

The development of manufacturing enterprises is determined primarily by the access to technology, the ability to use its technological potential and the introduction of innovative solutions. These factors affect the level of competitiveness of a given company on domestic and foreign markets. Therefore, it is necessary to understand the essence of the importance of technology for a particular company and to identify the mechanisms affecting the process of technology management. These mechanisms are different, depending on the characteristics of the industry in which the enterprise operates, and a number of internal and external factors affecting the organization and management in that company, both at the strategic and tactical level. Not without significance is also the ability to establish cooperation with other entities (including universities and business institutions) and the efficient use of its results. Such opportunities are provided by cooperation within the cluster arrangements.

Therefore, the main objective of the implemented project is **the development and empirical verification of the model of technology management in the cluster enterprise**. The need to undertake the research subject stems from the scientific problem formulated based on extensive literature studies and preliminary exploratory research, namely the need to identify the actions and mechanisms for determining the functioning of the model of technology management in companies involved in cluster arrangements. These problems have not yet been described in scientific literature concerning the analysed test subject. The research existing gap can be filled by the creation of the model of technology management in the cluster enterprise. For this purpose, a theoretical model of technology management will be developed which, when supplemented with elements specific to cluster enterprises will be verified empirically in the whole population of manufacturing enterprises gathered in the studied cluster.

The considerations undertaken in the project will be carried out on the basis of management studies. The expected results of the project will constitute an original contribution to development of management studies in the field relating to technology management theory. The model of technology management in the cluster enterprise, describing the structure of the network of connections between the factors shaping the conditions of the decision-making process in the company, will allow us to formulate implications for the management theory, as well as to identify good practices concerning the use of the model of technology management by the bodies managing the enterprises, cluster coordinators, and public institutions responsible for the creation of regional policy and responsible for the distribution of public aid.