

Leadership Transition: Lessons from a Brazilian Fintech

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ABSTRACT

ML models have long been utilized within financial institutions, particularly in the context of credit risk modeling [1]. These models hold a central role in the business model of numerous fintech companies, such as the Brazilian startup *SuperSim*. When the performance of an ML model is directly linked to the business' revenue, the opportunity cost of maintaining an extended release cycle becomes significant.

In this talk, we share our insights from replacing a longstanding Data Science leader at SuperSim, which involved restructuring the ML pipeline and implementing Agile Software practices. Over a period of nearly six months, our effective decision-making and stakeholder management culminated in a 40% revenue increase, as assessed through A/B tests.

1 POTENTIAL DISCUSSION POINTS

- Leadership transition: Strategies for fostering trust within a Data Science team and methods for iteratively improving a legacy ML pipeline.
- ML life-cycle management: Approaches to shifting from a research-centric mindset to one focused on business objectives.
- Agile Data Science: Techniques for enhancing feedback loops in ML projects to facilitate iterative improvement.

2 RELEVANCE TO THE WORKSHOP

This case study holds significant relevance to the workshop as attendees will gain insights into the challenges and opportunities associated with leadership transitions in Data Science teams, as well as strategies for effectively managing legacy ML pipelines. Furthermore, the presentation offers valuable lessons on aligning ML initiatives with business objectives and leveraging Agile principles to drive iterative improvement and revenue growth.

3 ABOUT THE PRESENTER

Gabriel Mendonça is a Head of Data Science at SuperSim and a PhD candidate at the Federal University of Rio de Janeiro. He obtained his masters in Systems and Computing Engineering (with honors) from the Federal University of Rio de Janeiro. Prior to SuperSim, he was one of the founders of the broadband measurement startup TGR.

The company. SuperSim is a Brazilian fintech that offers small loans to low income borrowers. The company believes in empowering the poor through microcredit services [2]. Since most clients lack a verifiable credit history and/or a steady income, assessing a

client's *probability of default* through ML models is a fundamental part of the business.

REFERENCES

- [1] Jose A. Lopez and Marc R. Saldenberg. 2000. Evaluating credit risk models. *Journal of Banking & Finance* 24, 1 (2000), 151–165. [https://doi.org/10.1016/S0378-4266\(99\)00055-2](https://doi.org/10.1016/S0378-4266(99)00055-2)
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