

Information and Business Transformation *AKA* Online Innovation: New Patterns of Power and Profit

Eric K. Clemons © August 2018

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Context — View from MBAs






Previous MBA students have had their own way to describe this course:

***Online Innovation for
Strategic Consulting,
Private Equity
Valuation, and
Entrepreneurship***










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Context — My View

-  Information and Business Transformation
-  Online Innovation: New Patterns of Power and Profit
-  A guide to strategy and online innovation in the age of digital transformation






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Context — My View

-  This course may not be for everyone at Wharton
-  Innovation is not structured
-  Leadership is not structured
-  Executives' problem solving is not structured
-  Life's problem solving is not structured
 -  6:50 at the airport and 500 people are already queued for customer service
 -  Sirens, sirens everywhere
-  You may not believe that non-algorithmic problem solving is important
 -  If so, you may not like this course










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Context — My View

-  This course is not for everyone in an MBA Program
-  Don't misunderstand me!
-  I want you to take this course
-  I want you to love this course
-  I want this course to make you automation-proof!

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Context — My View

-  A different way of thinking — **Look and Know**
 -  *246 toothpicks*
-  Find the Pattern
-  Find the Vulnerability
 -  *“15 seconds alone, here, with an ax?”*
 -  *“What if we were not fighting an army?”*
 -  *“How can you compete with a distribution system owned by a search engine?”*
-  Pulling a rabbit out of a hat?
-  Finding the rhinoceros hiding in the tea cup?

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Context

- A different way of teaching — **Look and Know**
- Find the Pattern
 - But the patterns have been changed by information and the digital transformation of everything
- **Reframe** — change the question
- **Recognize** — find the right pattern to resolve the question
- **Respond** — evaluate your options, choose and implement your strategy
- And **Extend** — learn to create new patterns









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Context

- A different way of thinking — **Look and Know**
 - Induction, deduction, and **abduction**
- **Abduction** vs. **Lucky Guesses**
- Abduction is how we **create** the patterns
- Charles Darwin vs. Alfred Russell Wallace
 - Theory of Evolution based on the analysis of a vast amounts of data
 - Theory of Evolution based on the interpretation of a small number of facts







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Context

-  A passion for business
-  A passion for competition
-  A passion for strategy
-  Preparation for consulting, of course
-  Preparation for management, of course
-  Preparation for running your own business
-  As importantly for many of you, preparation for your first round of interviews
-  ... when information changes everything!

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Context

-  Information changes everything
-  Why is this useful to remember?
-  All aspects of strategy have changed
-  Changes strategic consulting and changes strategic planning more generally
-  How can we know what will change?
-  And can this kind of knowing really be taught?

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Course Intent

- Mastering your APVs!
- Thinking, in the tradition of the first Operations Research professionals
- Solving problems with insufficient data
 - The start of corruption trials in China in 2012
 - What could it mean?
 - AMG share price
 - The trend continues



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Course Intent

- Mastering your APVs!
- Solving problems by transforming them
 - Water balloons off a penthouse in Lincoln Towers
 - Big data analytics at the London Stock Exchange, in 1990
- Not just any problems — problems in information-based strategy
 - Because information changes everything
 - Securities trading on and off exchange
 - The customer profitability gradient, and firms that cannot defend themselves
 - Capital One
 - The customer profitability gradient, and again firms that cannot defend themselves

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Course Intent

- Mastering your APVs!
- Solving Problems in information-based strategy by transforming them into something you've seen before
 - The customer profitability gradient, and incumbents who cannot defend themselves
 - Uber as Capital One transformed
- Formal analytics based on patterns in information-based strategy
- Not just story telling —the *Melian Dialogs*







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Course Intent

- Mastering your APVs!
- Functioning when you have insufficient information
 - My first visit to the London Stock Exchange after Big Bang, when I thought we were going to talk about technology!
 - My visit with the Vice Chair as Cazenove
- Learning to play the same game
 - “So I was Bear on the Future, Bull on the Option, Delta-Hedged, and I still owned the residual volatility”*








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The Information Revolution

-  Information changes everything?
-  Were there prior revolutions?
-  Were there bigger revolutions?
-  What would Schumpeter say about winners, losers, and *creative destruction*?
-  What would Western Union, Digital Equipment, Polaroid, Kodak, Blockbuster Video, or AT&T say about creative destruction?
-  Our mission in this course is to help you survive










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Why Is this Course For You?

-  Because information changes everything?
-  Because you are not yet fully invested in the status quo
 -  Because you have not yet trained for the wrong life!
-  Telephone and the fall of Western Union
-  Stukas and the fall of France
-  Laptops and the fall of IBM
-  Course intent — to prepare you to lead, and to take the surprise out of surprises caused by increased information endowment









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Why to Take this Course

-  You expect to lead a business, or to have strategic responsibility
-  You expect to enter Strategic Consulting
-  You expect to enter Private Equity and you need to be able to assess business risks and opportunities
-  You expect to start your own business and you need to be able to assess business risks and opportunities
-  You need to understand how innovative online business models affect social policy, regulation, and the law
-  You need to understand how social policy, regulation, and the law affect innovative online business models
-  You believe that managers are paid to be leaders and thinkers as well as quants, and you want to prepare for a long and successful career
-  You want to master the new patterns of power and profit
-  You are passionate about business and competition









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Why *Not* to Take this Course

-  You think information-based strategy is about **hardware**
-  You think information-based strategy is about **software**
-  You think this course is about big data analytics, or that it **should be** about big data analytics
-  You hope never to need to take a risk, manage a risk, or make a strategic decision during your long career!
-  You believe all questions have a correct answer that can be calculated algorithmically
-  You believe that executives are rewarded for solving algorithmic problem sets
-  You cannot handle ambiguity in the classroom
-  You cannot handle stress in the classroom









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Strategy

-  Course mission is to teach strategic thinking
-  Strategy writ large and small
 -  Crossing Walnut Street
 -  Playing a Nicklaus golf course
 -  Mao staring down Stalin
-  Strategy as we will teach it in this course
-  Focus on a small set of paradigms, the recurring problems in information-based strategy
-  Focus on reframing, recognition, and response

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Strategy

-  Strategy as the Deployment of Economic Resources to Achieve Desired Outcome
-  In the Presence of Uncertainty and Hostile Intent
-  Maneuver (Trafalgar) vs. Attrition (Traditional Broadside)
-  Hustle as a Strategy? Is speed enough?
-  Would you rather have been Pickett or Hancock at Gettysburg? ...
-  Would you rather have been Lord Cardigan or Colonel Prince Obolensky at Balaclava?
-  Red Queen Principle and Rabbits and Foxes
-  Hitting the Wall and the Limits to Hustle











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Recent Rhinos

-  Working with a fast-growing craft brewer
 -  Understanding the changing consumer behavior in the presence of online information
 -  Redesigning beer offerings and barbecue offerings for maximum buzz
 -  Figuring out a China expansion strategy
 -  Figuring out how to deal with **Budweiserization** of the craft brewing industry, based on **Unileverization** of ice cream
 -  Will big players be able to dominate through advertising or control of distribution?
 -  Can small players even survive?







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Recent Rhinos

-  Understanding Google's business model
 -  What if anything is new?
 -  What is the source of their market power?
 -  Does competition work to limit prices or does competition among search engines actually create a reverse price war?
 -  Does competition work to improve quality of search or not?
 -  Does competition work to improve search engine behavior in areas like privacy?
 -  Can a higher quality and better behaved search engine actually succeed?
 -  Do regulators support consumers' actual preferences or not?
 -  Can the EU compete against American firms using a business model that is illegal in Europe?
 -  Importance of recognizing prior examples of this model

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Conclusion

-  Information changes everything
-  Patterns are powerful, and we need a new set of patterns for dealing with changes driven by change in information endowment
-  Fortunately, many “*new*” business models are “*reruns*” of prior great information-based models
-  ***Reframe***
-  ***Recognize***
-  ***Respond***