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## Digital Strategy MGT 857 Fall 2023

### Session 3 (Disruptors and Complementors)

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Yale School of Management

### Agenda for Today's Session

#### Where we were:

- Module 1 : Entry in **new** "Digital Native" Markets
  - New markets created due to digital technology

#### Where we are going:

- Module 2:
  - Entry into **existing** markets
- Disruptors and Complementors
  - What is the disruption process?
  - Theory of Disruption (*The Innovator's Dilemma* by Clay Christensen)
  - Disruptor's Business Model
  - Complementing process
  - Complementor's Business Model
- Cases: Apple Pay, Robinhood, Zillow + Redfin (Group presentations)

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### Administrative Updates

- Need a group in place for both assignment and project.
- Project Proposal due on Friday, Sep 15
  - Developmental, not evaluative (Not graded)
  - One slide with one paragraph — submit on Canvas (each group submits one entry)
  - Groups with set up meetings with me week of Sep 18



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### Disruptive Innovation

- What is disruptive innovation? How is it different from sustaining innovation? Why is it important?
- What is the disruption **process**? Why does disruption happen even with strong and powerful incumbent firms?
- What business model should a disrupting entrant adopt?
- What should incumbents do when faced with disruption?
- Are there other types of disruption not explained by this theory?



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### Digital Transformation at the New York Times

David Rubin, Chief Marketing and Communications Officer, NYT

October 6, 2023 (Friday)  
Lunchtime Talk (11:45 am – 12:45 pm)



David Rubin is the Chief Marketing and Communications Officer for The New York Times where he is responsible for enterprise-wide brand strategy, external and internal communications, creative, and media, as well as audience definition, strategy and targets. David was previously senior vice president and head of audience and brand where he led the development of the award-winning advertising campaigns "The Truth Is Hard," (2017), "The Truth has a Voice," (2018), "The Truth Is Worth It" (2018/2019), which won two Grand Prix awards at Cannes Lions in 2019 and was cited by The Drum as 2019's 2nd most awarded creative ad in the world, and the most recent "Life Needs Truth," which was AdAge's #1 on their Best of 2020 list.

He is also responsible for all acquisition and performance marketing, helping to propel The Times's consumer business, which recently surpassed 8 million subscribers, the largest digital pay model for journalism. Since September, David also leads communications for The Times, both external reputation and internal. David was named a 2019 "Brand Genius" by Ad Week and one of Business Insider's "25 Most Innovative CMOs in the World" in 2018.

### Disruptive Innovation



Which of these was a disruptive innovation?



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## What is Disruptive Innovation?

Disruptive: Technology, Innovation, Company

What is a disruptive innovation? (Theory)

- Simpler
- More affordable
- Inferior (in some dimension)
- Focuses on a different market segment

Disruptive Innovation can disrupt or displace firms that are using a *previously existing technology*.

**Disruption:**  
Broadens the idea  
Used for **product / service**, not just technologies

## Types of Innovation

### Disruptive innovation

- An inferior innovation that disrupts or displaces firms that are *existing technology* using a *previous technology*.

### Sustaining innovation

- A technological innovation that improves – Better performance
- More features
- Increased usability

## What are some examples of disruption?

New	Old	Inferior?
E-mail	Mail	
Streaming Audio / Video	Physical Media	
Ridesharing	Taxis	
Wikipedia	Encyclopedias	
Electronic Payments	Cash / Credit Cards	
Online Retail	Stores	

What is **inferior** about the new technology at the time of introduction?

## WHY DO WE CARE SO MUCH ABOUT DISRUPTION?



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Film Camera  
(mid 90s)



Digital Camera



In 1997, market cap was \$30 billion

In 2010, Market Cap = ?

Was Kodak just a poorly run firm? What does the theory say?



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## Why do top-performing firms fail? Hypothesis Development

Incumbent companies:

- (H1): Did not have access to new technology
- (H2): Did not pay attention to their customers' needs
- (H3): Management was Short-sighted

How do we test these hypotheses?



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# DISRUPTIVE INNOVATION

What does the theory tell us about the **process**?



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Why does this process happen?

Incumbent:

- Managers listen to their *investors* and best *customers*
- Best Customers want more things
  - Don't want things taken away
- Investors want focus on profitability or higher margin



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It does NOT happen because:

- Managers at incumbents are incompetent
- Incumbent firms do not know about or have access to new technologies (Kodak)
- New entrant firms have superior capabilities



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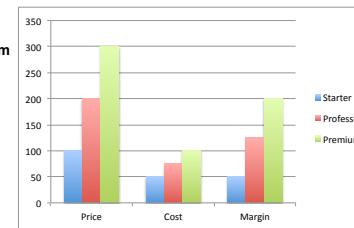
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What is the Process of Disruption ?  
(From incumbent firm's perspective)

What happens if a disruptive competitor comes in at the low end?

Product	Starter	Professional	Premium
Quality	Low	Medium	High
Price	100	200	300
Cost	50	75	100
Margin	50	125	200



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## The Disruption Process

for which product?

Undercuts the Price

Incumbent sees poor product performance

Incumbent invests in more profitable products

Drops starter product due to low performance

Value / Performance

Time

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What is the financially appropriate decision?

H

M

L

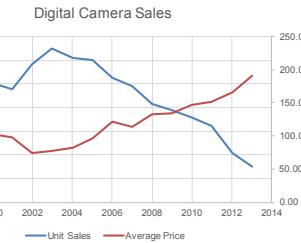
Disruptor

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Why does this process happen?

Digital Cameras in US

Is this consistent with theory of disruption?



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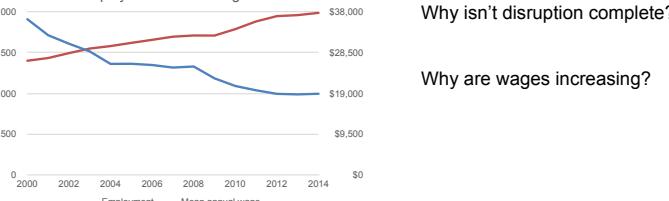
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## Disruption Examples

### Travel Agency



### Online Travel Agency (OTA)



Why isn't disruption complete?

Why are wages increasing?

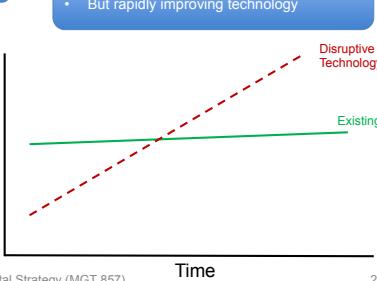
## DISRUPTOR'S BUSINESS MODEL

What business model should a disruptor use?

## Disruptor Business Model



Performance  
(Value from  
the Average  
Customer's  
viewpoint)



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## Disruptor Business Model

### Value Proposition

- Initially worse "performance"
- But rapidly improving technology

### Target Market

- Ignored or fringe market
- Worse on some dimension

### Technology

- Initially worse "performance"
- But rapidly improving technology

### Counterfactual (What If?)

What happens if the disrupting firm has a different business model?

- 1) Choose mainstream or "best" customers
- 2) Technology is worse and not improving
- 3) Choose a higher price
- 4) Go to Market through mainstream distribution channel



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## What should Incumbents do?



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## What should Incumbents do?

### Incumbent Best Practices

- Constantly evaluate new technologies for disruptive potential
- Do not focus only within industry: Look outside
- Evaluate how the new technology might disrupt
- Determine if you have in-house capabilities to develop the technology
- Do not attempt to manage a potentially disruptive technology in the same organization
- Consider acquiring emerging companies using disruptive technology

There is still no guarantee that you will not be disrupted!



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ELIE OFEK  
DIDIER TOUBIA  
OLIVIER TOUBIA

**HEAD vs. LEAD: Disruptions Originating at the High- vs. Low-End of the Market**

9-521-104  
APRIL 28, 2021

## Questions on Disruption

### Incumbent:

- If this process is well known, why don't incumbents learn about it and alter their response?
- How can we identify if something will be disruptive?
  - Especially if there several new technologies



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### Entrant

- For the disruptor, how do you choose the initial target market? Other than being a fringe market, are there any other criteria?
- Should disruptors always enter at the low end?  
(More Research needed)



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## Summary of Disruptive Innovation

- Two types of innovations: Disruptive and Sustaining Innovations
- Disruptive Innovation:
  - often begins as a simpler, less expensive alternative
  - Focuses on new uses or new markets
- Incumbent: You cannot measure markets that don't exist
- Disruption process can happen in a short period (< 5 years)
- Disruptor's business model is typically very different than incumbents
- Disruption is often incomplete
  - Incumbents in many cases find a way to go upmarket (but smaller)
- Identifying disruptive innovations (well in advance) is challenging.

v represents value or Willingness to Pay (WTP)

Independent Products  
 $v_{A+B} = v_A + v_B$

Complements  
 $v_{A+B} > v_A + v_B$

Substitutes  
 $v_{A+B} < v_A + v_B$

## COMPLEMENTS



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## COMPLEMENTOR BUSINESS MODEL

### Complementor Business Model



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### Disruptors and Complementors

- Technology can be used a disruptor or complementor
- Disruptor and Complementor strategy require very different business models
- Differ in terms of what resources and organizational structure are required
- Need to first determine overall strategic approach before going to business model.
- Can also change from one to the other over time



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