

Factors Influencing Collaboration in Creative Industries

*Peter Micak¹, Alena Kocmanova¹

¹ *Brno University of Technology, Faculty of Business and Management, Department of Economics, Kolejní 2906/4, Brno, 612 00, Czech Republic*

Abstract¹

The field of creative industries is an area that has recently become the subject of gradually increasing scientific interest. This growing attention is mainly linked to the fact that they are inherently associated with the modern way of life, economic development, and innovation. At the same time, the creative industries are also perceived as a sustainable concept of modern development. In addition to the direct positive effects on the country's GDP growth, the reduction of unemployment, the creation of social cohesion among the population, the promotion of creativity and innovation, the creative industries also have additional positive outcomes in the form of the so-called positive spillover effects. We consider it necessary to examine the creative industries not only from a macroeconomic or regional development point of view, which are the prevailing approaches to their research but also from a microeconomic point of view. Only by understanding the internal logic of companies in creative industries will it be possible to understand the benefits and functionality of their internal processes. The paper aims to analyse the influence of selected factors on a company's willingness to collaborate. Because through such collaboration, it is possible to effectively share knowledge and experience in this sector of the economy, which impacts companies' innovative performance. The research in this paper is based on a statistical analysis of data obtained from the publishing industry, a subsector of the creative industries. The results show a positive impact of strategic management's existence on the company's willingness to collaborate with other companies and institutions, especially with foreign, public, and multinational companies. The influence of a more liberal management approach on its willingness to cooperate with its surroundings was not confirmed in the analysis. The validity of these results must also be verified in other subsectors of the creative industries, as the creative industries cannot be considered a homogeneous sector, given the large number of subsectors they cover.

Keywords: *Creative Industries, Cultural Industries, Collaboration, Innovation*

¹ We would like to thank Dr. Prochazkova Katerina (Brno University of Technology, Faculty of Business and Management) for being our peer-editor and for proofreading the final version of our paper while ensuring that it is ready for trans-disciplinary communication.

1. Introduction

The creative industries sector can be described as one of the phenomena of our contemporary times, inherently linked to current lifestyle, economic development, and innovation. The dynamically changing environment, the impact of new technologies, and globalisation have meant a significant shift from traditional manufacturing industries towards the development of services and a shift in emphasis towards innovation. In this new digital economy, intangible values increasingly determine tangible values. Despite its relatively long development, the creative industries remain a sector that can provoke passionate debate (Cunningham, 2009; Kong, 2014). From the original negative connotation assigned by Adorno and Horkheimer to the original concept in 1944 (Adorno & Bernstein, 2001), we have reached a time when the creative industries are celebrated as vital economic growth drivers. Today's creative industries' discourse no longer deals with their nature and significance but progresses on to discussing whether the creative industries can be considered loci of innovation and employment in a modern knowledge-oriented economy. This is a consequence of the fact that creative industries are directly linked to contemporary values, aspirations, and innovations inherent to the modern way of life (Kontrimienė & Melnikas, 2017). The growing number of studies in the creative industries only underscores that this sector is becoming an increasingly important part of global knowledge-based economies (Win, 2014; Jones et al., 2016).

Despite the topicality and great present value of the creative industries, the internal processes that shape and transform the creative process in the creative economy remain largely unclear or often misunderstood (Jeffcut & Pratt, 2002). It is therefore essential to better understand their underlying internal processes and only then develop public policies that have the potential to function effectively (Castro-Higuera & de Aguilera-Moyano, 2018). Thus, despite considerable progress in creative industries research, there are still areas where there is no generally accepted consensus. One of the most crucial areas is the absence of creative industries

definition. The main reason for the absence of a generally valid and internationally accepted definition of the creative industries is, above all, the lack of consensus on which subsectors should be considered an integral part of the creative industries (Kong, 2014). Silvio (2018), however, argues that the creative industries, the creative economy and the creative class are not concepts, and categories that can be defined through empirical research but are concepts that are created and constructed through their application. The creative industries can thus be seen as a concept that develops through a dialogue between its participants, the public, and the government. On this basis, it is therefore understandable that definitions of the creative industries differ slightly across countries.

Today, no one doubts the importance of creative industries in their innovation and growth potential for the country's economy (Protogerou et al., 2017). They create space to foster human creativity, strengthen social cohesion, and significantly impact societies outside the creative industries. There is evidence that companies that are not directly part of the creative industries but are connected to them, are more innovative than other companies that do not have such a connection (Bakhshi & McVittie, 2009). Many authors perceive innovation as one of the key factors supporting economic growth (Zelazny & Pietrucha, 2017). Innovation is one of the main drivers of the creative industries, and they are among the most innovative sectors of the economy (Müller et al., 2009). Companies in the creative industries outperform companies in other sectors regarding product innovation or research and development intensity (Protogerou et al., 2017).

In creative industries, work is influenced by both economic and internal artistic logic (Eikhof & Haunschild, 2007). This fact leads to a specific organization of work in the creative industries. The organizational structure and hierarchy in companies operating in the creative industries are primarily informal (Bérubé & Demers, 2019). Efforts to over-manage employees can lead to a breach of artistic integrity and logic. Therefore, traditional economic logic and standardized management practices will have a lesser chance of success in areas that fall into the

creative industries (Eikhof & Haunschild, 2007). Thus, the management process is highly individualized in this sector. Resource management still makes sense and is helpful, but internal human resource management processes must be much more tailored to the company's specific needs than in traditional industries (Rivani & Raharja, 2018).

In most cases, companies in the creative industries are owned by individuals with a strong identity (Collins et al., 2018). The business owner's character, identity, emotional autonomy, and good education are essential prerequisites for innovative business behaviour, even in the context of economic uncertainty, especially at the time of founding a company (Lampel & Germain, 2016). Innovation in companies operating in the creative industries, despite the founder's strong influence, is rarely an act of individual genius. It is in most cases a dynamic and collective process in which actors work complementary and mutually beneficially (Jones et al., 2016). It is necessary to look at the business identity of the owner of the company contextually because each of the initial influences, from cultural conditions, economic conditions, institutional support, to a distinct development of individual subsectors of creative industries, has a significant impact on entrepreneur behaviour and psychological state (Porfirio et al., 2018). This is inherent in all sectors, but we encounter a specific self-perception of entrepreneurs in the creative industries. They do not perceive themselves as entrepreneurs and are strongly reluctant to accept entrepreneurial thinking. They often feel that they must choose between cultural and creative values, and entrepreneurial values. They feel that business values are at odds with their intrinsic values and consider it only a necessary evil to enable them to realize their creative ideas. Over time, they develop a specific picture of business identity, but their creative and cultural identity remains a fundamental element of their businesses (Werthes et al., 2018).

Parida et al. (2017) define collaboration as the company's ability to create and use a network of current and potential inter-organizational relationships to obtain resources that other market players have and its ability to integrate parts of the

organization, such as human resources partners. Collaboration is an essential prerequisite that enables establishing relationships with partners, which directly increases innovative behaviour. This creates a strong link between network capability and innovation. A surprising finding is the business owners' frequent willingness in the creative industry to collaborate, which essentially contradicts a lone artists' established idea with their truths and opinions (Loots et al., 2018).

2. Conceptual and Theoretical Analysis

As already mentioned in the introduction section, despite the growing notability of the creative industries and the considerable expansion of their research, their internal processes remain largely misunderstood (Jeffcutt & Pratt, 2002). Furthermore, it must also be borne in mind that there is no such thing as a single creative industry because it is not homogenous. Therefore, it is clear that the company's willingness to collaborate will be hidden within these internal company processes. However, as previous research suggests, entrepreneurs in the creative industries and their tendency to cooperate or compete do not depend on their age, gender, education, or income (Loots et al., 2018).

This article's research, will focus on factors that could affect a company's willingness to collaborate with other companies. In particular, the relationship between the degree of strategic management and the willingness to collaborate will be analysed. The strategic management indicator is based on whether the company sets goals and, subsequently, strategies to achieve these goals. As already mentioned in the introduction section, management in the creative industries, due to its specific needs, is possible mainly in smaller work teams because of the need for a highly individualised approach to employees. This trend is also evident in the Czech Republic, where based on the mapping of the creative industries, it was found that up to 95.9% of all entities in the creative industries were self-employed persons or micro-enterprises (Žáková et al. 2015).

Another part of the analysis that we assume will impact the company's willingness to collaborate is the company's degree of liberalism. This is given by the team nature of work in the company and the degree of democracy in making company-wide decisions. Based on the mentioned assumptions, two hypotheses are formulated and subsequently verified in the article.

H1: The higher the level of the company's strategic management is, the more positive effect it has on its willingness to collaborate.

H2: The more liberal management in the company is, the more positive effect it has on its willingness to collaborate.

3. Methodology

The following section describes the methods that will be applied in writing this paper. The established hypotheses will be verified based on an analysis of data from 82 companies that completed a questionnaire. Data from these companies were obtained during the first quarter of 2020. All 82 companies belong to the publishing industry, which is a subsector of the creative industries. The paper aims to provide information on which factors may affect a company's willingness to collaborate with other companies. In addition to information on whether the company collaborates with other companies, additional information in the form of whom the company collaborates with will be used for further analysis. In the questionnaire, companies could provide information on whether they cooperate with domestic companies, foreign companies, public institutions, or multinational companies. Given the results of empirical research, the following selected variables existing within the company will be subjected to statistical analysis:

- *I₁*: Previous work experience of the business owner (executive manager) in the field of business

- ***I*₂**: Highest achieved education of the business owner (executive manager)
- ***I*₃**: Number of employees in the company
- ***I*₄**: Gender composition of the working team
- ***I*₅**: Existence of goals that the company wants to achieve
- ***I*₆**: Existence of strategies and plans in the company
- ***I*₇**: Existence of an employee whose skills and experience are irreplaceable for the company
- ***I*₈**: Prevalence of teamwork in the company
- ***I*₉**: Democracy in business decision-making
- ***I*₁₀**: Collaboration with domestic companies
- ***I*₁₁**: Collaboration with foreign companies
- ***I*₁₂**: Collaboration with public institutions
- ***I*₁₃**: Collaboration with multinational enterprises

The thirteen manifest variables listed above will be subjected to descriptive statistical analysis. The Principal Component Analysis (PCA) and Exploratory Factor Analysis (EFA) will be applied first. The aim of applying these statistical procedures is to extract the factors and reduce the number of indicators if necessary. The Exploratory Factor Analysis results were evaluated by the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test.

Subsequently, based on empirical research and scientific knowledge from selected scientific papers, a model will be created through statistical Confirmatory Factor Analysis (CFA). The Chi-square test and additional fit measures in the form of Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) / Non-normed Fit Index (NNFI), Goodness of Fit Index (GFI), Root Mean Square Error of Approximation (RMSEA), and Standardised Root Mean Square Residual (SRMR), will be used to evaluate the results and validity of the model.

SPSS 26, AMOS 22, and JASP 0.14 software will be used to analyse the data. After verifying the created model's functionality through the mentioned fit measures, the

results will be verbally evaluated, and the validity of the established hypotheses will be verified.

4. Research and Discussion

Thirteen manifest variables were chosen to verify the research hypotheses. At the outset, most of the companies' representatives who took part in the questionnaire stated that they were collaborating with other companies. Only eight out of 82 companies indicated that they did not collaborate with other companies, representing less than 9.8%. This means that more than 90% of companies collaborate with other entities. This result confirms the findings of the research mentioned in the introductory part of the article. In 61% of collaboration cases, this cooperation took place through informal communication, while 39% of communication between companies took place on a formal level.

Principal Component Analysis and Exploratory Factor Analysis were applied on the selected thirteen manifest variables. The aim of applying these statistical procedures was to extract the factors and reduce the number of variables when such a need arose. The results were evaluated using Bartlett's test and Kaiser-Meyer-Olkin test to assess the suitability of the data for the application of factor analysis. Given the Principal Component Analysis and Exploratory Factor Analysis results, three manifest variables were excluded from further statistical analysis due to their insignificance to the resulting model. These three variables are:

- I₁: previous work experience of the business owner (executive manager) in the field of business,
- I₂: Highest achieved education of the business owner (executive manager),
- I₃: Number of employees in the company.

The exclusion of some variables is consistent with existing knowledge. For example the information that the employee's education does not affect its willingness to cooperate aligns with the other research findings (Loots et al., 2018). Within the Principal Component Analysis, two factors were identified from the data. Due to empirical research related to the variables, the first factor was named the *Liberalism factor*, and the second factor was named the *Strategy factor*. The variables and factors used in the model can be seen in Figure 1.

Based on theoretical knowledge and the results of Principal Component Analysis and Exploratory Factor Analysis, a model was created through Confirmatory Factor Analysis. This model was then subjected to a closer analysis in terms of Additional Fit Measures, the aim of which was to verify the functionality of the model. The graphical interpretation of the model expresses the factor load's standardised values between the latent variables, the manifest variables, and the correlation coefficient between the two latent variables.

In the case of the primary model fit indicator called the Chi-square test, the value of χ^2 of the test is 28.117, the number of degrees of freedom $df = 26$, and the value of p is 0.353, which is greater than the required value of $p > 0.05$. These results suggest that the model fits the measured data. In addition to the Chi-square test, the functionality of the model was also verified by additional Fit Indices, specifically through the Comparative Fit Index, Tucker Lewis Index / Non-normed Fit Index, Goodness of Fit Index, Root Mean Square Error of Approximation and Standardised Root Mean Square Residual. All the listed tests have exceeded the recommended minimum values; therefore, the proposed model can be accepted as appropriately representing the analysed data. The results of individual Fit Indices can be seen in Table 1, together with the recommended values according to Hatcher (2013).

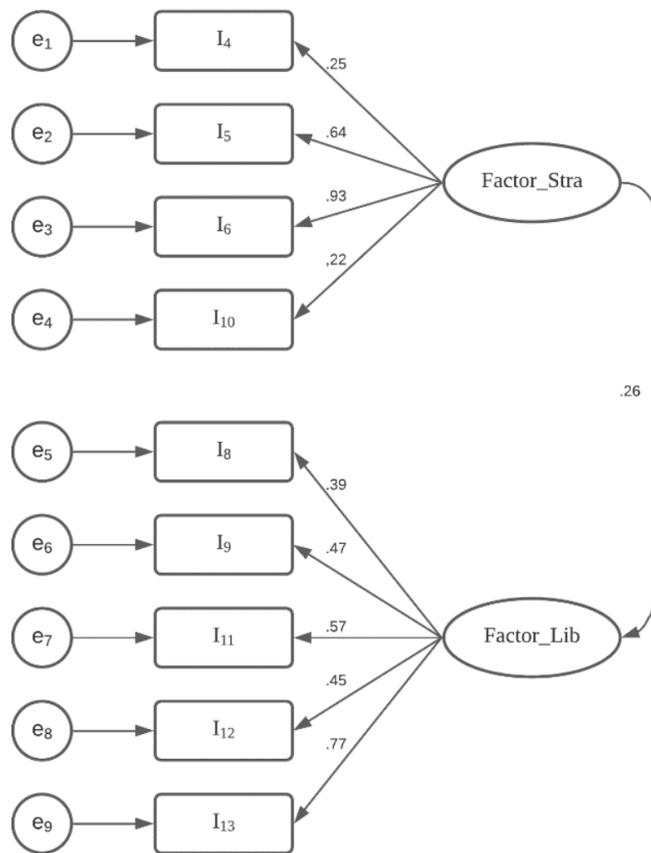


Figure 1: Cooperation Model (Authors' work)

Table 1: Characteristics of the model

Fit Indices	Measured Value	Required value
CFI	0.977	> 0.90
TLI / NNGI	0.967	> 0.90
GFI	0.992	> 0.90
RMSEA	0.032	< 0.06
SRMR	0.065	< 0.08

Author's work

The model consists of two latent factors, which are the *Strategy factor* and the *Liberalism factor*. Each of these factors is made up of several manifest variables. The *Strategy factor* consists of the output manifest variables I₄, I₅, I₆, and I₁₀. The *Liberalism factor* is formed by the output manifest variables I₈, I₉, I₁₁, I₁₂, and I₁₃. At the end of this part of the article, it is necessary to verify the established hypotheses. The testing of the two hypotheses established in this article can be seen in Table 2.

Table 2: The results of hypotheses testing

Hypothesis	Hypothesized Relationship	Estimate	Standard Error	p-value
H1	F_STR -> I11	0.571	0.163	< 0.001
	F_STR -> I12	0.445	0.150	0.003
	F_STR -> I13	0.605	0.200	0.002
H2	F_LIB -> I10	0.291	0.215	0.176

Author's work

H1: The higher the level of the company's strategic management is, the more positive effect it has on its willingness to collaborate.

The *Strategy factor* positively affects the variables I₁₁: Cooperation of the company with foreign companies, I₁₂: Cooperation of the company with public institutions, and I₁₃: Cooperation of the company with multinational enterprises. The p-value is below the required value <0.05 in all three cases. Given the results, it is possible to reject the alternative hypothesis and accept the null hypothesis in its original wording. The company's level of strategic management positively impacts the company's willingness to collaborate with with foreign companies, public institutions, and multinational companies.

H2: The more liberal management in the company is, the more positive effect it has on its willingness to collaborate.

In the case of the influence of the *Liberalism factor* in the company on the variable I₁₀: Cooperation of the company with domestic companies, it is not possible to speak of a statistically significant effect, as the p-value significantly exceeds the recommended values < 0.05 . Therefore, in the case of the second hypothesis, it is necessary to reject the null hypothesis and accept the alternative hypothesis.

5. Conclusions

The creative industries are a sector that differs in many ways from the more traditional sectors of the economy, for example, by specific internal company processes, a strong connection to critical personnel, or frequent rejection of purely economic logic. The very concept of creative industries was largely artificially created by the association of several sub-industries into a single entity. Thanks to this process, the creative industries have become sufficiently large enough to become the subject of interest of progressive politicians representing advanced economies. However this move has also had negative consequences, an example being the lack of a universally accepted definition, resulting from the fact that creative industries have a different mix of sub-sectors in different countries. However, despite the many shortcomings of this concept, no one doubts the importance of the creative industries for the economic development of a country, but also for the artistic and cultural life of a country. Nor is their tremendous potential for innovation any longer questioned.

A company's willingness to collaborate with other companies or institutions is quintessential for sharing knowledge and skills in this sector, which positively affects companies' innovative performance. In addition, businesses in the creative industries encourage innovation outside their sector through this collaboration. There is evidence that businesses that are not directly part of the creative industries, but are linked to them, are more innovative than businesses that do not have such a

link (Bakhshi & McVittie, 2009). Therefore, we consider it necessary to pay more attention to research on creative industries at the level of specific enterprises. Only through such an approach will it be possible to understand the internal processes of the companies operating in the creative industries better.

This paper aimed to verify the established hypotheses that assumed a positive influence of latent factors in the company on its willingness to collaborate with other companies. The first hypothesis assumes that with the increasing corporate management level, the company's willingness to collaborate with companies will also grow. This hypothesis proved to be accurate, as the results of the Confirmatory Factor Analysis in the form of a model, which was subsequently verified, show that the latent strategy factor affects the company's willingness to collaborate with other companies, especially to collaborate with foreign companies, public institutions, and multinational companies. In the first hypothesis, the null hypothesis is accepted, and the alternative hypothesis is rejected. The second established hypothesis, which assumed that with increasing liberalism of management in the company, the company's willingness to collaborate with other companies would also grow, was not confirmed. Thus, it is not possible to say that with the increasing liberalism of management in the company, its willingness to collaborate with its surroundings also increases. Therefore, in the second hypothesis, the null hypothesis is rejected, and the alternative hypothesis is accepted.

This research and the results of this paper can be considered as the basis for further research. It is necessary to verify the functionality of the model on a new data sample in the future. As already mentioned in the paper, it must also be borne in mind that the creative industries cannot be considered a homogeneous sector (Jeffcutt & Pratt, 2002). Therefore, it is not possible to consider the results valid for one subsector of the creative industries as automatically valid in other subsectors. The paper results were based on data obtained from the publishing industry, which is only one of multiple creative industries' subsectors. Therefore, it is necessary to

verify the validity of this paper's findings in other subsectors of the creative industries as well.

References

- Adorno, T. W., & Bernstein, J. M. (2001). *The culture industry: selected essays on mass culture*. New York: Routledge.
- Bakhshi, H., & McVittie, E. (2009). 'Creative supplychain linkages and innovation: Do the creative industries stimulate business innovation in the wider economy?,' *Innovation: Management, Policy and Practice*, 11(2), 169–189.
- Bérubé, J., & Demers, C. (2019). Creative organizations: when management fosters creative work. *Creative Industries Journal*, 12(3), 314-340.
- Castro-Higueras, A., & de Aguilera-Moyano, M. (2018). Assessing creativity: an index proposal. *Creative Industries Journal*. 11(1), 102-118.
- Cunningham, S. (2009). Creative industries as a globally contestable policy field. *Chinese Journal of Communication*, 2(1), 13-24.
- Collins, P., Mahon, M., & Murtagh, A. (2018). Creative industries and the creative economy of the West of Ireland: evidence of sustainable change? *Creative Industries Journal*, 11(1), 70-86.
- Eikhof, D. R., & Haunschild, A. (2007). For art's sake! Artistic and economic logics in creative production. *Journal of Organizational Behavior*, 28(5), 523-538.
- Hatcher L. 2013. *Advanced statistics in research: reading, understanding, and writing up data analysis results*. Saginaw: ShadowFinch Media.
- Jeffcutt, P., & Pratt, A. C. (2002). 'Managing Creativity in the Cultural Industries,' *Creativity and Innovation Management*, 11(4), 225–233.
- Jones, C., Svejenova, S., Pedersen, J. S., & Townley, B. (2016). 'Misfits, Mavericks and Mainstreams: Drivers of Innovation in the Creative Industries,' *Organization Studies*, 37(6), 751–768.
- Kong, L. (2014). From cultural industries to creative industries and back? Towards clarifying theory and rethinking policy. *Inter-Asia Cultural Studies*, 15(4), 593-607.
- Kontrimienė, V., & Melnikas, B. (2017). Creative industries: development processes under contemporary conditions of globalization. *Business, Management and Economics Engineering*, 15(1), 109-126.
- Lampel, J., & Germain, O. (2016). Creative industries as hubs of new organizational and business practices. *Journal of Business Research*, 69(7), 2327-2333.
- Loots, E., Cnossen, B., & van Witteloostuijn, A. (2018). Compete or Cooperate in the Creative Industries? A Quasi-experimental Study With Dutch Cultural and Creative Entrepreneurs. *International Journal Of Arts Management*, 20(2), 20-31.
- Müller, K., Rammer, C., & Trüby, J. (2009). The role of creative industries in industrial innovation. *Innovation*, 11(2), 148-168.
- Parida, V., Pesämaa, O., Wincent, J., & Westerberg, M. (2017). Network capability, innovativeness, and performance: a multidimensional extension for entrepreneurship. *Entrepreneurship & Regional Development*, 29(1-2), 94-115.
- Porfírio, J., Mendes, T., & Felício, J. (2018). From entrepreneurship potential in culture and creative industries to economic development: the situation of UK and southern European countries. *International Entrepreneurship And Management Journal*, 14(2), 329-343.
- Protogerou, A., Kontolaimou, A., & Caloghirou, Y. (2017). Innovation in the European creative industries: a firm-level empirical approach. *Industry And Innovation*, 24(6), 587-612.
- Rivani, & Raharja, S. J. (2018). Role of Human Resource Management in the Creative Industries in Bandung, Indonesia. *Review Of Integrative Business And Economics Research*, 7, 76-84.

- Silvio, T. (2018). After creativity: labour, policy, and ideology in East Asian creative industries. *Culture, Theory and Critique*, 59(2), 75-80.
- Werthes, D., Mauer, R., & Brettel, M. (2018). Cultural and creative entrepreneurs: understanding the role of entrepreneurial identity. *International Journal Of Entrepreneurial Behavior & Research*, 24(1), 290-314.
- Win, T. S. (2014). 'Marketing the entrepreneurial artist in the innovation age: Aesthetic labor, artistic subjectivity, and the creative industries,' *Anthropology of Work Review*, 35(1), 2-13.
- Zelazny, R., & Pietrucha, J. (2017). Measuring innovation and institution: the creative economy index. *Equilibrium*, 12(1), 43-62.
- Žáková, E. et al. (2015). *Mapování kulturních a kreativních průmyslů v ČR: Vymezení, kvantitativní mapování a strategické dokumenty*. Prague: Institut umění.