



## **Master Course FINTECH**

*Academic Year:* **2017/2018**

*Trimester:* **3<sup>rd</sup>**

*Instructor:* **João Freire de Andrade**

### Course Aim:

This course is designed for students who plan to get involved with the disruption of the financial sector. Banks and insurance companies are facing one of the most pressured moments of the industry history. After a financial and credibility crisis, the drivers of this pressure are not only clients seeking for innovation and convenience, but also regulators. Artificial intelligence, blockchain, cloud computing and the rise of a mobile first generation are some of the enablers but also drivers of a new reality that is already unbundling the financial sector as we know it.

### Objectives:

Fintech has a huge potential to disrupt the financial sector. The course intends to equip students with the tools to understand and participate in this change.

After successful completion of this course, the participant should be able to:

- Understand the status of the Fintech landscape, industry drivers and future trends.
- Acknowledge the tools to evaluate Fintech Ventures (internal or external) using the lens of entrepreneurs, investors and big corporations.
- Get to know real examples of financial technology that are solving current problems of customers and companies.

### Course Content:

During the twelve classes of the course, the following topics will be covered:

#### **1. Introducing Fintech landscape and the major drivers**

Describe the impactful trends and meaningful opportunities across different areas of the Fintech ecosystem. Discuss the impact of innovation in the industry. Briefly describe the major thematic areas of the landscape. Identify drivers of the strong wave of disruption recently registered.

#### **2. Analyzing key thematic areas and important verticals**

Thematic areas such as money and payments, infrastructure (security, identity, privacy), market places and financial markets will be explored.



Demystify important concepts that have been heavily discussed and their use cases for the financial industry, such as blockchain, smart contracts, artificial intelligence (AI), robo-advisory, RPA (automation), crowdfunding.

Closer look on the major sub-verticals: Insutech, RegTech and WealthTech.

### **3. Tools to analyze Fintech opportunities**

Learn to apply tools that help framing the analysis of a Fintech opportunity, despite of being internal or external ventures. These are important concepts for a systemic approach for decision making, given the large number of possible business models available.

### **4. Assemble your own Fintech Venture**

Industry analysis, research, prototyping, pitching and preparing the support documentation are some of the required actions to seize Fintech opportunities. Disruptive Business Models and non-linear business models will be subject of deeper analysis.

### **5. Future of Money and Regulation as a competitive advantage - ICO's and the Token economy**

Money is any item or verifiable record that is generally accepted as payment for goods and services and repayment of debts in a particular country or socio-economic context. Will the cryptocurrencies play a major role in this ecosystem? What about the distributed ledgers? What will be the impact in fiat money? What are the potential impacts in ecommerce and remittances? Regulation is one of the major enablers or showstopper for Fintech Ventures. Participants will be introduced to the global current state of regulators and the positive outcome of these policies. Present regulation is a competitive advantage tool.

### **6. The future of financial markets, market places and the financial sector on the emerging markets**

Explore the impact of technology on the financial markets and the structural change on the potential of trading returns.

Which opportunities are emerging from the intersection between Fintech and areas such as IoT, crowd realities, sharing economy, behavioral pricing and context economy?

How important is Fintech in emerging markets, what are the potential impacts in ecommerce and remittances? Analyze the creation a financial sector for the financially excluded. Case studies from India and Africa.

### **7. The new Banking reality**

The new layers of banking, new types of banks (white label and neo-bank), the differentiation between players. Open banking (and Payments Service Directive 2). Examples of new kinds of insurance companies. What are the GAFAs (Google, Amazon, Facebook, Apple), Telco's and retailers doing in this field?



## 8. The innovation dilemma

Elaborating on the startups' dilemma of disrupting or partnering with incumbent players. Learn methodologies to frame successful partnerships between startups and big corporations. Use appropriate tools to evaluate external and internal innovations in a corporate context – a systemic approach for decision making. Best practices in a B2B relation during the lifetime of a project.

## 9. Overview of the Fintech investment market across stages

Overview of the Venture Capital, Private Equity and M&A market in the Fintech space. Is it a hot topic in the market? What are the most active verticals? Are there potential exits? Lessons learned from the Fintech companies listed on the stocks exchanges.

## 10. Real Fintech examples

Learn by the experience of entrepreneurs venturing on the fields of study of this course. Closer look on representative examples of the described key thematic areas. Special focus on the Portuguese Fintech landscape and collaboration opportunities with local startups.

## 11. Class Presentations

Final project presentation and Q&A session.

## 12. Future Trends

Hypothesis about the future of Fintech worldwide. A summary of the most important topics covered during the course that will impact the future of the financial sector and relate with the likely disruptions.

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### Grading:

#### Participation (10%):

- Pre-Class Quizzes (5%)
- In class exercises (5%)

#### Individual written essay (15%)

#### Final Project (45%)

#### Exam (30%) [Minimum exam grade required: 7 values].

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### Bibliography / Recommended Textbook(s) / Additional Readings:

#### Books:

- When Tech Meets Finance: A Roadmap for Digital Banking Transformation, by Vicente Quesada.



- The FINTECH Book,' by Susanne Chisti and Janos Barberis

Studies:

- **The State of the Financial Services Industry 2017 TRANSFORMING FOR FUTURE VALUE**

<http://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2017/jan/the-state-of-the-financial-services-industry-2017.pdf>

- **Fintech Pulse**

<https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/07/pulse-of-fintech-q2-2017.pdf>

- **DIGITAL DISRUPTION - How FinTech is Forcing Banking to a Tipping Point**

<https://www.ivey.uwo.ca/cmsmedia/3341211/citi-2016-fintech-report-march.pdf>

Open Resources:

- <https://banknxt.com/>
- <https://thefinanser.com/>

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Biography:

João Freire de Andrade is the head of BiG Start Ventures, an early-stage Venture Capital investing in startups innovating in the fields of finance (FinTech), insurance (InsurTech) and cybersecurity. The geographical focus is Lisbon, Berlin and London, but it is open to startups from other locations. BiG Start Ventures provides entrepreneurs with a unique environment for FinTech development, with access to banking infrastructures, systems expertise, banking products, banking users, compliance and regulation. João was a volunteer at the microfinance NGO Move, where he has been in charge of supporting the creation of 7 businesses with underprivileged entrepreneurs in Mozambique. Founder President of Bring Entrepreneurs Together, the largest Portuguese university organization dedicated to develop entrepreneurship in the country. BET has been responsible for the 24 Hours Entrepreneurship event, involving thousands of participants through the different editions. Examples of companies raised on the program are Uniplaces, Chic by Choice, Clinky, Yoochai and Recibos on-line. João has an Economics Bachelor degree from Nova SBE, a Master in Management with Major in Finance from Católica Lisbon SBE and the Fintech Course of Massachusetts Institute of Technology (MIT). He was a Teaching Assistant at the Master of Finance and Executive Education of Nova SBE and in 2017 has joined Católica Lisbon SBE to fully focus his academic contribution in Fintech.

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Contact(s) and Office Hours:

[joaofa@portugalfintech.org](mailto:joaofa@portugalfintech.org) ; Office Hours: *to be defined*.



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Required background:

None.

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Extra Costs (case studies, platforms...):

None.

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Code of conduct and ethics:

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Along with all the other members of our community, students are expected to follow professional standards and CATÓLICA-LISBON standards of Academic Integrity. Some details should be mentioned here: Please arrive on time for class with uninterrupted attendance for the duration of the class. Signing attendance sheet for anyone else in the class constitutes fraud and a violation of the CLSBE code of conduct. Use of computers and other electronic devices during the class is not allowed, unless expressly requested by the instructor of the course. Students who persistently act in a disruptive and disrespectful manner during the class session may be invited to leave. Students are expected to behave at all times according to the fundamental principles of academic integrity, including honesty, trust, fairness, respect, and responsibility. In particular,

- a) In **individual graded assignments** of any type, students may not collaborate with others or use any materials without explicit permission from the instructor of the course;
- b) In **group assignments and reports**, all students listed as authors should have performed a substantial amount of work for that assignment;
- c) It is dishonest to fabricate or falsify data in experiments, surveys, papers, reports or other circumstances; fabricate source material in a bibliography or "works cited" list; or provide false information in other documents in connection with academic efforts;
- d) **Plagiarizing**, i.e. "to steal and pass off the ideas or words of another as one's own and or to use another's production without crediting the source" (Merriam-Webster Dictionary) is an Academic Integrity breach. It can be avoided by using proper methods of documentation and acknowledgement. Visit this guide for additional resources on how to avoid plagiarism in your written submissions <http://en.writecheck.com/plagiarism-guide>
- e) In **exams** students must not receive or provide any unauthorized assistance. During an examination, students may use only material and items authorized by the faculty. Use of smartwatches or other communication devices is not permitted during the exam.

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