperformed the overall market since 2000, and as shown in Exhibit 5, even a leading industry participant like Verizon Communications has not been able to perform in-line with