



8601-001

Digital Disruption &  
Technology Transformation  
*Draft Syllabus*

# Administration

## Overview:

As the generation of digital natives enter the c-suite and promote digital change, digital disruption to analog businesses will be a pervasive theme of management. *Digital Disruption & Transformation* seeks to navigate how companies can transform in the face of disruption. Specifically, the class will focus on the challenges and best practices associated with successfully transforming a business to compete with digital competitors. The class will dissect transformation across all facets of the business: product, marketing, leadership, organizational design, as well as customer acquisition and experience. The course will include digital transformation narratives across a variety of different industries in order to show what best practices exist across multiple contexts and to highlight how these practices should be customized to the specific industry. Students will learn to recognize digital disruption, identify best practices in devising and executing a transformation strategy, efficiently allocate resources to support that strategy, and alter organizational design to ensure the long-term success of the transformation. The course is focused on teaching via the case method with significant in-class discussion on cases as well as post class activities related to the case. The course will address all topics in the context of primarily later stage, larger enterprises and should be taken only by students with a serious interest in going into marketing, consulting, strategy, general management, or investment professionals interested in executing turnarounds or other similar strategies.

## Students will leave the class with:

- The ability to recognize disruption and devise pro-active strategies to compete
- A framework for understanding what makes for successful digital transformation
- An understanding of the interrelations between product, leadership, organizational design, and customer experience when executing a transformation strategy
- An understanding of how to build the necessary capabilities among employees and infrastructure to support a digital transformation strategy
- What cause a failed digital transformation
- The intricacies of digital transformation across different industries and an appreciation of where the specific idiosyncrasies of an industry come into play
- Substantial real-world lessons and advice through case work

## Course Materials:

Canvas will contain everything you need for the course, including class readings and assignment overviews.

## Grading:

In short, this class requires only your individual effort. First, you will be asked to participate in the lectures, case discussions, in-class scenarios, exercises, and guest speaker discussions. Second, you will be required to write up answers to questions in preparation for the class discussions. These will be based on the cases you read and in quiz format due prior to class.

- |   |       |
|---|-------|
| • Attendance & Class Participation (6 classes)    | 50.0% |
| • Individual Assignments – Case Quizzes (6 total) | 50.0% |

All students will be required to turn in all assignments on time. THERE ARE NO EXCEPTIONS. To prosper in this class, you must attend every class and complete all assignments before the start of class on the due date.

### Class Participation:

We will be spending some amount of time in class focused on the case and discussions within. Everyone should contribute over the course of the semester. Here are some points to keep in mind regarding classroom participation:

- One unexcused absence will result in a grade decrease. You need to attend all classes.
- You cannot be shy in leading transformation. Ask questions, participate, and most importantly, what you take from this class will be what you put into it. This will allow you to get the maximum amount out of this class and will help you in the future.
- Work together. Students can get together and discuss the best course of action for each class, case, and in class work. However, when you come to class you should come prepared to discuss individually.

### Prerequisites:

None. However, use your best judgement.

## Lesson Overview & Details

### Week 1: Course Introduction & Failed Digital Transformations.

We will introduce the course and dive in to one of the highest profile failed digital transformations: GE. Using the [GE](#) case as our guide, we will discuss what leads to failure in digital transformation. We will begin by discussing GE's correct insight that the value of data flows will be greater than the goods and services that the data is initially describing. We will then go on to describe GE's transition from selling "boxes" (hardware and goods) to selling outcomes--service contracts that ensure a desired outcome. We will move on to why this transition failed. As part of this discussion we will look at the issues presented by incumbency in a certain field and how that leads to difficulty in innovation. We will look at the failure among salespeople and customers to transform in the way management needed. In addition, we will also examine the difficulties of managing multi-sided platforms like GE and the importance of relationship capital when executing transformation. Last, we will conclude by discussing what we can extrapolate from the GE case to managing digital transformation at other companies.

*Real World Questions Answered In This Lesson: What is the difference between selling boxes and selling outcomes and what does that mean for cashflows and long term value creation? Why would a company prefer selling outcomes? What is the Industrial IoT and how will it change industrial companies? Why did GE fail to transform from selling boxes to selling outcomes? What are the difficulties in transforming an incumbent player? What should a company do when its core competences are destroyed through innovation? What generalizable concepts can be extracted to avoid failure when conducting digital transformation in other contexts?*

### Week 2: Digital Transformation Execution & The Merits Of Various Strategies.

Using the cases of [Mastercard](#) and [Axel Springer](#) as two successful digital transformations, we will discuss how both companies managed their digital transformations. As part of this discussion, we will identify the key difficulties that both Mastercard and Axel Springer faced in implementing corporation-wide change. We will contrast Axel Springer's very well-articulated and designed digital transformation strategy, with Mastercard's more amorphous vision of competing as a currency rather than a payment processor. We will discuss why both a top-down (Axel Springer) and bottoms-up (Mastercard) innovation strategy can work. We will also discuss innovation through acquisition vs. organic innovation. We will conclude by reflecting on the meaning of digital transformation as both a pro-active company strategy and reactive strategy.

*Real World Questions Answered in This Lesson: How do companies recognize the need for digital transformation? What drives a successful digital transformation and what is the role of leadership? How can management compartmentalize a business to ensure the transformation is complete across every facet of the business? How can a company innovate through strategic acquisitions? What are the role of successful partnerships in creating a successful digital transformation strategy?*

### Week 3: Digital Disruption & The Need for Transformation.

Using the [Barnes and Noble](#) case as our guide, we will discuss what constitutes digital disruption and what contributes to the success of a digitally disruptive product or strategy—in this case eBooks and tablets. Students will learn about the market dynamics of eBooks and digital publishing. After a thorough understanding of market dynamics, we will discuss the various strategic steps Barnes and Noble took to stay relevant. In addition, we will discuss the best way for Barnes and Noble to invest in order to compete with

larger companies like Apple or Amazon. The lesson will conclude by having students generate their own solutions to what they think Barnes and Noble should do next in the face of digital disruption.

*Real World Questions Answered in This Lesson: What are the advantages of the digitization of print publishing? Who is the target audience? What products will prevail in the industry? How do you pick a market winner-i.e. which company or product is best set up to compete given market dynamics? How do you efficiently allocate scarce resources to compete with more well capitalized companies? What is the book pricing and agency model and what does it entail for Barnes and Noble ability to compete on price with digital sellers like Amazon?*

#### **Week 4: Finding Best Practices For Digital Transformation Part I.**

This class will take a break from the case method and examine the frameworks proposed by [McKinsey](#) around what the best practices are for successful digital transformation. We will discuss McKinsey's five keys to success and apply this framework to the cases we have discussed thus far. We will identify the key challenges to following each key to success and how management can overcome these challenges. We will also discuss the implications that building capabilities for the workforce and empowering people to work in new ways might have on organizational design.

*Real World Questions Answered in This Lesson: What are the best practices as identified by McKinsey research for instituting successful digital transformation? What are the difficulties in following these prescriptions? What does a leader of digital transformation have to do to optimize for success? What is the role in equipping and deploying new technologies across a business in creating a successful transformation? How do managers need to transform communication channels? How can transforming organizational design aid digital transformation?*

#### **Week 5: Finding Best Practices For Digital Transformation Part II.**

Building on the framework from the McKinsey article, we will return to the case method and examine the cases of [ING](#) as well as [AccorHotels](#). We will begin analyzing the digital disruption taking place in both banking and hospitality. As part of that discussion, students will examine the advantages and disadvantages present in new technology for both sectors. We will also highlight the differences in how transformation should take place given the difference in industries. The Accor case will give students a chance to evaluate a successful transformation while the ING case will give students a chance to formulate their own thoughts on what the company will need to do both from a strategic, mission oriented standpoint and what that implies for implementation and organizational design. The class will build upon the framework offered by McKinsey to assess these two transformations.

*Real World Questions Answered in This Lesson: What is the role of online content in value creation for hospitality companies? What are the different types of online content and how do they affect the customer's experience? What are the various ways of managing online content? What are the consistent themes and best practices in changing organizational design to ensure successful digital transformation? What is the extent to which banking and hotels have been disrupted by digital technology? What are the advantages and disadvantages of adopting certain technologies? How should businesses invest in digital technologies to stay relevant?*

#### **Week 6: Digital Transformation In Not-for-Profit & Course Conclusion.**

In our last lesson we will apply what we have learned in digital transformation to a different context – not-for-profit. This lesson will draw on the [Tate](#) case and showcase how the CEO transformed what was thought to be a physically centered experience (i.e. Museums) into a virtual experience. The class will begin by discussing

the value and role of digital experience in a not-for-profit, brick-and-mortar business. We will then move on to discuss the keys to success and future challenges. This discussion will focus on clear articulation of KPI's and apply the frameworks developed in the two prior classes to assess what the Tate's CEO did well. The discussion will also take a look at ROI and monetization plans and try to assess the long-term value of the Tate's digital assets. The class will then conclude focusing on target market and value proposition to future consumers.

*Real World Questions Answered in This Lesson: What KPI's are essential in understanding the success of a digital transformation? What changes are required across interrelated parts of a business for that business to successfully go digital? How do you move consumers from a free model to a paid model? How do you measure ROI of digital programs? How does the combination of digital and physical improve the overall brick and mortar business?*

## Frequently Asked Questions

**What other schools offer a class like this?**

***Executive Education Programs:***

- **HBS:** [\*Leading an Agile Workforce Transformation / Driving Digital Strategy / Competing in the Age of Digital Platforms\*](#)
- **Wharton:** [\*Business Model Innovation in the Digital Age\*](#)
- **MIT Sloan:** [\*Digital Transformation: From AI to IoT to cloud, blockchain, and cybersecurity\*](#)
- **Haas:** [\*Digital Transformation\*](#)
- **Kellogg:** [\*Leading in the Digital Age\*](#)

***MBA Programs:***

- **HBS:** [\*Digital Innovation and Transformation\*](#)
- **Stanford:** [\*Systems Leadership for the Digital Industrial Transformation\*](#)
- **Haas:** [\*Digital Transformation\*](#)
- **NYU Stern:** [\*Digital Transformations in Media & Entertainment\*](#)

**What other courses at Columbia are similar to this course?**

***Executive Education:***

- [\*Digital Business Leadership Program\*](#)

***MBA Programs:***

- B8125-001: [\*Digital Literacy for Decision Makers\*](#)
- B8429-001: [\*Digital Investing\*](#)