The World is Flat
Book Review, Chapters 1-3

Dr. James Stapleton
1. Introduction

1. The Author – Thomas L. Friedman, Pulitzer Prize Winner, New York Times Columnist, Best-Selling Author

- 1990 - From Beirut to Jerusalem
- 2000 – The Lexus and the Olive Tree
- 2003 - Longitudes and Attitudes
- 2005 – The World is Flat
Discovering the Flat World

1. While I Was Sleeping
   1. Genesis Moment; 2004 – Friedman traveled to Bangalore, India to film a Discovery Channel documentary about outsourcing
   2. Meeting with Nandan Nilekani, CEO of Infosys Technologies
      ▪ Nilekani described very recent advances in global network connectivity and computer technology that created a “platform” intellectual work could be delivered from anywhere in the world
      ▪ “The global playing field has been leveled”.

2. Meeting with Nandan Nilekani, CEO of Infosys Technologies
   ▪ Nilekani described very recent advances in global network connectivity and computer technology that created a “platform” intellectual work could be delivered from anywhere in the world
   ▪ “The global playing field has been leveled”.
Discovering the Flat World

3. What does a “level playing field” mean?
   - All the knowledge centers in the world can now be connected
   - **Anyone, anywhere** can deliver anything that can be digitized and transported using the Internet
   - The comparative advantages held mostly by Western economies have been minimized by social, technical, and economic factors around the world

4. While we were sleeping (consumed with 9/11 and global terrorism) unique forces converged in about the year 2000, and the global economic playing field changed dramatically

5. Like Columbus in 1492, Friedman accidentally discovered a drastic change in the world
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- Brief history of globalization?
  - **Globalization 1.0 (1492-1800)**
    - Spearheaded by countries and governments globalizing
    - Dynamic force of change was brawn; imperialism, power, collection of natural resources
  - **Globalization 2.0 (1800-2000)**
    - Spearheaded by multinational companies globalizing
    - Dynamic force of change was hardware (from steamships and railroads to mainframe computers)
Discovering the Flat World

- Brief history of globalization?
  - Globalization 3.0 (2000-present)
    - Spearheaded by individuals and small groups globalizing; new and unique in this era of globalization
    - Dynamic force of change was the creation of a flat-world platform that enables individuals and small groups to communicate and compete in the global economy
    - Large and small companies have been newly repowered – if they can adapt to The Flat World business paradigm
Discovering the Flat World

1. Flat World Business Paradigm
   1. Market forces apply to global marketplace: Work gets done where it can be done most effectively and efficiently
      ▪ When work is outsourced it frees up resources to focus on delivering value and reduces costs, benefiting customers and companies.

2. Digitizing and Decomposing the Value Chain – a Flat World Paradigm
   ▪ To maintain a comparative advantage, companies must look for opportunities to reduce costs by outsourcing those functions that can be delivered across the new global communication platform
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1. Flat World Business Paradigm—Outsourcing from U.S. to India

1. Mphasis: Virtual Tax Room
   - Transforming the U.S. accounting profession
   - Prepared 400,000 personal income tax returns in 2005
   - 70,000 accounting graduates annually in India, starting salary is $100/month
   - What services will US accounting firms offer? More creative and complex value-added services!
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1. Flat World Business Paradigm – It’s Happening
   1. Outsourcing from U.S. to India Call Centers
      - Estimated 245,000 Indians employed in contact centers
      - Inbound and outbound customer contact calls—everything from tracing luggage to computer support and sales
      - Service provider for large US firms including Dell, Microsoft, and Citibank
      - Considered high-wage, high-prestige job in India, monthly take home pay starting at $200/month
      - NARS – Cape Girardeau, considered low-wage, low prestige? Monthly take home pay starting at $1,200/month
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1. It’s Global: Outsourcing from Japan to China
   1. Japanese speaking Chinese individuals doing high-tech jobs in Dalian, China for Japanese firms
   2. Same firms provide backroom data processing for US multinational Asian operations
   3. Despite historical conflict between China and Japan – Japanese want to be successful in Flat World
Discovering the Flat World

1. It’s Domestic: Other Flat World Business Examples in the U.S.
   1. JetBlue: Homesourcing
      ▪ 400 reservation agents work from home connected to JetBlue’s operational systems via the Internet
      ▪ Why rent big buildings and the associated costs?
      ▪ Estimated in 2006 that 16% of the U.S. workforce worked from home
Discovering the Flat World

1. It’s Domestic: Other Flat World Business Examples in the U.S.

1. Cape Girardeau McDonald’s franchises outsource order-taking to Colorado call center
   - Excellent example of a business decomposing its value chain. Can’t anyone, anywhere take your order for burgers and fries.

2. UPS provides logistics fulfillment for dozens of U.S. firms, because they do it better, faster, and cheaper
Discovering the Flat World

1. Is Globalization 3.0 profound and historic in proportion to previous fundamental changes in the world?
   1. Invention of the printing press
   2. Industrial Revolution

2. The Flat World could produce changes in the role of individuals, governments, business practices, how wars are waged, ways science is conducted, etc...
   1. Some argue The Flat World is unique because it’s transition is broader and much faster than previous eras.
The World is Flat – Chapter 2

- What flattened the world?
  - Approximately in the year 2000 a convergence of several economic, technical, and social forces combined to provide a platform where intellectual work and intellectual capital could be delivered from anywhere in the world.

  - This global platform is connecting all of the knowledge centers on the planet into a single global network.
Ten Forces That Flattened the World

- Flattener #1 – 11/9/1989 – When the Walls Came Down and the Windows Went Up

- Friedman takes the opportunity to combine a significant social force with a significant technical force that took place at the end of 1989 and beginning of 1990 as his first flattener; first significant move toward a flat world.
The Berlin Wall was a cement wall that separated West Berlin from East Berlin and the rest of East Germany. The wall was built in 1961. Between 1961 and 1989, when the wall was dismantled, more than 300 people were killed for trying to cross the wall. East German government prevented its citizens from enjoying, even glimpsing at freedom.
Ten Forces That Flattened the World

- The East German government allowed citizens to cross the wall into West Germany on 11/9/89
- Fall of the Berlin Wall started a string of events that ultimately liberated all of the Soviet Empire
- It also tipped the balance of power across the world toward those advocating democratic, consensual, free-market-oriented governance (capitalism over communism)
Ten Forces That Flattened the World

- The democratic - capitalist movement provided more freedom to 100’s million of people from India, Brazil, China, and Soviet Union
- It also allowed people to start thinking about the world differently: to see it as more of a seamless whole (significant event in globalization)
What lead to the fall of the Wall?

- The physical decay of the Wall is symbolic of the decay of communist empires
- The Cold War was the period of conflict, tension and competition between the United States and the Soviet Union and their respective allies from the mid-1940s until the early 1990s
- Friedman believes that among other things, technology ended the Cold War and lead to the fall of the Berlin Wall, and the end of communism
Ten Forces That Flattened the World

- Technology ended communism?
  - The fall of the Wall eliminated a physical geopolitical barrier—another barrier stood in the way
  - People had access to very limited information; until.....
  - A personal computer that used universal operating systems that could be connected to telephone networks came along
Ten Forces That Flattened the World

- Information is Power
  - The first PCs hit the market in 1981 and Windows 1.0 operating system launched in 1985
  - The PCs were slow and the operating system was very difficult to use (no graphic interface)
  - Windows 3.1 shipped on May 22, 1990 with greatly improved user-friendliness
  - About the same time the Internet became commercially available and people other than scientists began using e-mail, fax machines to share information
Ten Forces That Flattened the World

- The political constraints in communist countries on individuals access to information ended! (although some constraints still exist)
- The practical constraints ended with the PCs running Windows OS connected to the Internet
  - But the technology was still a limiting factor for passing large amounts of data
Ten Forces That Flattened the World

- Flattener #2 – 8/9/95 – When the Web Went Around and Netscape Went Public

- By the mid 1990s the PC had reached it’s plateau.
  - Connectivity was limited to a small network of computers – normally within one company
  - A breakthrough was needed to expand the capacity to exchange information using the Internet
Ten Forces That Flattened the World

- The first breakthrough—The World Wide Web
  - The World Wide Web was created by British computer scientist Tim Berners-Lee and he posted the first Web site in 1991
  - The WWW was a global hypertext system invented to bring the Internet alive as a tool of connectivity (Internet) and collaboration (WWW)
  - Within 5 years the number of Internet users jumped from 600,000 to 40 million
Lee’s invention was very important, but what popularized the WWW and the Internet was the creation of the commercial web-browser

- Before the browser, the WWW looked like a folder on your hard drive.....a long list of text-titled database files (NO LINKS OR GRAPHICS!!!!!!!!!!)

- Netscape created the first widely popular commercial web browser and started offering their stock to the public 8/9/1995
Ten Forces That Flattened the World

- Netscape immediately captured the majority of the browser market, offering its product free in many cases to generate users on the Internet.
- The WWW protocols and browser software created the ability to share anything that could be digitized over the Internet.
- But the Internet network was still a constraint; it wasn’t available in many countries or regions, and it had limited bandwidth and transmitted data at very low-speeds.
Ten Forces That Flattened the World

- Netscape’s very successful public stock offering sparked the Internet boom

- This led to enormous interest in technology start-ups and stock market investment, largely speculative, in firms focused on Internet and WWW products and services
Ten Forces That Flattened the World

- Stock investors poured billions of dollars into Internet and telecommunication companies based purely on speculation that all-things Internet were golden investments.
- This over-investment creates a phenomenon referred to as a bubble (a metaphor for a market about to pop).
- The dot-com bubble was the largest in the history of the world.
Ten Forces That Flattened the World

- Before the dot-com bubble burst, the Internet got a big dose of steroids
- In order to transmit large data files the Internet backbone needed to improved
- Telecommunications companies were the darlings of the dot-com bubble—tremendous investment in Internet bandwidth, including global fiber-optic networks provided nearly endless Internet capacity worldwide
Ten Forces That Flattened the World

- When a market bubble bursts stock holders sell their stock, forcing the market price down and depleting the company’s capital
- Most of the dot-com companies did not generate profits, so they went bankrupt
- Fortunately, many of their investments were still operable—most importantly a worldwide fiber optic Internet
Ten Forces That Flattened the World

- Flattener #3 – 8/9/95 – Work Flow Software

- What was left to create a robust global communication platform?
  - Capitalist economies were expanding
  - PCs were improving dramatically
  - The WWW and browser provided a system for easy browsing of rich media
  - The Internet was being built everywhere, with endless bandwidth and speed
Ten Forces That Flattened the World

- Software was needed that enabled people in more places around the world to design, manage, and collaborate on business data handled manually—people wanted to do business on the Net.
- Work started to flow within and between companies and continents faster than ever but everyone seemed to have their own software applications and couldn’t work with each other.
Ten Forces That Flattened the World

- Systems were needed that would ensure that everyone’s e-mail and software applications could connect seamlessly with everyone else’s inside or outside my company—no matter what software they were using.
- Dozens of new standards were created so documents and data could be transmitted to, and read on, any computer anywhere (SMTP, HTML, HTTP, TCP/IP, etc).
Ten Forces That Flattened the World

- Genesis Moment for the Flattening of the World: A New Global Platform for Collaboration
  - All kinds of people form around the globe could now plug and play, compete and connect on—in order to share work, exchange knowledge, start companies, and invent and sell goods and services.
  - This platform made the flattening of the world possible
We end our look at Friedman’s *The Flat World*, by discussing:

- The Triple Convergence: a tipping point around the year 2000 when the ten flatteners converged on such a scale and with such intensity that millions of people on different continents suddenly started to see something was new.
The Triple Convergence

- Convergence #1

- The Ten Flatteners converged to create a global, Web-enabled platform that allowed individuals, groups, companies, and universities anywhere in the world to collaborate.
The Triple Convergence

- Convergence #2

- Large gains in productivity come when new technologies are combined with new ways of doing business and new ways of living, and this always takes time.

- It takes time for the supplemental technologies, business processes, and changes in personal habits to converge and create real productivity increases.
The Triple Convergence

- Convergence #2

- Without the emergence of a large group of people interested and capable of developing ways to utilize the new global collaboration platform, the technology would have produced ZERO productivity gains.
The Triple Convergence

- Convergence #3

- Just as we finished creating this new, horizontal playing field, and companies and individuals primarily in the West started quickly adapting to it, 3 billion people who had been locked out suddenly found themselves liberated to plug and play.
The Triple Convergence

- Flattener #3

- The closed economies of China, Russia, Eastern Europe, Latin America, and Central Asia opened up during the course of the 1990s so their people were increasingly free to join the free-market game.

- The scale of the global community that is soon going to be able to participate in all sorts of discovery and innovation is something the world has simply never seen before.
Will free trade benefit America as a whole when the world is flat and so many more people can collaborate and compete?

What jobs in the flat world will be American jobs?

What comparative advantage will the U.S. have?
Free-trade Theory of Comparative Advantage, David Ricardo, Early 19th Century English Economist

If: A nation specializes in the production of goods in which it has a comparative cost advantage

And: Trades with other nations for their specialized goods

Result: Overall gain in trade and income levels should rise in each nation
## Comparative Advantage: Example

<table>
<thead>
<tr>
<th>Country</th>
<th>Wheat</th>
<th>Wine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost/Unit in Labor Hrs</td>
<td>Cost/Unit in Labor Hrs</td>
</tr>
<tr>
<td>England</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Portugal</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

- **England:**
  - Opportunity cost of a unit of wine is 2 units of wheat.
  - Comparative advantage producing Wheat.

- **Portugal:**
  - Opportunity cost of a unit of wine is 1.5 units of wheat
  - Comparative advantage producing Wine.
## Comparative Advantage

<table>
<thead>
<tr>
<th>Country</th>
<th>Wheat</th>
<th>Wine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Trade</td>
<td>After Trade</td>
</tr>
<tr>
<td></td>
<td>Wheat</td>
<td>Wine</td>
</tr>
<tr>
<td>England</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Portugal</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17</td>
<td>11</td>
</tr>
</tbody>
</table>

- England has 270 labor hours of production, Portugal has 180.
- Theoretically, specialization leads to increased global production, and each country earns more profit by focusing on producing the product with the least opportunity cost.
Lump of Labor Theory

- Notion that there is a fixed amount of labor demanded in the world, when it is supplied, regardless by whom, there won’t be any more jobs
  - Assumes everything that is going to be invented has been invented
  - While some jobs are lost to offshoring and outsourcing, new jobs are being created
Lump of Labor Theory Adjustment

- **U.S.**
  - Population: 100
  - Knowledge workers: 80
  - Low-skilled: 20

- **China**
  - Population: 1,000
  - Knowledge workers: 80
  - Low-skilled: 920

  Market expanded from 100 people to 1,100
  Knowledge workers expanded from 80 to 160
  Low-skill workers from 20 to 940

- Point: market expansion and free trade should benefit everyone, except for momentary adjustment periods during expansion

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Comparative Advantage in the Flat World

- Knowledge job wages will increase, even in developing countries as markets expand
  - Example: Knowledge workers in Bangalore

- Low-skill jobs that can be easily moved to lower-wage economies will move

- U.S. Future? “There may be a limit to the number of good factory jobs in the world, but there is no limit to the number of idea-generated jobs in the world.”
  Friedman

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Comparative Advantage in the Flat World

- Ricardo’s theory is still plausible in the flat world; the difference is how economies will develop and deliver their specialty products and services.

  - Examples of countries adapting from one comparative advantage to another
    - Northern Italy’s textile and apparel industry
The Way Forward

- *The Entrepreneurial Imperative*, Carl Schramm, Director, Kauffman Foundation for Entrepreneurship
  - The only uniquely American resource at our disposal “in the flat world” is entrepreneurial capitalism
  - Large corporations, government, universities, and start-up firms must fully exploit our comparative advantage
At the same time that 3 billion new competitors joined the global market, technological advances and changing business and individual habits converged to create the flat world.

If the theory of comparative advantage holds true, the US must find and focus on using it’s advantage.