Diego Jannace

Date of birth: 02/06/1995

Citizenship: Italian

Address: Via Luigi Anelli, 4 – 20122 Milan (Italy)

E-mail address: diego.jannace@phd.unibocconi.it

Recommendation letter writer: Prof. Arnaldo Camuffo, Bocconi University

Qualifications

PhD in Business Administration and Management

September 2020 – present

Bocconi University, Italy

Master of Science in International Management

2017-2019 (two-year program)

Final mark: 110/110 cum laude

Bocconi University, Italy

Bachelor of Science in Business Administration and Management

2014-2017 (three-year program)

Final mark: 110/110

Bocconi University, Italy

Awards and Scholarships

Bocconi University, Milan

Full PhD fellowship (September 2020 – present)

Bocconi University, Milan

Erasmus+ Scholarship for Vienna University of Economics and Business (Feb. – June 2020)

Research Interests

Entrepreneurial decision making, Entrepreneurship, Strategic Human Capital

Work Experience

September 2021 – Present: Program Manager, *IdeaBoosterLab (Entrepreneurship*

	& Pre-Acceleration Training Program)
January 2021 – Present:	Researcher, *ION Investment Group Decision Science Center*
June 2019 – July 2020:	Staff Accountant, *KPMG Italy*

Studies abroad

Gies College of Business - University of Illinois at Urbana-Champaign, USA

Vienna University of Economics and Business (WU), Austria

Language Skills

Italian: *Native* – **English**: *C2 (Cambridge CAE)* – **French**: *B2*

List of Completed and Current PhD Courses:

Applied Business Studies – Prof. A. Gambardella

Strategic Human Resources and Human Capital – Prof. A. Camuffo

Social Network Analysis – Prof. R. S. Burt

Strategic Interaction and Firm Behavior – Prof. A. Fosfuri

Advanced Econometrics for Business Studies – Prof. M. D. Amore

Microeconomics Foundation for Business Studies – Prof. C. Panico

Introductory Econometrics for Business Studies – Prof. L. Gagliardi

Strategy – Prof. C. F. Williams

Organization Theory – Prof. A. Iorio

Technology & Innovation Management – Prof. P. Cillo

Research Boot Camp – Prof. N. Dutt & P. Aceves

Experimental Methods for Research – Prof. J. Vosgerau

Applied Accounting for Management Research – Prof. P. Hribar & C. Lewis

Empirical Approaches for Marketing and Management Research – Prof. Q. Shi

Sociology for Business Studies – Prof. F. Perretti

Text Analysis – Prof. D. Hovy (Current course)

Organizational Sociology – Prof. F. Castellucci (Current course)

Current and future research

I am a second-year PhD student in Business Administration & Managament at Bocconi University (Italy), working mainly with Professors Arnaldo Camuffo, Alfonso Gambardella, and Ronald S. Burt. My main avenue of research at the moment consists in contributing to a project, funded by the European Research Council, titled "A Scientific Approach to Innovation Management", where Prof. Gambardella is the Principal Investigator. Starting from the strong evidence that entrepreneurs have poor methods to take decisions under uncertainty, this project studies whether entrepreneurs can improve their ability to take these decisions by adopting a scientific approach based on the formulation of models tested with data, such as scientists do.

Within this broader research project, I am especially interested in exploring how a scientific approach improves entrepreneurial decision-making through more parsimonious theories and focused experiments. Starting from the famous mantra of "less is more", I analyze some of the potential mechanisms which explain the positive effect of a scientific training on start-ups' performance and pivoting behavior. In short, I propose that clarity and parsimony of the business theories is indeed one of the mechanisms, embedded in the scientific approach, driving these outcomes. My research is based on two main theoretical "pillars", the first of which is the literature on scientific approaches to decision making (e.g., Camuffo et al., 2020, 2021; Contigiani & Levinthal, 2019). The second pillar is instead formed by the literature on subtraction (Klotz, 2021) and idea simplicity (e.g., Camuffo & Gambardella, 2018; Sorensen & Carroll, 2021), which have been shown to generate outsize returns. Moreover, a recent paper on Nature found that people systematically search for additive transformations and overlook valid subtractive transformations when seeking change (Adams et al., 2021). These two pillars are then joined together thanks to a piece by T. Felin and T. Zenger (2017), who proposed that novel or "great" strategies come from valuable theories, which must be parsimonious and simple. Therefore, I argue that a scientific approach to entrepreneurship provides entrepreneurs with the tools to develop better theories (Camuffo et al., 2020, 2021), which allow them to identify the most important elements that they should focus on, only including "what really matters" in their business models. These arguments are relevant because previous research has shown that there are cognitive, cultural, and socioecological reasons to suspect that people might privilege additive over subtractive changes (Klotz, 2021). These findings are also relevant for the discussion on startups, for example with Kirtley & O'Mahony (2020) showing that, when facing an unanticipated opportunity trigger, most nascent entrepreneurial firms chose to make a "strategic addition". Overall, I explore whether these biases towards addition

also hold for early-stage entrepreneurs when they elaborate their ideas, and whether a scientific approach to decision-making would mitigate them and lead to improved performance.

My analyses are mainly based on data collected through a training program offered free of charge to entrepreneurs and administered in Milan (Italy), which I am actively managing. Participants are randomly assigned to three different experimental conditions: scientific approach training, lean startup training, pure control. A baseline survey is administered to all entrepreneurs prior to the intervention, to collect pre-treatment data and to perform the randomization, making sure that the observable characteristics are balanced across the groups. We also developed a software based on Adams et al.'s (2021) "grid task", which allows me to measure the entrepreneurs' propensity to add vs. subtract in a non-entrepreneurial setting. To measure the parsimony of theories, I also compile measures of linguistic complexity (e.g., Ganguly et al., 2019) from the textual descriptions of the participants' business ideas.

The empirical setting for my analyses consists of a randomized control trial (RCT), with the three experimental conditions mentioned above. I first test for correlation between measures of simplicity and scientific intensity (from Camuffo et al., 2021). Then, I employ a difference-in-differences approach to test whether the experimental training has a significant effect on the parsimony of the entrepreneurs' business ideas and on their propensity to add or subtract. Finally, I run a two-stage model to check whether parsimony is indeed one of the mechanisms, embedded in the scientific approach, driving outcomes such as increased revenues and pivots.

If proven empirically, these findings would be very relevant for the entrepreneurship field, since more parsimonious business theories would allow entrepreneurs to be more focused in the development of a new venture. Greater simplicity would thus allow them to allocate their scarce resources to those fewer elements that are really meaningful for achieving success, rather than spreading them over many elements hoping that some of them will succeed. The randomized experimental setting (i.e., RCT) will also provide rich data that will hopefully strengthen the expected findings and their contribution to our field.

Being able to attend this boot camp would offer me an invaluable opportunity to further my knowledge of the entrepreneurship field, learning from its leading scholars in this exceptional setting offered by the NBER. Moreover, this would allow me to gain a range of new and critical insights for my research agenda, which would be precious for its development. I also believe that attending this bootcamp will open future avenues for collaboration and scientific production with the other esteemed PhD participants who might share common interests.

Università Commerciale
Luigi Bocconi

Via Sarfatti 25
20136 Milano

Arnaldo Camuffo
Professor of Management
Department of Management and Technology
Bocconi University
Viale Rontgen, 1 – 4th floor – office E2-07 - MILAN, ITALY 20136
Tel. +39-0258362630 Fax +39-0258362634
e-mail: arnaldo.camuffo@unibocconi.it

Milan, January 19th, 2022

Dear NBER applications review Panel,

I am writing in support of Mr. Diego Jannace's application to the NBER Entrepreneurship Research Boot Camp 2022. I am Mr. Diego Jannace's dissertation advisor. As hereby illustrated, I strongly believe Diego's research is addressing an important phenomenon in the field of entrepreneurship and it has potential applicability to the entrepreneurial practice.

The dissertation topic is "LESS IS MORE: how a scientific approach improves entrepreneurial decision-making through more parsimonious theories and focused experiments". It will investigate whether entrepreneurs and managers can improve their ability to take these decisions by adopting a scientific approach based on the formulation of rigorous models tested with data. The dissertation goal is to explore how a scientific approach improves entrepreneurial decision-making through more parsimonious theories and focused experiments. Diego's work proposes that clarity and parsimony of the business theories is indeed one of the mechanisms, embedded in the scientific approach, which explain the positive effect of a scientific training on start-ups' performance and pivoting behavior.

I hereby certify that Mr. Diego Jannace is currently a regular second-year student at the PhD Program in Business administration & Management at Bocconi University, and that he is in good standing. A transcript of his coursework and grades is available upon request.

Mr. Diego Jannace's research is also part of a broader research project – funded by the European Research Council – titled "SAIM: A Scientific Approach to Innovation Management", where Prof. Alfonso Gambardella is the Principal Investigator and I am the second investigator. Diego is actively managing the project, which consists of a training program offered free of charge to entrepreneurs and administered in several large cities across the globe. The empirical setting of his analyses consists of a randomized control trial (RCT), where participants are randomly assigned to three different experimental conditions: scientific approach training, lean startup training, control.

I firmly believe that Mr. Diego Jannace's work will be completed. He is currently collecting pre-treatment data through a baseline survey administered to all entrepreneurs prior to the intervention. This will allow him to soon perform the randomization procedure, making sure that the observable characteristics are balanced across the experimental groups. He is also training the research assistants who will aid with data collection, as well as the instructors who will teach the entrepreneurship training materials. The program is on schedule and the first rounds of performance and outcome measurements will be collected in April and May 2022. Therefore, should he be accepted to the NBER Entrepreneurship Research Boot Camp 2022 in July, he would be able to show preliminary results. In particular, his analyses start by testing for correlation between measures of simplicity and scientific intensity (from Camuffo et al., 2021). Then, he will perform difference-in- differences regressions to test whether the experimental training has a significant effect on the parsimony of the entrepreneurs' business ideas and theories. Finally, he will run a two-stage model with instrumental

variables to check whether parsimony is indeed one of the mechanisms, embedded in the scientific approach, driving outcomes such as increased revenues and pivots. If proven empirically, his findings would be of high interest for the entrepreneurship field. In fact, simpler and more parsimonious business models would allow entrepreneurs and managers to be more focused in the development of a new venture. Being parsimonious would in fact allow them to allocate their scarce resources to those fewer elements that carry important contributions toward achieving success, rather than inefficiently allocating them over a large number of potentially superfluous elements. The randomized experimental setting (i.e., RCT) will also provide rich data that will hopefully strengthen Mr. Jannace's expected findings and their contribution to our field. The data is in fact longitudinal (with several measurements over a 1.5 years experimental time frame), rich (dozens of measures pertaining to key aspects relevant for entrepreneurial decision-making) and randomized (RCT design with balance checks to make sure that the only difference between groups is represented by the experimental treatments).
Mr. Diego Jannace has never attended a NBER Entrepreneurship Research Boot Camp. I hope this statement meets the ERBC 2022 panel's competition requirements. Please do not hesitate to contact me for any further inquiry.

Bocconi

Yours sincerely,

Arnaldo Camuffo

