SUMMARY

The purpose of the research undertaken in the thesis was to identify and evaluate the conditions for using the concept of the demand-driven innovation model (User-Driven Innovation, UDI) in shaping the innovativeness of the food industry in Poland. The subjective scope of the research referred to enterprises from three selected branches of the food industry (processing and preserving of meat and production of meat products, production of fruit and vegetable juices and milk processing and cheese production). Apart from the scope of user involvement at individual stages of UDI, the scope of the use of knowledge sources for the purposes of creating innovations, the openness of entities to cooperation under the demand-side approach, the motives and barriers of innovative activity and its direct effects were also measured.

The thesis uses secondary data that comes from the literature and studies of the Central Statistical Office (PNT-02 form from 2006-2016), as well as primary data that were obtained through a survey in 2018 and 2019.

The research procedure adopted in the thesis consisted of three stages. The first one included an analysis of the literature and documents which were used for systematization of the knowledge in the area of innovations, innovativeness, as well as definitions relating to the economic mesosystem and theoretical approaches to creating innovations (traditional and open models). Based on the analysis of the literature, research objectives, questions and hypotheses were constructed, in which it was assumed that:

1. There is a positive statistical dependence between the level of openness to cooperation as part of innovative activities (measured by the scope of using external sources of information) of enterprises in the analyzed sectors of the food industry sector and the level of their innovativeness.
2. Enterprises of the analyzed branches of the food industry involving users in the process of creating innovations are more innovative than enterprises using external sources of information.
3. The level of innovativeness of enterprises of the analyzed food industry branches depends on the number of stages of the demand-driven innovation model (UDI).

Companies that involve users in more stages of the demand-driven innovation model(UDI) are more innovative.

4. The main objective of engaging users in the innovative activity of food industry enterprises in Poland is the need to enter new markets.
5. The main barrier to engaging users in the innovative activity of food industry enterprises is the lack of funds to finance the innovation process.

The objective of the second stage of the research was to determine the dynamics of changes in the analyzed branches, regarding to the official statistics (Central Statistical Office, 2006-2016) by using measures that determining the degree of use of information sources obtained for the purposes of creating innovations in the surveyed branches and identifying factors determining and limiting the innovativeness of these industries.

The key part of the third stage of the research was conducting a survey measurement using the CAWI method, which covered the years 2018-2019. Its main purpose was to determine the level of innovativeness of enterprises in analyzed branches, to examine the scope of their use of the demand-driven innovation model (UDI), indicating the sources of informations obtained for the purpose of creating and commercializing innovations in the surveyed entities, as well as examining the relationship between the scope of application of the demand-driven innovation model and the level of innovativeness of the surveyed branches. At this stage, the statistical analysis of the collected data was also performed, the research hypotheses put forward in the thesis were verified and the final conclusions were formulated.

The dissertation consists of five chapters supplemented by an introduction, lists of tables and figures, an annex and a summary. The first two chapters are theoretical considerations, the third chapter is methodological, and the last two are empirical. In the theoretical chapters, the subject of shaping innovation and innovativeness at the level of economic mesosystems was addressed. The factors determining innovativeness in macro-, meso- and microeconomic terms were indicated, as well as its conditions and methods of its measurement at the sector and industry level that have also been discussed. Theoretical considerations were also used to discuss issues related to the evolution of paradigms in the approach to creating innovations and shaping innovativeness. This section also describes the differences between the closed and the demand-driven model of innovation, presents the

essence of the demand-driven innovation model, and also recalls selected results of research on the innovativeness of the food industry sector in Poland.

The empirical chapters discuss the results of research on the innovativeness of the food industry sector in Poland on the example of selected industries. The first of the resulting chapters contains analyzes on the innovativeness of selected branches of the food industry sector in Poland, the goals of innovative activity undertaken in these industries, expenditures on innovative activity, sources of knowledge used in the process of creating innovations as well as barriers accompanying this process. The analyzes in this chapter are based on data (2006-2016) from official statistics. The second of the resulting chapters contains conclusions from the research carried out using the CAWI technique, covering the period of 2018-2019. It also discusses the level of innovativeness of the examined branches of the food industry sector in Poland, the scope of cooperation with the environment of these industries and its impact on the level of their innovativeness, the scope of implementation of the demand-driven innovation model in the discussed industries and the extent to which this implementation affects the level of innovation, as well as the goals and barriers of applying the demand-driven model of innovation in the analyzed industries.

The research confirmed that in the enterprises of the analyzed industries there is a positive statistical relationship between the level of openness to cooperation (measured by the scope of using external sources of information by enterprises of the analyzed branches of the food industry) and the level of their innovativeness. It was noticed that in the innovation processes of the surveyed entities there is a mixed model, in which internal and external sources of information used for the purposes of innovation complement each other.

The important element of the undertaken primary research was to determine the scope of application of the demand-driven innovation model (User-Driven Innovation, UDI) in enterprises of analyzed industries. On the basis of research and analysis, it was found that the surveyed enterprises of the food industry apply a demand-driven approach to innovation. Users and external entities were involved mainly in the three stages of the innovation process implemented in the UDI concept (innovation impulse, prototype creation and testing).

These entities were involved to a lesser extent at the stage of identifying market opportunities and at the stage of post-implementation monitoring. In addition, it was noted that the average number of innovations developed in the surveyed enterprises increases with a simultaneous

increase in the number of stages where informations from users are used. The level of innovativeness of enterprises in the analyzed branches of the food industry depends on the scope of application of the demand-driven innovation model (UDI).

The main motives for conducting innovative activities based on the demand-driven model of innovation were: the need to acquire new customers and enter new sales markets, and also the need to develop and implement new products. On the other hand, the following turned out to be significant barriers to the use of UDI: lack of necessary funds in the company to finance the innovation proces, high costs of adjusting to government regulations and legal requirements, high cost of access to technology, high level of competition in the market, difficulties in acquiring public grants or subsidies for innovations, uncertain demand for innovations. On the other hand, the most important effects resulting from conducting innovative activity based on the use of the demand-driven innovation model turned out to be: increase in market share in which they operate, achieving higher income from the sale of innovative products.