Smarter Worlds
Half-Term course

Fall 2019 A term
Thursdays, 5:45 pm - 9:00 pm
September 12 – October 24, 2019

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TA: TBD

METHOD OF EVALUATION

Class preparation, Attendance and Participation 30%
Group Presentations 50%
Final Individual Paper 20%

READINGS

• Future Today Institute, “2018 Emerging Tech Trends”
• Erik Brynjolfsson and Andrew McAfee, The Second Machine Age, Chapters 1, 2, 4
• Michael Porter and Jim Heppelmann, “A Manager’s Guide to Augmented Reality,” HBR Article Collection
• Seth Shapiro and Andriy Pishchalenko, “Virtual and Augmented Reality: A State of the Industry Review,” USC School of Cinematic Arts
• Philip Evans, et al., “Thinking Outside the Blocks,” Boston Consulting Group
• Phil Gomes, “Blockchain Technology: The Marketing Value of Digital Permanence”
• McKinsey Global Institute, “The Internet of Things: Mapping the Value Beyond the Hype,” Executive Summary
• The Integer Group, “Embracing the Machines: AI’s Collision with Commerce”
• Susan Etlinger, “The Age of AI: How Artificial Intelligence Is Transforming Organizations,” The Altimeter Group
• Microsoft, “The Future Computed: Artificial Intelligence and Its Role in Society”
COURSE OVERVIEW

The Smarter Worlds course will give students the opportunity to learn about how new technologies are changing consumer behavior and business practices, and how this will impact the future of business development and brand building.

Developments in augmented reality, virtual reality, the Internet of Things, blockchain technology, artificial intelligence, and robotics will create a “smarter world” in the future. Ever-increasing amounts and forms of data will be analyzed and fused into new interactive tools that affect how businesses build relationships with their stakeholders, impact society, and build brands.

Major themes for course lecturers, guest speakers, discussions, and group and individual assignments will focus on the near- and medium-term impacts of these technologies on businesses and brand development:

- What elements are necessary for technological advances to reach mainstream business and/or consumer use?
- How will people react to the roll out of these new technologies? What will they expect from such technologies as they interact with brands that employ them?
- What strategies will firms need to employ internally and externally to use these new advances effectively?
- How can these technologies be used most effectively to build brand affinity?
- Where will these technologies create societal shifts that affect business and brand development?

COURSE ORGANIZATION

This course is a half-term course. It will include a mix of lectures that look at broad implications and methodologies around which to consider the effects of smarter worlds in addition to a range of guest lectures from practitioners implementing these technologies for business growth and brand building.

Students will be divided into groups that will present an analysis of a specific technological use case and its effects on consumer behavior or business model development.

Readings will be provided on Canvas.
CONNECTION TO THE CORE

The learning in this course will utilize, build on, and extend concepts covered in the following core courses:

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Connection with Core</th>
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<tbody>
<tr>
<td>Marketing</td>
<td>1. Innovation</td>
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<td>2. Integrated marketing communications</td>
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<td>3. Customer Analysis</td>
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<td>4. Competitive Analysis</td>
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<td>5. Branding</td>
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<td>6. Market Penetration &amp; Marketing Strategy</td>
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Students will be expected to have mastered these concepts and be able to apply them in the course.

ASSIGNMENTS AND GRADING

Requirements for the course are: prepare for, attend class and participate in class discussions (30%), written assignment (20%), and final group project (50%).

*Group Presentations* — During the first class students will break into groups of 4-5 members. In the projects, each group will take the perspective of a brand consultant and present insights and recommending a course of action to address how a particular brand could utilize two (or more) areas of technology development to better build its relationships with its stakeholders (external or internal).

This course adheres to Columbia core culture. Students are expected to be:

**Present:**
- On time and present for every session
- Attendance tracked

**Prepared:**
- Complete pre-work needed; expect cold calling
- Bring nameplates and clickers

**Participating:**
- Constructive participation expected and part of grade
- No electronic devices unless explicitly called for by the instructor
COURSE OUTLINE

Note: Tentative planning based on availability of guest lectures

<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>First-half</th>
<th>Second-half</th>
<th>Possible Guests/Companies</th>
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<tbody>
<tr>
<td>Session 1</td>
<td>9/12</td>
<td>Smarter Worlds</td>
<td>Internet of Things: Lecture</td>
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<td>introduction</td>
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<td>Session 2</td>
<td>9/19</td>
<td>Internet of Things: Guest panel</td>
<td>Artificial Intelligence: Lecture</td>
<td>Intersection, Honeywell</td>
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<td>Session 3</td>
<td>10/3</td>
<td>Artificial Intelligence: Guest panel</td>
<td>AR/VR: Lecture</td>
<td>Accenture, Deloitte Digital, HPE</td>
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<td>Session 4</td>
<td>10/10</td>
<td>AR/VR: Guest panel</td>
<td>Robotics: Lecture</td>
<td>Ori Inbar, Founder, Super Ventures</td>
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<td>Session 5</td>
<td>10/17</td>
<td>Robotics: Guest panel</td>
<td>Final Group Presentations</td>
<td>Aaron Horowitz, CEO and Co-Founder, Sproutel</td>
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<td>Session 6</td>
<td>10/24</td>
<td>Blockchain technology: Lecture</td>
<td>Blockchain technology: Guest panel</td>
<td>David Post, IBM</td>
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READING SCHEDULE

**Session 1: Smarter Worlds**
- REQUIRED: Future Today Institute, “2018 Emerging Tech Trends,” pgs 8-21
- REQUIRED: Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age*, Chapters 1, 2, 4

  **Internet of Things: Lecture**
  - REQUIRED: McKinsey Global Institute, “The Internet of Things: Mapping the Value Beyond the Hype,” Executive Summary (pgs 1-14)

**Session 2: Artificial Intelligence: Lecture**
- RECOMMENDED: The Integer Group, “Embracing the Machines: AI’s Collision with Commerce”
• RECOMMENDED: Microsoft, “The Future Computed: Artificial Intelligence and Its Role in Society”

Session 3: AR/VR: Lecture
• REQUIRED: Future Today Institute, “2018 Emerging Tech Trends,” pgs 134-140

Session 4: Robotics: Lecture

Session 6: Blockchain Technology: Lecture
• RECOMMENDED: Philip Evans, et al., “Thinking Outside the Blocks,” Boston Consulting Group