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EDUCATION

INSEAD Enrolment in 2023
PhD Candidate (Entrepreneurship Area)
Dissertation Committee: Vibha Gaba, Erdem Dogukan Yilmaz

Korea University
M.S. in Business Administration 2022
B.S in Business Administration, B.A in History 2020
Study Abroad, University of California, Berkeley 2017

RESEARCH INTERESTS

Entrepreneurship and Technology; Open-Source Innovation, Artificial Intelligence, Organizational Learning

DISSERTATION

Three Essays on Digital Technology and Entrepreneurial Learning

Chapter 1. **Koh, B.**, Yilmaz, D., Gaba, V. Beyond Open Participation: How Should Startups Collaborate in Open-Source Communities. *Working Paper*

Chapter 2. **Koh, B.** Startup's Experiential Learning in the Age of Generative AI. *Data collection completed*

Chapter 3. **Koh, B.** Algorithmic Information Environments and Entrepreneurial Decision-Making. *Design stage*

OTHER PROJECTS

Koh, B. High-Velocity Technological Development as Micro-shocks to Startup Innovation. *Data collection in progress*

RELEVANT COURSES

PhD Seminars: Entrepreneurship Research A (Balagopal Vissa, Henrich Greve) Entrepreneurship Research B (Chiara Spina) Entrepreneurship Research C (Erdem Dogukan Yilmaz) Foundations of Strategy and Organization (Gabriel Szulanski) Special Topics in Strategy (Hyunjin Kim, Victoria Sevcenko) Applied Microeconomics (Morten Bennedsen)

Methods: Econometrics A (Lin Tian) Econometrics B (Dylan Glover) Applications of Econometrics to Management (Phebo Wibbens) Computational Org Science (Chiara Spina, Henrich Greve) Research Methods (So Yeon Chun)

Statement of Purpose

My research examines how technological advances reshape the organizational constraints facing young firms and how entrepreneurs adapt their strategies and organizational practices in response. I am particularly interested in how young firms organize access to external knowledge and capabilities, accumulate experience through productive activities, and make strategic decisions under uncertainty.

Specifically, my dissertation addresses three questions concerning how startups respond to emerging digital technologies. First, as open-source communities make external expertise increasingly accessible, I examine how startups can effectively leverage external expertise that they do not directly control. Second, recent advances in generative AI have enabled startups to develop products without necessarily possessing the underlying technical knowledge. Amid growing discussions of one-person/vibe-coding startups, I investigate which forms of direct experience remain valuable for firm performance and future organizational scaling even as AI capabilities continue to advance. Finally, while digital platforms provide entrepreneurs with access to an abundance of information, recommendation algorithms may systematically narrow the information they encounter. I examine whether such algorithmic filtering helps entrepreneurs focus on relevant information or instead limits their ability to reconsider existing assumptions and strategic alternatives.

Through the NBER Digital Economics and AI Tutorial, I hope to sharpen my dissertation question by engaging with the researchers studying digital economy. By broadening my understanding, I would like to discover and develop important questions surrounding the advances of digital technology and how it influences our prior understanding of the organization of work and firm strategy. At the same time, I also hope to contribute by actively engaging and adding to the conversation during the workshop, drawing on my own empirical work with startups. Ultimately, I hope to draw on these perspectives to strengthen my dissertation program and develop novel and interesting research question about how technological advances transform firms and their organizations.

Dissertation Title: Three Essays on Digital Technology and Entrepreneurial Learning

Committee: Vibha Gaba, Erdem Dogukan Yilmaz

Overview

Technological advances are reshaping young firms' strategy and performance. Such technologies often lower the costs of acquiring information and accessing capabilities, allowing young firms to undertake activities that previously required substantial resources and specialized expertise.

However, realizing the value of technological advances requires firms to adapt their organizational arrangements and practices accordingly. Such adjustments may be particularly consequential for young firms with limited prior knowledge and organizational experience. As technological advances relax some of the constraints these firms face, other constraints may become increasingly important in shaping their performance.

Hence, this dissertation aims to shed light on how young firms organize their activities, accumulate knowledge, and make strategic decisions as technological advances reshape the constraints they face. Studying these processes, however, presents several empirical challenges. The internal arrangements through which firms adopt and organize around new technologies are often difficult to observe. Moreover, assessing the performance implications of these organizational choices requires distinguishing their effects from the characteristics of firms that make them. To address these challenges, this dissertation leverages rich longitudinal data on startups' organizational and productive activities in open-source software environments, as well as a proposed experimental setup using a digital research tool that allows researchers to manipulate entrepreneurs' information exposure.

The first essay looks into cases where startups can increasingly access capabilities they do not control directly. Advances in open-source software and the communities that nurture it have opened access to diverse knowledge, yet startups that attempt to leverage it face the challenge of managing dispersed contributors. Drawing on the organization design literature on decentralization, we consider when startups should let external contributors exercise the authority to evaluate and integrate externally generated contributions. In the second essay, I turn to how startups can effectively adopt generative artificial intelligence in production. Generative AI allows firms to produce outputs that they do not fully have the knowledge to produce themselves. I explore which experiences, despite advancing technology, should still be accumulated inside the firm for performance growth and future organizational scaling. Finally, in the third essay, I highlight the abundant yet selective nature of the information environment on digital platforms, which is driven by algorithmic recommendation, and investigate whether this selectiveness changes how entrepreneurs evaluate strategic alternatives and make decisions.