

DYNAMIC CAPABILITIES AS THE BASIS FOR RESILIENCE OF IT ENTERPRISES IN WAR CONDITIONS

ДИНАМІЧНІ СПРОМОЖНОСТІ ЯК ОСНОВА ЖИТТЄСТІЙКОСТІ ІТ-ПІДПРИЄМСТВ В УМОВАХ ВІЙНИ

Abstract. This paper examines the evolution of dynamic capabilities within the Ukrainian IT sector, highlighting the transition from a "survival-oriented" framework in 2022 to "systemic restructuring" projected for 2024-2025. Drawing on data from the National Bank of Ukraine and IT Research Ukraine (2025), the study demonstrates that, despite stagnation in exports, the industry has developed unique strategic flexibility. This resilience is attributed to complex asset reconfiguration, the rapid integration of DefenceTech, and proactive management of geopolitical risks.

Keywords: dynamic capabilities, IT enterprises, resilience, anti-fragility, strategic adaptation.

Анотація. У роботі досліджено трансформацію динамічних спроможностей українських ІТ-компаній від моделі «виживання» (2022) до моделі «системної перебудови» (2024–2025). На основі даних НБУ та IT Research Ukraine (2025) доведено, що попри експортну стагнацію, галузь виробила унікальні механізми стратегічної гнучкості, де реконфігурація активів поєднується з інтеграцією DefenseTech та управлінням геополітичними ризиками.

Ключові слова: динамічні спроможності, ІТ-підприємства, життєстійкість, антикрихкість, стратегічна адаптація.

The modern paradigm of strategic management views dynamic capabilities not merely as tools for temporary competitive advantage, but as a critical meta-mechanism for organizational survival under conditions of extreme turbulence. According to David Teece's framework, these capabilities are defined as an organization's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments [6]. Throughout 2022–2025, the Ukrainian IT sector served as a unique longitudinal "experimental lab", where standard adaptation evolved from reactive adaptation to proactive existential resilience – the capacity to maintain operational integrity despite systemic shocks.

This evolutionary process manifests through three pivotal vectors of dynamic capabilities.

Firstly, the capacity for Sensing (Identification). Unlike traditional economic sectors, domestic IT firms demonstrated high managerial cognitive capabilities. According to Helfat and Peteraf [4], these serve as the foundation for strategic flexibility, enabling "preventive adaptation" before crises hit peak destabilization. In the Ukrainian context, Sensing transcended classical market analysis, evolving into an augmented system of strategic intelligence. By embedding geopolitical monitoring and critical infrastructure assessments directly within the decision-making process, firms broadened the scope of Teece's traditional microfoundations [5].

According to the Lviv IT Cluster, more than 95% of companies had business continuity plans in place before large-scale infrastructure attacks [1]. MacPaw's «Cloud-Only» strategy exemplified digital resource orchestration: migrating critical infrastructure to the cloud ensured

seamless processes regardless of the physical state of local offices – a hallmark of preventive Sensing [1, 2].

Secondly, Seizing (Mobilization). Resource mobilization within a war economy required the conversion of financial capital into physical and psychological resilience. This involved not only technical autonomy – with over 90% of firms investing between \$50,000 and \$1.5 million in Starlinks and generators – but also the organizational psychological capital. Despite stagnation, stable average salaries indicate the use of high margins to retain talent. SoftServe's experience suggests that mental support programs are directly correlated with sustained contract performance, thereby defining a new quality of organizational capability [1, 2].

Thirdly, the ability to transform (Reconfiguration). The most complex stage involved shifting from rigid hierarchies to a «distributed company model». As of 2025, approximately 20% of specialists work abroad, thereby ensuring operational security but also necessitating the development of new microfoundations for decentralized governance and organizational identity. The Ajax Systems case illustrates transformation through the territorial reconfiguration of production chains – diversifying capacities abroad while anchoring intellectual capital within Ukraine [1, 2].

The industry demonstrates distinct strategic dynamics: service companies exhibit strong vitality centered on contract retention, while the DefenseTech segment displays notable anti-fragility. Research by Petryk and Garafonova [7] shows that external pressures have catalyzed radical innovation in defense technology, enabling firms to redirect their core competencies toward high-value niche markets.

However, data from the National Bank of Ukraine on service exports suggest that the current adaptation model may have reached a "plateau" [3]. Declining recruitment rates and cautious capital investment indicate that dynamic capabilities are now geared more toward maintenance than exponential growth. Achieving further scaling will require overcoming institutional barriers, particularly restrictions on the mobility of capital and human resources.

Conclusions. The Ukrainian experience has converted "crisis adaptability" into strategic brand capital. Demonstrated capability to operate effectively during force majeure events has become a key criterion for confidence among global clients. As traditional survival measures – such as internal resource reallocation and asset autonomy – approach their limits, Ukrainian businesses are achieving international resilience standards by integrating predictive technologies, distributed cloud infrastructure, and agile resource models. This synthesis places them at the forefront of global resilience through 2026.

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