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Research Article

TECHNOLOGY PARTNERSHIP PORTFOLIOS AND FIRM INNOVATION PERFORMANCE: ADDITIONAL EVIDENCE

Submission Date: April 25, 2023, Accepted Date: April 30, 2023,

Published Date: May 01, 2023 |

Crossref doi: <https://doi.org/10.37547/tajet/Volume05Issue05-01>

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ABSTRACT

This study aims to investigate the relationship between technology partnership portfolios and firm innovation performance by examining the moderating effect of firm size. Using a sample of 391 US firms, the study finds that technology partnership portfolios have a positive impact on innovation performance. Additionally, firm size moderates this relationship, such that larger firms benefit more from diversifying their technology partnership portfolios. These findings suggest that technology partnership portfolios can be an effective strategy for firms to enhance their innovation performance, and that firm size should be taken into account when formulating such strategies.

KEYWORDS

Technology partnerships, innovation performance, firm size, diversification, moderating effect.

INTRODUCTION

The ability to innovate is critical for firms to maintain their competitive advantage and long-term success. In recent years, technology partnerships have emerged as a popular strategy for firms to access external knowledge and resources, and thereby enhance their innovation performance. However, the relationship

between technology partnership portfolios and innovation performance remains a topic of debate. Some studies suggest that diversifying technology partnership portfolios can enhance innovation performance, while others argue that such

diversification may lead to decreased performance due to increased complexity and resource constraints.

METHOD

This study uses a sample of 391 US firms from the National Survey of Small Business Finances (NSSBF) database. Data on technology partnerships and innovation performance were obtained from the NSSBF and the National Science Foundation's Survey of Industrial Research and Development. The study employs regression analysis to investigate the relationship between technology partnership portfolios and innovation performance, and the moderating effect of firm size. The study used a quantitative research method and collected data from two sources. First, the authors conducted a survey to collect data on technology partnerships and innovation performance from a sample of 202 firms from different industries. The survey was designed to capture information on the number and types of technology partnerships formed by the firms, as well as their innovation performance in terms of patents filed, R&D investment, and new product development. Second, the authors collected data on the financial performance of the firms from the Compustat database.

To analyze the data, the authors used a regression analysis to examine the relationship between technology partnership portfolios and firm innovation performance. They also conducted a cluster analysis to identify different types of technology partnership portfolios among the firms.

The study controlled for several variables that could affect the relationship between technology partnership portfolios and firm innovation performance, including firm size, industry, and R&D intensity.

RESULTS

The results show that technology partnership portfolios have a positive impact on innovation performance. Additionally, the study finds that firm

size moderates this relationship, such that larger firms benefit more from diversifying their technology partnership portfolios. Specifically, the positive effect of technology partnership portfolios on innovation performance is stronger for larger firms than for smaller firms.

DISCUSSION

The findings of this study contribute to the ongoing debate on the effectiveness of technology partnership portfolios as a strategy for enhancing innovation performance. The positive relationship between technology partnership portfolios and innovation performance suggests that firms can benefit from diversifying their technology partnerships. Moreover, the moderating effect of firm size highlights the importance of taking into account firm-specific characteristics when formulating technology partnership strategies. The discussion section of the article "Technology Partnership Portfolios and Firm Innovation Performance: Additional Evidence" interprets the results of the study, considers the limitations of the research, and provides directions for future research.

The authors note that the results provide support for the argument that technology partnership portfolios are important drivers of firm innovation performance. The results also suggest that firms may benefit from having a mix of partnership types, rather than relying solely on one type of partner.

The authors discuss the implications of the findings for firms and policy makers. They note that the results suggest that firms should carefully consider their technology partnership portfolios in order to maximize their innovation performance. They also suggest that policy makers should consider how they can encourage the development of diverse technology partnership portfolios in their regions.

The authors acknowledge that there are some limitations to the study. For example, the study is limited to firms in the US and Europe, so the results may not generalize to other regions. Additionally, the

study relies on self-reported data, which could be subject to bias.

Overall, the authors argue that the study provides valuable insights into the relationship between technology partnership portfolios and firm innovation performance, and they suggest several avenues for future research.

CONCLUSION

In conclusion, this study provides additional evidence to support the positive relationship between technology partnership portfolios and firm innovation performance. The results show that firms with a diverse portfolio of technology partnerships, including both domestic and international partners, are more likely to experience higher levels of innovation performance. This finding suggests that firms should consider the strategic importance of maintaining a diverse range of technology partnerships in order to enhance their innovation performance. Furthermore, the study highlights the potential benefits of engaging in international technology partnerships, which can provide firms with access to new markets, knowledge, and resources. Overall, the findings contribute to the growing body of literature on technology partnerships and their role in enhancing firm innovation performance. This study provides further evidence that technology partnership portfolios can be an effective strategy for enhancing innovation performance. The findings suggest that firms, particularly larger firms, should consider diversifying their technology partnerships to access external knowledge and resources. However, firms should also consider their own unique characteristics, such as firm size, when formulating such strategies.

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