Capabilities as Real Options

Bruce Kogut, Nalin Kulatilaka

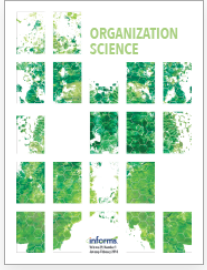
Published Online: 1 Dec 2001 | https://doi.org/10.1287/orsc.12.6.744.10082

Abstract

Strategy research consists of a balance between positive and normative theory. Normative theories suggest particular heuristics, or cognitive representations, to find appropriate solutions. Heuristics permit faster solutions to real-time problems; they also suffer from the potential of negative transfer to inappropriate applications.

The theory of real options provides the appropriate heuristic framing of competencies and exploratory search. A real options approach marries the theory of financial options to foundational ideas in strategy, organizational theory, and complex systems. We join these approaches to identify three pairs of concepts: scarce factor and the underlying asset in option theory, inertia and irreversibility, and the ruggedness of landscape and option values. Strategic theories of resources largely define a core competence as unique and nonimmutable. In doing so, this definition has wrongly forgotten Barney's initial insight into scarce factor markets as determining the valuation of a competitive asset. Financial theory of real options derives its heuristics of investing in exploratory search by inferring future value of today's investments from market prices.

We apply the three conceptual pairs to the evaluation of capabilities as real options through a formal descriptive model. The valuation of core capabilities is derived from observing the price dynamics of correlated strategic factors in the market. Because of inertia, managers cannot easily adjust the wrong set of organizational capabilities to the emergence of market opportunities. However, firms that have made investments in capabilities appropriate to these opportunities are able to respond. From this description, we define core competence as the choice of capabilities that permits the firm to make the best response to market opportunities. The heuristic framing of capabilities as real options guides the normative evaluation of the balance between exploitation and exploration.



Volume 12, Issue 6

November-December 2001
Pages 661-777

Article Information

Metrics

Downloaded 35 times in the past 12 months

Information

Published Online: December 01, 2001

© 2001 INFORMS

Cite as

Bruce Kogut, Nalin Kulatilaka, (2001) Capabilities as Real Options. Organization Science 12(6):744-758.
https://doi.org/10.1287/orsc.12.6.744.10082

Keywords

Strategy | Options | Capabilities | Heuristics | Irreversibility | Landscapes

PDF download

Sign Up for INFORMS Publications Updates and News

SIGN UP



Institute for Operations Research and the Management Sciences

5521 Research Park Drive, Suite 200
Catonsville, MD 21228 USA

INFORMS (Institute for Operations Research and the Management Sciences) is a U.S. 501(c)(3) nonprofit organization; EIN: 52-1898636.

phone 1 443-757-3500

phone 2 800-4INFORMS (800-446-3676)

fax 443-757-3515

email informs@informs.org

Get the Latest Updates

Discover INFORMS
Explore OR & Analytics
Get Involved
Impact
Join Us

Recognizing Excellence
Professional Development
Resource Center
Meetings & Conferences
Publications
About INFORMS
Communities

PubsOnLine
2024 INFORMS/ALIO/ASOCIO International Conference
Certified Analytics Professional
Career Center
INFORMS Connect

Copyright 2026 INFORMS. All Rights Reserved
INFORMS Code of Conduct | Terms of Use | Privacy | Contact INFORMS | Sitemap

Follow INFORMS on: X Facebook Linked In Bluesky