Innovator's Dilemma

Earl F. Burkholder, PS, PE, F.ASCE Global COGO, Inc. – Las Cruces, NM 88003 November 2023

The Digital Revolution is characterized by the transition from analog to digital signals for the representation of information. At times, consequences of the Digital Revolution are known as Disruptive Innovation because the rules for handling digital information must satisfy different processing procedures and models. Such changes are embraced by some but avoided by others.

On the positive side, the disruptive innovations become the basis of expanding opportunities in various activities and operations. New more efficient methods are brought to bear on existing operations, and many have benefited. Examples and case studies are often cited to give testimony to numerous successes.

However, just making the transition analog to digital is no guarantee of success. Managers responsible for planning a fruitful path forward also need to be aware of possible pitfalls. An excellent source of cautionary examples is, "The Innovator's Dilemma" by Clayton M. Christensen published by Harvard Business Review Press (©1997, 2000, 2016).

The Introduction of the book begins, "This book is about failures of companies to stay atop their industries when they confront certain types of market and technological change."

Introduction, page xvii, contains the statement, "Part One, chapters 1 through 4 builds a framework that explains why sound decisions by great managers can lead firms to failure."

The same section continues, "Part Two, chapters 5 through 10, works to resolve the dilemma."

Chapter 11, "The Dilemmas of Innovation: A Summary," describes seven specific insights which are offered as "simple and sensible." In this author's opinion, Chapter 11 is a "must read."

The back cover of the book lists the following testimonials. . .

- 1. Business Week: "A holy book for entrepreneurs in Silicon Valley."
- 2. Michael R. Bloomberg, founder, Bloomberg Financial Markets, former mayor of New York City: "Absolutely brilliant. Clayton Christensen provides an insightful analysis of changing technology and its importance to a company's future success."
- 3. The Financial Times: "The Innovator's Dilemma achieves a rare feat: It is at once a satisfying intellectual solution to a long-standing business puzzle and a practical guide for executives and investors."
- 4. Wired: "... Required reading in Silicon Valle, where it has been championed by the likes of Steve Jobs, George Gilder, and Andy Grove.

Examples of "disruptive innovation" and "going digital" include:

- A. Disruptive Innovation & Future of Surveying, see <u>www.globalcogo.com/DisruptiveInnovation.pdf</u>.
- B. AT&T see <u>www.globalcogo.com/ATandT-Story.pdf</u>
- C. A web search on "Kodak digital" returns many links, including. . .
 - <u>https://pradeepsingh.com/kodak-digital-revolution/</u>
 - https://en.wikipedia.org/wiki/Kodak