



## **СИНЕРГІЯ ІНТЕРНЕТ-ТЕХНОЛОГІЙ**

Матеріали  
**І ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ**  
**(26 березня 2026 року)**



м. Івано-Франківськ  
2026 рік

Міністерство освіти і науки України  
Заклад вищої освіти  
«Університет Короля Данила»  
Факультет суспільних і прикладних наук  
Кафедра інформаційних технологій

# СИНЕРГІЯ ІНТЕРНЕТ-ТЕХНОЛОГІЙ

*Матеріали I Всеукраїнської науково-практичної конференції  
(м. Івано-Франківськ, 26 березня 2026 року)*

Івано-Франківськ

2026

*Hohol Oleksandr, Kutsela Mariia*

LINGUISTIC INDICATORS OF AI-GENERATED PHISHING MESSAGES IN  
CYBERSECURITY USING NLP TECHNOLOGIES ..... 133

*Kunitsyn Oleh, Gavkalova Nataliia*

INNOVATIVE AI-BASED TECHNOLOGIES FOR ENHANCING SKILLS AND  
ADAPTIVE CAPACITY OF PUBLIC SECTOR EMPLOYEES ..... 135

*Labetska Marta*

SMART PRINTING IN THE AGE OF UBIQUITOUS CONNECTIVITY:  
CONVERGING INTERACTIVE POLYGRAPHY WITH CLOUD SERVICES, IOT  
ECOSYSTEMS, AND AUGMENTED REALITY OVERLAYS ..... 139

*Lytvynenko Andriy*

ENTERPRENUERSHIP DEVELOPMENT IN UKRAINE: PROBLEMS, TRENDS  
AND PROSPECTS ..... 143

*Marynchenko Inna*

THE POTENTIAL OF THE DIGITAL EDUCATIONAL ENVIRONMENT IN  
SHAPING THE PEDAGOGICAL EXPERTISE OF PRE-SERVICE TEACHERS 146

*Milinchuk Ihor, Kutsela Mariia*

ACCURACY CRITERIA IN TRANSLATION: A COMPARATIVE ASPECT OF AI,  
MACHINE SYSTEMS AND HUMANS..... 150

*Vandzhuliak Andriy, Kutsela Mariia*

LINGUO-TECHNICAL ASPECTS OF DEEPFAKE IDENTIFICATION IN  
CYBERSECURITY USING CONVOLUTIONAL NEURAL NETWORKS ..... 153

***Lytvynenko Andriy,**  
Associate Professor of the Department of Public Administration,  
Public Administration and Economic Policy,  
Candidate of Economic Sciences, Associate Professor,  
Semen Kuznets Kharkiv National University of Economics,  
Kharkiv, Ukraine  
ORCID: <https://orcid.org/0000-0001-5973-5173>*

## **ENTREPRENUERSHIP DEVELOPMENT IN UKRAINE: PROBLEMS, TRENDS AND PROSPECTS**

In recent decades, entrepreneurship has increasingly been viewed not only as a source of economic growth, but also as a mechanism that allows the economy to adapt to structural shocks and institutional changes. The ongoing processes of globalization and digital transformation have significantly changed the role of entrepreneurship. Today, entrepreneurial initiatives are increasingly associated with the creation and dissemination of innovations, rather than just traditional business activities.

For Ukraine, the development of entrepreneurship is of particular importance in the conditions of war and post-war transformations of the economy. It is the entrepreneurial sector that is able to act as a driver of economic recovery, stimulate innovative activity and contribute to the integration of Ukraine into the European economic space. Unlike many transition economies, Ukraine is demonstrating a rapid transition to micro-scale digital entrepreneurship in the face of military uncertainty.

From a theoretical perspective, entrepreneurship has been interpreted differently across different economic schools. While classical economists viewed it primarily as a factor of production, later approaches have emphasized the role of the entrepreneur in innovation, risk-taking, and the discovery of market opportunities. Classical economic theory considers entrepreneurship as a factor of production along with land, labor and capital, emphasizing the role of the entrepreneur as an organizer of production and a bearer of economic risk.

The Austrian School of Economics views the entrepreneur as an innovator who identifies market opportunities and creates new products. At the same time, institutional theory emphasizes the influence of the quality of state institutions on the development of entrepreneurship, and modern approaches combine economic, social and environmental aspects of business, in particular through the development of social entrepreneurship. The level of entrepreneurship development in a country is assessed using a system of

indicators, among which the key ones are the level of entrepreneurial activity of the population, the density of new business creation, innovative business activity, the survival rate of small businesses and access to financial resources.

International analytical reports indicate that small and medium-sized enterprises remain the dominant source of employment in most national economies and generate a significant share of gross domestic product [1].

In Ukraine, the small and medium-sized business sector also plays a key role in the national economy. According to the Ministry of Economy of Ukraine, in 2024, about 2 million individual entrepreneurs operated in the country, and the share of small and medium-sized businesses accounted for over 99 % of all enterprises, providing about 63 % of employment [2].

The development of entrepreneurship in Ukraine is taking place in conditions of significant challenges. The full-scale war led to significant economic losses, destruction of infrastructure and relocation of a significant number of enterprises. According to estimates by international economic organizations, in 2022, about 30 % of enterprises temporarily ceased operations, and some businesses were forced to move production to other regions or abroad.

Despite this, the Ukrainian entrepreneurial ecosystem demonstrates significant adaptability. The startup sector is developing significantly, especially in the field of information technology. According to the international ranking StartupBlink, Ukraine is among the 50 largest startup ecosystems in the world, and the number of technological startups exceeds 2,000 projects [3; 4].

In the Ukrainian context, further expansion of entrepreneurial activity will largely depend on the consistency of government policies. Regulatory predictability, access to finance, and institutional support for innovative firms remain key factors shaping the business environment. Immediate policy priorities include regulatory simplification, wider access to financing for small and medium-sized enterprises, and institutional support for innovation-oriented enterprises. Digitalization has become one of the most important drivers of modern entrepreneurship. For many small firms, especially in developing countries, digital platforms and online commerce significantly lower the barriers to market entry. As a result, Ukrainian entrepreneurs are increasingly relying on digital channels not only to reach domestic consumers, but also to access international markets.

A comparative analysis of the development of entrepreneurship in different countries allows us to assess the structural features of entrepreneurial ecosystems and identify factors of their competitiveness. Generalized indicators of entrepreneurial activity, the role of small and medium-sized businesses in the economy and innovation potential are presented in Table 1.

Table 1

**Comparative characteristics of the development  
of entrepreneurship in individual countries\***

Indicator	USA	Germany	Japan	Ukraine
Entrepreneurial activity of the population (TEA), %	15–16	8–9	5–6	7–8
Share of SMEs in the number of enterprises, %	99.9	99.6	99.7	99.8
Share of SMEs in employment, %	47	60	70	63
Share of SMEs in GDP, %	≈44	≈53	≈52	≈55
Level of innovation (Global Innovation Index, place)	3	8	13	55
Density of startups	very high	high	medium	increasing

\* Compiled by the author based on analytical reports from the OECD, GEM and StartupBlink.

As can be seen from the table, developed economies are characterized by high entrepreneurial activity, a significant role of small and medium-sized businesses in creating added value, and a developed innovation ecosystem. In Ukraine, despite the difficult economic and military conditions, there is a positive dynamics of entrepreneurship development, which is manifested in the growth of the number of startups, the activation of digital business and the gradual expansion of access to international markets.

The development of entrepreneurship is one of the key factors of economic recovery and long-term growth of Ukraine. The formation of an effective entrepreneurial ecosystem requires a combination of state support, innovative business activity and integration into the global economy. Under current wartime conditions, entrepreneurial flexibility becomes one of the key factors of macroeconomic stability.

**References:**

1. Global Report 2023/2024. *Global Entrepreneurship Monitor (GEM)*. URL: <https://www.gemconsortium.org>
2. SME and Entrepreneurship Outlook 2023. *OECD*. URL: <https://www.oecd.org>
3. Entrepreneurship and SME development indicators. *World Bank*. 2024. URL: <https://www.worldbank.org>
4. Global Startup Ecosystem Index. *StartupBlink*. 2024. URL: <https://www.startupblink.com>

Наукове видання

СИНЕРГІЯ ІНТЕРНЕТ-ТЕХНОЛОГІЙ

Матеріали I Всеукраїнської науково-практичної конференції

(26 березня 2026 року)

Відповідальний за випуск: Є. О. Письменський

Упорядник: Д. Л. Мотульська

Коректор: Д. Л. Мотульська

Формат 60x84/16.

Гарн. PT Serif.

Умовн. др. арк. 45.

ЗВО «Університет Короля Данила»

76018, м. Івано-Франківськ, вул. Євгена Коновальця, 35

тел. +38(068) 755 75 75



**УНІВЕРСИТЕТ  
КОРОЛЯ ДАНИЛА**

**ПРОСТІР ФОРМУВАННЯ  
УСПІШНИХ**

м. Івано-Франківськ, 76018  
вул. Є. Коновальця, 35  
[www.ukd.edu.ua](http://www.ukd.edu.ua)