POLITECNICO DI MILANO

PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 39th cycle

THEMATIC Research Field: ORGANIZATIONAL DESIGN DECISIONS TO SCALE-UP STARTUPS

Monthly net income of PhDscholarship (max 36 months)
€ 1450.0 In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity	
Motivation and objectives of the research in this field	Scale-ups, i.e., successful high-growth innovative enterprises, are the key drivers of innovation, productivity, growth, and job creation. While our understanding of new ventures (hereafter, startups) and their ecosystems has increased significantly over the past decades, the factors contributing to successfully scaling a startup and the barriers inhibiting the scale-up are still poorly understood.Policy reports usually describe access to funds as the key enabler of scale-up. Instead, scholars recognize that, as human capital is strongly linked to startups' growth, to scale up, startups also need talented employees. The scientific literature on recruitment in startups is underdeveloped. This is a problem for entrepreneurs who intend to scale up their startups because they would benefit significantly from the guidance that academic research may provide to face the severe challenges of recruiting talented employees. Indeed, in the war for talents, startups are at a competitive disadvantage with respect to established companies because they are less familiar to job seekers, have a high propensity to fail due to the liabilities of newness and smallness they suffer from, and are particularly vulnerable to economic downturns. The vast literature on talent recruitment in established organizations provides entrepreneurs with limited help to overcome the disadvantages described above because the results of such literature are hardly generalizable to startups.

	Besides recruiting talents, the entrepreneurs willing to scale up their startups need to i) retain their employees by giving them incentives to stay and put effort into their job and ii) organize these employees' activities. Research addressing startups' organizational design issues other than hiring is also limited. Only a few works study startups' organizational structure, hierarchy, task allocation, functional specialization, role formalization, decision rights, and managerial practices to motivate and retain employees. Again, there is a broad literature on organizational design choices in established firms, but due to the fundamental differences between these firms and startups, this literature scarcely informs entrepreneurs who have to make decisions about the organization of their startups to scale them up.This research thus aims to study how startups make organizational design decisions to scale up their business and how specific decisions affect successful scale-up.
Methods and techniques that will be developed and used to carry out the research	To achieve the above-mentioned research objectives, a critical literature review will be combined with a quantitative approach. The Ph.D. candidate might use data already available in the research group about a large sample of European startups and integrate these data with information about these firms' employees extracted from LinkedIn to study the effects of specific events (e.g., the receipt of a round of VC funding) on hiring and organization. Moreover, the Ph.D. candidate might be involved in a research project funded by MUR where an experimental approach will be adopted. Specifically, the research team will conduct a randomized control trial with entrepreneurs from a sample of Italian startups in the pre-scale-up phase and randomly assign the entrepreneurs of these startups to a treatment and a control group. We will offer the entrepreneurs in the treatment group i) free-of-charge training on how to recruit talents and organize employees? activities and ii) networking and mentoring activities to improve recruiting and training. Then, we will conduct regular interviews with the entrepreneurs in both the treatment and the control groups to monitor the actions and performance of all

	startups over ten months. We will then use these data to test whether the treatment leads to more reviews of organizational design decisions and to better performance.
Educational objectives	At the end of the program, the Ph.D. candidate should: possess adequate research skills in economics and management; be able to realize literature reviews; build and analyze large datasets using statistical and econometric techniques; design and conduct experiments
Job opportunities	Academia, public administrations, public and private research centers, and consulting firms.
Composition of the research group	6 Full Professors 2 Associated Professors 6 Assistant Professors 11 PhD Students
Name of the research directors	Evila Piva

Contacts
evila.piva@polimi.it

Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	725.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
Candidates with a background in Economics or Management Engineering and quantitative skills are encouraged to apply. The candidate might be involved as a research associate in additional research projects and as a teaching assistant in Business Economics and Organization orentrepreneurship courses offered at the MSc in Management Economics and Industrial Engineering. The candidate will have the right to use the shared workstations at the Department of Management Economics and Industrial Engineering and get a laptop from the research group