# Non-Technical Summary

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# Technology followers and key competencies:

# Establishing competencies driving innovative performance and company competitiveness

**Principal researchers:**

- **Tanja Rajkovič, PhD, research assistant, University of Ljubjana, Faculty of Economics, E-mail: tanja.rajkovic@ef.uni-lj.si**
- **Maja Vehovec, PhD, senior research fellow, The Institute of Economics, Zagreb, Croatia, E-mail: mvehovec@eizg.hr**

The article examines three groups of firm competencies that hold the central role in new product development processes. Aligned with the competence based theory of competitive advantage, better competencies should lead to improvements of these processes and ultimately contribute to firm's performance. As an approximation of outcomes of these processes was used the non-financial measure of innovative performance. Further the article investigates the nature of these competencies in the case of firms that are technology leaders and those that are followers as well as firms pursuing different innovation strategies. The three groups of competencies in question are:

- Technological competencies which encompass practical and theoretical know-how, as well as the methods, experience and equipment necessary for developing new products.
- Marketing competencies requiring market analysis and reflecting in good awareness of customer needs. They assist firms in creating value on all elements of a product or service that are relevant to the customers.
- Complementary competencies that present a link between the technological and marketing competencies.

The broad definition of competencies, incorporating wide network of firm assets and capabilities, enables cross-industry comparisons when companies are individually positioned against their own main competitors. For this purpose a custom questionnaire was developed. In the survey were included medium sized and large established manufacturing firms from Slovenia and Croatia.

Two main tools were used. To verify and validate the proposed model of competencies, innovative performance and firm performance, structural equation modeling was used, more precisely the Partial Least Squares Approach. In order to identify different clusters of firms

according to their innovative performance and specify their difference, cluster analysis was applied.

The main findings can be summarized as follows:

- There is a positive and significant link between competencies (technological, marketing and complementary), innovative performance and firm performance.
- The most innovative companies – technology leaders – demonstrate to have all competencies highly developed. Identified were also two segments of followers that predominantly rely on imitation in their innovation strategy.
- The distinctive core competencies of technology leaders are notably technological competencies. Strong followers build their competitiveness on marketing and complementary competencies.

Main contributions to theory and practice are considered to be:

- The first attempt to link the three concepts of competencies, innovative performance and firm performance within the same model.
- The proposed approach of measuring firm competencies can be useful because of the many opportunities it provides for interpreting data. Enabling cross-industry comparisons country level data can be analyzed. This way an insight into the dynamics of the economy is obtained.
- The competencies and innovative performance approach clearly shows that companies with potential are not necessarily contingent on industry but more likely on the competencies they are able to develop.
- On the firm level, the findings can be used by firms in defining their own innovation strategy.

*Key words:* Technological, marketing and complementary competencies; innovative performance; incremental innovation; radical innovation; technological and marketing turbulence; clustering; structural equation modelling – PLS; technology leaders; technology followers; innovation policy.