

NEW DIGITAL ECONOMIES

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Introduction

I delivered this lecture to a graduate class of 30 Master's Degree candidates in Mexico City for the University of Texas (Dallas) In the complete lecture, there are 29 slides. Ten are available here. I updated the slides in January 2019. To view the complete lecture, contact Frank McDonough at frank@frankamcdonough.com. With your request, please enclose a few sentences describing your current interests and background.

In this lecture, I have three goals

1. Demonstrate to the students that successful organizations come and go. Few, including governments, stay at the top forever. Leaders must consider the inevitability of change. I use the contrasting examples of Kodak and Google to illustrate this principle.
2. The second goal is to help my students plan for their organizations, their programs, their careers and to be able to provide career advice to their children. To enable this planning, we discuss those industry sectors already transformed in the post-industrial age, those being transformed, and the lessons we can learn from these changes.
3. To further assist students to plan for their many responsibilities, how can each of us look into the near future? What lies ahead for factors important to us as individuals with separate interests and needs? What sources should we review? What sources should we trust?

Define the Digital Economy

It is the **global network** of economic and social activities that are **made possible by** platforms such as the **internet, mobile, and sensor networks.**

Drivers of the Digital Economy

- Mobility,
- Cloud computing,
- Data mining creating business intelligence and
- Social media
- *Note: The developed world is investing at a greater rate in these technologies than the developed countries.*

Trends

- Global competitiveness
- Emerging countries are investing heavily in technology, potentially leapfrogging developed countries

Companies, Like Teams, Do Not Stay At the Top for Long

- Peter Senge, MIT, concludes the average life of a Fortune 500 company is 30 years.
- **Fortune 500 companies are the largest in America. In revenue, Walmart is number one in 2018. Exxon and Berkshire Hathaway are tied for number two.**
- Jim Collins, author, notes only 71 companies on the original 1955 Fortune 500 list are there today.
- **50% of Fortune 500 companies in 1999 are off the list today.**

In the Digital Society, there are Winners and Losers

- **Kodak is one of the losers.**
- **Google is one of the winners.**

One Victim of the Digital Age-Kodak

- **1900 - The Brownie camera was launched with a price of \$1, bringing photography to the mass market. 1969 - The film, used on the Apollo 11 missions, was manufactured by Kodak.**
- **1975 - Kodak was the first company to build a working digital camera**
- **1976 - Kodak had a 90% market share for photographic film and an 85% share of camera sales in the US.**

Kodak continued

- At its peak, it had 100,000 employees and sales in 2013 dollars equivalent to \$50 billion.
- **2004 - Kodak stopped selling film cameras in the face of increasingly popular digital alternatives.**
- **2005 - Kodak was the largest seller of digital cameras in the US, with revenue reaching \$5.7 billion. By 2007, it had fallen to fourth place and by 2010 to seventh.**

Kodak continued

- 2009 - Kodak stopped selling 35mm colour film after 74 years of production.
- 2011 - Kodak shares fell by more than 80% as it struggled to maintain market share and faced a huge pension costs for workers.
- 2012 - [Kodak filed for chapter 11 bankruptcy](#), sues Apple for patent infringement, and begins its patents for \$525,000,000.
- 2012-2018. After bankruptcy, focus is on imaging for business

As Kodak Goes, Google Arrives

- 1995. Larry Page and Sergey Brin meet at Stanford. (Larry, 22, a U Michigan grad, is considering the school; Sergey, 21, is assigned to show him around.)
- 1996. They begin collaborating on a search engine called [BackRub](#).
- Sun co-founder Andy Bechtolsheim writes [a check for \\$100,000](#) to an entity that doesn't exist yet: a company called Google Inc.

Google History continued

- 1998. Google sets up workspace in Susan Wojcicki's garage at [232 Santa Margarita, Menlo Park](#).
- 1998-2012. see this site for the extraordinary activities in Google.
 - <http://www.google.com/about/company/history>
- 2018 Market value: \$762 billion