## Supervisor Expression of Interest

**MSCA-IF Marie Sklodowska Curie Action-Individual Fellowship 2019**

| Supervisor name: | Prof. Massimo G. Colombo (supervisor)  
|                 | Prof. Massimiliano Guerini (co supervisor) |
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| Department Name: | DIG Department of Management, Economics and Industrial Engineering (DIG) |
| Research topic: | SCALING-UP: BUILDING, LEADING AND SUSTAINING RAPID GROWTH |

### MSCA-IF Research Area Panels
- CHE_Chemistry
- ECO_Economic Sciences
- ENG_Information Science and Engineering
- ENV_Environmental and Geosciences
- LIF_Life Sciences
- MAT_Mathematics
- PHY_Physics
- SOC_Social Sciences and Humanities

### Politecnico di Milano Areas:
- Cultural Heritage
- Smart Cities
- Territorial Fragilities
- Health
- Industry 4.0

### Brief description of the Department and Research Group (including URL if applicable):
Prof. Massimo G. Colombo from the DIG department is the coordinator of the research group for Entrepreneurship, Finance and Innovation (EFI). He is the Principal Investigator of the PoliMI Unit within the EU H2020 Project RISIS 1 and RISIS 2. Prof. Massimiliano Guerini works within the EFI group, being responsible of several working packages of the RISIS 1 and RISIS 2 Projects. Both Prof. Guerini and Colombo have developed the Cheetah database (within the RISIS 1 project), which record information on more than 40,000 European high-growth firms.
**Brief project description: (max 1 page)**

Studies show that high-growth firms (i.e., those that achieve average annual growth in employees or sales turnover greater than 20 percent per annum over a three-year period), play a crucial role in fostering job-creation, improving productivity and diffusing new product and technological innovations. However, research has also suggested that only a small proportion of startups scale-up and maintain rapid growth over time. Accordingly, scholars have called for more research on the factors explaining the emergence and prevalence of high-growth firms. Indeed, extant research provides rather disparate and disjointed insights into the factors that enable successful transitions from start-up to scale-up or that support established firms in scaling new opportunities for rapid growth. For instance, we lack theoretical and empirical insights into the dynamic process of scaling-up or the institutional and ecosystem effects that facilitate this process. The present project aims to fill this gap by developing new theoretical insights and providing extensive empirical evidence at the European level. We will do so in the following steps:

1. Review of the academic literature on high-growth firms and on the antecedents of start-up growth, in order to provide the state of the art on these topics.

2. Update and extension of the information currently contained in the Cheetah database. Update refers to the identification of high-growth firms from 2012 onwards. Extension will be focused on the mode of growth of these firms (organic vs. external), their ownership structure and governance.

3. Data analysis aimed at increasing our understanding on the dynamics of the scaling-up process as well as the presence of institutional/ecosystem effects. We will explore the following research questions:
   - *How do start-ups transform into scale-ups?*
   - *What alternative pathways are possible to scale-up new businesses? How do they differ in forms, including organic and external growth?*
   - *How do scale-ups sustain their high-growth over time?*
   - *How do scale-ups drive the transformation of industries and regional economies?*
   - *How do regional and institutional conditions affect the transition from start-up to scale-up?*