Pricing strategy as a leading predictor of the profitability in creative industry companies

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Abstract
Background: Price setting is a determinant of a company's profitability especially in the sector of creative industry (CI) and is intensively discussed in academic and business area.
Purpose: The aim of this research paper is to investigate whether a well-defined and successfully implemented pricing strategy can significantly affect the profitability of companies in the creative industry.
Study design/methodology/approach: This study investigates the differences in interval variables, including financial indicators, number of price management techniques, and price management metrics, between companies that have implemented pricing strategies and those that have not. To assess this, a two-sample t-test was used to compare the variables between the two groups. Since the creative industry is highly heterogeneous, we have analyzed the profitability of creative sub-industries more in detail through ANOVA test.
Findings/conclusions: As it turned out, the analyzed parameters do not differ significantly in their average values, except for the parameter "Gross margin", where a statistically significant difference in average values was confirmed. Based on the findings of studies conducted by other authors as well as our own analyses, we conclude that assessing CI's profitability relative to other industries is inappropriate and represents only a simplistic view of the industry's performance. It is important to observe the profitability in each subindustry of CI, because the nature of the product (output) is different in each segment of this industry.
Limitations/future research: Despite the initial findings, it was recognized that the research was limited to a single country and a specific industry. To gain further insight into the pricing and profitability of companies in the creative sub-industries and cultural industry, subsequent research should be conducted. It would also be useful to link the topic of pricing and profitability with the theme of revenue models including pricing models, pricing metrics and payment systems.

Keywords
creative industry (CI), pricing strategy, price management, pricing, profitability

Introduction

According to the UK Government's 2001 *Creative Industries Mapping Documents* the creative industry was outlined as those industries which have their source in individual creativeness, skill, and talent and which have a capacity potential for creation of occupation and wealth through the formation and utilization of intellectual property (Smith, 2001; Higgs & Cunningham 2008; Wilkins & Holtham, 2012; Zhao & Cao, 2014). Under the term creative industry, we can comprehend the entire structure of the cultural and creative industries (Miller, 2009; Markusen, Wassall, DeNatale & Cohen, 2008; Cunningham, 2002). Inside a deeper comprehension of the extent of the creative industry, manufacturing, utilization, and distribution are deemed to be the implementation of the outcomes of creation and creativity rather than a direct portion of the creative industry (Department for Digital, Culture, Media & Sport, 2015). It is very difficult to create adequate indicators in order to define the creative and cultural industry and ascertain who exactly belongs to the creative class, due to the fact that there are no existing uniform definitions of terms related to the creative economy (Noeri, 2020; Galloway & Dunlop 2007; Dong, Zhu & Hu, 2015). Different views on the definition of the creative industry are also caused by its different forms of measurement. These different views are based on historical developments and the cultural and economic environment (Dronyuk, Moiseienko & Greguš, 2019), where, for example, O'Connor (2009) stresses the idea of the creative-consumer-citizen. However, the creative economy is constantly growing and needs to be quantified (Cunningham, 2002; Flew & Cunningham, 2010; Galloway & Dunlop, 2006; Imperiale, Fasiello & Adamo, 2021).

According to the European Commission, which set up a Programme Creative Europe for the programme period 2021-2027 (European Commission, 2018), Europe's cultural heritage and dynamic cultural and creative sectors are a part of European identity. The cultural and creative sectors fully contribute to the Union's economic development, generating jobs and growth, and thus are the key for Europe's future (European Commission, 2023). They also promote European excellence on the world stage, reinforcing the Union's global position. From an economic point of view, Cultural and creative industry generates US$ 2,250 billion of revenues and 29.5 million jobs worldwide (UNESCO, 2015).

Taking everything in consideration, people are the carries of creative value, hence investment in human capital plays a key role at national and business level. According to the results of a study conducted by Creative Industries Federation and Creative England (Giles, Spilsbury & Carey, 2020), companies must invest in creativity. Recent figures demonstrate that the creative industry is a stimulant for post-pandemic recovery, capable of forming 300,000 new positions and producing an augmented £28bn for the economic system by 2025 (Norbury, 2022). The creative industry represents an important pillar of the economic success of EU countries (4.4% of EU GDP), so in the next part of this research paper we will look at the profitability and pricing of companies operating in this sector and the efficient way to get there. The reason why a well-defined pricing strategy is crucial for succeeding on the market, is its ability to directly influence a company's profitability, market position and overall success. Without a clearly defined pricing strategy, creative industry companies lack a blueprint for implementing and controlling pricing decisions. This issue has emerged as a clear research gap, therefore the aim of our research is to investigate whether well-defined and successfully implemented pricing strategy can significantly affect profitability of companies in the creative industry.

1. Theoretical background

Pricing is one of the most challenging company's decisions, because of many variables and steps (Baldin, Bille, Ellero & Favaretto, 2018; Estelami, Estelami & Lichtmann, 2019; Laamanen, 2013) incorporated into the decision-making process in price management. The decision-making process in price management refers to a specific decision-making process within a company, which encompasses internal business data as well as external variables such as market share, demand, perceived value, customer decision-making process, brand image, or competition (Remeňová & Kintler, 2020).

A usual custom in the performing arts is to grant incentives to customers to differentiate themselves according to their reservation cost, offering a catalogue of distinct prices corresponding to different seats in the venue (Zieba, 2009; Davis & Swanson, 2009). In this context, price and allocation of seating are decision variables that empower managers to pursue their conflicting objectives. As Kang (2010) argued, regardless of

the grounds of a customer's price sensibility, the performing art organisation should price in agreement with the worth expectations of the intended audience. The larger the company, the more variables enter the decision-making process in such price management (Holden & Burton, 2010). Therefore, it is necessary to analyse several internal and external factors that influence pricing decisions (Ringstad & Løyland, 2011; Kolhede, Gomez-Arias & Maximova, 2022; Liozu & Hinterhuber, 2013). To avoid obvious price management failures occurring in companies, marketing experts and price specialists have proposed a standardised price management process (Bernstein & Macias, 2002; Dutta, Zbaracki & Bergen, 2003), consisting of pricing strategy, pricing, price tactics and price metrics. Pricing refers to use of different approaches such as cost-based pricing, demand-based pricing, competition-based pricing, value-based pricing, and their combinations (Smith & Colgate, 2007; Schindler 2011; Grisáková & Štetka, 2022).

As a relatively young economic sector, creative industry draws attention from both academia and industry to explore factors that influence financial performance of the creative industry (Hou, Lu & Hung, 2019; Kitsios, Champipi & Grigoroudis 2017; Askerud & Engelhardt, 2007; Gosman, Kelly, Olsson & Warfield, 2004). Some authors have studied the impact of price decisions on the sustainability of business, profitability, and the stability of sales channel strength (Zhang, Liu & Wang, 2012; Ma, Zhang, Guo & Liu, 2012; Huanga, Yanga & Zhang, 2012). According to authors Cross and Dixit (2005), pricing is perhaps the most accessible lever to manage profitability (De Toni, Milan, Saciloto & Larentis, 2017). According to Potts and Cunningham (2008), who compared the profitability of creative industry companies with aggregate profitability, creative industry entities grew at a cumulative annual growth rate (CAGR) of 11.3%. Compared to the Potts and Cunningham's (2008) study, European estimates of average profitability measured by return on invested capital (ROIC) in the cultural and creative industries in 1999-2003, were 9%, which is similar to Australian estimates. Other studies, conducted in German cultural and creative industries in rural areas, stress two important challenges concerning the profitability of the CCI company - price-based competition and declining willingness to pay for cultural and creative services (Andres, Erdsiek, Ohnemus, Rammer & Viete, 2019).

Despite the fact that some authors describe the creative industries as a profit-generating alternative (Setiadi, Boediprasetya & Wahdiaman, 2012; Aldianto, Wirawan, Anggadwita & Rizqi, 2020; Zheng & Chan, 2014; Fox, 2004), currently, a small percentage of scientific studies on pricing and profitability are dedicated to the creative industry (Boix-Domenech & Soler-Marco, 2017; Labaronne & Slembeck, 2015; Rentschler, Hede & White, 2007; Chamberlain, 1986; Vaccaro & Cohn, 2004; Selwood, 2015; Björk & Solomon, 2012).

At this point, scientists recommend perceiving the creativity as a sector's economic potential (Cunningham, 2006) where the value and price have important consequences for the price policy and profitability (Hracs, 2012; Lyubareva, Benghozi & Fidele, 2014; Dickens, 2010; Chung, 2008; Herliana, 2014). Rushton (2015) stresses the fact that pricing is paramount to success in the creative industry and is not currently included in any existing textbook.

2. Materials and methods

The aim of this research paper is to investigate whether well-defined and successfully implemented pricing strategy can significantly positively affect profitability of companies of creative industries. At the same time, we investigated whether the level of profitability varies by output type and creative industry sector. We have tested the following hypotheses:

- H0: CI companies do not achieve better results in financial indicators (Revenue, Profit, Gross margin, Assets, Own capital, Total indebtedness) than companies from non-creative industries.
- H1: CI companies achieve better results in financial indicators (Revenue, Profit, Gross margin, Assets, Own capital, Total indebtedness) than companies from non-creative industries.

Because creative industries include profit and non-profit organizations (Goto, 2017), we have focused on companies generating profit.

The research sample (N=143 respondents) consists of managers working at all levels of management (operational, tactical, strategic), in functional areas such as product management, marketing, finance, human resources, IT, senior management (CEO), etc. The questionnaire *Decision Making in Price Management*, which was the basic research tool,

consisted of open and closed questions, divided into several thematic areas: factographic data, financial data, price and revenue management activities, metrics, and tools, decision-making process in price management. For this purpose, a questionnaire taken from researchers from the University of Worms was used to map decision-making, decision-making process, techniques and metrics in price management, with the permission of its authors. To focus on the topic of profitability and price management tools, individual consultations and structured interviews with chosen companies and experts in price and revenue management were taken.

The research looked at price management tools referring to price techniques and price metrics used in the implementation and control of pricing strategy. Only selected ones are presented - Quantification of customer value, Conjoint analysis, Price-value map, Price elasticity, Willing to pay, Prices, Segment Discounts, Market Share, Total Sales, Sales Per Customer Segment, Sales Volume, Sales Margin, Price Sensitivity, or Customer churn rate.

To ensure the accuracy of the measurements taken during the research process, electronic data collection tools were utilized in order to avoid any potential influence on the research subject (Silverstein & Auerbach, 2009). Following this, the validity and reliability of the questionnaire were evaluated (Jones et al., 2015; Kennedy et al., 2019). Reliability, which is a statistical method for determining the degree of internal consistency and reliability of a research tool (Geiger & Shelton, 2019) was used to confirm the measured construct. The Cronbach's alpha was used to analyse the reliability of the questionnaire's items in the Slovak companies. For a sample of 143 respondents, the value α=0.88 was obtained (Table 1). This value represents an acceptable level of internal consistency, i.e., how the group of items is closely related within the group.

Table 1 Reliability of the questionnaire

Cronbach's Alpha	Number of items
.88	52

Another parameter of the accuracy and quality of measurement employing a questionnaire is its content validity (Beck & Gable, 2001). The content validity of the questionnaire was measured using the CVR Lawshe index (content validity ratio)

(Ayre & Scally, 2014; Zamanzadeh et al., 2015). The CVR of each item did not fall below 0.7, and the overall CVI reached 0.95.

Obtained relevant information from respondents is successful from the researchers' point of view, with an eighty percent return rate (265 questionnaires). However, for further analyses in the context of fulfilling the scientific aim of the paper, we could only include 143 fully completed questionnaires. Subsequently, a statistical sample was created in the PSPP software by random selection.

The two-sample t-test was used to identify and determine the size of the difference in achieved financial indicators and price management variables (price management techniques and metrics) related to CI industry and non-CI industry results, where we have monitored the differences in interval values for the two groups of variables (companies of CI and companies of non-CCI). The following formula defines the magnitude of the effect for a two-sample t-test:

$$r = \sqrt{\frac{t^2}{t^2+df}} \qquad (1)$$

where r is the Pearson correlation coefficient, t^2 is the t score, and df is the number of degrees of freedom.

ANOVA was used to determine the difference in interval values for more than two categories of variables, where one independent variable affects the dependent variable. We have concentrated on analyses of financial results and price management tools used actively in sub-industries of CI. In terms of significance, we are talking about the statistical significance of our results, but there is still significance or the strength of significance, called the effect size. The more significant the difference between the groups compared, the greater the effect. The magnitude of the effect of t-test and ANOVA was calculated by Pearson's r:

$$r = \sqrt{\frac{SSM}{SST}} \qquad (2)$$

where SSM is the variance between the groups and SST is the total variance.

3. Results and discussion

Outcome of the transformation process of CIs is specific product of intellectual property, which can be determined as an end product of creative work or activities (Roecker, Mocker & Novales, 2017; Tepper, 2002; Gadrey, 2000), also referred to as creative goods and services (Luo, 2021; Gouvea &

Vora, 2018; Huang, Ting & Chen, 2014; Lan & Kaufman, 2012; Bariletti & Sanfilippo, 2017; Dong & Truong, 2020). The table below represents the distribution of the research sample according to the nature of the final output. More than 46% of respondents selected service as the main result of their creative activities (Table 2). More than 32% of examined companies sell both services and products. Only less than 22% of companies have their business model based on production.

Table 2 Companies by the result of business activity

Result of business activity	%	% cumulated
services	46.13	46.13
products	21.63	67.76
product & service	32.24	100.00
Total	100.0	

Source: the authors' own calculations

As we can see in the table above, 67.76 % of the respondents (CIs) stated that they focus on one type of output activity in their business activities. Irrespective of whether the CIs are focused on one type (product or service) or multiple types (product and service) in their business activities, properly

implemented pricing plays critical role for company's profitability.

Even though pricing is a determinant of a company's profitability especially in CI environment and is intensively discussed in academic and business area, there is a lack of publications on this subject. This can be caused by the heterogeneity of the creative industry structure itself, which consists of the different entities operating in different areas of the business environment, such as: arts and culture (literature, theatre, music, audio-visual, visual arts, design), architecture, crafts, fashion, publishing, software, games, advertising, communication media, ICT, etc. Some authors look at the impact of the creative industries on the performance of selected regions in Europe by analysing labour productivity (Boix-Domenech, Peiró-Palomino & Rausell-Köster, 2021).

According to the above presented studies profitability in creative industries is generated through the higher creative value. Therefore, we examined the profitability performance of Slovak companies in creative industries (CI) on selected financial indicators.

Table 3 Descriptive table for financial indicators for CI companies

Variable	N	Mean	Std Dev	Variance	Kurtosis	Skewness	Min	Max
Revenue	143	28177299	81988606	6,7E+015	25,36	4,77	6518	485482987
Profit	143	2082615	10379844	1,1E+014	38,50	5,98	-9443181	68137938
Assets	143	12279884	28627643	8,2E+014	16,94	3,79	4492	158677861
Equity	143	6167349	21913165	4,8E+014	33,77	5,58	-5224804	139698627
Indebtedness	143	4116,10	5045,96	25461668	2,09	1,46	3,460	21422,000
Gross margin	143	1782,63	2296,80	5275269	1,22	1,36	,00	8.773,00

Source: the authors' own calculations

Based on the descriptive statistical results mentioned in the table 3, we stated that the average revenue (in euros) of CI companies is $M=28 \times 10^6$ with variability $SD=8.2 \times 10^6$. The minimum value of the achieved revenue is Min=6518 EUR, maximum value is $Max=48,5 \times 10^7$. The average gross margin value is M=1782.6 EUR (SD= 2296.80) and gross margin interval is Min=0.00, Max=8.773.

The CI companies generated an average annual profit of $M=20.8 \times 10^5$ ($SD=10.4 \times 10^6$), where the highest profitable company reached profit of Max $=EUR\ 68 \times 10^6$. Average value of assets CI companies reach level $M=12.3 \times 10^6$ EUR, where the highest amount of the company assets in this industry was observed at the highest level of Max $=158.7 \times 10^6$. The average value of the equity corresponds to half part of its assets, $M=6.17 \times 10^6$. Average indebtedness of these companies

M=4116.10 EUR, and level of the highest indebtedness is Max=21422 EUR.

The statistical sample shows the highest positive value of the skewness in the variable "Profit" (Skewness=5.98), which provides the information on a larger representation of companies with lower values of "Profit". Furthermore, there are more companies with a minor "Revenue" value (Skewness=4.77). Based on the facts about kurtosis, we established how the values of the factors are condensed about the mean. The variable "Revenue" shows a positive value for the kurtosis coefficient ($\gamma=25.36$), which signposts that most of the values are condensed about the mean.

"Profit" values show the same tendency ($\gamma=38.50$). The variables on "Assets" ($\gamma=16.94$), "Equity" ($\gamma=33.77$), total "Indebtedness" ($\gamma=2.09$) and "Gross margin" ($\gamma=1.22$) are positive, giving

a clear concentration around the mean, although with different variability.

Since the studies cited in the theoretical background, associate higher profitability with creative value creation, we investigated whether a statistically significant difference arises in the financial ratios of companies from creative industry and companies which do not belong to the creative industry. Nevertheless, we think that highly profitable business outcomes can be

achieved without higher creative value proposition. This assertion would undermine the very principle of an industry's profitability. To verify this, we applied the independent t - test, which told us how significant the difference between two groups is, non-CI companies and CI companies in profitability indicators.

Table 4 Summary results of t-test and homogeneity test for the Pricing Strategy and Financial indicators

Variables	t-test				
	Levene's Statistic	Sig.	t	Sig.	r
Revenue	23.92	.000	3.22	.002	
Profit	17.06	.000	2.37	.019	
Assets	2.50	**.115**	.87	.385	
Equity	7.53	.007	1.66	.099	
Indebtedness	2.60	**.109**	1.18	.238	
Gross margin	5.53	**.200**	1.29	**.020**	.03

Source: the authors' own calculations

Results of the two-sample t-test show statistically significant differences achieved in some financial variables in relation to the implemented pricing strategy (table 4). Statistically significant distinguishing indicator is the "Gross margin" (Lev.Stat=5.53, p-value=.200, t=1.29, p-value=.020) with the overall effect of r=.03. CI companies with well-defined and successfully implemented price strategy achieve on average 3.5 times higher gross margin than CI companies without implemented pricing strategy.

The difference in average values between the groups of CI companies with implemented and not

implemented price strategy was shown for the variable Number of approaches to pricing (Lev.Stat=.90, p-value=.343, t=2.75, p-value =.006) as statistically significant, with the overall effect size of r=.17 (table 6). Companies with an implemented price strategy use on average two approaches in pricing (M=2.06, SD=.68), while companies without implemented pricing strategy, use only one approach (M=1.81, SD=.67). As it turned out, CI companies still rely primarily on a cost-based pricing approach, combined with competitive-based pricing.

Table 5 Summary results of t-test and homogeneity test for the Pricing Strategy and Price management tools

Variables	t-test				
	Levene's Statistic	Sig.	t	Sig.	r
Number of approaches	.90	**.343**	2.75	**.006**	.17
Number of key price management techniques	27.20	**.100**	5.09	**.000**	.30
Number of additional price management techniques	2.84	**.093**	2.12	**.035**	.135
Total number of price management techniques	15.54	.000	4.20	.000	
Number of key price management metrics	5.47	**.020**	3.78	**.000**	.24
Total number of price management metrics	3.06	**.082**	3.02	**.003**	.19

Source: the authors' own calculations

Companies with an implemented price strategy differ statistically in the average number of used key techniques (Lev.Stat=27.20, p-value=.100, t =5.09, p-value=.000) with the overall effect of r =.30. On average, companies with an implemented price strategy use twice more techniques (M= 6.09, SD=4.66) compared to the entities without pricing

strategy (M=3.61, SD=2.98). A significant difference can also be confirmed for the variable additional price techniques (Lev.Stat=2.84, p-value=.093, t=2.12, p-value=.035) with the overall effect of r=.135. We also confirmed a statistically significant dependence between the number of key metrics (Lev.Stat=5.47, p-value=.020, t=3.78, p-

value=.000, (M=3.82, SD =2.37) with the overall effect of r=.24 and the total number of price metrics (Lev.Stat=3.06, p-value=.082, t=3.02, p-value=.003), (M=6.20, SD=3.40) with the overall effect of r=.19 in companies that have implemented pricing strategy.

Although the average revenues of companies with an implemented pricing strategy differ significantly from companies without an implemented pricing strategy, this difference is not statistically significant (Lev.Stat=23.92, p-value =.000, t=3.22, p-value=.002). Companies with an implemented pricing strategy achieve better results in the indicators Total indebtedness (Lev.Stat=2.60, p-value=.109, t=1.18, p-value =.385), (M=.69, SD =.48 / do not have M=.96) and Assets (M=3x109/ do not have M =1.12x109), but this difference could not be statistically confirmed (Lev.Stat=2.50, p-value=.115, t=.87, p-value=.238).

As shown by a profitability analysis of CI companies and non-creative industry companies,

we could not confirm the hypothesis about higher profitability level of CI companies. It is because of the high heterogeneity of CI industry itself, which is also highlighted in Table 2.

Therefore, in the next part of the analysis, we focused on the profitability of sub-creative industries, which we divided into categories defined in terms of output: audio-visual production (movies, broadcasting, and music industry), ICT, publishing (press and book market), architecture (architecture market), event services (events), hardware and software (software and games industry), advertising (advertising market), crafts (design industry), art (art market). A parametric ANOVA test was used to compare the ten sub-sectors of the creative industry based on financial indicators. Based on the results of the Levene's test for the analysis of sphericity and homogeneity of variance, which does not confirm a violation of this assumption (if p > 0.05), we followed the primary hypothesis of statistically significant differences in main parameters.

Table 6 Summary results of ANOVA and homogeneity test for the Price Strategy and Fin. indicators in CI sub-industries

Variables	ANOVA				
	Levene Statistic	Sig.	F	Sig.	r
Revenue	1.14	.367	.42	.915	
Profit	1.3	.372	.30	.982	
Assets	1.45	.208	.57	.814	
Equity	.81	.617	.32	.970	
Indebtedness	2.88	.004	1.63	.098	
Gross margin	5.07	.200	2.04	**.042**	**0.44**
Number of approaches	.98	.469	1.06	.406	

Source: Source: the authors' own calculations

Results of the analysis of variance show that the differences achieved in average values of financial variables are not statistically significant (table 6). Average revenue and Profit vary significantly among the sub-industries, but this difference is not statistically significant (Lev.Stat (revenue) = 1.14, p-value = .367, F = .42, p-value = .915; Lev.Stat (profit) = 1.3, p-value = .372, F = .30, p-value = .982). Also, the economic indicators such as Assets (Lev.Stat = 1.45, p-value = .208, F = .57, p-value = .814), Equity (Lev.Stat = .81, p-value = .617, F = .32, p-value = .970) and Indebtedness (Lev.Stat = 2.88, p-value = .004, F = 1.63, p-value = .098) show wider differences in the average values, but these differences are not statistically significant. Average indebtedness of the industry is 69%, with companies in the art and architectural services sub-industries contributing the most.

As it turned out, the analysed parameters do not differ significantly in their average values, excluding Gross margin, where the statistically

significant difference was confirmed (Lev.Stat= 5.07, p-value=.200, F=2.04, p-value=.042) with the total effect r =.44. The average value of "Gross margin" varies significantly between creative sub-industries. The most profitably sub-industry turns out the architecture services with the average "Gross margin" 75%, followed by Software sub-industry sM(GM) = 58%. Average "Gross margin" from 35% to 41% was observed in the sub – industries fashion and textile design (35%), Art (36%), advertising (38%), publishing (39%) and ICT (41%), with the lowest "Gross margin" work companies in CI oriented on event services (23%). Based on the above analysis, we can talk about low-margin and high-margin CI industries.

Table 7 Summary results of ANOVA and homogeneity test for the Price Stra. and Price Manag. tools in creative sub-ind.

Variables	ANOVA				
	Levene Statistic	Sig.	F	Sig.	r
Number of approaches	.98	.469	1.06	.406	
Number of key price management techniques	1.20	.303	.97	.478	
Number of supplementary techniques	2.58	.09	1.72	.088	
Total number of price management techniques	1.69	.096	1.38	.201	
Number of key price management metrics	1.33	.230	1.23	.287	
Number of supplementary price management metrics	4.63	.000	1.45	.171	
Total number of price management metrics	.70	.732	1.21	.299	

Source: the authors' own calculations

According to Lu, Kweh, He & Shih (2017), companies in the publishing industry, creative life, popular music, and cultural content sector averagely perform better than those in the other three types of CIs in terms of profitability. From the pricing approach point of view, CI companies usually use cost-based and competitive-based pricing. However, the average total number of used price management metrics varies significantly among the sub-industries; also, significant difference cannot be confirmed within the variable "Total number of price management metrics" (Lev.Stat =.70, p-value =.732, F=1.21, p-value =.299) (table 8). The most price management metrics by companies in publishing sub-industry (M=8), on the other end, the least are used in audio-visual production (Mean=4). Publishing sub-industry mostly uses price management techniques (M=9), but the difference in their usage among creative sub-industries is not statistically significant.

Conclusion

Pricing is one of the most challenging business decisions, because it involves several variables and steps that ensure company's profitability and it sustain to the future. Profitability of a business is directly dependent on the sales level, costs, and of the nature of output, including its specific characteristics.

The aim of this research study was to investigate whether the well-defined and successfully implemented price strategy can significantly positively affect profitability of companies of creative industries. At the same time, we investigated whether the level of profitability varies by output type and creative industry sector. Because creative industries include profit and non-profit organizations (Goto, 2017), we have focused on the companies generating profit.

The difference between the profitability of the CI and non-CI companies was not statistically significant. Therefore, we looked more deeply at the CI companies in relation to the implemented price management tools and metrics.

The main goal of our study was to prove the idea of the positive impact of the well-defined and successfully implemented price strategy on profitability of the company. We applied the two-sample t-test to test this hypothesis. We looked at differences in the main financial indicators and price management tools (techniques and metrics which are the core of a price strategy) of companies that have implemented price strategy and those that haven't. Then we could confirm the significant differences achieved in some financial variables in relation to the implemented price strategy. Statistically significant distinguishing indicator is the Gross margin with the overall effect of r =.03. CI companies with well-defined and successfully implemented price strategy achieve on average 3.5 times higher gross margin than CI companies without implemented pricing strategy. We were also able to confirm an interesting fact, that companies with an implemented price strategy differ statistically in the average number of used key techniques with the overall effect of r =.30. On average, companies with an implemented price strategy use twice more techniques compared to the entities without pricing strategy.

Using Analysis of Variance, we compared the creative sub-industry companies to find out the difference in profitability level. Results of the analysis show that the differences achieved in average values of financial and economic variables and price management tools are not statistically significant. Average Revenue and Profit vary significantly among the sub-industries, but this difference is not statistically significant. As it turned out, the analysed parameters do not differ significantly in their average values, excluding gross margin, where the statistically significant difference was confirmed.

When analysing the creative sub-industry, we were inspired by the study from Lu et al. (2017),

where authors stated that companies in the industries of publishing, creative life, popular music, and cultural content averagely perform better than those in the other three types of CIs in terms of profitability. We confirmed a similar result in our study, but only at the level of the parameter "Gross margin". However, we were able to identify other associations related to pricing strategy (defined through price management tools). However, the average total number of used price management metrics varies significantly among the sub-industries, and significant difference cannot be also confirmed within the variable "Total number of price management metrics". The most price management metrics are used by companies in sub-industry publishing (M=8), on the contrary, the least in audio visual production (Mean=4). Publishing sub-industry mostly uses price management technics (M=9), but the difference in their usage among creative sub-industries is not statistically significant.

Based on the findings of studies conducted by other authors as well as our own analyses, we conclude that assessing CI's profitability relative to other industries is inappropriate and represents only a simplistic view of the industry's performance. It is important to observe the profitability in each subindustry of CI, because the nature of the product (output) is different in each segment of this industry.

Limitation of the study

This research paper provides a theoretical background on pricing and price strategy in the creative industry based on research analysis conducted by well-known foreign authors. From our own research, we have been able to establish a correlation between pricing strategy and the profitability of creative industry (CI) companies.

While the results are thought-provoking, the research is limited to a single country and industry. Even though pricing is a determinant of a company's profitability, especially in CI environment, and is intensively discussed in academic and business area, there is a lack of publications on this subject. The heterogeneity of the creative industry structure, which consists of the different entities operating in different areas of the business environment, such as: arts and culture (literature, theatre, music, audio visual, visual arts, design), architecture, crafts, fashion, publishing, software, games, advertising, communication media, ICT, etc. can be seen as a key role of this theoretical and scientific insufficiency in this field.

Further research is necessary to gain a more granular insight into pricing and profitability of companies in the creative sub-industries and cultural industry. It would also be beneficial to explore the relationship between pricing and profitability with revenue models, including pricing models, pricing metrics, and payment systems.

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