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The impact of entrepreneurial characteristics and competencies on business performance in the creative industry in Indonesia

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Abstract

Purpose – The purpose of this study is to examine the impact of the characteristics and competencies of entrepreneurs on business performance within the creative industry in Indonesia. By creative industry, is refer to market-oriented enterprises that use creativity and intellectual capital to create, produce, distribute and disseminate creative goods and services through media channels.

Design/methodology/approach – This study measured six entrepreneurial characteristics: creative and innovative, risk-taking, need for achievement, leadership, autonomy and proactiveness. In addition, it measured five entrepreneurial competencies: opportunity, strategy, relationship, organization and learning. Data collection was conducted using a questionnaire administered to 294 entrepreneurs operating businesses within the creative industry in Java, Sumatra and Kalimantan, Indonesia.

Findings – The findings of this study demonstrated that entrepreneurial characteristics and competencies had a significantly positive effect on business performance. Creativity and innovation emerged as the most influential characteristics, whereas strategy stood out as the most influential competency.

Originality/value – This study aimed to examine whether the personal qualities of entrepreneurs as identified within conventional industries – specifically their entrepreneurial characteristics and competencies – had an impact on business performance in the creative industry in Indonesia. Conventional industries, unlike creative industries, are characterized by the production and distribution of physical goods or basic services, with less emphasis on creative innovation as the core driver.

Keywords Creative industry, Entrepreneurial characteristics, Entrepreneurial competencies

Paper type Research paper

Introduction

The creative industry is an ecosystem where individual talent and ideas are channeled into market-oriented production of intellectual property, leading to innovative goods and services that drive economic and social well-being. The creative industry is a key business sector that drives economic growth and creates jobs globally (Maryunani and Mirzanti, 2015; Chen *et al.*, 2018; Husin *et al.*, 2021). In Indonesia, the creative industry is expected to

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address declines in various areas such as economic growth, poverty, workforce expansion and product competitiveness (Setiadi *et al.*, 2012; Burhanudin *et al.*, 2020). The creative industry is expected to have the capacity to absorb more workers while simultaneously improving the quality of the workforce. The term "creative industry" was introduced in Indonesia in 2007 when the Ministry of Trade of the Republic of Indonesia published a study about it (Maryunani and Mirzanti, 2015).

To promote the creative economy in Indonesia, in January 2015, the government established a nonministerial institution called the "Creative Economy Agency." However, in early 2019, the Creative Economy Agency was merged with the Ministry of Tourism under a presidential policy and became the Ministry of Tourism and Creative Economy. This merger aimed to strengthen the competitiveness of the creative industry against imported products and promote various types of Indonesian creative economy products, thereby fostering the growth of creative economy players who could support both the regional and national economies of Indonesia.

In 2018, the creative industry accounted for approximately 14.28% of employment and contributed 13.77% of Indonesia's total exports. Even amidst the COVID-19 pandemic and the implementation of the Restriction of Community Activities (i.e. the lockdown policy), the creative industry in Indonesia contributed a significant 1.211 tn rupiahs to the country's gross domestic product (GDP). The creative industry in Indonesia encompasses 16 subsectors, among which are three prominent subsectors that make a significant contribution to Indonesia's GDP: handicrafts, culinary arts and fashion [1].

Those employed in the creative industry produce products that emphasize creativity, local cultural values and the intellectual wealth of the individuals who create them (Chen *et al.*, 2018). Initially, creative industry products were primarily regarded by the general public as aesthetic goods (Patten, 2016). Nevertheless, with the rapid development of the creative industry, creative products have also come to be appreciated for their commercial value (Mylonas and Petridou, 2018). The majority of the creative industry in Indonesia consists of micro-, small- and medium-sized enterprises (MSMEs). Entrepreneurship in the creative industry is defined as the creation of culturally valuable products or services for commercial purposes (Chen *et al.*, 2018). An entrepreneur in the creative industry must mediate between the need to express individual creativity and artistry in a product and its commercial value as well as the strategies and planning that are necessary to enhance revenue outcomes (Patten, 2016; Setiadi *et al.*, 2012) while remaining market-oriented in terms of production and distribution (Tomczyk and Spychalska-Wojtkiewicz, 2018).

To enhance entrepreneurial activities in the creative industry, the performance of entrepreneurs needs to be taken into account. Entrepreneurial performance can be influenced by two factors: the personal qualities of the entrepreneur and the business aspects of his or her company (Sarwoko *et al.*, 2013). Research that focuses on the personal qualities of entrepreneurs has analyzed how their demographics, characteristics and competencies affect business performance. Entrepreneurial characteristics are by their nature enduring and resilient and serve as the distinct attributes that contribute to entrepreneurs' potential for success (Sarwoko *et al.*, 2013). On the other hand, entrepreneurial competency is defined as the ability of entrepreneurs to effectively use various resources to enhance performance and achieve success (Al Mamun *et al.*, 2019a). Strong entrepreneurial characteristics are factors that can influence the success of a business, while entrepreneurs with a high level of competency are capable of dealing with various situations, whether it be succeeding in highly competitive environments or uncertain situations (Soejono *et al.*, 2015).

Previous research has shown that the characteristics and competencies of entrepreneurs have a significant positive impact on business performance in conventional industries such as retail, agriculture, manufacturing and so on. Compared to creative industries, which prioritize and leverage creative innovation as a core driver, conventional industries are driven by the production and distribution of tangible goods or essential services. However, less research has been conducted on this topic in the context of the creative industry. Most existing research has focused on the development of the creative industry in designated creative cities in Indonesia, such as Denpasar and Bandung (Duarte *et al.*, 2022; Maryunani and Mirzanti, 2015; Setianti *et al.*, 2017) or on specific subsectors of the creative industry, such as fashion and craft (Foster, 2018; Sumawidjaja *et al.*, 2019). This study aimed to address this gap in the literature by examining whether the personal qualities of entrepreneurs as identified in conventional industries, such as their characteristics and competencies, have an impact on business performance in the diverse subsectors of the creative industry in Indonesia.

Literature review

The creative industry

Creative industries are market-oriented enterprises that use creativity and intellectual capital to create, produce, distribute and disseminate creative goods and services through media channels (Sumawidjaja *et al.*, 2019). This focus on originality and intellectual property distinguishes it from other industries. On a global scale, creative industries are recognized for their remarkable contribution to product and technological innovation, surpassing conventional industries in this regard (Tomczyk and Spychalska-Wojtkiewicz, 2018). However, in Indonesia, the creative industry presents a unique perspective. While innovation and intellectual property remain important aspects, it also embraces and integrates the nation's rich traditional cultural heritage (Hidayat and Asmara, 2017; Duarte *et al.*, 2022). For instance, in the realm of product design, this manifests through the incorporation of traditional motifs and materials into the creation of furniture, homeware and accessories. According to Syahbudi *et al.* (2023), individual creativity and innovation drive the creative industry, creating jobs and improving well-being in communities. Recognizing these benefits, Indonesia values its creative industry for its contributions to economic growth, reduce unemployment, national identity, innovation and social well-being (Hikmah *et al.*, 2023; Setianti *et al.*, 2017; Sumawidjaja *et al.*, 2019).

The creative industries encompass a diverse range of sectors that leverage creativity and talent to generate economic and social value. In the UK, the creative industries traditionally include visual and performing arts, heritage and cultural industries like cinema, publishing, advertising, design, television, fashion and computer games (Gutierrez-Posada *et al.*, 2023). Germany uses a similar definition under the term "Kulturwirtschaft" encompassing nine core sectors: music, book market, art market, film, broadcasting, performing arts, design, architecture and press/print media (Tomczyk and Spychalska-Wojtkiewicz, 2018). Indonesia, however, adopts a broader categorization with 16 subsectors within its creative industry, including app and game development, architecture, visual communication design, product design, film and animation, photography, crafts, culinary arts, music, fashion, publishing, advertising, television and radio, performing arts and visual arts.

Entrepreneurial characteristics

Entrepreneurial characteristics vary from one individual to another. However, there are distinctive characteristics possessed by entrepreneurs that can generate a strong work ethic, thus influencing business performance. Entrepreneurial characteristics can be classified into

two major groups: psychological and nonpsychological characteristics. Nonpsychological characteristics include age, marital status, gender, religion, family influence, work experience and education. Meanwhile, psychological characteristics can take the form of creativity/innovation, risk-taking, autonomy, proactiveness and leadership (Sarwoko *et al.*, 2013; Bawakyillenuo and Agbelie, 2021; Salve, 2022; Setiawan and Soelaiman, 2022).

Creativity and innovation are the most crucial elements of businesses operating in the creative industry. Creativity refers to the ability to generate new products or features to create solutions for problems, especially in uncertain situations (Al Mamun and Fazal, 2018). On the other hand, innovation refers to the outcome and implementation of creativity through a process that generates added value for consumers, such as new products, new processes, the development of new distribution channels or new raw materials (Cho and Lee, 2018; Wohl, 2021). Innovation in the creative industry arises from entrepreneurs who take their unique expressions and values, and turn them into commercially viable products and services (Tomczyk and Spychalska-Wojtkiewicz, 2018).

Risk-taking refers to an entrepreneur's willingness to take bold actions and a readiness to commit significant resources that involve a high level of risk (Islam *et al.*, 2011; Ferreras-Méndez *et al.*, 2021). The process of taking risks demonstrates the extent to which an entrepreneur can bear the potential loss of resources when making decisions in uncertain situations with the hope of achieving greater profits or avoiding undesirable consequences (Širec and Močnik, 2012). The need for achievement refers to an individual's tendency to concentrate on objectives, exert skills and abilities to achieve a desired goal and to display a high level of engagement at work (Kong and Choo, 2022; Salve, 2022; Setiawan and Soelaiman, 2022).

Leadership is one of the distinctive characteristics of entrepreneurs that is essential to entrepreneurial performance (Nguyen *et al.*, 2021; Østergaard, 2018). The implications of strong leadership include the ability to organize and delegate tasks and the aptitude to manage resources effectively, to motivate others to enhance their performance and to engage all stakeholders in achieving a common objective (Mustapha *et al.*, 2020; Østergaard, 2018). In a similar vein, autonomy pertains to the ability of an entrepreneur to be self-reliant in realizing the concept and vision of a business (Islam *et al.*, 2011). Autonomy is required by entrepreneurs in the creative industry for freedom in decision-making, controlling strategies and determining business plans (Albert and Couture, 2013). It empowers individuals with a sense of authority over their professional endeavors, which allows for creative and innovative thinking in product creation and problem-solving (Galloway and Haniff, 2015). Finally, proactiveness allows entrepreneurs to make strategic and progressive decisions and enhances their ability to detect market changes faster than their competitors and transform them into advantageous opportunities (Cho and Lee, 2018; Ferreras-Méndez *et al.*, 2021).

Entrepreneurial competencies

Entrepreneurial competencies are defined as a specific set of valuable knowledge, skills and abilities possessed by entrepreneurs in running their businesses to differentiate themselves from others, which can enhance business performance (Al Mamun *et al.*, 2019b; Irene, 2017; Tehseen and Ramayah, 2015). Entrepreneurial competencies integrate technical and nontechnical skills into unique behaviors that are difficult for competitors to imitate (Barazandeh *et al.*, 2015; Zainol *et al.*, 2018). The more unique the entrepreneurial competency, the greater its impact on business performance and the greater the ability of entrepreneurs to create competitive advantages in their ventures (Al Mamun *et al.*, 2019a).

Opportunity is defined as the ability of entrepreneurs to use their knowledge and experience to identify and select information that advances their businesses (Botha *et al.*, 2019;

Vidyatmoko and Hastuti, 2017). Entrepreneurs play a dual role in identifying opportunities. They can either be discovery-oriented, seeking out and capitalizing on existing market needs, or creation-oriented, actively exploring unmet consumer needs and shaping new markets (Patten, 2016; Tehseen and Ramayah, 2015; Zainol *et al.*, 2018). Strategy refers to entrepreneurs possessing the ability to set clear objectives, develop implementation steps to achieve them, monitor progress, adjust strategies based on changes in problems or opportunities and evaluate the costs and benefits of those strategies (Man, 2001; Sarwoko *et al.*, 2013).

Relationship refers to the ability to cultivate strong connections with partners, customers, suppliers and employees through dedicated communication (Islam *et al.*, 2011). This fosters mutually beneficial opportunities, such as increased consumer purchases and recommendations, improved cooperation agreements with partners and suppliers and attracted investments (Zainol *et al.*, 2018). Organizing refers to an entrepreneur's ability to effectively manage resources, lead and motivate employees, delegate tasks, oversee program development and plan finances (Man, 2001; Mustapha *et al.*, 2020). Learning refers to the ability of entrepreneurs to learn various things in different ways, to strive to stay up-to-date in their fields and to implement the knowledge and skills they have acquired (Man, 2001). Entrepreneurs with this competency make an effort to keep up with technological advancements, policy changes and other market shifts to avoid falling behind competitors and remain relevant to their customers.

Business performance

In the field of entrepreneurship and research focused MSMEs, entrepreneurial performance is considered a critical benchmark for evaluation. This applies to both empirical studies, which rely on data and observation, and theoretical models, which provide frameworks for understanding entrepreneurial behavior (Man, 2001). Business performance is a multidimensional construct that encompasses the operational and financial aspects of a company (Al Mamun *et al.*, 2019a). Both financial and nonfinancial indicators can be used to explain business performance (Agbim, 2014; Barazandeh *et al.*, 2015; Islam *et al.*, 2011; Irene, 2017). Financial indicators consist of sales growth, profit growth, customer growth and asset growth (Širec and Močnik, 2012; Vidyatmoko and Hastuti, 2017; Al Mamun and Fazal, 2018; Zainol *et al.*, 2018). This study aimed to examine business performance using the financial indicators of sales, profit and customer growth.

The achievement of superior business performance is influenced by its resources, the characteristics of the entrepreneur, the MSME's characteristic, unique entrepreneurial competencies and chosen strategies (Agbim, 2014). The competencies and characteristics possessed by an entrepreneur play a crucial role not only as a means of surviving in a competitive environment but also in directly impacting business performance (Sarwoko *et al.*, 2013; Soejono *et al.*, 2015), especially when the entrepreneur operates the business single-handedly with only a few employees (Vidyatmoko and Hastuti, 2017). As such, this research examined the influence of entrepreneurial characteristics and competencies on enhancing company performance in the creative industry.

Research methodology

This study analyzed whether the personal qualities of entrepreneurs – their characteristics and competencies – influenced the performance of businesses in the creative industry. Characteristics are measured in terms of the creativity and innovation possessed by entrepreneurs, their willingness to take risks, their ability to act independently, their proactivity in terms of decision-making and their leadership skills. Competencies, on the

other hand, are measured according to an entrepreneur's ability to identify opportunities, to maintain good communication with external and internal parties, to organize available resources and create strategies and the ability to learn new things.

Sample size

The sample for this study consisted of 294 entrepreneurs from various subsectors within the creative industry in Indonesia. These subsectors included fashion; visual communication design; crafts; culinary; publishing; advertising; photography; film, animation and video; and product design. The entrepreneurs were spread across several islands in Indonesia: Java (specifically, Jakarta, West Java, Central Java and East Java), Sumatra and Kalimantan. Data were obtained through offline and online interviews with business owners using a questionnaire.

Research instrument

This study used a questionnaire as the instrument to gather data. This study used a structured questionnaire as the primary instrument for data collection. The questionnaire, designed by the researcher, was administered in an interview format by trained enumerators. Enumerators received comprehensive training on the questionnaire content, proper interviewing techniques and participant confidentiality protocols. The questionnaire was divided into three parts. The first part collected demographic information about the participating entrepreneurs, such as their gender, age, highest level of education and marital status. The second part measured the characteristics and competencies possessed by the entrepreneurs, while the third part measured business performance over the preceding three years. To measure business performance and entrepreneurial characteristics and competencies, this study used a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Likert scale is frequently used in the social sciences because it can assess responses to a series of statements by having participants indicate their level of agreement with each statement (Croasmun and Ostrom, 2011). This method is commonly used to measure psychological constructs, which can quantify a person's thoughts and attitudes (Batterton and Hale, 2017). Likert scale questionnaires offer several advantages over other survey instruments, including the ability to collect data efficiently from a large number of respondents and to provide reliable estimates of individual abilities (Nemoto and Beglar, 2014).

Data analysis method

Structural equation modeling (SEM) is a collection of statistical techniques that allow for the examination of relationships between one or more independent variables and one or more dependent variables. It is also known as causal modeling (Ullman and Bentler, 2013). SEM is a confirmatory approach to testing theoretically established relationships using actual data, and many researchers use SEM to evaluate how well the assumed model is supported by data (Hair *et al.*, 2012; Kang and Ahn, 2021). SEM as a statistical analysis tool is widely used in social science research with the main aim of identifying factors that can influence the success of target constructs (Sarstedt *et al.*, 2021). In this study, SEM analysis was conducted using the Linear Structural Relationship software (LISREL) version 8.70. LISREL is a computer program for covariance structure analysis that uses multivariate techniques that combine factor analysis modeling from psychometric theory and the SEM associated with econometrics (Reisinger and Turner, 1999).

Findings

Demographic characteristics

Approximately 35.7% of the respondents were female and the remaining 64.3% were male, with marital status reported as 57.1% married and 42.9% not married. The age distribution of respondents revealed that 53.4% fell within the 30–39-year range, followed by 25.5% (20–29 years), 19% (40–49 years) and 2.1% (over 49 years). In terms of level of education, 43.5% of the respondents had earned a bachelor's degree, 27.9% had secondary school degree, 23.1% had earned a D3 degree, 3.1% had a primary school level of education and 2.4% had earned a postgraduate degree. A total of 63.9% of responding entrepreneurs employed fewer than five employees, 27.6% employed between five and ten people, 3.7% employed between 10 and 15 people, 3.1% employed more than 20 people and 1.7% employed between 15 and 20 people.

Goodness of fit

In SEM studies, a test is used to evaluate the model by examining its goodness-of-fit value. Goodness of fit aims to evaluate the overall model and measure how well the created model represents the actual events presented in the data (Kang and Ahn, 2021; Ullman and Bentler, 2013). The evaluation of model fit in SEM does not use a single significance test but rather considers several significance tests together to assess whether the model is consistent with the empirical data (Schermelleh-Engel *et al.*, 2003). The results of the model fit analysis for this study are presented in Table 1.

In SEM, a good fit for measurement model is achieved when the estimated measurement matrix closely resembles the covariance matrix of the observed data. This suggests that the model accurately captures the relationships between the latent variables and the observed variables it uses. This research evaluated the model's fit to the data using eight goodness-of-fit indices. These indices, which serve as statistical criteria for assessing model adequacy, included the Root Mean Square Error of Approximation (RMSEA) and the Root Mean Squared Residual (RMR). The RMSEA value of 0.0213 fell within the acceptable range ($\leq$0.05), indicating a close fit between the model and the observed data. Similarly, the RMR value of 0.020 satisfied both common cut-off criteria ($\leq$0.05 or $\leq$0.1), further supporting the model's fit. Furthermore, the analysis used comparative fit indices such as the Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Non-normed Fit Index (NNFI) and Incremental Fit Index (IFI). All these indices exhibited values exceeding their respective recommended thresholds (GFI, AGFI, NFI $\geq$ 0.95; CFI, NNFI, IFI $\geq$ 0.97). Collectively, these results provide strong evidence

Goodness-of-fit	Cut-off value	Result	Remark
Root Mean Square Residual (RMR)	≤0.05	0.02	Good fit
Root Mean Square Error of Approximation (RMSEA)	≤0.05	0.02	Good fit
Goodness-of-Fit Index (GFI)	≥0.95	0.99	Good fit
Adjusted Goodness-of-Fit Index (AGFI)	≥0.90	0.99	Good fit
Comparative Fit Index (CFI)	≥0.97	1.00	Good fit
Normed Fit Index (NFI)	≥0.95	0.99	Good fit
Non-normed Fit Index (NNFI)	≥0.97	1.00	Good fit
Incremental Fit Index (IFI)	≥0.90	1.00	Good fit
Relative Fit Index (RFI)	≥0.90	0.99	Good fit

Table 1.
Goodness of fit

Source: Table by author

for the model's overall fit and its ability to adequately represent the underlying relationships within the data.

Validity and reliability

SEM relies heavily on the quality of its measurement model. This model specifies the relationships between the latent variables (underlying constructs) and the observed indicator variables used to measure them. Validity testing examines if the indicators significantly contribute to explaining the variance of the latent variable (underlying constructs), whereas reliability testing focuses on the consistency of the measurement (Ardi and Isnayanti, 2020).

To measure the validity of the indicators for explaining the latent variables, the standardized loading factor values need to be examined. Standardized loading factors are a key metric used to assess the validity of indicator variables. In SEM, a commonly used validity threshold is a standardized loading factor value of $\geq$0.05 (Ardi and Isnayanti, 2020). Table 2 shows that all of the indicator variables for the entrepreneur characteristics latent variable have standardized loading factor values exceeding 0.05. This provides evidence that these indicators are valid in capturing the intended variable of entrepreneur characteristics.

Similarly, for the entrepreneurial competencies variables, all of the indicators had standardized loading factor values greater than 0.05. This means that all five indicators could be used to measure the entrepreneurial competencies variables. The business performance variables, which were explained by the three indicators of profit growth, sales growth and customer growth, had standardized loading factor values greater than 0.05. This provides evidence that these indicators demonstrating the ability to converge on the latent variable of business performance.

Furthermore, to measure reliability of the latent variables, reference is made to the values of composite reliability (CR) and average variance extracted (AVE), in which a latent variable can be considered reliable if the CR value is >0.7 and the AVE value is >0.5 (Al Mamun and Fazal, 2018; Ardi and Isnayanti, 2020). As shown in Table 2, all three latent variables (entrepreneurial characteristics, entrepreneurial competency and business

Variable	Indicator		Loading factors	*T*-statistic	Standard deviation	CR	AVE
Karakteristik Wirausaha	Self-confidence	X11	0.80	32.73	0.37	0.9309	0.6930
	Autonomy	X12	0.74	30.68	0.45		
	Risk taking	X13	0.88	33.62	0.22		
	Leadership	X14	0.82	32.99	0.33		
	Creative and innovative	X15	0.93	33.49	0.21		
	Proactiveness	X16	0.85	32.13	0.29		
Kompetensi Wirausaha	Learning	X21	0.91	26.85	0.21	0.9437	0.7708
	Strategy	X22	0.94	27.17	0.18		
	Relationship	X23	0.81	28.89	0.34		
	Opportunity	X24	0.89	33.76	0.21		
	Organizational	X25	0.88	33.37	0.23		
Performance	Profit growth	Y1	0.85	19.96	0.28	0.9001	0.7505
	Sales growth	Y2	0.91	21.00	0.18		
	Customer growth	Y3	0.84	19.46	0.29		

Source: Table by author

Table 2. Validity and reliability

performance) satisfied these criteria with CR and AVE values above 0.7 and 0.5, respectively. This indicates that the measurement of these constructs demonstrates good internal consistency.

Path analysis

LISREL provides two key metrics for evaluating the measurement model: *T*-statistics and standardized loading factors. *T*-statistics assess the statistical significance of the relationship between an indicator variable and its corresponding latent variable. A significant *T*-value (often exceeding a threshold like 1.96) suggests a strong association between the indicator and the latent variable it represents. Standardized loading factors, on the other hand, quantify the strength and direction of this relationship. A higher standardized loading factor indicates a greater influence of the indicator variable on the latent variable.

As shown in Table 2, these metrics provide insights into the significance and influence of the indicator variables on their respective latent constructs. Analysis revealed significant relationship (*T*-statistic > 1.96) between all indicators and their respective latent variables (entrepreneur characteristic, entrepreneurial competency and business performance). Standardized loading factors further supported the analysis, revealing strong influences of the indicators on their respective latent variables. These influences ranged from 0.74 (autonomy) to 0.93 (risk-taking) for entrepreneur characteristic latent variable, from 0.88 (organizing) to 0.94 (strategy) for entrepreneur competency latent variable, and ranging from 0.84 (customer growth) to 0.91 (sales growth) for business performance variable latent.

Table 3 focuses on the evaluation of the structural model, which measures and explains the relationships and influences among the latent variables in a study (Ardi and Isnayanti, 2020). The table also reveals the impact and the significance of the "entrepreneurial characteristics" and "entrepreneurial competency" latent variables on the "business performance" latent variable. The entrepreneur characteristics had a positive influence on business performance, with a loading factor of 0.37 and a *T*-statistic value of 2.51, which was greater than 1.96, indicating the significance of the entrepreneur characteristics variable. The latent variable entrepreneurial competencies had a *T*-statistic value of 3.88 (>1.96) and a standardized loading factor value of 0.58, indicating that entrepreneurial competencies significantly influenced business performance. Furthermore, the study evaluated the model's explanatory power using the *R*-square value (Ardi and Isnayanti, 2020). This value, typically exceeding 0.5, indicates a good model fit. In this case, the model achieved an *R*-square of 0.54, exceeding the recommended threshold (Ardi and Isnayanti, 2020) and suggesting that the model effectively explains the relationships between the variables.

Discussion

In the context of business performance, entrepreneurial characteristics can be key factors that influence it positively (Shakeel *et al.*, 2020; Troise and Tani, 2020). This study showed

Path	Standardized loading factor	*T*-statistic
Characteristic entrepreneur → business performance	0.37	2.51
Competency entrepreneur → business performance	0.58	3.88

Table 3.
Path result

Source: Table by author

that the success of business performance in the creative industry was positively and significantly influenced by entrepreneurial characteristics. The findings of this study were consistent with previous research (Ferreras-Méndez *et al.*, 2021; Hoque, 2018; Marlina *et al.*, 2023; Rahmidani *et al.*, 2023; Srimulyani *et al.*, 2023; Wijaya and Rahmayanti, 2023). The characteristics of entrepreneurs in MSMEs are highly influential on business performance, as demonstrated by several studies (Ferreras-Méndez *et al.*, 2021; Hoque, 2018; Marlina *et al.*, 2023; Srimulyani *et al.*, 2023), due to the inherent characteristics of MSMEs. Unlike larger corporations with established structures and resource abundance, MSMEs often operate with limited financial and human capital. In this environment, the entrepreneur's skills and decision-making abilities become paramount. Wijaya and Rahmayanti (2023) further emphasized this point, highlighting the significant influence of entrepreneurial characteristics on business performance within the creative industry, particularly in the handicraft subsector (Marlina *et al.*, 2023; Rahmidani *et al.*, 2023). The entrepreneur's ability to identify unique materials, translate traditional techniques into contemporary designs and tell the story behind the product can significantly differentiate the offerings. In essence, the creative industry thrives on the very characteristics that define a successful entrepreneur. Entrepreneur's vision, creativity, adaptability and networking skills become the driving force behind an MSME's success in this dynamic and competitive landscape.

Creativity and innovation are considered the most influential indicators of entrepreneurial characteristics impacting business performance in this study. This aligns with existing research suggesting a strong correlation between these entrepreneurial traits and success in the creative industry (Hossain *et al.*, 2022; Kneipp *et al.*, 2019; Marlina *et al.*, 2023; Mylonas and Petridou, 2018; Wijaya and Rahmayanti, 2023). Notably, entrepreneurs with strong creative and innovative competencies are demonstrably more adaptable to the disruptive trends and rapid technological advancements that characterize the creative landscape, which enables them to navigate these challenges more effectively compared to their counterparts who lack such competencies (Kilu *et al.*, 2023). However, some researchers found the opposite (Al Mamun and Fazal, 2018; Cho and Lee, 2018). For example, Al Mamun and Fazal (2018) found that influencing business performance requires other supporting factors and competencies beyond creativity and innovation.

Indonesia's status as one of the world's most populous nations fosters a highly competitive environment within its creative industry. Therefore, entrepreneurs who effectively leverage creativity and innovation in their products can gain a competitive edge by differentiating themselves from others. This differentiation can be achieved not only through product uniqueness but also by incorporating local traditional culture, which results in distinctive offerings. For instance, a fashion designer might use traditional weaving techniques or incorporate local embroidery patterns into their clothing lines. This can be a competitive advantage for business owners because individual entrepreneurs within the same culture have different ideas about how to represent cultural characteristics in their products. As Krisiukėnienė and Pilinkienė (2023) mentioned, leveraging cultural identity in the creative industry can act as a strategic tool for both enhancing brand value and increasing global recognition.

Another indicator is risk-taking, which is intricately linked to the creative and innovative processes undertaken by entrepreneurs (Henriksen *et al.*, 2021). Entrepreneurs in the creative industry strive to realize their creative ideas and translate them into innovative products, although there is no guarantee that these ideas and innovations will be fully successful and accepted by consumers. Entrepreneurs, known for their ability to navigate uncertainty, seize opportunities by meticulously evaluating risks and allocating resources strategically to maximize profits (Cho and Lee, 2018; Al Mamun and Fazal, 2018).

This study identifies proactiveness as a significant factor impacting business performance. This finding aligns with prior research demonstrating a positive influence of proactiveness on business outcomes (Hossain *et al.*, 2022; Rezaei and Ortt, 2018). In the dynamic and ever-evolving creative industry, proactiveness allows entrepreneurs to anticipate and capitalize on emerging trends, identify new market opportunities and adapt their strategies quickly. This proactive approach fosters not only a responsive decision-making style but also a proactive exploration and exploitation of new products and markets (Ferreras-Méndez *et al.*, 2021; Hossain *et al.*, 2022; Rahmidani *et al.*, 2023).

This study reinforces the established notion that leadership practices significantly impact business performance, aligning with previous research findings (Nguyen *et al.*, 2021; Purwati *et al.*, 2020; Srimulyani *et al.*, 2023). Effective leadership in the creative industries necessitates a synergistic approach that balances employee motivation for high productivity with fostering their creative talent and thought processes (Holzmann and Mazzini, 2020). This ensures a sustainable flow of innovative ideas and high-quality output within the organization. Apart from fostering a creative environment, good leadership can encourage the product innovation process to be executed effectively and promote continuity in those innovations (Saiyed, 2019).

The need for achievement is a vital characteristic for entrepreneurs in the creative industry (Gregori *et al.*, 2021; Setiawan and Soelaiman, 2022). It fuels innovation and risk-taking, sustains motivation and resilience, fosters a focus on excellence and quality and drives continuous improvement, all critical elements for success in this dynamic field. Individuals in the creative industry maintain high standards and a high level of commitment to their work (Tomczyk and Spychalska-Wojtkiewicz, 2018) because they express their creativity and artistic values in the products and services they create (Patten, 2016). The need for achievement serves as a driving force for individuals to succeed and continuously improve their job performance to fulfill personal aspirations without encountering failure (Anwar and Saleem, 2019; Mahmood *et al.*, 2020). Lastly, entrepreneurial autonomy is also a critical characteristic for achieving superior business performance (Albert and Couture, 2013). It empowers creativity and innovation, fosters a sense of ownership and accountability and enhances problem-solving and adaptability – all essential elements for success in this dynamic environment.

Business performance in this study was influenced not only by the characteristics of the entrepreneurs but also by their entrepreneurial competencies. This finding aligned with previous research that yielded similar conclusions (Gunartin *et al.*, 2023; Mustapha *et al.*, 2020; Rehman *et al.*, 2023; Sukriani *et al.*, 2023; Umar *et al.*, 2018), who all identified a strong correlation between entrepreneurial competencies and the business performance of micro, small and medium enterprises (MSMEs). Further emphasizing this point, Umar *et al.* (2018) investigated 12 distinct entrepreneurial competencies (strategic, commitment, conceptual, opportunity recognition, organizing and leading, relationship building, learning, personal, technical, familism, ethical and social) in the context of Malaysian MSMEs, revealed that all 12 competencies significantly impacted business success. Building upon Gunartin *et al.* (2023) findings in the Indonesian context, a robust foundation in entrepreneurial competencies empowers MSME owners to navigate challenges, make informed decisions and manage resources effectively, ultimately achieving superior business performance.

Sukriani *et al.* (2023) further emphasized the significant influence of entrepreneurial competencies on business performance within the creative industries, particularly in the culinary subsector. Their research aligns with the observations presented here, highlighting the crucial role entrepreneurs play in shaping the success of creative ventures. The unique nature of creative industry places a heavy reliance on leadership and decision-making by

founders. Consequently, the abilities and competencies of the entrepreneur have a significant impact on a business's success. Entrepreneurial competencies go beyond artistic vision, equipping individuals to translate their creative ideas into commercially viable products or services. Financial management, strategic marketing decisions and the development of sustainable business models are all facilitated by these competencies, ensuring the financial security of creative endeavors alongside their artistic merit.

The analysis revealed that strategic and learning competencies emerged as the most influential factors within the entrepreneurial competency framework impacting business performance. This finding was consistent with the research by Umar *et al.* (2018), which stated that the strategy and learning competencies contributed to improved business performance. Having a competency in strategy is essential for entrepreneurs to establish goals and initiate actions using systematic, rational and logical planning methods (Donkor *et al.*, 2018; Al Mamun *et al.*, 2019b). By maximizing their strategy competency, entrepreneurs can analyze potential long-term customer interests to increase product sales without compromising the idealism and creative characteristics of the product. Entrepreneurs can also leverage other competencies to implement their strategies effectively (Cong and Thu, 2021; Mustapha *et al.*, 2020).

On the other hand, the learning competency is necessary to motivate entrepreneurs to continuously and proactively learn, to update their knowledge and information related to their business and to apply that knowledge to their ventures (Mustapha *et al.*, 2020). Hence, the learning competency has a positive impact on business performance, aligns with previous research (Salisu and Abu Bakar, 2020). The creative industry is a whirlwind of ever-evolving trends, emerging technologies and shifting consumer preferences. Entrepreneurs with a robust learning mindset can navigate this dynamism by actively acquiring new knowledge and adapting their businesses accordingly. Furthermore, learning competency empowers entrepreneurs to embrace new technologies, effectively integrate them into their operations and leverage their potential for business growth.

Business performance within the creative industries hinges not only on artistic expression, but also on the entrepreneur's capacity to effectively identify opportunities, adapt to evolving market trends and ensure alignment between creative offerings and consumer demands (Chen *et al.*, 2018). This competency allows entrepreneurs to act as proactive trendspotters, identifying unmet needs and market gaps. By capitalizing on these opportunities, they can develop innovative products or services that resonate with target audiences and generate new revenue streams. Entrepreneurs can anticipate changes in market demands and identify opportunities that cater to shifting consumer tastes, allowing their creative offerings to remain relevant and competitive. While the creative industry often operates with smaller teams, organizing competency remains a critical driver of business performance. This competency empowers entrepreneurs to navigate the complexities of even seemingly simple projects. By effectively breaking down tasks into manageable stages, delegating responsibilities and ensuring smooth project flow, organizing competency minimizes wasted time and resources, leading to efficient project completion and improved financial performance. Furthermore, it fosters a collaborative environment by establishing clear team structures, defining roles effectively and encouraging open communication.

The last competency, the relationship competency, is needed to establish and sustain networking relationships with both current and potential stakeholders (Al Mamun *et al.*, 2019a). This competency fosters a network of strong and mutually beneficial relationships with various stakeholders, ultimately propelling business growth and success. First, relationship competency allows entrepreneurs to build trust with clients. Effective communication, active listening and a genuine understanding of client needs cultivate a

positive working environment and foster repeat business. Second, it facilitates the development of strategic partnerships and collaborations. The more connections they have, the more opportunities they can pursue. Furthermore, relationship competency strengthens the brand image and reputation of the business. Positive interactions with clients, collaborators and industry professionals build trust and establish a strong brand identity.

Conclusion

Conclusion, limitations and direction for future research

Entrepreneurs in the creative industry must enhance their creativity and innovation in product development to succeed in the competitive domestic and international markets. Entrepreneurs also need to develop strategies and learning competencies to improve their businesses' performance. Strategies are essential for businesses to operate in a structured and visionary manner, with a focus on short-term and long-term planning. Learning is also important for businesses to stay relevant to consumers by adapting to changing market trends and consumer preferences.

The government's support initiatives for entrepreneurs in creative industry should encompass a comprehensive and strategic approach. The focus should shift toward facilitating long-term business sustainability, which would enable creative entrepreneurs to not only establish themselves but also to thrive in a dynamic and competitive marketplace. This can be achieved through a multifaceted approach, including: creative incubators (nurturing grounds with resources and mentorship to help creative businesses hatch and grow), innovation grants and funding (financial resources to fuel the development of new and innovative creative ideas), mentorship programs (pairing experienced professional with creative entrepreneurs to provide guidance and support), cultural heritage exhibitions (platforms for showcasing creative works that draw inspiration from or celebrate cultural heritage) and trade and export promotions (programs that help creative entrepreneurs connect with international markets).

In terms of limitations, this study solely examined the direct influence of entrepreneurial characteristics and competencies on business performance without considering any mediating variables that might indirectly affect business performance. Moreover, it focused exclusively on entrepreneurs in the creative industry.

To comprehensively understand the determinants of business performance within the creative industry, further research efforts should be directed toward unveiling the multifaceted influence on multiple aspects of creative business performance. This includes analyzing both direct and indirect effects on metrics such as financial performance, market performance and innovation performance. By delving deeper into the direct and indirect effects across these various aspects of performance, researchers can gain a richer understanding of how different factors influence the success of entrepreneurs in creative industry.

Note

1. www.kemenparekraf.go.id/rumah-difabel/industri-kriya-satu-dari-tiga-jagoan-penyumbang-pdb-ekonomi-kreatif

References

Agbim, K.C. (2014), "Moderating effects of individual entrepreneur and enterprise characteristics on the relationship between business environmental scanning behaviour and entrepreneurial performance", *Journal of Business Studies Quarterly*, Vol. 6 No. 1, pp. 248-269.

Al Mamun, A. and Fazal, S.A. (2018), "Effect of entrepreneurial orientation on competency and micro-enterprise performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 3, pp. 379-398, doi: 10.1108/apjie-05-2018-0033.

Al Mamun, A., Fazal, S.A. and Muniady, R. (2019a), "Entrepreneurial knowledge, skills, competencies and performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 13 No. 1, pp. 29-48, doi: 10.1108/apjie-11-2018-0067.

Al Mamun, A., Muniady, R., Fazal, S.A. and Malarvizhi, C.A. (2019b), "Micro-enterprise development training and entrepreneurial competencies among low-income households in Malaysia", *Asia Pacific Journal of Innovation and Entrepreneurship, Emerald*, Vol. 13 No. 3, pp. 354-366, doi: 10.1108/apjie-06-2019-0042.

Albert, M.N. and Couture, M.M. (2013), "The support to an entrepreneur: from autonomy to dependence", *SAGE Open*, Vol. 3 No. 2, pp. 1–9, doi: 10.1177/2158244013492779.

Anwar, I. and Saleem, I. (2019), "Exploring entrepreneurial characteristics among university students: an evidence from India", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 13 No. 3, pp. 282-295, doi: 10.1108/apjie-07-2018-0044.

Ardi, N. and Isnayanti, L. (2020), "Structural equation modelling-partial least square to determine the correlation of factors affecting poverty in Indonesian provinces", *IOP Conference Series: Materials Science and Engineering*, Vol. 846 No. 1, doi: 10.1088/1757-899X/846/1/012054.

Barazandeh, M., Parvizian, K., Alizadeh, M. and Khosravi, S. (2015), "Investigating the effect of entrepreneurial competencies on business performance among early-stage entrepreneurs global entrepreneurship monitor (GEM 2010 survey data)", *Journal of Global Entrepreneurship Research*, Vol. 5 No. 1, doi: 10.1186/s40497-015-0037-4.

Batterton, K.A. and Hale, K.N. (2017), "*The Likert Scale What It is and How to Use It, Phalanx*", Vol. 50 No. 2, pp. 32-39, available at: www.jstor.org/stable/26296382

Bawakyillenuo, S. and Agbelie, I.S.K. (2021), "Environmental consciousness of entrepreneurs in Ghana: How do entrepreneur types, demographic characteristics and product competitiveness count?", *Sustainability (Switzerland)*, Vol. 13 No. 16, pp. 1-16, doi: 10.3390/su13169139.

Botha, M., Carruthers, T.J. and Venter, M.W. (2019), "The relationship between entrepreneurial competencies and the recurring entrepreneurial intention and action of existing entrepreneurs", *The Southern African Journal of Entrepreneurship and Small Business Management*, Vol. 11 No. 1, pp. 1-16, doi: 10.4102/sajesbm.v11i1.191.

Burhanudin, M., Rindayati, W. and Anggraeni, L. (2020), "Analysis of creative industries development in Indonesia", *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, Vol. 49 No. 1, pp. 195-205.

Chen, M.H., Chang, Y.Y. and Pan, J.Y. (2018), "Typology of creative entrepreneurs and entrepreneurial success", *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 12 No. 5, pp. 632-656, doi: 10.1108/JEC-07-2017-0041.

Cho, Y.H. and Lee, J.H. (2018), "Entrepreneurial orientation, entrepreneurial education and performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 2, pp. 124-134, doi: 10.1108/apjie-05-2018-0028.

Cong, L.C. and Thu, D.A. (2021), "The competitiveness of small and medium enterprises in the tourism sector: the role of leadership competencies", *Journal of Economics and Development*, Vol. 23 No. 3, pp. 299-316, doi: 10.1108/jed-06-2020-0080.

Croasmun, J.T. and Ostrom, L. (2011), "Using Likert-type scales in the social sciences", *Journal of Adult Education*, Vol. 40 No. 1, pp. 19-22.

Donkor, J., Donkor, G.N.A. and Kwarteng, C.K. (2018), "Strategic planning and performance of SMEs in Ghana", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 No. 1, pp. 62-76, doi: 10.1108/apjie-10-2017-0035.

Duarte, B.A.M., Pfeffer, K., Indriansyah, N.R., Bhuana, A.A.D.C., Aritenang, A.F., Nurman, A., Zul Fahmi, F., Ramdan, D., Iskandar, Z.S. and Maduereira, M. (2022), "Creative industries in Indonesia: a socio-spatial exploration of three Kampongs in Bandung", *Creative Industries Journal*, Vol. 17 No. 1, pp. 1-29, doi: 10.1080/17510694.2022.2077557.

Ferreras-Méndez, J.L., Olmos-Peñuela, J., Salas-Vallina, A. and Alegre, J. (2021), "Entrepreneurial orientation and new product development performance in SMEs: the mediating role of business model innovation", *Technovation*, Vol. 108 No. 2021, pp. 1-13, doi: 10.1016/j.technovation.2021.102325.

Foster, B. (2018), "An investigating on entrepreneurial competencies of creative industry in Bandung, Indonesia", *International Journal of Research in Business and Social Science (2147-4478)*, Vol. 7 No. 3, pp. 10-17, doi: 10.20525/ijrbs.v7i3.869.

Galloway, L. and Haniff, A. (2015), "Managing projects in architecture: a study of leadership in a creative industry", *Open Economics and Management Journal*, Vol. 2 No. Suppl 1: M6, pp. 38-44.

Gregori, P., Holzmann, P. and Schwarz, E.J. (2021), "My future entrepreneurial self: antecedents of entrepreneurial identity aspiration", *Education + Training*, Vol. 63 Nos 7/8, pp. 1175-1194, doi: 10.1108/ET-02-2021-0059.

Gunartin, H., Praktiko, H., Winarno, A. and Restuningdiah, N. (2023), "The role of entrepreneurial competencies: successful key SMEs a literature review", *International Journal of Professional Business Review*, Vol. 8 No. 7, pp. 1-12.

Gutierrez-Posada, D., Kitsos, T., Nathan, M. and Nuccio, M. (2023), "Creative clusters and creative multipliers: evidence from UK cities", *Economic Geography*, Vol. 99 No. 1, pp. 1-24.

Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 414-433, doi: 10.1007/s11747-011-0261-6.

Henriksen, D., Mishra, P., Creely, E. and Henderson, M. (2021), "The role of creative risk taking and productive failure in education and technology futures", *TechTrends*, Vol. 65 No. 4, pp. 602-605, doi: 10.1007/s11528-021-00622-8.

Hidayat, A.R.R.T. and Asmara, A.Y. (2017), "Creative industry in supporting economy growth in Indonesia: perspective of regional innovation system", *IOP Conference Series: Earth and Environmental Science*, Vol. 70, pp. 1-10, doi: 10.1088/1755-1315/70/1/012031.

Hikmah, H., Ratnawati, A.T. and Darmanto, S. (2023), "The effect of entrepreneurial orientation and dynamic capability on business performance in creative industry: mediating role of innovativeness product advantage", *Global Business and Finance Review*, Vol. 28 No. 2, pp. 17-33, doi: 10.17549/gbfr.2023.28.2.17.

Holzmann, V. and Mazzini, L. (2020), "Applying project management to creative industries: the relationship between leadership style and project success", *Journal of Organizational Culture, Communications and Conflicts*, Vol. 24 No. 1, pp. 1-17.

Hoque, A.S.M.M. (2018), "The effect of entrepreneurial orientation on Bangladeshi SME performance: role of organizational culture", *International Journal of Data and Network Science*, pp. 1-14, doi: 10.5267/j.ijdns.2018.7.001.

Hossain, K., Lee, K.C.S., Azmi, I.B.A.G., Idris, A.B., Alam, M.N., Rahman, M.A. and Ali, N.M. (2022), "Impact of innovativeness, risk-taking, and proactiveness on export performance in a developing country: evidence of qualitative study", *RAUSP Management Journal*, Vol. 57 No. 2, pp. 165-181, doi: 10.1108/RAUSP-01-2021-0002.

Husin, R., Hidayah, N. and Mukmin, T.M. (2021), "Creative industries in supporting Indonesia's economic growth in innovation perspective", *Business and Economics Journal*, Vol. 12 No. 1, pp. 1-4.

Irene, B.N.O. (2017), "Women entrepreneurship in South Africa: understanding the role of competencies in business success", *The Southern African Journal of Entrepreneurship and Small Business Management*, Vol. 9 No. 1, pp. 1-9, doi: 10.4102/sajesbm.

Islam, A.M.D., Khan, M.A., Obaidullah, A.Z.M. and Alam, S.N. (2011), "Effect of entrepreneur and firm characteristics on the business success of small and medium enterprises (SMEs) in Bangladesh", *International Journal of Business and Management*, Vol. 6 No. 3, pp. 289-299, doi: 10.5539/ijbm.v6n3p289.

Kang, H. and Ahn, J.W. (2021), "Model setting and interpretation of results in research using structural equation modeling: a checklist with guiding questions for reporting", *Asian Nursing Research*, Vol. 15 No. 3, pp. 157-162, doi: 10.1016/j.anr.2021.06.001.

Kilu, R.H., Sanda, M.A. and Alacovska, A. (2023), "Demystifying business models (shifts) among Ghanaian creative entrepreneurs in a COVID-19 era", *African Journal of Economic and Management Studies*, Vol. 14 No. 2, doi: 10.1108/AJEMS-07-2022-0305.

Kneipp, J.M., Gomes, C.M., Bichueti, R.S., Frizzo, K. and Perlin, A.P. (2019), "Sustainable innovation practices and their relationship with the performance of industrial companies", *Revista de Gestão*, Vol. 26 No. 2, pp. 94-111, doi: 10.1108/REGE-01-2018-0005.

Kong, H. and Choo, S. (2022), "Gender differences in the relationship between achievement motivation and entrepreneurial intention: a conditional process model of entrepreneurship and gender", *SAGE Open*, Vol. 12 No. 2, pp. 1-12, doi: 10.1177/21582440221097897.

Krisiukėnienė, D. and Pilinkienė, V. (2023), "Theoretical presumptions of the creative industries innovation productivity performance", *Creativity Studies*, Vol. 16 No. 1, pp. 91-107.

Mahmood, T.M.A.T., Al Mamun, A. and Ibrahim, M.D. (2020), "Attitude towards entrepreneurship: a study among ASNAF Millennials in Malaysia", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 14 No. 1, pp. 2-14, doi: 10.1108/apjie-06-2019-0044.

Man, T.W.Y. (2001), "Entrepreneurial competencies and the performance of small and medium enterprises in the Hong Kong services sector", Ph.D Thesis. The Hong Kong Polytechnic University, available at: www.proquest.com/openview/e299bd6affba056c6b7cd4797b41a9b6/1?pq-origsite=gscholar&cbl=18750&diss=y

Marlina, L., Senen, S.H., Yuniarsih, T. and Ahman, E. (2023), "Human capital competitiveness model in the digital era of craft creative industry entrepreneurs", *Journal of Competitiveness*, Vol. 15 No. 2.

Maryunani, S.R. and Mirzanti, I.R. (2015), "The development of entrepreneurship in creative industries with reference to Bandung as a creative city", *Procedia - Social and Behavioral Sciences*, Vol. 169, pp. 387-394, doi: 10.1016/J.SBSPRO.2015.01.324.

Mustapha, W.N.W., Al Mamun, A., Mansori, S. and Balasubramaniam, S. (2020), "Effect of entrepreneurial competencies on micro-enterprises income and assets in Malaysia", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 14 No. 3, pp. 249-261, doi: 10.1108/apjie-01-2020-0009.

Mylonas, N. and Petridou, E. (2018), "Venture performance factors in creative industries: a sample of female entrepreneurs", *Gender in Management: An International Journal*, Vol. 33 No. 5, pp. 385-404, doi: 10.1108/GM-03-2017-0035/FULL/XML.

Nemoto, T. and Beglar, D. (2014), "Developing Likert-scale questionnaires", in Sonda, N. and Krause, A. (Eds), *JALT 2013 Conference Proceedings*.

Nguyen, P.V., Huynh, H.T.N., Lam, L.N.H., Le, T.B. and Nguyen, N.H.X. (2021), "The impact of entrepreneurial leadership on SMEs' performance: the mediating effects of organizational factors", *Heliyon*, Vol. 7 No. 6, pp. 1-13, doi: 10.1016/j.heliyon.2021.e07326.

Østergaard, A. (2018), "The beneficial differentiation within entrepreneurship of self-employed, business owner and entrepreneur", *Industry and Higher Education*, Vol. 33 No. 1, pp. 18-29, doi: 10.1177/0950422218816554.

Patten, T. (2016), "Creative?'. . . 'Entrepreneur?' – Understanding the creative industries entrepreneur", *Artivate*, Vol. 5 No. 2, pp. 23-42, doi: 10.1353/artv.2016.0006.

Purwati, A.A., Budiyanto, P., Suhermin, L. and Hamzah, M.L. (2020), "The effect of innovation capability on business performance: the role of social capital and entrepreneurial leadership on SMES in Indonesia", *Accounting*, Vol. 7 No. 2, pp. 323-330, doi: 10.5267/j.ac.2020.11.021.

Rahmidani, R., Susanti, D., Armiati, P. and Vrsita, Y.L. (2023), "Entrepreneurial marketing: improving the marketing performance of the creative industry in the embroider stitching sector in West Sumatera", *International Journal of Professional Business Review*, Vol. 8 No. 6, pp. 1-23.

Rehman, S.U., Elrehail, H., Nair, K., Bhatti, A. and Taamneh, A.M. (2023), "MCS package and entrepreneurial competency influence on business performance: the moderating role of business strategy", *European Journal of Management and Business Economics*, Vol. 32 No. 1, pp. 1-23, doi: 10.1108/EJMBE-04-2020-0088.

Reisinger, Y. and Turner, L. (1999), "Structural equation modeling with Lisrel: application in tourism", *Tourism Management*, Vol. 20 No. 1, pp. 71-88.

Rezaei, J. and Ortt, R. (2018), "Entrepreneurial orientation and firm performance: the mediating role of functional performances", *Management Research Review*, Vol. 41 No. 7, pp. 878-900, doi: 10.1108/MRR-03-2017-0092.

Saiyed, A.A.M. (2019), "The role of leadership in business model innovation: a case of an entrepreneurial firm from India", *New England Journal of Entrepreneurship*, Vol. 22 No. 2, pp. 70-88, doi: 10.1108/NEJE-08-2019-0040.

Salisu, Y. and Abu Bakar, L.J. (2020), "Technological capability, relational capability and firms' performance: the role of learning capability", *Revista de Gestão*, Vol. 27 No. 1, pp. 79-99, doi: 10.1108/REGE-03-2019-0040.

Salve, S. (2022), "Factors impacting women performance in entrepreneurship: the psychological and non-psychological", *Asia-Africa Journal of Business Entrepreneurship Education and Management*, Vol. 1, pp. 1-15, doi: 10.5281/zenodo.

Sarstedt, M., Ringle, C.M. and Hair, J.F. (2021), "*Partial Least Squares Structural Equation Modeling*", Springer Nature Switzerland AG, doi: 10.1007/978-3-319-05542-8_15-2.

Sarwoko, E., Surachman, G., Armanu, U. and Hadiwidjojo, D. (2013), "Entrepreneurial characteristics and competency as determinants of business performance in SMEs", *IOSR Journal of Business and Management*, Vol. 7 No. 3, pp. 31-38.

Schermelleh-Engel, K., Moosbrugger, H. and Müller, H. (2003), "Evaluating the fit of structural equation models: tests of significance and descriptive goodness-of-fit measures", *Methods of Psychological Research Online*, Vol. 8 No. 2, pp. 23-74.

Setiadi, N.J., Boediprasetya, I. and Wahdiaman, A. (2012), "Boosting Indonesia's creative industries: identification of people's characteristics and creative behaviour", *Quaestiones Geographicae*, Vol. 31 No. 4, pp. 53-62, doi: 10.2478/v10117-012-0035-3.

Setianti, Y., Dida, S. and Putri, S. (2017), "City branding of Denpasar city as a creative city through the Denpasar festival event", *Emerald Reach Proceedings Series*, Vol. 1, pp. 357-371, doi: 10.1108/978-1-78756-793-1-00025.

Setiawan, J. and Soelaiman, L. (2022), "Pengaruh Faktor Psikologis dan Keterampilan terhadap Keberhasilan Wirausaha Wanita", *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, Vol. 6 No. 1, pp. 85-94, doi: 10.24912/jmieb.v6i1.15974.

Shakeel, M., Yaokuang, L. and Gohar, A. (2020), "Identifying the entrepreneurial success factors and the performance of women-owned businesses in Pakistan: the moderating role of national culture", *SAGE Open*, Vol. 10 No. 2, pp. 1-17, doi: 10.1177/2158244020919520.

Širec, K. and Močnik, D. (2012), "Gender specifics in entrepreneurs' personal characteristics", *Journal of East European Management Studies*, Vol. 17 No. 1, pp. 11-39.

Soejono, F., Mendari, A.S. and Rinamurti, M. (2015), "Competency, entrepreneur characteristic and business performance: study of the Pempek business in Palembang", *Journal of Indonesian Economy and Business*, Vol. 30 No. 1, pp. 30-41, doi: 10.22146/jieb.7332.

Srimulyani, V.A., Hermanto, Y.B., Rustiyaningsih, S. and Waloyo, L.A.S. (2023), "Internal factors of entrepreneurial and business performance of small and medium enterprises (SMEs) in East Java Indonesia", *Heliyon*, Vol. 9 No. 11.

Sukriani, N., Febrina, D. and Dewi, D.S. (2023), "Knowledge, abilities, skills, and its impact on business performance of business actors in the culinary sector", *International Journal of Islamic Business and Management Review*, Vol. 3 No. 1, pp. 119-129.

Sumawidjaja, R.N., Ahman, E. and Machmud, A. (2019), "The impact of entrepreneurial competencies on creative industry performance in Indonesia", *Journal of Entrepreneurship Education*, Vol. 22 No. 6, pp. 1-13.

Syahbudi, M., Ramadhani, S. and Barus, E.E. (2023), "Indonesia Creative Economy 2025: creative industries MSMEs competitiveness strategy towards international markets through SOAR analysis", *Journal of Indonesian Applied Economics*, Vol. 11 No. 1, pp. 13-26.

Tehseen, S. and Ramayah, T. (2015), "Entrepreneurial competencies and SMEs business success: the contingent role of external integration", *Mediterranean Journal of Social Sciences*, Vol. 6 No. 1, pp. 50-61, doi: 10.5901/mjss.2015.v6n1p50.

Tomczyk, M. and Spychalska-Wojtkiewicz, M. (2018), "Creative industry in South Baltic area region", *Management*, Vol. 22 No. 2, pp. 234-248, doi: 10.2478/manment-2018-0033.

Troise, C. and Tani, M. (2020), "Exploring entrepreneurial characteristics, motivations and behaviours in equity crowdfunding: some evidence from Italy", *Management Decision*, Vol. 59 No. 5, pp. 995-1024, doi: 10.1108/MD-10-2019-1431.

Ullman, J.B. and Bentler, P.M. (2013), "Structural equation modeling", in Weiner, I.B. (Ed.), *Handbook of Psychology, Second Edition*, John Wiley and Sons, NJ, pp. 661-690.

Umar, A., Omar, C.M.Z.C., Hamzah, M.S.G. and Hashim, A. (2018), "The mediating effect of innovation on entrepreneurial competencies and business success in Malaysian SMEs", *International Business Research*, Vol. 11 No. 8, pp. 142-153, doi: 10.5539/ibr.v11n8p142.

Vidyatmoko, D. and Hastuti, P. (2017), "The determinants of entrepreneurial success: a multidimensional framework", *Journal of STI Policy and Management*, Vol. 2 No. 2, pp. 163-178.

Wijaya, N.S. and Rahmayanti, P.L.D. (2023), "The role of innovation capability in mediation of COVID-19 risk perception and entrepreneurship orientation to business performance", *Uncertain Supply Chain Management*, Vol. 11 No. 1.

Wohl, H. (2021), "Innovation and creativity in creative industries", *Sociology Compass*, Vol. 16 No. 2, pp. 1-11, doi: 10.1111/SOC4.12956.

Zainol, N.R., Al Mamun, A., Ahmad, G. and Simpong, D.B. (2018), "Human capital and entrepreneurial competencies towards performance of informal microenterprises in Kelantan, Malaysia", *Economics and Sociology*, Vol. 11 No. 4, pp. 31-50, doi: 10.14254/2071-789X.2018/11-4/2.

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