

**CHAPTER 13**  
**REALIZATION OF THE DIGITAL POTENTIAL**  
**OF IT STARTUPS IN CREATIVE INDUSTRIES**  
**AS A DRIVER OF RESILIENCE ECONOMY FORMATION**

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**INTRODUCTION**

Modern economic reality necessitates a conceptual rethinking of the development paradigm for nations amidst global shocks and crises. For Ukraine, this issue has acquired existential significance: the unprecedented destruction of economic potential dictates an urgent need to transition toward a "resilience economy" and to establish effective mechanisms for post-war recovery. In this context, creative industries emerge as one of the most flexible sectors capable of generating high added value. Prior to the full-scale invasion, the creative sector generated approximately 4% of Ukraine's GDP and provided employment for over 300,000 specialists, demonstrating stable growth dynamics<sup>1</sup>. However, under crisis conditions, traditional business models have revealed their vulnerability. Their development is often hindered by the "legacy effect" and path dependence – a tendency of enterprises to rely on outdated institutional and managerial patterns, which significantly reduces their adaptability.

Overcoming this institutional inertia requires the involvement of new drivers, among which IT startups hold a key position. Ukraine's export-oriented IT industry has proven its phenomenal resilience, accounting for over 40% of the state's total service exports even during the most challenging periods<sup>2</sup>, serving as indisputable evidence of the efficiency of digital business models. It is digital startups that act as catalysts for transformation, offering innovative solutions that break the patterns of path dependence.

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<sup>1</sup> Крістіна Голубицька: Мінекономіки забезпечує умови для всебічного розвитку креативних індустрій в Україні : вебсайт. Кабінет Міністрів України. 2021. 3 вересня. URL: <https://www.kmu.gov.ua/news/kristina-golubicka-minekonomiki-zabezpechuye-umovi-dlya-vsebihnogo-rozvitku-kreativnih-industrij-v-ukrayini> (дата звернення: 28.03.2026)

<sup>2</sup> Експорт ІТ-послуг вперше за тривалий час знизився у річному показнику: дані за 2023 рік : вебсайт. IT Ukraine Association. 2024. 2 лютого. URL: <https://itukraine.org.ua/eksport-it-poslug-vpershe-za-trivalij-chas-znizivsya-u-richnomu-pokazniku-dani-za-2023-rik/> (дата звернення: 24.03.2026)

The necessity of such synergy is enshrined at the highest state level. Specifically, in the National Economic Strategy for the period until 2030<sup>3</sup>, the development of the digital economy and creative industries is defined as cross-cutting vectors of growth. Furthermore, the Plan for the implementation of the Ukraine Facility program<sup>4</sup> emphasizes business digitalization and innovation as fundamental prerequisites for European integration and enhanced competitiveness. A significant step in overcoming institutional barriers was the adoption of the Law of Ukraine "On Stimulating the Development of the Digital Economy in Ukraine"<sup>5</sup> and the launch of the "Diiia.City" legal regime, which created unique fiscal and regulatory conditions for scaling startup ecosystems.

Realizing the digital potential of IT startups within the creative industries not only ensures business survival but also shapes new models of economic development. The construction of robust startup ecosystems facilitates the capitalization of creative products, the retention of human capital, and, consequently, a substantial strengthening of the state's fiscal capacity. Researching the institutional and economic mechanisms of synergy between the IT sector and creative industries as a foundation for a resilience economy is timely, scientifically grounded, and of high practical significance.

**The purpose of the study** is to substantiate the role of the realization of the digital potential of IT startups in creative industries as a key driver for the formation of a resilience economy and overcoming the path dependence of domestic business.

To achieve the set goal the following **research tasks** have been identified:

1. To analyze the influence of the "historical legacy effect" and institutional barriers on the development of traditional creative sector enterprises.
2. To substantiate the role of IT startups and startup management methods as an effective tool for overcoming the path dependence of domestic business.
3. To develop a practical management algorithm for the realization of digital potential for the transformation and enhancement of the viability of traditional companies.

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3 Про затвердження Національної економічної стратегії на період до 2030 року : Постанова Кабінету Міністрів України від 03 берез. 2021 р. № 179. URL: <https://zakon.rada.gov.ua/laws/show/179-2021-%D0%BF#Text> (дата звернення: 29.03.2026)

4 Про схвалення Стратегії розвитку індустріальних парків на період до 2030 року : Розпорядження Кабінету Міністрів України від 18 берез. 2024 р. № 244-р. URL: <https://zakon.rada.gov.ua/laws/show/244-2024-%D1%80#Text> (дата звернення: 29.03.2026)

5 Про стимулювання розвитку цифрової економіки в Україні : Закон України від 15 лип. 2021 р. № 1667-IX. URL: <https://zakon.rada.gov.ua/laws/show/1667-20#Text> (дата звернення: 29.03.2026)

**Research methodology** is based on a comprehensive combination of general scientific and special economic methods which allowed for a multidimensional analysis. The theoretical basis of the work is the works of leading scientists in the field of institutional and evolutionary economics. Neo-institutional and evolutionary approaches were used to conceptualize the essence of the "historical legacy effect", analyze institutional barriers, and substantiate the mechanisms for overcoming path dependence. System-structural analysis was used to study creative industries and startup ecosystems as a single interconnected macroeconomic system. Methods of statistical and comparative analysis allowed for evaluating the dynamics of domestic computer services exports in 2020–2025. The case study method was used for the empirical confirmation of theoretical conclusions on the example of Ukrainian IT startups. The method of structural-logical modelling and algorithmization was used during the development of a practical management algorithm for the transformation of business models.

### **13.1. Institutional Barriers and the "Historical Legacy Effect" in Creative Industries**

The study of the mechanisms for forming a resilience economy is impossible without a deep analysis of the institutional environment in which economic entities operate. Creative industries, despite their innovative nature, have long developed within the framework of traditional economic paradigms, which led to the formation of a specific institutional matrix. The fundamental basis for understanding these processes is laid in the works of the founders of neo-institutionalism, in particular Douglas North, who substantiated the influence of the institutional environment on the formation of inefficient development trajectories and the difficulty of abandoning them<sup>6</sup>.

The conceptualization of the phenomenon of path dependence and the institutional lock-in effect was detailed in the classic studies of Paul David<sup>7</sup> and Brian Arthur<sup>8</sup>. Scientists have convincingly proven that economic entities often continue to use outdated, inefficient practices and technologies solely due to historical inertia and the high transaction costs associated with transitioning to new models.

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<sup>6</sup> North D. C. *Institutions, Institutional Change and Economic Performance*. Cambridge : Cambridge University Press, 1990. 159 p. DOI: <https://doi.org/10.1017/CBO9780511808678>

<sup>7</sup> David P. A. *Clio and the Economics of QWERTY*. *The American Economic Review*. 1985. Vol. 75, no. 2. P. 332–337.

<sup>8</sup> Arthur W. B. *Competing Technologies, Increasing Returns, and Lock-In by Historical Events*. *The Economic Journal*. 1989. Vol. 99, no. 394. P. 116–131. DOI: <https://doi.org/10.2307/2234208>

The transfer of these macroeconomic concepts to the soil of modern industries was carried out by representatives of evolutionary economic geography. For instance, Ron Martin and Peter Sunley detailed in their works how entire regional economies fall into historical legacy traps, and precisely how innovations are capable of generating "new paths" of development<sup>9</sup>. Crucial to our study is Robert Hassink's approach to path renewal processes, which demonstrates that outdated institutions critically inhibit economic development, and their restart requires external innovative shocks<sup>10</sup>.

The direct impact of historical legacy on the ability to form new creative ecosystems is revealed in the research of Sako Musterd and Marco Bontje<sup>11</sup>, as well as Roberta Comunian, who analyzes creative industries through the lens of complexity theory and evolutionary economics<sup>12</sup>. According to their conclusions, the development of the creative sector is rigidly determined by previous institutional conditions, requiring the implementation of fundamentally new business models that are disruptive to old systems.

In domestic realities, the "historical legacy effect" manifests in the dominance of linear models oriented primarily toward the physical consumption of the creative product. Prior to the onset of the full-scale crisis, traditional creative enterprises – from the hospitality and tourism industry to the cultural sphere – relied on extensive growth factors. Exogenous shocks dealt a critical blow to such models. For example, the tourism sector, which is a significant part of the creative industries, demonstrated high vulnerability to the destruction of logistics chains: according to the State Agency for Tourism Development of Ukraine, state budget revenues from the industry in the first year of the full-scale invasion decreased by almost a third<sup>13</sup>.

In domestic realities, the "historical legacy effect" manifests in the dominance of linear models oriented towards physical consumption.

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<sup>9</sup> Martin R., Sunley P. Path dependence and regional economic evolution. *Journal of Economic Geography*. 2006. Vol. 6, no. 4. P. 395–437. DOI: <https://doi.org/10.1093/jeg/lbl012>

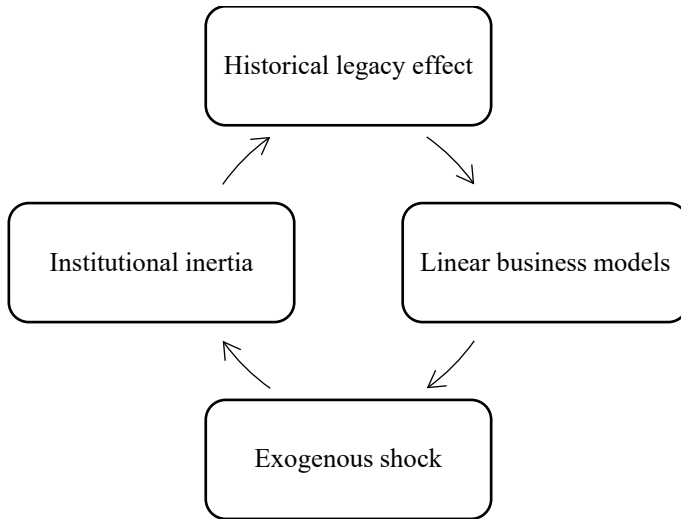
<sup>10</sup> Hassink R. Locked in decline? On the role of regional lock-ins in old industrial areas. *Evolutionary Economic Geography*. 2010. Vol. 3, no. 4. P. 450–470. DOI: <https://doi.org/10.4337/9781849806497.00031>

<sup>11</sup> Musterd S., Bontje M. Inventive City-Regions: Path dependence and creative knowledge strategies. *European Planning Studies*. 2010. Vol. 18, no. 5. P. 681–701.

<sup>12</sup> Comunian R. Rethinking the Creative City: The Role of Complexity, Networks and Interactions in the Urban Creative Economy. *Urban Studies*. 2011. Vol. 48, no. 6. P. 1157–1179. DOI: <https://doi.org/10.1177/0042098010370626>

<sup>13</sup> Надходження до держбюджету від туристичної галузі у 2022 році скоротилися майже на третину : вебсайт. Державне агентство розвитку туризму України. 2023. 21 березня. URL: <https://www.tourism.gov.ua/blog/nahodzhennya-do-derzhbyudzhetu-vid-turistichnoyi-galuzi-u-2022-roci-skorotilysya-mayzhe-na-tretynu> (дата звернення: 29.03.2026)

Exogenous shocks revealed the critical vulnerability of such models, as demonstrated by the cycle of institutional blocking in Fig. 1.



**Figure 1. The cycle of institutional "lock-in" and path dependence of creative industries enterprises**

*Source: compiled by the author*

The analysis of Figure 1.1 illustrates that the crisis acts as a catalyst for a "vicious circle" where outdated management practices prevent rapid adaptation, leading to a permanent decline in income.

Consequently, breaking this vicious cycle of inertia necessitates a powerful external impetus. IT startups thus emerge as transformative drivers and pivotal instruments for overcoming path dependency, offering the creative sector turnkey digital solutions that forge an entirely new institutional landscape.

Enterprises in the creative sector proved to be unprepared for rapid digital transformation not due to a lack of technology on the market, but rather because of managerial inertia. Path dependency is manifested in the management's inability to abandon conventional hierarchical structures in favour of agile methodologies. A fundamental barrier to transitioning into a resilience paradigm is the acute shortage of startup management competencies within traditional business. While classic enterprises focus on risk minimization, the startup approach entails continuous hypothesis testing and rapid scaling.

According to analytics from the Ukrainian Startup Fund, the level of innovation adoption in the real sector remains insufficient specifically due to weak systemic interaction between traditional corporate business and technological entrepreneurs<sup>14</sup>.

The successful transition to a resilience economy involves learning from the institutional experiences of Eastern Europe. The comparative analysis of these strategies is presented in Table 1.

Table 1

**Comparative analysis of strategies for overcoming institutional inertia in Eastern Europe**

Country	Key Strategy	Main Tool	Result for Creative Industries
<b>Poland</b>	Evolutionary modernization	SEZs and EU structural grants	Transformation of traditional industries into R&D and gaming hubs
<b>Estonia</b>	Radical digitalization	e-Residency and "digital state" (e-Estonia)	World leadership in the number of "unicorns" per capita
<b>Ukraine</b>	Hybrid transformation	"Diia.City" project and IT integration	Formation of a resilience economy through dematerialization

*Source: compiled by the author based on the comparative analysis of institutional data from the OECD Economic Survey of Poland<sup>15</sup>, the World Bank report on the Estonian digital ecosystem<sup>16</sup> and the project by the Ministry of Digital Transformation of Ukraine<sup>17</sup>*

As shown in Table 1.1, the divergence in results is determined by the depth of institutional reforms. While Poland focused on the modernization of existing zones, Estonia’s radical digitalization allowed it to "jump over" several stages of economic evolution. For Ukraine, the hybrid model of "Diia.City" appears

<sup>14</sup> Український фонд стартапів. Трек «Корпоративні інновації»: вебсайт. Ukrainian Startup Fund. 2023. URL: <https://usf.com.ua/corporate-innovation/> (дата звернення: 29.03.2026)

<sup>15</sup> OECD Economic Surveys: Poland 2023. Paris : OECD Publishing, 2023. 128 p. URL: [https://www.oecd-ilibrary.org/economics/oecd-economic-surveys-poland-2023\\_9193d692-en](https://www.oecd-ilibrary.org/economics/oecd-economic-surveys-poland-2023_9193d692-en) (дата звернення: 29.03.2026)

<sup>16</sup> Vassil K. Estonian e-Government Ecosystem: Foundation, Applications, Outcomes. Background Paper for the World Development Report 2016: Digital Dividends. World Bank Group, 2016. 32 p.

<sup>17</sup> План України для реалізації програми Ukraine Facility : вебсайт. Міністерство економіки України. 2024. 18 березня. URL: <https://www.me.gov.ua/Documents/Download?id=e389c922-094d-4404-9844-36940026e7a2> (дата звернення: 29.03.2026)

to be the most promising way to counteract historical inertia. This divergence is further explained by the institutional differences between traditional enterprises and startups, summarized in Table 2.

Table 2

**Institutional differences between traditional creative sector enterprises and IT startups**

<b>Comparison Criterion</b>	<b>Traditional Creative Enterprises</b>	<b>IT Startups</b>
Management Structure	Rigid hierarchy	Flat structure, Agile methodologies
Attitude to Innovation	Risk minimization	Culture of hypothesis testing
Business Model Basis	Physical infrastructure	Dematerialized product, SaaS models
Reaction to Shocks	Institutional "lock-in"	Rapid adaptation (Pivot)
Scalability	Limited by location	Global scalability

*Source: compiled by the author*

The data in Table 1.2 convincingly prove that IT startups possess fundamental advantages. Their orientation towards continuous testing and flat structures makes them the benchmark for transforming conservative sectors.

In concluding the analysis within the first subsection, it should be underscored that domestic creative economy enterprises have reached a state of profound institutional lock-in. Obsolete managerial practices and an over-reliance on physical infrastructure have forged a persistent path dependency, which critically undermines business viability during exogenous shocks. An autonomous recovery of this traditional sector from the current crisis is highly constrained and necessitates the imperative involvement of external innovative catalysts. Consequently, the logic of our subsequent research dictates a comprehensive examination of the specificities of startup management and the direct mechanisms for realizing digital potential, both of which are capable of dismantling this institutional inertia and transitioning creative industries toward a resilience paradigm.

**13.2. IT startups as a Mechanism for Realizing Digital Potential and Breaking Institutional Inertia**

Overcoming institutional lock-in and the ‘legacy effect’ within creative industries necessitates the implementation of fundamentally new managerial

and technological paradigms. As suggested by evolutionary economic theory, the disruption of path dependency most frequently occurs through exogenous innovation shocks (disruptive innovations). In the contemporary resilience economy, IT startups serve as the primary generators of such shocks. Their role extends beyond mere software development to the establishment of new institutional ‘rules of the game,’ which compel the traditional creative sector to either adapt or forfeit its market positions.

The fundamental distinction of startups, enabling them to act as drivers of transformation, lies in the specificities of startup management. In contrast to classical corporate governance – which focuses on optimizing existing linear processes – startup management is predicated on Agile methodologies, Lean Startup principles, and Customer Development frameworks. The Lean Startup concept, developed by Eric Ries, entails a continuous cycle of building a Minimum Viable Product (MVP), hypothesis testing, and validated learning<sup>18</sup>. Within the context of crisis conditions, it is precisely this capacity for a rapid strategic shift (pivot) without substantial capital losses that ensures the economic resilience critically lacking in traditional enterprises burdened by their ‘legacy effect’.

The realization of digital potential through IT startups within the creative industries manifests across several key dimensions. Firstly, it entails the dematerialization of the creative product. Startups specializing in Virtual and Augmented Reality (VR/AR) facilitate the transition of cultural, educational, and entertainment content consumption into a digital dimension. This mitigates geographical and security-related constraints, which is of paramount importance for Ukraine in the current context.

Secondly, it involves the transformation of the hospitality and tourism sectors through the development of the TravelTech ecosystem. As one of the most prominent segments of the creative economy, traditional tourism has historically suffered from high operational inertia and a heavy reliance on physical infrastructure. The integration of startup solutions allows for these barriers to be surmounted. Modern TravelTech startups implement platform-based business models, Artificial Intelligence (AI) algorithms for the hyper-personalization of travel itineraries, cloud-based Destination Management Systems (DMS), and smart tourism instruments.

Consequently, a new value proposition is generated: the strategic focus shifts from the sale of basic logistical services to the provision of a comprehensive, seamless digital experience. As highlighted in analytical

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<sup>18</sup> Ries, E., 2011. The Lean Startup Methodology. URL: <http://theleanstartup.com/principles>

reports concerning innovation ecosystem development, it is precisely the synergy between the technological sector and creative/tourism niches (CreativeTech and TravelTech) that generates the highest added value within the framework of economic recovery <sup>19</sup>.

Thirdly, IT startups function as the architects of the platform economy. The establishment of marketplaces for creative services, crowdfunding platforms, and sharing economy ecosystems is radically reshaping the institutional structure of the market. This shift facilitates disintermediation, whereby traditional intermediaries are bypassed, transaction costs are significantly diminished, and independent creators gain unhindered access to global markets. According to research conducted by the Ministry of Digital Transformation of Ukraine, the advancement of the domestic startup ecosystem and the expansion of the 'Diia.City' legal regime catalyze a strategic transition from an outsourcing-driven IT business model to a product-oriented one, characterized by the engineering of innovative solutions at the convergence of technology and creative industries <sup>20</sup>.

Consequently, IT entrepreneurship functions as an institutional disruptor of obsolete practices. By implementing advanced startup management methodologies and cutting-edge digital solutions, startups empower traditional creative businesses to realize their full digital potential. This process transforms a sector vulnerable to physical shocks into an agile, scalable ecosystem, which emerges as a fundamental driver of the resilience economy.

The mechanism for overcoming path dependence is visualized in Fig. 2.

The experience of Ukrainian product-led companies provides empirical validation for the theoretical propositions regarding the role of IT startups in overcoming the 'legacy effect.' These enterprises are successfully transforming creative industries and fostering a resilience economy. Practice demonstrates that the integration of their solutions enables traditional businesses to transcend physical and logistical constraints.

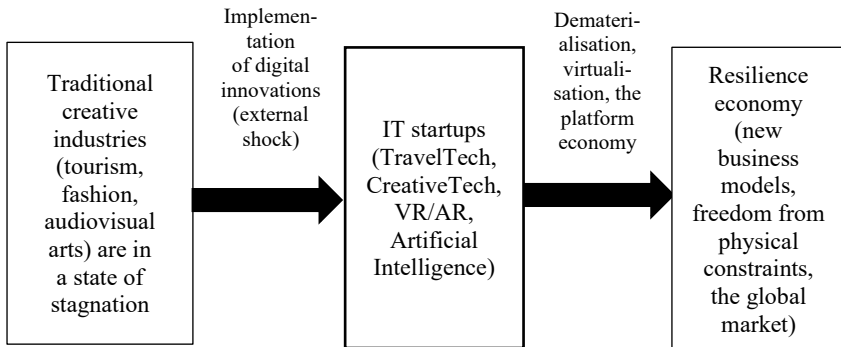
The Ukrainian startup Respeecher, which specializes in AI-powered voice cloning, serves as a quintessential example of disrupting path dependency within the film and gaming industries. The traditional dubbing and voice-over process (a historical legacy) necessitates the physical presence of actors in specialized studios, rendering the production cycle susceptible to external

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<sup>19</sup> Creative Tech Sector Overview : вебсайт. TechUkraine. 2023. URL: <https://techukraine.org/industries/creative-tech/> (дата звернення: 29.03.2026)

<sup>20</sup> Екосистема стартапів: Win-Win стратегії : вебсайт. Міністерство цифрової трансформації України. 2023. URL: <https://thedigital.gov.ua/projects/win-win-startups> (дата звернення: 02.11.2025)

shocks such as pandemics, armed conflicts, or logistical disruptions. Respeecher's technology enables high-fidelity synthesis of any human voice, effectively virtualizing this stage of creative production.



**Figure 2. Mechanism for overcoming path dependence of creative industries through IT startup integration**

*Source: compiled by the author*

Even amidst full-scale warfare, the Ukraine-based team continued to facilitate voice creation for major global projects by Hollywood studios. According to internal estimates for large-scale productions like Star Wars (Disney/Lucasfilm), the implementation of AI synthesis eliminates the costs associated with international talent logistics and pick-up recording sessions, yielding savings of \$200,000 to \$500,000 per major project. Instead of weeks dedicated to physical recordings and multiple takes, a digital voice asset allows for the generation of new dialogue within days. In 2025, the company secured \$14 million in a Series A funding round, bringing its total investment to \$17.5 million. This milestone signifies a strategic transition from a "service studio" model to a high-margin "technology platform," where a single digital asset (a voice model) can generate revenue for decades. This is a vivid manifestation of the resilience economy: the digitalization of the creative process ensures invulnerability to physical shocks while generating high export added value <sup>21</sup>.

<sup>21</sup> Respeecher: Voice Cloning for Content Creators and Film Studios. 2024. URL: <https://www.respeecher.com/> (accessed 20.01.2026)

The fashion industry remains one of the largest segments of the creative economy, historically tethered to physical points of sale and fitting rooms – a classic linear consumption model. The Ukrainian startup 3DLOOK developed smartphone-based body scanning technology to facilitate virtual try-ons. The integration of this solution by traditional retailers and fashion brands has resulted in a radical reduction in return rates and a simultaneous surge in online sales.

A partnership with the brand 1822 Denim demonstrated a 30% reduction in returns, while for the brand TA3 SWIM, returns due to "incorrect sizing" plummeted by 47% (reaching an industry-low of 9%). Such optimizations directly enhance the net margin by reducing reverse logistics expenditures. Furthermore, users utilizing virtual fitting rooms exhibit a fourfold increase in purchase conversion compared to standard site visitors. Notably, the YourFit conversion rate reaches 46%, an anomalous figure for the e-commerce sector where industry averages typically hover between 1.5% and 2%. Driven by digital sizing confidence, customers tend to increase their basket size, raising the Average Order Value (AOV) by 10–15%. Additionally, costs for remakes in the custom uniform sector have been reduced by 90%. This case illustrates how an IT startup empowers traditional creative businesses to overcome the "legacy effect" of physical retail, realize digital potential, and maintain financial stability even when physical storefronts are inaccessible <sup>22</sup>.

The tourism and hospitality sectors are foundational to the creative economy yet frequently suffer from archaic management frameworks. The Ukrainian TravelTech startup Hotel Matrix developed a cloud-based B2B product for web analytics and revenue management. Traditionally, domestic hoteliers relied on intuitive pricing and manual competitive data collection. The implementation of this SaaS solution automates these processes, enabling enterprises to respond flexibly to market fluctuations and maximize profits despite volatile demand.

Hotels integrated with Hotel Matrix have demonstrated a RevPAR (Revenue Per Available Room) growth of 10–12% during periods of unstable demand. For instance, in 2025, within the Polish market (where the startup maintains a strong presence), highly digitalized hotels reported an 8.9% increase in RevPAR. Whereas traditional manual data collection typically consumes 2 to 4 hours of a manager's daily workflow, Hotel Matrix reduces this time expenditure by 90%, allowing personnel to pivot toward strategic planning and guest services. Moreover, the integration of AI forecasting

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<sup>22</sup> 3DLOOK Case Studies: Reducing Returns in Fashion Retail. 3DLOOK Official. 2023. URL: <https://3dlook.ai/> (accessed 10.02.2026)

modules allows hotels to predict demand peaks with up to 95% accuracy. This minimizes losses from unrealized revenue during high seasons and maintains the ADR (Average Daily Rate) at an optimal level. This serves as a prime example of a startup product infusing Agile management competencies into a conservative sector, thereby enhancing its overall economic viability <sup>23</sup>.

The systematization of these effects is provided in Table 3.

Table 3

**Matrix of breaking institutional inertia in creative industries**

<b>Creative Sector</b>	<b>Path Dependence</b>	<b>Startup Solution</b>	<b>Resilience Result</b>
Audiovisual Art	Physical presence	Respeecher: AI voice cloning	Complete virtualization
Fashion Industry	Physical stores	3DLOOK: body scanning	Digital-first sales
Hospitality	Intuitive pricing	Hotel Matrix: cloud analytics	Pre-emptive profitability

*Source: compiled by the author*

The aforementioned case studies provide evidence that IT startups do not merely serve the creative industries but rather function as catalysts for their profound institutional transformation. The dematerialization of processes (Respeecher), the virtualization of the consumer experience (3DLOOK), and the automation of managerial decision-making (Hotel Matrix) establish a novel structural foundation for the sector. Consequently, traditional enterprises that integrate these innovations successfully navigate beyond path dependency and acquire resilient attributes, which are imperative for organizational survival during periods of crisis.

**13.3. New Models of Economic Development: Expanding Fiscal Capacity**

The institutional transformation of creative industries through the realization of the digital potential of IT startups extends beyond merely enhancing the operational efficiency of individual enterprises. At the macroeconomic level, these processes forge fundamentally new development models that underpin the resilience economy. A state’s ability to withstand exogenous shocks and finance its own recovery is directly predicated on its

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<sup>23</sup> Hotel Matrix: Platform for hotel market analytics and revenue management. 2025. URL: <https://hotel-matrix.com/> (accessed 05.03.2026)

fiscal capacity – the ability to generate stable tax revenues even amidst infrastructure or security crises.

In the classical paradigm, the fiscal capacity of the creative industries and the hospitality sector was rigidly tethered to physical consumption (e.g., ticket sales, room bookings, on-site attendance). Consequently, any disruption in logistical chains led to a proportional decline in tax revenues. Conversely, the integration of IT startup solutions creates a new, dematerialized tax base. Export-oriented products generate high added value and ensure a stable inflow of foreign currency, irrespective of the condition of physical infrastructure.

Empirical validation of the high adaptability of dematerialized business models is found in macroeconomic indicators. As evidenced by data from the National Bank of Ukraine, the IT sector has demonstrated antifragility, accounting for a significant share of the state’s service exports, as clearly illustrated by the dynamics in Table 4.

Table 4

**Dynamics of Computer Services Export Volumes as an Indicator of Ukraine’s Digital Economy Resilience (2020–2025)**

Year	IT Export Volume, billion USD	Change from previous year, %	Share in service exports, %
2020	5.04	+20.4	24.0
2021	6.80	+36.0	37.0
2022	7.34	+7.7	45.5
2023	6.73	-8.3	41.5
2024	6.45	-4.1	37.4
2025	6.66	+3.3	41.6

*Source: compiled by the author based on NBU<sup>24</sup> and IT Ukraine Association<sup>25</sup> data*

The aforementioned dynamics vividly illustrate the resilience economy concept. Notwithstanding the objective adjustment of indicators during 2023–2024 – precipitated by the global transformation of the technology market and protracted security challenges – the IT industry has demonstrated a profound capacity for rapid recovery. By the end of 2025, computer services exports resumed growth (+3.3%), reaching \$6.66 billion and accounting for

<sup>24</sup> Статистика зовнішнього сектору України : Аналітичний звіт / Національний банк України. 2026. URL: <https://bank.gov.ua/ua/statistic/sector-external> (дата звернення: 20.03.2026).

<sup>25</sup> Експорт ІТ-послуг України: підсумки 2025 року та прогноз на 2026 рік / IT Ukraine Association. 2026. URL: <https://itukraine.org.ua/> (дата звернення: 18.03.2026).

41.6% of the nation's total service exports. This capacity for consistent foreign currency revenue generation designates dematerialized business models as a benchmark for the digital transformation of traditional sectors.

A critical institutional mechanism catalyzing this trajectory in Ukraine was the establishment of the 'Diia.City' special legal and fiscal framework. Through the integration of gig-contracts and elements of English law, the state established unprecedented conditions for the formalization of innovative enterprises, ultimately securing billions in tax revenues for the national budget <sup>26</sup>.

The formation of such ecosystems alters the very trajectory of economic development, facilitating a transition from a commodity-based and low-margin service economy toward a knowledge-based economy. This shift is fully aligned with the strategic vector of Ukraine's European integration. Specifically, within the official Ukraine Facility Plan, digital transformation and the advancement of innovation ecosystems are identified as cross-cutting priorities <sup>27</sup>.

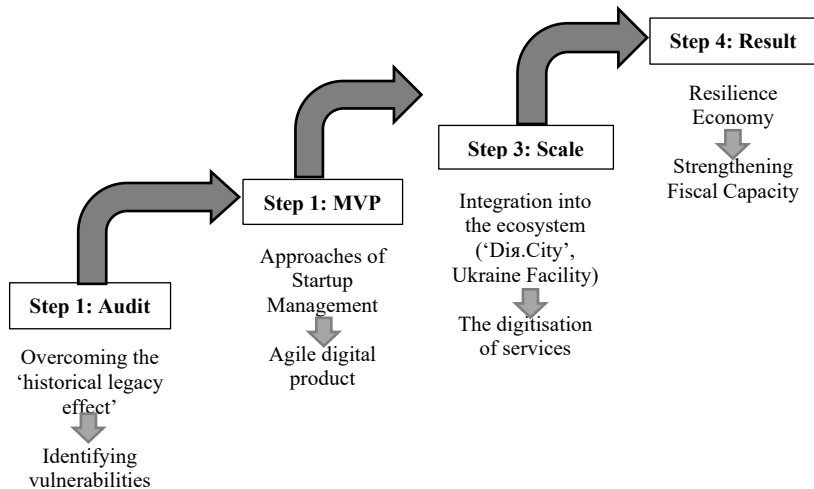
Furthermore, the development of IT startups within the creative segment serves a critical socio-economic function: human capital retention. Highly skilled professionals are granted the opportunity to capitalize on their expertise domestically, thereby expanding the personal income tax (PIT) base and stimulating internal consumer demand.

The transition of creative industries toward a resilience economy necessitates the formal institutionalization of the innovation integration process at the enterprise level. Consequently, a management algorithm for digital potential realization has been developed, the logic of which is visualized in Fig. 3.

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<sup>26</sup> Дія.City – унікальний правовий та податковий простір для IT-компаній / Міністерство цифрової трансформації України. 2024. URL: <https://city.diia.gov.ua/> (дата звернення: 12.03.2026).

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**Fig. 3. Management algorithm for the realization of the digital potential of IT startups by creative industries enterprises**

*Source: compiled by the author*

Following the logic of Fig. 3, the transition must be phased. Detailed actions for each stage are provided in Table 5.

The practical implementation of the developed algorithm necessitates a fundamental shift in the management of creative industry enterprises – from a reactive management style (responding to crises post-facto) to a proactive startup paradigm. Each stage of the algorithm is designed to systematically dismantle institutional inertia and facilitate the transition toward a resilience-oriented model.

At the first stage, the enterprise must conduct a profound self-diagnostic to detect the "legacy effect." The primary objective is to identify business processes most vulnerable to physical constraints and logistical disruptions. Management must evaluate the proportion of manual operations and the degree of revenue dependency on the physical presence of the client.

Table 5

**Management algorithm for the realization of the digital potential  
of IT startups by creative industries enterprises**

<b>Management Stage</b>	<b>Content of Management Action (Strategic Integration of Startup Approach)</b>	<b>Expected Business Result (Formation of Corporate Resilience)</b>
Stage 1. Institutional audit and identification of digital gaps	Analysis of the internal "historical legacy" and operational vulnerabilities (dependence on physical customer presence, manual process management, obsolete distribution channels).	Formation of a clear internal demand for digitalization: identification of processes requiring optimization through the integration of IT startup solutions.
Stage 2. Technology partner engagement and MVP launch	Partnership with an IT startup to implement innovation without significant capital expenditures. Testing a Minimum Viable Product (MVP) based on Agile/Lean methodologies.	Overcoming managerial inertia within the team; rapid and cost-effective validation of the viability of the new digital service delivery model.
Stage 3. Operational transformation and scaling	Full-scale integration of the validated digital solution into daily operations; product dematerialization or transition to platform/SaaS (Software as a Service) models.	Reduction of transaction costs; elimination of geographical constraints; enhanced capacity for global business scaling.
Stage 4. Performance evaluation and business continuity assurance	Management of the updated business model based on continuous data analytics (data-driven approach); monitoring of corporate financial resilience indicators.	Ensuring business continuity; diversification of revenue streams; establishment of a sustainable competitive advantage.

*Source: compiled by the author*

**Management Self-Diagnostic Checklist:**

What percentage of our product can be consumed remotely without compromising quality?

How critical is the disruption of logistical chains to our daily revenue?

Do we maintain a unified Customer Relationship Management (CRM) database, or is data stored in a decentralized manner?

What volume of managerial labor is dedicated to routine data entry that is subject to automation?

Is the company capable of adjusting its pricing policy within 30 minutes in response to volatile market demand?

The output of this stage is a formalized "Innovation Request"? clearly outlining the business "bottlenecks" that require resolution through external technological partnerships.

At the second stage, following problem identification, the enterprise initiates an active search for solutions within the startup ecosystem. A prevalent error at this stage is the attempt to develop complex proprietary software from scratch, which necessitates significant capital investment and time. Conversely, the startup approach advocates for the integration of existing agile solutions.

Criteria for Selecting an IT Startup Partner:

1. Scalability: Is the solution capable of processing increasing data volumes without performance degradation?
2. Integration Velocity: What is the timeframe for deploying the first Minimum Viable Product (MVP)?
3. API Interoperability: How seamlessly can the startup product synchronize with existing enterprise systems (accounting, web platforms, payment gateways)?

During this phase, the Build-Measure-Learn cycle is initiated. The company selects a pilot area (e.g., an online booking system for a single hotel in a chain or a virtual storefront for a specific brand collection) and tests the startup solution for 1–3 months. This approach mitigates internal resistance to innovation, as results become evident without a global restructuring of the entire business.

If MVP testing validates the viability of the digital model, the stage of deep integration (operational transformation and scaling) commences. This is the most critical period, as it mandates a fundamental shift in organizational culture. Traditional hierarchical structures must evolve into an agile model, where teams are empowered to engage in data-driven decision-making. Strategic vectors for scaling:

1. Product Dematerialization: Developing Digital Twins of physical objects or services. For instance, a design brand transitioning to 3D pattern modeling eliminates the need for physical prototypes.
2. Transition to SaaS Models (Software as a Service): Utilizing cloud-based services rather than local servers, ensuring business management accessibility from any global location.
3. Automation of Customer Experience: Implementing AI-driven chatbots for 24/7 client support and predictive analytics systems for personalized sales.

The primary performance indicator at this stage is the shift from a linear dependency ("more personnel = more revenue") to an exponential model, where digital tools allow for a tenfold increase in client capacity without a proportional increase in headcount.

The final stage of the algorithm focuses on solidifying new data-driven management standards. Digital transformation is not a discrete project but a continuous process of optimization. At this juncture, the company implements a resilience monitoring system. Resilience KPIs for a Digital Business Model:

1. Recovery Time Objective (RTO): The duration required to fully restore operations following a technical failure or exogenous shock.

2. LTV/CAC Ratio: The ratio of Customer Lifetime Value to Customer Acquisition Cost. Digitalization must drive down acquisition costs.

3. Digital Revenue Share: The proportion of total revenue generated exclusively through digital channels, independent of physical infrastructure.

Management at this stage focuses on "antifragility." Every new startup solution integrated into the enterprise ecosystem should render the business stronger and more independent of localized risks. This fosters a business model capable of not only surviving but thriving under conditions of uncertainty.

The detailed breakdown of these four stages underscores that the realization of digital potential is, fundamentally, a transformation of the managerial mindset. By traversing this algorithm, traditional businesses progressively shed their "legacy" characteristics and adopt the attributes of a technology company. This not only enhances the net margin of the individual enterprise but also bolsters the collective resilience of the creative sector at the national level, establishing it as a robust fiscal contributor to the state.

## CONCLUSIONS

The conducted research conceptualizes the transformation processes of creative industries through the integration of IT startups and proves that digitalization is a fundamental condition for the transition to a resilience economy. The analysis confirmed that the development of traditional creative sector enterprises is critically inhibited by the influence of historical legacy and path dependence. Linear business models rigidly attached to physical infrastructure have revealed their complete vulnerability to exogenous shocks. An effective tool for breaking this institutional inertia is IT startups which, thanks to the introduction of agile management methodologies and innovative products, successfully dematerialize the creative product. The developed management algorithm clearly demonstrates the process of integrating startup approaches into traditional business to maximize margins and diversify risks.

At the macroeconomic level the formation of such innovative ecosystems within special legal regimes significantly expands the fiscal capacity of the state and ensures a stable flow of export earnings during crisis periods.

Despite the validity of the presented results this study has certain limitations. The proposed digital resilience model relies on the uninterrupted operation of the basic technology infrastructure. Furthermore, the limited longitudinal data do not allow for a full assessment of the life cycle of traditional enterprises after the integration of startup solutions on a long-term planning horizon.

## SUMMARY

The research is devoted to the study of the transformation processes of creative industries under the conditions of unprecedented exogenous shocks and deep institutional inertia. The work substantiates the role of realizing the digital potential of IT startups as a fundamental driver for the formation of a resilience economy and an effective tool for overcoming the path dependence of domestic business. Based on evolutionary economics methods and case studies the complete vulnerability of traditional linear business models due to their rigid attachment to physical infrastructure is proven. An alternative to such approaches is the integration of startup management methods and agile development methodologies into the conservative creative sector. Due to the dematerialization of the product digital innovations allow traditional enterprises to diversify risks and maximize margins even during periods of crisis. An important practical result of the work is the developed management algorithm for the stage-by-stage integration of startup solutions into the activities of creative economy companies. At the macroeconomic level the impact of scaling innovative ecosystems on strengthening the fiscal capacity of the state is studied. Empirical data on the dynamics of domestic computer services exports confirm the ability of dematerialized models to generate stable foreign exchange earnings. The strategic importance of synchronizing the development of innovative business with European markets within the implementation of global post-war recovery programs is summarized.

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