

Dana Jongyoun BAEK

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EDUCATION

Expected 2025	INSEAD, PhD Candidate Department of Entrepreneurship and Family Enterprise	Singapore
2017	Seoul National University M.S. in Organizational Behavior and Human Resources Management	Seoul, Korea
2015	University of Seoul Bachelor of Business Administration, Minor in Urban Sociology	Seoul, Korea
2012-2013	University of California, Berkeley , Exchange Student	CA, USA

RESEARCH INTERESTS

Innovation and Technology, Incumbent Firms' Adaptation to Technological Discontinuities through Strategic Alliances, Automotive Industry, Corporate Venture Capital Investment

JOB MARKET PAPER

The Interplay of Alliance and Knowledge Networks in Strategic Value Creation: Insights from the Autonomous Driving Field (*Received Will Mitchell Dissertation Research Grant, Strategic Management Society, 2024-2025*)

RESEARCH IN PROGRESS

Dana Jongyoun Baek, Andrew Shipilov, and Nathan Furr. "How Brokerage in Buyer-Supplier Networks Affects Incumbents' Adaptation to Technological Discontinuities" (*Revise and Resubmit at Organization Science*)

Dana Jongyoun Baek, Andrew Shipilov, and Nathan Furr. "From Gasoline to Electric: How Incumbents Leverage Their Old Network to Cope with Technological Discontinuities in the Automotive Industry" (*Under Review at Strategic Management Journal*)

Dana Jongyoun Baek and Martin Gargiulo. "The Unintended Consequences of Strategic Alliances on the Stability of Supply Relationships in the Automotive Industry" (*Preparing for Submission*)

Dana Jongyoun Baek and Daniel Wilde. "How Corporate Venture Capital Investment Affects Incumbents' Intra-firm Cognitive Variations on Emerging Technology" (*Data Analysis Stage*)

INVITED CONFERENCE PRESENTATION (* denotes co-author presentations)

Technological Interdependence and Partnership Networks: Shaping Incumbents' Innovation through the Alliance Portfolio Design

2024 | CCC Doctoral Student Colloquium (Saint Louis), Academy of Management (Chicago), Strategic Management Society (Istanbul)

2023 | Wharton-INSEAD Doctoral Consortium (Singapore)

How Brokerage in Buyer-Supplier Networks Affects Incumbents' Adaptation to Technological Discontinuities

2024 | Reputation Symposium (London)

2023 | Network Evolution Conference (Fontainebleau), Strategic Management Society (Toronto)*, Academy of Management (Boston)

The Unintended Consequences of Strategic Alliances on the Stability of Supply Relationships in the Automotive Industry

2024 | ESMT Research Seminar (Berlin)*

2023 | Academy of Management (Boston), Trans-Atlantic Doctoral Conference (London)

2022 | Wharton-INSEAD Doctoral Consortium (Fontainebleau)

How Corporate Venture Capital Investment Affects Incumbents' Intra-firm Cognitive Variations on Emerging Technology

2023 | INSEAD Doriot Entrepreneurship Conference (Singapore), Strategic Management Society (Toronto)

AWARDS & FELLOWSHIPS

Will Mitchell Dissertation Research Grant, Strategic Management Society, 2024-2025

PhD Award, Rudolf and Valeria Maag Scholarship in Entrepreneurship, 2023-2025

INSEAD Doctoral Fellowship, 2018-2024

Seoul National University TA Fellowship 2016-2017

TEACHING

2020, 2023 TA for Social Network Analysis (PhD course at INSEAD, taught empirical analysis using Python NetworkX)**2021, 2022** Introduction to Programming Language with Python (Python Bootcamp for Incoming PhD students at INSEAD)**REFERENCE**

Prof. Andrew Shipilov (Advisor)INSEAD | andrew.shipilov@insead.edu**Prof. Martin Gargiulo (Advisor)**INSEAD | martin.gargiulo@insead.edu**Prof. Nathan Furr**INSEAD | nathan.furr@insead.edu**Prof. Melissa Schilling**New York University | mas28@stern.nyu.edu**RESEARCH ABSTRACTS**

The Interplay of Alliance and Knowledge Networks in Strategic Value Creation: Insights from the Autonomous Driving Field (Job Market Paper)

This paper investigates inter-firm networks as engines of innovation, focusing on incumbent firms' strategic alliances formed around self-driving car technology in the global automotive industry. It builds on alliance portfolio literature to highlight the importance of broader knowledge architecture, characterized by the interdependence of knowledge components. This study shows that firms aligning their alliance networks with this knowledge architecture derive more innovation from their alliances. Specifically, traditional automotive companies perform better in the self-driving car industry when their alliances reflect the interdependencies among technology components. Additionally, it examines how network resource interdependencies and alliance structures among partners predict incumbents' innovation ability. Misalignment between networks of interdependent AI knowledge domains and alliance structures can hamper robot-taxi performance. This research contributes to alliance portfolio literature by demonstrating how knowledge networks influence a firm's innovation outcomes.

Dana Jongyoun Baek, Andrew Shipilov, and Nathan Furr. “How Brokerage in Buyer-Supplier Networks Affects Incumbents’ Adaptation to Technological Discontinuities” (Revise and Resubmit at Organization Science)

Incumbents often face technological discontinuities to which they struggle to adapt. During this adaptation process, incumbents can become embedded in two buyer-supplier networks, one for the old and one for the new. While simple embeddedness in a technology buyer-supplier network may create inertia to adaptation, brokerage in these networks could lead to external integrative capabilities that facilitate adaptation. In a study of the U.S. automotive industry between 2013 and 2020 responding to a regulatory shock that accelerated the discontinuity, we find that brokerage in the old technology network predicts both half-steps into the new technology (i.e., number and performance of hybrid technology models) and adaptation to the new technology (i.e., number and performance of new technology models). Surprisingly, brokerage in the old technology network was more impactful than brokerage in the new technology network for the transition from internal combustion engines to electric vehicles.

Dana Jongyoun Baek, Andrew Shipilov, and Nathan Furr. “From Gasoline to Electric: How Incumbents Leverage Their Old Network to Cope with Technological Discontinuities in the Automotive Industry” (Under Review at Strategic Management Journal)

One of the challenges incumbents face when adapting to technology discontinuities is developing a reliable supplier network to produce the new technology. We study how supplier relationships in old technology networks shape the development of new technology networks. We find that relational and structural embeddedness affect how incumbents chose EV suppliers from the pool of ICE suppliers. Yet, whether ties transfer from old to new technology networks heavily depends on the existence of organizational linkages to complementary assets—namely incumbents’ “dual purpose” factories that simultaneously make different products based on old and new technologies. We add to the literature on technology discontinuity and network multiplexity by showing boundary conditions under which ties in old technology networks may influence the selection of new technology suppliers.

Dana Jongyoun Baek and Martin Gargiulo. “The Unintended Consequences of Strategic Alliances on the Stability of Supply Relationships in the Automotive Industry” (Preparing for Submission)

We study the unintended consequences of alliances between organizations separated by two steps in a supply network. We argue that those alliances create a structure through which a supplier can indirectly influence the behavior of one of its clients through its alliance with one of this client’s customers, independently of the motives that prompted the supplier to enter the alliance. This, in turn, can lead the client to reconsider the convenience of maintaining the commercial exchange with this supplier, especially when the client can switch demand to other suppliers within or outside its current supply network. We find partial support for our hypotheses on a sample of triadic supply chain relationships and alliances in the automotive industry between 2005 and 2020. Our results contribute to developing a dynamic version of resource dependence theory by highlighting the unintended consequences of attempts to manage interdependencies on the stability of such interdependencies.

Dana Jongyoun Baek and Daniel Wilde. “How Corporate Venture Capital Investment Affects Incumbents’ Intra-firm Cognitive Variations on Emerging Technology” (Data Analysis Stage)

This study investigates the influence of corporate venture capital (CVC) investment on incumbents’ intra-firm cognitive variations concerning emerging technologies. Previous research shows that incumbents invest in new ventures to explore and gain access to new technologies. While direct effects of CVC investments—such as immediate access to new technologies and reduced investment risks—have been well-studied, this research focuses on the indirect effects. Direct effects refer to the tangible, immediate outcomes of specific investments in portfolio companies. Indirect effects, on the other hand, involve broader impacts that arise from being embedded in a network of startups and investors, such as enhanced access to an entrepreneurial ecosystem and identification of technological trajectories. By examining how incumbents’ positions within networks of emerging technologies affect intra-firm cognitive diversity, we find that

greater accessibility to diverse entrepreneurial ecosystems through portfolio companies leads to cognitive convergence on technology trajectories. This convergence enhances incumbents' ability to integrate emerging technologies into their products. Our findings highlight the importance of both internal dynamics and external network exposure in adapting to technological changes.