

Industry 4.0 digital tools as a platform for ensuring the dynamic sustainability of small and medium-sized enterprises

Valery P. Nevmyvako, Applicant MEI RAS
e-mail: nevmyvako@ranepa.ru

Abstract

Small and medium-sized enterprises are the most sensitive to technological and infrastructural changes in the social and economic system across the region, the national economy or the world. As an excellent indicator of the economic sentiment of society, SMEs also strive to actively introduce innovative solutions in the organization and management of business processes of their own business, which not only optimizes transaction costs, but also scales the business in the shortest possible time. On the other hand, the digitalization of the national economy carries many systemic risks for the architecture of the socio-economic system itself, transforming traditional institutions of regulation and control and creating new institutional entities whose functioning potential is still difficult to assess. In this vein, it is the subjects of small and medium-sized enterprises who act as the first line of defense, taking on the challenges and threats of new instruments for the implementation of economic relations and transactions, acting in fact as a platform for testing new forms of interaction between business, government and society. *The purpose* of writing the article is a critical review and assessment of the capabilities and threats of digital tools of Industry 4.0 within the framework of the implementation of state programs for the sustainable development of small and medium-sized enterprises. *The leading methods* in the study of the digitalization of business models of the organization of SMEs-subjects are general scientific (qualitative and logical analysis, deduction, systemic approach, retrospective analysis,) and philosophical methods that make it possible to comprehensively consider the assessment of the impact of risks and threats of digital instruments on indicators of economic security of SMEs. The article presents the main stages of the development of the idea of digitalization of business processes of SMEs, reveals the conceptual apparatus of Industry 4.0 and gives its critical analysis, identifies the main risks and threats in the field of the influence of digital tools on ensuring the dynamic stability of small and medium-sized enterprises. *Conclusions.* The materials of the article are of practical value for the founders of SMEs, top management of SMEs, anti-crisis managers, institutions of state regulation of small and medium-sized enterprises.

Keywords: *digital economy, Industry 4.0, sustainable development, smart growth, institutional reforms, business model, engineering, risks, proactive development, financial and technical companies, venture capital investments*

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About author

Valery P. Nevmyvako, Applicant, Market Economy Institute of RAS, Moscow.

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