

FINTECH, DIGITAL FINANCE & DEFI

International MBA IMBA-EN SEP-2024 S-FI

Area Finance

Number of sessions: 15

Term: Concentrations

Category: regular

Language: English

Professor: **PABLO SOLER BACH**

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Pablo is currently active as a consultant and advisor to corporations and start-ups, and as a Business Angel, investing in projects in different fields, such as fintech, e-travel, legaltech, real estate tech, gamification or media. He is a Mentor in Fintech in the European accelerator Startup Bootcamp, as well as in the Accelerator Finnovista, centered mainly in Spain and LatAm.

He started an international career in large corporations, based in several European countries and participating in a number of assignments both for General Electric and The Boston Consulting Group. The projects involved Corporate Finance deals, financing, valuations and internal audit, giving him a wide exposure to strategy and finance in an international corporate environment. After that period, Pablo started his life as an entrepreneur and investor, joining and co-funding several projects in different sectors.

Academic Background

- MBA INSEAD, Fontainebleau, France
- CEMS Master in International Management (Community of European Management Schools), HEC, Paris, France
- BS Business Management and Administration, ESADE, Barcelona, Spain

Academic Experience:

Adjunct Professor, Department of Finance, IE Business School

- Venture Capital - Private Equity - Fintech - Impact and sustainability - Entrepreneurship
- IMBA, MIF, GMIF, ExMIF Programmes – (2015-present)

Guest Lecturer, Department of Economics, Universidad Autónoma de Madrid

- Master in Microfinance and Financial Inclusion - Fintech Guest Lecturer,

Visiting Professor, Department of Economics, University of Trento

PhD program - Innovation, Business Growth, Entrepreneurship, Fintech

Startup Lab - EiT - European Institute of Innovation and Technology

School of Innovation (several courses)

Office Hours

Office hours will be on request. Please contact at:

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SUBJECT DESCRIPTION

The financial industry is experiencing an important moment of disruption. The frontiers between industries have blurred thanks to the use of technology. This has allowed new entrants, both start-ups and big technology players to enter activities which used to be traditionally reserved to banks.

During this course, we will focus on some of the changes that are happening in areas such as payments (with new players like Paypal, Venmo or Plaid), fighting the Visa+Master Card duopoly and BigTech becoming ever more powerful, with apple pay, google pay or amazon financing. The job market is shifting, as in wealth management, with the introduction of robo-advisors that put in jeopardy thousands of jobs, or sustainable investment questioning long time practices. We will analyze how particular technologies, such as Blockchain or Big Data, are reshaping the industry. We will also pay attention to two key aspects like regulation and security, which are essential for any player operating in the financial sector.

We will also analyse where is the “smart money” going, such as neobanks or point-of-sale financing, and how Venture Capital is helping to reshape the financial sector to the benefit, in part, of consumers, who enjoy more, better and more affordable financial products and services.

LEARNING OBJECTIVES

The main learning goals of this course are:

- To understand the levers that are facilitating the current disruption of the Financial industry, e.g. technology, business models, resources, data and information.
- To understand the main implications, challenges and opportunities of the Fintech disruption for the different players involved: entrepreneurs, investors and traditional players.
- To have a detailed view on some of the most successful new companies and their strategies and business models, as well as some of the risks and failures.

At the end of the course, students will have a good knowledge of the implications and impact of the Fintech revolution in each part of the value chain of the finance industry, including insurance, payments, lending, investing, fundraising, financial advisory, money management, or even corporate finance.

Finally, participants will have a good vision of the main trends, strategies and players that are shaping the future of Finance globally.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	Weighting
Lectures	30.0 %
Discussions	6.0 %
Exercises in class, Asynchronous sessions, Field Work	10.0 %
Group work	27.0 %
Individual studying	27.0 %
TOTAL	100.0 %

AI POLICY

Generative artificial intelligence (GenAI) tools MAY be used in this course ONLY to:

- assist in market and general research;
- to explore more in depth concepts covered during the course.

It MAY NOT be used to execute analysis or produce presentations or text in general. If a student is found to have used AI-generated content inappropriately, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

If you are in doubt as to whether you are using GenAI tools appropriately in this course, I encourage you to discuss your situation with me.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Introduction: FinTech. Reshaping the Financial Sector

In this session I will outline the course and make an introduction to Fintech and some of its main areas of development, and try to understand the main drivers behind the fintech "revolution". I will also outline the Group Presentations and final online test.

Other / Complementary Documentation: Reimagining the Future of Finance) (BCG Global Fintech Report(Optional)

Technical note: CB Insights Fintech Report 2022 (CB Insights) (CED) (Optional)

SESSION 2 (LIVE IN-PERSON)

Payments

Plaid, the Visa acquisition that was stopped by the DoJ of USA

The payment sector is one of very high volumes and very low margins, allowing for significant network effects. We will analyse how Visa and Mastercard have become a powerful duopoly and what new players can do to compete and win.

We will also analyse the beginnings of paypal as the "dean" of fintech companies.

- understands the terms "black hole of hypercompetition" and "escape velocity" applied to a Fintech company
- analyse conditions and risks for a company to achieve "escape velocity"

- understand the difficulties for firms to formulate viable long-term strategies

Previous to class: payments - listen to the Paypal - Pieter Thiel podcast

Multimedia Material: Break Free of Competition, a Podcase with Peter Thiel (HBS 7148-HTM- ENG)

SESSION 3 (LIVE IN-PERSON)

Consumer Lending

In this session we will discuss a short real life case of Fintech entrepreneurship in consumer lending and try to understand:

- the opportunities for Fintech in the lending space - the complexity of technology applied to Finance the different technology and business model options facing the entrepreneur (e.g. integration or development, make or buy of functionalities, barriers of entry, scalability)

Previous to class: work on the Lending case - Choosing between two instant lending models

Other / Complementary Documentation: Choosing between two instant lending models (IE)

SESSION 4 (LIVE IN-PERSON)

Neobanking

Are neobanks a real threat to traditional players?

We will explore how the neobanks are operating and why are they growing faster than any other bank in history.

Is their model sustainable in the long term? Why?

SESSION 5 (LIVE IN-PERSON)

Regulation: enabler or constraint / business opportunities in heavily regulated markets.

One of the key factors to be successful with a FinTech company is to understand the regulatory environment. We will analyze how to approach regulation, and also how to use it to detect business opportunities.

SESSION 6 (LIVE IN-PERSON)

Robo-Advisors. Democratizing Asset Management

The Asset Management industry is experiencing a big disruption. By lowering the minimum investment requirements sophisticated investment tools are being democratized.

SESSION 7 (LIVE IN-PERSON)

Peer-to-Peer Lending and Crowdfunding

We will introduce ourselves into an area that pivoted from one business model to another: P2P Lending.

We will use the case of Lending Club also to explore several key challenges that are common to FinTech companies operating at scale. Also, we will explore how the p2p lending companies and business models have evolved to become sustainable businesses.

We will analyse the crowdfunding diverse models and the keys to success in that growing sector.

Previous to class: explore online companies in the p2p space and try to understand their different strategies and business models.

Practical Case: Lending Club (HBS E597-PDF-ENG)

SESSION 8 (LIVE IN-PERSON)

Insuretech

In this session we will cover how tech is reshaping the very traditional Insurance sector, one of the industries most ripe for disruption, particularly after the ongoing effects of Covid19, and what this disruption entails for us, as consumers, and as professionals.

We will see examples of successful strategies and companies, and the key drivers that will make some of them winners and others losers.

Case: Monetizing insurance at Trôv

Trov is a disruptive startup in the insurance space ("insurtech"). It allows consumers to simply turn on and turn off insurance for each of their possessions on a mobile app with the swipe of a finger. Consumer love the simple, on-demand, single-item coverage product. However, the cost to acquire customers (CAC) for Trov is significantly higher than the total expected contribution margins (CLV) for the single item coverage insurance product that the company is known for. In light of this, what should the CEO of Trov do with the product? How can Trov monetize on-demand insurance?

In this session we will discover the power of unbundling and decoupling in the insurance industry and how to monetize digitally disruptive consumer insurance products.

Previous to class: work on the Trov case, an insuretech company.

Technical note: CB Insights Insuretech Report 2022 (CB Insights) (CED) (Optional)

Practical Case: Monetizing Insurance at Trov (519082-PDF-ENG)

SESSION 9 (LIVE IN-PERSON)

Artificial Intelligence, Big Data, Compliance and Regtech

We will start the session with an introductory short online tutorial on Big Data. (25 minutes)

After, we will explore how new technologies (including AI, Big Data and IoT) and business models are affecting a variety of stakeholders in the Financial Services sector:

- the regulator and the direct players (lawyers, judiciary, government systems) - example: how blockchain can introduce transparency and better behaviour in governments and other public institutions as the judiciary;
- private companies and compliance, how can they benefit? how will they operate? individual citizens/consumers: what are the advantages, and some of the dilemmas we are facing? (privacy versus security, privacy versus costs, transparency versus privacy...)

Technical note & tutorials: The characteristics of Big Data (IST020316-U-ENG-VID)

SESSION 10 (LIVE IN-PERSON)

Real Estate Tech - PropTech

The Real Estate sector has traditionally been low in the use of new technologies and exploiting data, resulting into a sometimes opaque, inefficient and highly volatile industry.

In this session we will explore how technology can bring transparency, efficiency and lower levels of volatility (booms and crashes) to the real estate markets, from the perspective of several players: developers, land owners, local authorities (smart city), brokers and agents, investors or consumers.

We will also discuss the case Roofstock: The Cloud of Real Estate Investing, and try to understand the technological levers that can allow for disruption in the sector.

Previous to class: explore online the business model of Roofstock and try to understand how it works and how it can be affected by the current environment of lower interest rates and limited house supply.

Practical Case: Roofstock: The Cloud of Real Estate Investing (219021-PDF-ENG)

SESSION 11 (LIVE IN-PERSON)

Blockchain - Defi - Crypto

Challenges and potential of blockchain and defi.

We will compare the two main models: public networks (Bitcoin, Ether...) and the private or semi-private networks (Paypal Coin or other stablecoins) or government controlled network (e-krona) CBDC (Central Bank Digital Currency).

Some concerns: energy consumption, security, regulation.

Pros and cons of crypto... will it ever become mainstream?

SESSION 12 (LIVE IN-PERSON)

Fintech startups funding / Venture Capital

We will analyse the different options that Fintech startups have when they raise funds, including Venture Capital, Corporate Venture Capital, other private investors...

We will also cover the increasingly important role of Fintech in Corporate Finance: M&A, Private Equity, Capital Structure and leverage...

SESSION 13 (LIVE IN-PERSON)

Financial Inclusion and Mobile Banking – Technology in ESG and Social Impact Investing This lecture highlights the fact that for the first time in history:

- We have a real opportunity for global financial inclusion thanks to technology (e.g. mobile). The business opportunities around that have huge room for growth.
- There is huge potential for transparency and personalization of investments, allowing for a much more efficient ESG financial sector and Social Impact investing.

SESSIONS 14 - 15 (LIVE IN-PERSON)

Fintech startups group presentations.

In this double session groups will both present a business idea supported by a brief pitch deck, and also evaluate both as VC and Corporate VC the business projects presented by other groups.

Short Online Final Test - bring laptops (and chargers or fully charged batteries!)

EVALUATION CRITERIA

criteria	percentage	Learning Objectives	Comments
Final Exam	50 %		understand the concepts covered in the lectures
Group Work	30 %		ability to work in group and bring value to outcome
Class Participation	20 %		engage in productive and constructive discussion and debate

FAILING GRADE AND REASSESSMENT

When students receive a Fail in a course, they have the opportunity to present themselves for reassessment in order to earn the necessary credits toward graduation.

The reassessment of students should be scheduled between 5 and 10 working days after the review session takes place.

Grades for the reassessment are limited to a Low Pass and Fail.

Both, the initial Fail as well as the grade of the reassessment remain on the transcript. For the purpose of calculating the GPA however, only the grade of the reassessment is to be considered. Students receiving a failing grade in the reassessment of a course will not be able to continue in the program.

BIBLIOGRAPHY

Recommended

- Brett King. (2012). *Bank 3.0: Why Banking Is No Longer Somewhere You Go But Something You Do*. 1st edition. Wiley. ISBN 1118589637 (Digital)
- Miguel Grinberg. (2018). *Flask Web Development: Developing Web Applications with Python*. 2nd Edition. O'REILLY. ISBN 1491991739 (Digital)
- Yves Hilpisch. *Title: Python for Finance: Mastering Data-Driven Finance, 2nd edition*. O'Reilly Media. ISBN 1492024333 (Printed)
- Raymond Anderson. *The Credit Scoring Toolkit: Theory and Practice for Retail Credit Risk Management and Decision Autom.* Oxford Press. ISBN 0199226407 (Digital)
- Joseph, F. Hair Jr, William C. Black, Barry J. Babin & Ralph E. Anderson.. (2014). *Multivariate Data Analysis*. 7th edition. Pearson International Edition. Pearson Education Limited. ISBN 9781292021 (Printed)

BEHAVIOR RULES

Please, check the University's Code of Conduct [here](#). The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy [here](#). The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code [here](#). The Program Director may provide further indications.