The Digital Transformation of Creative Industries as a Management Imperative of Information Security of Society on a Parity-Legal Basis

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Abstract

The article defines that the composition and structure of creative industries, their branch specialization and cooperation, the scale and directions of development of industrial and other relations are determined by means of solving spatial problems and are conditioned by the level of digital transformation as imperative system-reflex management of information
security of society at parity-legal principles. The process of formation of digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis in modern conditions today must meet globalization challenges that dictate the development of the country's economy as a whole. This should be manifested in the application of modern integration models for the formation and development of creative industries. It is substantiated that the main tasks of the strategy of financial capacity for digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis are to achieve balance of financial opportunities and needs of industries, efficiency of their financial relations, efficiency of processes of formation, movement, allocation and use of financial resources, rational structure of sources of financial resources, under which is possible stable financial support of digital transformation.

Keywords: Digital Transformation; Creative Industries; Imperatives; System-Reflexive Management; Information Security.

Introduction

Formation and development of creative industries at the present stage of digital transformation as an imperative of system-reflexive management of information security of society on a parity basis is a key factor of creation of an economically strong state with a high level of competitiveness and efficiency of branches, industrial production and products. Creative industries are one of the leading parts of the country's economy, which has created 3/4 of all consumed material goods and which provide 2/3 of all foreign currency revenues due to the export of industrial products. The existence of significant imbalances in the industry of the regions of the country, which have only deteriorated in recent years, require the solution of the existing problems of industry in a systemic-reflexive solution, taking into account the influence of digital transformation and parity-legal principles of governance.

Literature Review

The issues of digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis were investigated by such scientists, including Belyalov T., Charan R., Daisley B., Deineka A., Khabibullin R.,
Prokhorova V. and others. However, the issues identified remain not sufficiently investigated and need further study.

**Methodology**

Definition of the essence of the imperative system-reflex management of information security of society is defined as the obligatory ability of society to develop, implement and accept innovations, taking into account the priority of informational component of development, possibilities of transition of system-reflex management system from current state to new at rhythmic management of information security in tactical and strategic periods under conditions of change of external factors of influence on society (Babenko et al., 2019). Parity legal principles are the basis through which it is possible to find a margin of legal stability for several purposes and to balance their components depending on the target priorities and the time of assessment (Kaganovska et al., 2022). The digital transformation of creative industries is the introduction of modern technologies into the business processes of the creative industries (Derbentsev et al., 2021). This approach involves not only the installation of modern hardware or software, but also fundamental changes in approaches to management, corporate culture, external communications. As the level of our country in the Global Innovation Index is not the highest (table 1), it is necessary to improve the creative industry's innovation and digital base (Vasilyeva et al., 2022). The advantages of the digital transformation of creative industries are: improving the customer experience, flexibility and acceleration of business processes, innovative opportunities for business development, use of modern technologies for data processing, partnerships and cooperation, etc.

<table>
<thead>
<tr>
<th>Year</th>
<th>Place in the ranking of countries</th>
<th>Index indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>64</td>
<td>36.45</td>
</tr>
<tr>
<td>2017</td>
<td>56</td>
<td>35.42</td>
</tr>
<tr>
<td>2018</td>
<td>50</td>
<td>37.62</td>
</tr>
<tr>
<td>2019</td>
<td>43</td>
<td>38.52</td>
</tr>
<tr>
<td>2020</td>
<td>47</td>
<td>37.40</td>
</tr>
<tr>
<td>2021</td>
<td>45</td>
<td>36.32</td>
</tr>
</tbody>
</table>

In recent years, Ukraine has been undergoing active processes in the legal area of regulation of creative industries. Legal regulation of creative industries is a form of regulation of social relations in order to regulate the behavior of participants in these relations in accordance with the law. According to analysts, during the 5th session of the Verkhovna Rada registered 156 legislative drafts included in the Plan of the lawmaking work. This is in fact 83% of the number of legislative drafts that should be registered in the parliament in February-July 2021 and 41% of the total number of legislative drafts. As to the status of their consideration, the most of the legislative drafts (74) are under review in the committees, 21 the legislative drafts is awaiting consideration, another 21 are approved and signed by the
President, 17 are preparing for the second reading, 8 are waiting for the second reading, 7 are removed from consideration. Another 8 legislative drafts are at other stages of review. The most registered legislative drafts relate to the topics of “Economic Development” (54), “Justice” (26) and “Financial System” (14), and the least (2 each) the topics “Digital Transformation” (table 2) and “Youth and Sports”.

Table 2. Interim results of implementation of the Plan of the lawmaking work of the Verkhovna Rada of Ukraine for 2021 (as of September 2021)

<table>
<thead>
<tr>
<th>№</th>
<th>Subject</th>
<th>Number of projects</th>
<th>Number of registered legislative drafts</th>
<th>Registered legislative drafts (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The way to Europe</td>
<td>9</td>
<td>4</td>
<td>44%</td>
</tr>
<tr>
<td>2</td>
<td>Digital transformation</td>
<td>5</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>3</td>
<td>Government machine</td>
<td>13</td>
<td>6</td>
<td>46%</td>
</tr>
<tr>
<td>4</td>
<td>Economical development</td>
<td>58</td>
<td>54</td>
<td>93%</td>
</tr>
<tr>
<td>5</td>
<td>Financial system</td>
<td>44</td>
<td>14</td>
<td>32%</td>
</tr>
</tbody>
</table>

That is why effective parity-legal regulation is one of the priority tasks of the state, which, applying comprehensive measures of regulatory influence, influences on creation of favorable conditions for development of creative industries in the interests of society and the state as a whole. Since the composition and structure of creative industries, their sectoral specialization and cooperation, the scale and directions of development of industrial and other relations are determined by means of solving of spatial problems and are conditioned by the level the digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis (Guryanova et al., 2020; Savytska et al. 2021, 2022). Defining the structure and mechanism of system-reflex management of creative industries, it is necessary to note that the obligatory input parameter of the creative complex, along with various resources, acts the parity-legal task of the higher management on production and supply of products. Thus, creative industries cannot be created "naturally", but only on the basis of strategically determined imperatives of system-reflex management of information security of society. Since only with such logical approach can the maximum effect from investment investments and use of different types of resources be achieved at effective organization of production processes and connections (Fig. 1).
The subject of management of creative industries

Object of management of creative industries

Creative industries of specializations

Creative industries of service industries

Natural resources

Infrastructure

Society

Levels of system-reflexive control

Feedback

Fig. 1. Scheme of management of the main components of creative industries and connections between them

The process of digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis in modern conditions should meet the globalization challenges that dictate the development of the country's economy as a whole. This should be manifested in the application of modern integration models concerning the formation and development of creative industries (Sudomyr et al., 2022). A positive point, however, is the presence of experience in the management and operation of an integrated association, which is the industrial complex of the country. Practitioners know different types of integration that solve different tasks, including: improving the quality of management and resource efficiency, reducing costs and risks. Thus, in order to solve strategic tasks to improve the formation of digital transformation of creative industries, it is proposed to start the restoration of basic industries based on the use of inter-branch industrial and financial groups. The positive aspects of this should be noted: Transfer of economic contacts from vertical to horizontal; expansion of banks' participation in the industrial stock capital; attraction and concentration of funds at the regional level, etc., i.e. possibility to obtain additional benefit from consolidation of capital and expansion of sphere of influence of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis. However, the experience of recent years shows that creative industries have not achieved the main goals of their development.
Concentration was limited by an initial capital flight and the output of highly profitable production from under state influence. The main reasons are: Low technological, production and scientific potential; low level of corporate culture; lack of appropriate real methods of system-reflex management; ineffect state support and inconsistent state policy. Moreover, in the regions, which are based on traditional industries, which have experienced a period of deep decline in production and today are in unstable financial condition, the creation of such industries is connected with significant financial and organizational difficulties and significant risk. Thus, a large number of creative industries, which have a significant part of production potential, are not included in such integrated corporate structures at all. Some controversial experience of application of certain models of integration of creative industries does not show the inability to use them.

The financial capacity of the formation of digital transformation of creative industries as imperative system-reflex management of information security of society on the basis of parity-legal principles is their ability to resist destabilization of social and economic development on the basis of ensuring sufficient volume of financial and legal resources, their optimal distribution and effective use on condition of observance of such structure of sources of financing, which will ensure stable systemic development in the short and long term. As for the strategy of digital transformation of creative of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis, it includes conceptual definition of the bases and directions of this strategy from the position of solution of the set tasks of socio-economic development and development of concrete measures on realization of the set tasks, and therefore provides a set of actions and measures, what should be done within the limits of the functions and powers given to them in the sphere of financial activity of creative inductions with the purpose of solving certain tasks and achievement of the set goals.

The strategy can be considered as a system of long-term actions and goals of creative industries regarding the management of processes of formation, distribution, redistribution and use of available and potential financial resources aimed at ensuring their financial sufficiency, efficiency and sustainability of system-reflex management in general, which comes from the national goals, meets the interests and opportunities of the regions and takes into account the barriers to their development. Therefore, it is necessary to research the mutual influence of these priority goals in a direct and reverse direction. The establishment of direct interaction between financial sufficiency, effectiveness and sustainability of creative industries, allows to study at the strategic level the problems of coordination of goals and decisions on ensuring financial capacity to form digital transformation of of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis (Fig. 2).
Ensuring the financial viability of creative industries as an imperative of system-reflexive management of information security of society on a parity basis

Ensuring the financial sufficiency of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis

Ensuring the financial stability of creative industries as an imperative of system-reflexive management of information security of society on a parity basis

Fig. 2. Interrelation of strategic directions of providing financial capacity of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis

Results

However, as of today, the low financial efficiency of Ukraine’s creative industries does not provide them with either financial sufficiency or financial stability. At the same time, in accordance with the conditions of mutual dependence and mutual understanding of the directions of financial capacity of socio-economic development, achievement of one specific goal will strengthen the meaning of another, the achievement of which will become a precondition or result of provision of another goal or their combination. Moreover, for the majority of creative industries today, according to their level and type of financial capacity, practical solutions to the tasks in all directions are rather problematic, so for some industries it is necessary to choose the most likely strategic directions of financial capacity enhancement. Development of a strategy to ensure financial capacity for digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis provides several stages (Fig. 3).
The Digital Transformation of Creative Industries as a Management Imperative…

Carrying out diagnostics of financial capacity of creative industries

Identification of reserves to increase the financial capacity of creative industries

Defining the strategic goal of ensuring the financial capacity of creative industries

Selection of priority goals of the strategy to ensure the financial capacity of creative industries

Choice of strategic guidelines for ensuring the financial capacity of socio-economic development

Highlighting conclusions and practical recommendations for improving the level of financial capacity

System of parity and legal principles

Defining methods and tools of the mechanism for implementing the strategy of ensuring the financial capacity of creative industries

Elements of ensuring the financial capacity of creative industries

Regulatory and legal

Organizational

Financial and economic

Information

Scientific and educational

Methods of ensuring the financial capacity of creative industries

Financial planning

Financial support

Financial regulation

Administrative

Legal

Economic

Financial control

Tools for ensuring financial capacity for the formation of digital transformation of creative industries

Taxes, transfers, budget investments, subsidies, decentralization of budget funds, prices, depreciation rates, duties, government loans, government orders, government contracts, quotas, interest on loans, deposit rates, insurance rates, minimum wages, living wages, etc.

Normative legal acts

Budget, fiscal tax, transfer reinforcement and other policies

Entities providing financial capacity for the formation of digital transformation of creative industries

Legislative and executive structures

Directorate of creative industries

Creative industry staff

The level of digitization

Legal entities are financial corporations, non-profit organizations, foreign and domestic investors, etc.

Fig. 3. Stages of formation and realization of strategy of ensuring financial capacity to digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis
Ensuring the financial capacity of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis positively influences their level of both financial sufficiency and financial stability. Increasing the level of financial stability of creative industries guarantees them the growth of financial sufficiency. The sufficiency of financial resources and financial stability of creative industries are prerequisites for financial efficiency.

At the stage of formation of strategy of ensuring financial capacity to digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis it is necessary to define strategic goal as the main goal, which should meet requirements of reach, objectivity, clarity, specificity, reality. The main goal of such a strategy is to define ways of ensuring sufficient, efficient and stable development and favorable conditions for the functioning of creative industries, which will result in overcoming their financial incapability in strategic periods.

In order to determine the overall indicator of effectiveness of factors of influence on digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis it is necessary to conduct prognostic calculations of integral indicators of influence for 2023, 2025 and 2027 years. To do this, use the method of constructing a taxonomic indicator, using the coefficients: In - index of novelty and modern equipment of creative industries; TC - index of system-reflexive management of information security of society; Cp - index of state policy to support entrepreneurship; Kz - the level of tax burden on creative industries; OK - change in the national currency; Tp - inflation rate; KP - the status of crediting of creative industries; ΔBK - availability of digital transformation of creative industries; A - state of development of the sphere of creative industries; MA - instability of the legal framework; MP - development of Internet technologies; I - level of digitalization of society; ZV - increase in the level of social needs of society; ChP - index of net profit of creative industries; D - income of creative industries; VK - an indicator of the level of equity of creative industries; VP - index of the use of modern technologies for data processing, partnership and cooperation; DZ - innovative opportunities for the development of creative industries; Kal - flexibility and acceleration of business processes of creative industries; Kp - improving the customer experience of creative industries; Kbi - level of tax burden of creative industries.

Observation matrix (X) for creative industries:

\[
\begin{pmatrix}
4116.6 & 1068.7 & 660 & 2387.9 & 1125.6 \\
2288 & 1153.4 & 165.2 & 969.4 & 387.4 \\
1002.7 & 540.9 & 0 & 461.8 & 306.6
\end{pmatrix}
\]
The formed matrix of standardized values for creative industries has the next form:

\[
\begin{pmatrix}
1.67 & 1.16 & 2.40 & 1.88 & 1.86 \\
0.93 & 1.25 & 0.60 & 0.76 & 0.64 \\
0.41 & 0.59 & 0.00 & 0.36 & 0.51 \\
\end{pmatrix}
\]

The research is based on a matrix of the influence of the digital transformation process (independent variable) on the corresponding coefficients (dependent variable) without changing other parameters (assumptions), taking into account the random effects for each of the efficiency indicators of the factors influencing the digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis. Effectiveness of activity is a multifactor process, which is determined both by internal factors and by external factors.

Thus, we have the calculated data:

\[
P_0 = (1.67; 1.25; 0; 0.36; 1.86) \text{ – vector-etalon,}
\]

\[
C_{\text{year}_2023} = 2.84 \text{ – determining the distance between individual observations and vector-etalon;}
\]

\[
C_{\text{year}_2025} = 1.6;
\]

\[
C_{\text{year}_2027} = 1.96.
\]

\[
C_0 = 2.13 \text{ – the average distance between observations.}
\]

\[
S_0 = 0.52 \text{ – standard deviation.}
\]

\[
C_0 = 3.17 \text{ – the maximum possible deviation from the consolidated standard.}
\]

\[
d_{\text{year}_2023} = 0.89 \text{ consolidated dynamic indicator.}
\]

\[
d_{\text{year}_2025} = 0.50;
\]

\[
d_{\text{year}_2027} = 0.62.
\]

\[
K_{\text{year}_2023} = 0.11 \text{ – taxonomy ratio.}
\]

\[
K_{\text{year}_2025} = 0.50;
\]

\[
K_{\text{year}_2027} = 0.38.
\]
Thus, according to the coefficient of taxonomy by year, we can conclude that the creative industries in year 2 will have the highest opportunity to implement digital transformation in their activities as an imperative of system-reflexive management of information security of society on a parity-legal basis. The assessment of the effectiveness of factors influencing the digital transformation of creative industries as an imperative system-reflex management of information security of society at the parity-legal basis is proposed by calculating the generalized indicator of efficiency of distribution digital processes \(Y_p\), which is also defined by partial indicators adjusted on the gross factors.

The sum of the weight multipliers should be 1, among the partial indicators the highest priority in the evaluation of the effectiveness of the strategic orientation of the parity system and, accordingly, the largest value of the gross multiplier 0.2 has an indicator of information security. The next most significant indicators are the type of digital stability, the stability of digital growth, the structure of financial flows, the value of which should be adjusted to the 0.15 weight multiplier. The remaining calculated partial indicators should be adjusted to 0.1. After the calculations we get the following indicators, which are given in (table 3):

Table 3. General indicator of effectiveness of factors influencing digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis

<table>
<thead>
<tr>
<th>Indicator</th>
<th>year 2023</th>
<th>year 2025</th>
<th>year 2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Y_p)</td>
<td>1.228824</td>
<td>1.904304</td>
<td>0.774546</td>
</tr>
<tr>
<td>(I_{in})</td>
<td>1.127068</td>
<td>0.691876</td>
<td>-0.01047</td>
</tr>
<tr>
<td>(T_C)</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(K_r)</td>
<td>-0.37271</td>
<td>0.291664</td>
<td>0.172545</td>
</tr>
<tr>
<td>(C_p)</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(O_k)</td>
<td>4.82914</td>
<td>1.513554</td>
<td>0.004771</td>
</tr>
<tr>
<td>(T_p)</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>(K_{pr})</td>
<td>0.670589</td>
<td>0.463631</td>
<td>1.971417</td>
</tr>
<tr>
<td>(\Delta BK_i)</td>
<td>0.008008</td>
<td>0.001385</td>
<td>0.033777</td>
</tr>
<tr>
<td>MA</td>
<td>190</td>
<td>15210</td>
<td>28370.7</td>
</tr>
<tr>
<td>MP</td>
<td>117</td>
<td>14333</td>
<td>15103</td>
</tr>
<tr>
<td>A</td>
<td>1002.7</td>
<td>69648</td>
<td>43208</td>
</tr>
<tr>
<td>I</td>
<td>0.11</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>ZV</td>
<td>672.4</td>
<td>32291</td>
<td>85181</td>
</tr>
<tr>
<td>ChP</td>
<td>-201.6</td>
<td>-4195</td>
<td>-5093</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VK</td>
<td>540.9</td>
<td>-14383</td>
<td>-29517</td>
</tr>
<tr>
<td>VP</td>
<td>3241.2</td>
<td>5226</td>
<td>40</td>
</tr>
<tr>
<td>DZ</td>
<td>93.06</td>
<td>3452.8</td>
<td>8384</td>
</tr>
<tr>
<td>(K_{al})</td>
<td>0</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>(K_{p})</td>
<td>1.51</td>
<td>0.91</td>
<td>0.58</td>
</tr>
<tr>
<td>(K_{bi})</td>
<td>-0.23755</td>
<td>-0.05936</td>
<td>-0.0698</td>
</tr>
</tbody>
</table>

The digital transformation of creative industries taking into account the parity-legal principles is an instrument for increasing the effectiveness of the activity in the strategic perspective. During its implementation the time lag was taken into account, which allows to
get high profitability on capital investments in short-term period and to show the efficiency of transformation in economic indicators of short-term character. Thus, the general indicator of effectiveness of factors of influence on digital transformation of creative industries as an imperative of system-reflexive management of information security of society on a parity-legal basis points out that in the forecast period year_2025 is characteristic for sufficient financial resources effective use of them and introduction of digital transformations on creative industries. Therefore, a significant reserve of strategic provision of their financial capacity for socio-economic development is the increase of financial efficiency. Since the need (lack) of financial resources for digital transformation as an imperative of systemic and reflexive management of information security of society on the basis of parity-legal principles can be covered by hidden sources of financial resources of creative industries, the most strategically important among which can be singled out: Financial resources, which are in the shadow of the regional economy; Financial resources of creative industries, directed to the budget in the part, which in the form of transfers is returned to the territory; savings; financial resources, which in the form of investments "flow" abroad; financial resources of financial and credit institutions, are not involved in the economy; financial resources of creative industries in the state of accounts and accounts receivable, etc. At the same time, it is obvious that creative industries can and should develop their own resource base, first of all, by means of efficient use of available resources, attraction of external sources of financial resources will increase their financial dependence. Thus, at the present stage of their development of financial capacity requires, first of all, achievement of their financial efficiency, based on the most effective management of subjects of financial and economic relations.

**Conclusion**

This study considers the main aspects of the formation of project maturity of public administration in the implementation of the digital transformation projects. The existence of a direct dependence is proved prospects for the implementation of digital transformation projects from the level of project maturity of public management. Sweden's progressive experience in digital transformation and implementation of the projects in public administration has considered, with the possibility of using such experience in Ukraine during the implementation of digital transformation projects. It has been established that the main component of the success of the Swedish model of the digital transformation is the history of the decentralized model of government. Having a decentralized structure simplifies adaptation to local conditions and challenges. Therefore, the transformation is fast and efficient, ensuring the digital development of state and local authorities, organizations and society as a whole. This experience is interesting for Ukraine. A variant of the project maturity model adapted to the local self-government body has been developed and is being implemented in the conditions of Ukraine. This model highlights key areas that are crucial for the implementation of digital transformation projects. The model assumes three levels of maturity of local
governments. It has established that the majority of the created united territorial communities of Ukraine have characterized by the first two levels of maturity. The implementation of the maturity model makes it possible to assess the current state of the system, choose adequate tools for staff training, and create conditions for continuous improvement and realization of the potential of the local community for the implementation of digital transformation projects.

Conflict of interest

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

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Model of project maturity of hromadas first presented for AHs of Dnipropetrovsk Oblast. URL: https://decentralization.gov.ua/en/news/8746


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