

# Critical Trends, Tools, and Issues in Telecommunications



**John H. Nugent**  
*University of Dallas, USA*

**David Gordon**  
*University of Dallas, USA*

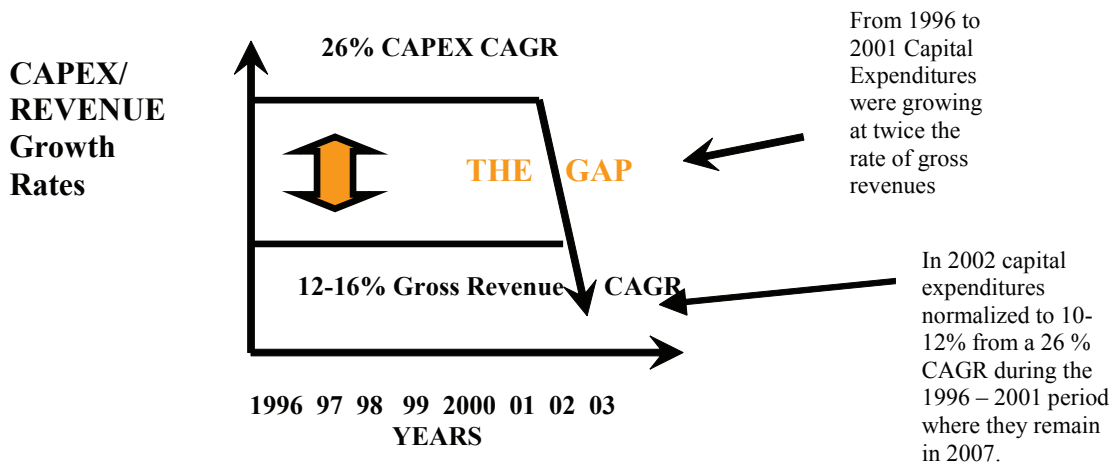
## INTRODUCTION

As in all industries, in order to win in a market and set an appropriate strategy, it is important to know as much as possible about that market and have at one's disposal tools that will provide insight and competitive advantage when properly, collectively, consistently, and timely applied. This paper presents a series of powerful, but easy to use and understand, analytical and operational tools that deliver insight and competitive advantage to the telecommunications professional. Moreover, it should be stated that as with all good tools, the tools and models as presented herein transition across industry lines and are not limited to the telecommunications industry alone.

## BACKGROUND

Starting in the 1990s, the telecommunications market appeared to experience unprecedented and unbounded growth with the advent of The Telecommunications Act of 1996. This growth was paralleled by a growth in capital equipment purchases (CAPEX) by network operators (see Figure 1). However, by the early 2000s, we saw a major market correction and the collapse of many firms that caught many industry professionals, bankers, and investors by surprise. The economic dislocations caused by the failure of so many telecommunications network providers were enormous. Hence, an examination was undertaken to see if tools and models existed that could provide significant insight into

Figure 1. The revenue capital expenditure growth rate comparisons



Source: Hilliard Consulting Group, Inc., 2007

changing market conditions. By examining these market dynamics and the fundamentals at play in the telecommunications space, it becomes apparent there are models and tools that provide insight as to the market's stage, and where it is likely to go next. Such a view is important to the investor, creditor, and operator alike in order to have a vision of the current and future market states so appropriate and timely decisions can be reached.

## ANALYTICAL TOOLS AND MODELS

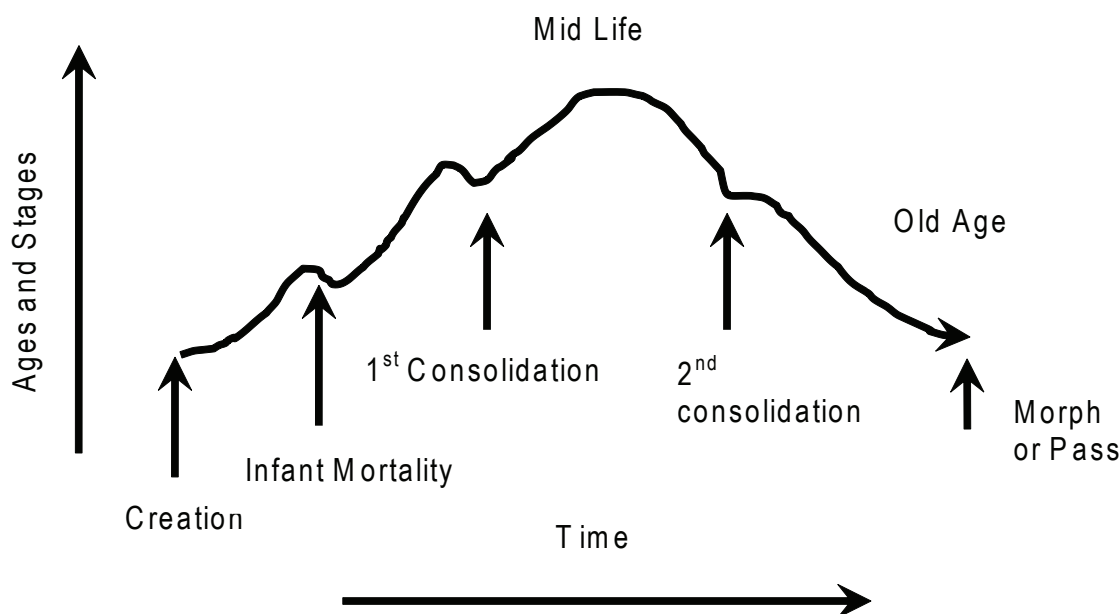
Because of the turmoil experienced in the telecommunications industry over the past decade, it is useful to view tools that can assist the telecommunications professional with understanding the market(s) and the trends at play. Looking at the telecommunications market from 1996 to 2007, it can be seen that the market exploded in the first half of this period with a 26% cumulative annual capital expenditure growth rate (CAPEX CAGR), collapsing in the latter part of this period (Hilliard, 2007; Lehman Brothers, 2000).

When capital expenditures so far outstrip the gross revenue growth rate, one knows this situation cannot continue unabated, and a return to a more normal state must take

place. In order to discern approximately when a return to a more normal state will come about, one may examine the underlying market drivers (Nugent, 2001, 2003). Market drivers will often signal the size, breadth, and depth of a market.

*Market Drivers:* During the period of 1996-2003 several large drivers were evident. The first was identified as the Y2K driver. Here many firms determined it to be better, easier, and less costly and risky to replace versus remediate infrastructure equipment. But here it was known this driver would be satiated by 2000. A second major driver was The Telecommunications Act of 1996 ([www.fcc.gov](http://www.fcc.gov)). This Act brought about the creation of many new telecom competitors that raised billions of dollars in the equity and debt markets that went on a spending spree. However, most of these firms had flawed business plans, and through competitive thrusts by the incumbents in the form of administrative delay, regulatory appeal, and litigation, these new entrants were literally bled dry via the consumption of cash in non-revenue producing activities such as regulatory appeals and litigation, and doomed to failure (Nugent, 2001, 2003). Understanding how significant incumbents fight and how they use the most strategic weapons of all – cash position and cash flow – the demise of these new incumbents could be foreseen.

Figure 2. The life cycle curve



Source: Hilliard Consulting Group, 2006

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