

THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING

Departmental Research Seminar



Business Method Innovation in US Manufacturing and Trade By

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Date : 26 Jan 2023 (THU)
Time : 9:30 – 11 am
Venue : Online via Zoom

Abstract

Problem Definition. In what kinds of business method innovation do firms in the manufacturing and trade sectors engage? Does engaging in business method innovation create value for these firms? The present paper answers these questions using empirical evidence.

Methodology/Results. Using text analysis of business method patents, we show that business method innovation in the US manufacturing and trade sectors is aimed primarily at improving the business operations that support the sales of tangible products—that is, how the firm targets customers, manages product delivery, or enhances the product through service offerings. We then evaluate the effect of having business method innovation, as evidenced by patents, on a firm's value. Leveraging the exogenous shock of the State Street ruling, which first recognized business methods as a patentable category of innovation, we identify a set of firms that possess business method patents and a matched set of comparable firms without such patents. Then, using a difference-in-differences with firm fixed effects model on the matched sample, we show that the valuation of the former set of firms increased by 9% after State Street, as measured by Tobin's q. We further show that (1) business method innovators in the manufacturing sector gained a 7% increase, whereas business method innovators in the trade sectors gained a 25% increase; and (2) only firms with broader innovation scope—that is, business method innovations covering the range of customer targeting, product delivery, and service support of products—experienced a significant (18%) value bump.

Managerial Implications. This research provides evidence that business method innovation in the manufacturing and trade sectors primarily involves innovating in business operations that support product sales. Our work also provides empirical support for the proposition that engaging in business method innovation drives manufacturing and trade firms' market performance.

Prof. Anandhi Bharadwaj is the Vice Dean and the Goizueta Endowed Chair in Electronic Commerce at the Goizueta Business School of Emory University. She holds a PhD in Management Information Systems from Texas A&M University.

Prof. Bharadwaj's research examines the adoption, use and impact patterns associated with technological change. Her work has made impactful contributions in the areas of business value and impact of information technology, digital business strategies, healthcare processes and systems, and technology outsourcing. Her research has been published in leading scholarly journals such as *Management Science*, *Information Systems Research*, *MIS Quarterly*, *Organization Science*, *Manufacturing and Service Operations Management*, *Productions & Operations Management*, *IEEE Transactions on Engineering Management*, and *Journal of Management Information Systems* as well as in practitioner journals. She has presented her work to academic and practitioner audiences worldwide. She was recently included among top 2% of scientists worldwide across 27 different fields (PLoS Biol 2020) and inducted into Emory's prestigious Millipub Club for High Impact Scholarship. For her research achievements, the Goizueta Business School has awarded her the Jordan Research Excellence Award (2017) and the Caldwell Research Award (1997). She has received the Distinguished Doctoral Alumni Award from Texas A&M and served as a Distinguished Academic Fellow of the Indian School of Business.

Prof. Bharadwaj's has served as a Department Editor for the Information Systems track at *Management Science*, as Senior Editor at *Information Systems Research*, and as an Associate Editor at *MIS Quarterly* and the *Journal of the Association for Information Systems*. She has also guest co-edited a special issue of *MIS Quarterly* on "Digital Business Strategy".

Prof. Bharadwaj's has taught a variety of courses in the undergraduate, MBA, Executive, and Doctoral programs and has chaired and served as committee member in several doctoral dissertations. She also serves her school and university in several senior leadership positions.

All interested are welcome.



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