# THE CHANGING ENVIRONMENT OF WIRELINE TELECOMMUNICATIONS: HOW CAN ILECS ADAPT?

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#### ABSTRACT

The wireline telecommunications industry has experienced dramatic changes during the last three decades. The internet, new digital technology and regulatory changes have significantly increased competitive pressures on existing telephone companies or Incumbent Local Exchange Carriers (ILECs) as they were called after the passing of the Telecommunications Act of 1996. This paper briefly reviews the history of the wireline telecommunications industry and the development of ILECs and Competitive Local Exchange Carriers (CLECs) that entered the industry after 1996. Three propositions are developed that utilize the internet as a strategy to address the competitive pressures facing the industry. The first proposition states that most ILECs should have a website in today's telecommunications environment. The second proposition states that ILECs should keep their websites up-to-date and provide a great network experience. The last proposition states that rural ILECs should have a community specific online presence.

#### **INTRODUCTION**

After decades of slow growth and development, the telecommunications industry has dramatically changed in the past three decades (Chaturvedi, 2003). The two most notable changes are within the technological and regulatory environments of the industry. The invention of wireless technology has created a significant shift from wired services to wireless services. A study released by the Centers of Disease Control in December 2013 stated that 39.4% of American homes in June 2013 only had a cell phone (Blumberg & Luke, December 2013). The internet made Voice Over Internet Protocol (VOIP) popular with businesses. In addition, increased demand for mobile internet communications, video streaming technologies of all types, improved smartphones and cellular networks are contributing to the dramatic technological development in the telecommunications industry.

Until the late 1960s, the telephone industry was considered a natural monopoly that needed to be regulated (Rosston, 2012). However, technological advances paved the way, in part, to significant changes in the regulatory system of the industry. The creation of more communication choices, for example, the internet and cell phones, pushed the Federal Communications Commission ("FCC") to reduce regulations and encourage competition, especially between existing cable, satellite and telephone companies and potential new entrants.

How are traditional wireline telephone companies competing in this rapidly changing industry? This paper addresses this question be discussing ILECs and CLECs and proposing 3 propositions.

### **ILECs AND CLECs**

A Local Exchange Carrier (LEC) is responsible for connecting customers to local exchanges (the place where local residential and business phone lines terminate) and then re-routing the phone call to another local exchange or to a long-distance carrier. After the Telecommunications Act of 1996, these local exchanges became a shared space (Roos, 2014). The original owner and operator of the local exchange was called an Incumbent Local Exchange Carrier (ILEC) who was required to sell access to its network to new entrants and competitors called Competitive Local Exchange Carriers (CLEC) in addition to maintaining the equipment and services for all customers. The services, or access, to the local exchanges had to be sold to CLECs at wholesale prices. The CLECs also had the option of which specific network pieces (such as loops, switches, and lines) they wished to have access to. This ability to access already in place networks greatly reduced barriers to entry for new firms and increased competition. CLEC telephone service grew quickly and by 2007 CLECs operated 18% of the end-user telephone line market.

Today, ILECs are laying fiber optic cable lines as the last-mile connection to residential and commercial telephone subscribers. Under the Telecommunications Act of 1996, ILECs are only required to share and allow access to the traditional copper phone lines.

install infrastructure to reach subscribers.

### PROPOSALS

Given all the dramatic changes in the industry environment of ILECs, how can they plan for the future? It starts with them changing their perception of themselves of 'just being a telephone company' to being a 'communications and entertainment company' and by communicating this to their customers (Kemmerer, July 25, 2012), just like the largest ILECs, Verizon and AT&T, have done. Many rural ILECs still view themselves as companies that just provide telephone service. The following three proposals are predominantly geared towards rural ILECs who should adopt strategies that connect them to their customers in a more mobile and online manner.

*Proposition 1: Most ILECs, small, medium and large, will maintain a website.* 

*Proposition 2: Larger ILECs will have websites that are more up to date and useful to consumers than the websites of smaller ILECs.* 

*Proposition 3:* Rural telephone companies will have website content and features that are more community specific than larger telephone companies that serve multiple states or the country.

## **References Available Upon Request**