



Financial Disruption

Automation, Blockchains, and AI



The biggest factor in human progress is our ability to coordinate. Economists have been discussing how humans coordinate since Adam Smith's "the invisible hand" of the market. Markets are one way to coordinate; a decentralized way that reduces all our preference choices to one number: Price. But markets are not the only way. The second way is a completely centralized hierarchical structure: The firm. Markets and firms coexist and coordination mechanisms shift back and forth depending on what is more effective at any time or in any country. For example, Amazon, one of the biggest disrupters across a huge number of industries is almost completely centralized with all information flowing up to Jeff Bezos.

How you will benefit

- ✔ Understand why finance is being disrupted by technology
- ✔ Understand what areas of your own firm might be at risk from automation
- ✔ Brainstorm on ways to effectively implement the disruptive effects of technology into your own firm
- ✔ Understand when and why you might need blockchains
- ✔ Understand when AI is most likely to be effective

Faculty

Raghu Rau is the Sir Evelyn de Rothschild Professor of Finance at the Cambridge Judge Business School. He is also a founder and director of the Cambridge Centre for Alternative Finance (CCAF), as well as a member of the Cambridge Corporate Governance Network (CCGN).

Raghu Rau has taught at a number of universities around the world, including the Institut d'Etudes Politiques de

There are three major problems of coordination:

1. Matching (borrowers to lenders; employees to employers, workers to managers)
2. Solving asymmetric information issues
3. Adjusting for behavioral biases

The **Financial Disruption** course argues that technology is changing the way we coordinate. It documents how boundaries between firms and markets are shifting, disrupting entire industries in the process.

Paris (Sciences PO), the UCLA, and the University of California at Berkeley. Previously, he was president of the European Finance Association and Principal at Barclays Global Investors, then the largest asset manager in the world, in San Francisco from 2008-2009.

His research interests include empirical corporate finance, information economics, behavioral finance, and game theory. His papers focus on why investors behave the way they do in real life. He has investigated for example, behavioral biases that make investors value companies higher when the companies change their names, and the effect of early-life natural disasters on CEO risk taking behavior. He has also published a textbook on corporate finance.

Professor Rau is a former editor of *Financial Management*, and currently sits on the editorial board of several academic journals including the *Journal of Corporate Finance*, *Journal of Banking and Finance*, and the *Quarterly Journal of Finance*. His research has frequently been covered by the popular press including the *New York Times*, the *Financial Times*, the *Wall Street Journal*, and *The Economist*, among others. In 2015, Raghu was awarded the Ig Nobel Management Prize for his paper "What doesn't kill you will only make you more risk-loving: Early life disasters and CEO behavior".



This program is eligible for **18 CE credit hours** as granted by CFA Society VBA Netherlands

🕒 3 days

📅 18 – 20 September 2019

💰 € 3,600

Automation and Transformation

Information problems in firms

- Imperfect information, asymmetric information, and behavioral biases
- Digitalization and information flows within firms and markets
- Organizing data in firms
- Developing ontologies to compare preferences
- Matching preferences across multiple dimensions
- Capturing multi-dimensional preferences

Case study: AccorHotels – A digital transformation

The case discusses the strategic response of industry incumbents to the challenges coming from digital disruptors.

Case study: Transformation at ING (A): Agile

The case discusses the "agile" transformation of ING bank in the Netherlands, a reorganization of work which had been critical to respond to and exceed rapidly changing customer expectations.

Brainstorming: Threat and Opportunity Analysis

- Is your firm likely to face disruption? Should you automate processes? If so, which processes are ripe to be automated?
- Case studies from the audience

Distributed Ledgers and Blockchains

Distributed Ledgers: Bitcoin, Blockchain and Beyond

- What is bitcoin?
- What is a distributed ledger? When is it useful?
- When are blockchains useful?
- Mining blocks in class
- Understanding smart contracts
- The problems with poor smart contracting

Case study: Maersk: Betting on blockchain

The case discussed what challenges an organization will face in implementing blockchain technology.

Brainstorming: Threat and Opportunity Analysis

- When should you implement blockchain technology in your own firms? What are the advantages and disadvantages?
- Case studies from the audience

AI and Machine Learning

- How are AI systems created?
- Do AI systems help understanding employees and customers better?
- Can deep learning help detect fraud?
- The problems of AI systems
- The dark side of technology

Case study: Vodafone: Managing Advanced Technologies and Artificial Intelligence

The case discusses how to change an organization to incorporate technological advancements - big data, automation and artificial intelligence - to improve the way the functions work, and how to incorporate machine learning and AI.

Brainstorming: Threat and Opportunity Analysis

- Does your organization face a threat from AI? How can we implement machine learning or artificial intelligence in our own organizations?
- Case studies from the audience

Enrolling & Practical Information

Enrollment requirements

AIF considers each enrollment application carefully to ensure the quality and level of the program is maintained and that participation of candidates is beneficial to both themselves and their organizations. The general prerequisite for all AIF programs is the possession of an academic or equivalent degree, as well as proficiency in English and practical experience.

Accommodation

AIF has special corporate rates available for participants at a number of hotels in central Amsterdam.

Certificates

An AIF certificate of attendance is awarded to all participants who successfully complete the program.

Program location

The programs are held in the center of Amsterdam, within an easy walk from Amsterdam Central Station, and within 30 minutes from Schiphol international airport.

Program fees

Program fees include tuition, all comprehensive program materials, books, and any software that is required for the program, as well as luncheons and daily refreshments. Accommodation is not included.

In-company programs

For information on how AIF can add value to your organization via a tailored in-company program, please contact AIF directly at: +31 20 520 0160.

Ready to learn more? Find your program and reserve your place at [AIF.nl](https://www.aif.nl)

About Amsterdam Institute of Finance

AIF is a global financial innovation and education institute headquartered in Amsterdam. Through our open enrollment programs in Amsterdam and our in-company programs throughout the world, we connect ambitious professionals with the best minds in finance and other related topics. Taking part in one of our programs is a direct investment in your personal future and the success of your organization.

This is what makes the AIF experience unique:

- We believe in responsible, sustainable and inclusive finance
- Our clients, rather than profits, come first
- AIF is an independent and not-for-profit foundation, which allows us to cherry-pick our faculty from the world's leading business schools, such as INSEAD, Oxford, Kellogg, Cambridge Judge and others
- AIF delivers top quality programs. Our alumni give our faculty an average rating of 4.6 out of 5.0
- Enrollment in one of our programs means you become part of the AIF network, connecting you to professionals from more than 1,200 organizations in over 110 countries

