# Case Study

## Startup Bakery

**success for a startup is not reached by chance**
**https://www.startup-bakery.com/**

## Description

Startup Bakery is an Italian startup studio, i.e. a "generator of startups", a company that builds new enterprises in series following a "parallel entrepreneurship" approach.

The startup studio model aims at significantly reducing the risk of failure, typical of newly created enterprises while enhancing the quality of the new startups. The key idea is implementing a well-established receipt that makes the most of the lean approach and appropriately uses the latest Cloud and AI technologies.

Startup Bakery has developed a business process to guide and monitor the execution of the activities required to launch a startup in its first stage. During the first six months, it is necessary to validate the idea, identify a CEO to co-found the startup, prepare the papers, set up the business plan, the technical infrastructure, and convince investors to support the company with the second round of funding.

The process is specified with a BPMN model. Using PM techniques Startup Bakery wants to validate it and study techniques to monitor its execution at each step. The goal is having an evaluation of the timelines of each activity and of the risk of failure of the process, based on known timing constraints for key activities (specified in the annotations of the BPMN).

## Assignment

1. Specify the goals of Startup Bakery and define a Knowledge Uplift Model that can support the company in reaching them.

2. Use the provided process model to simulate event logs the company could record in executing the process. Explore methods that allow specifying temporal constraints.

3. Identify and express constraints that define impossible behaviour to be used in filtering out synthetic cases to be removed in testing the techniques to use for monitoring the process.

4. Identify and express constraints that can capture if activities are timely or not.

5. Identify and express constraints that can capture if the risk of failure is approaching.

6. Run a conformance checking that can spotlight those cases that are deviating from the model and the time constraints that apply.

7. Design and if possible implement a procedure to compute the timelines of each single executed activity and to update the risk of failure after each activity have been executed.

8. Based on the results obtained and on your intuitions suggest a to-be version of the model where the risk of failure is reduced.