

The Quantitative Model of the Business Success Based on Entrepreneurial Characteristics, Motivation And Business Ability

Agus Riyanto¹, Ismatul Maula², M. Yani Syafei³, Gabriel Sianturi⁴, and M Azka Fadhilla⁵,

^{1,2,5} Department of Management, Faculty of Economics and Business, Universitas Komputer Indonesia, Indonesia

³ Doctor of Management Science Program, Universitas Komputer Indonesia, Indonesia

⁴ Departement of Industrial Engineering, Faculty of Engineering and Computer Science, Universitas Komputer Indonesia, Indonesia

Jalan Dipatiukur No. 112-116 Bandung, Indonesia

E-mail : agus.riyanto@email.unikom.ac.id

Abstract. This study aims to analyse the influence of entrepreneurial characteristics, motivation and business capabilities on business success in printing companies. The method used in this research is descriptive and verification with a sample of 63 respondents. The analysis used in this research is multiple linear regression analysis and coefficient of determination analysis with hypothesis testing using the T test and F test using SPSS V22 software. The results obtained by multiple linear regression analysis are as follows: Simultaneously entrepreneurial characteristics, motivation and business capabilities have a significant effect on business success in printing companies.

1. Introduction

Business development at a time like this has great potential in increasing income, maintain sustainability and fulfill life needs In achieving a successful business in the midst of increasing business competition in the field of business and trade, especially for small and medium scale businesses. Therefore, companies are required to carry out various ways to increase competitiveness by realising the company's competitive advantage [1]. Changes in printing companies follow the same technological shifts. This fundamental shift in IT technology demands similar changes in printing. Today's leading print services now integrate cloud technology, mobility, and support standards in the Internet of Things (IoT) [2]. The Business Capacity building concept can be expressed as a plan to develop (or improve) the knowledge, output levels, management, skills, and other capabilities of an organisation through acquisition, incentives, technology, and/or training [3]. Entrepreneurial characteristics are one of the most important factors when people talk about entrepreneurship, because a business can only grow and survive if it has strong entrepreneurial characteristics. An entrepreneur must also have certain characteristics to achieve success and sustainability of his or her business. To undertake development and sustainability, a strong entrepreneurial character is one of the prerequisites [4].

Individual characteristics are personal characteristics that are inherent in an entrepreneur from birth, while psychological characteristics are character traits formed based on life experience, indicating that entrepreneurial characteristics and entrepreneurial competence have an overall positive influence on business performance [5]. Motivational factors are also important in the productive cultivation of the company, motivation is an inherent tendency to seek new developmental challenges and to use personal skills to discover and learn in business. [6]. In running a business, an entrepreneur must have

the motivation to develop his business to be more advanced; this is in line with Mc Clelland's theory of achievement motivation. When the company's ambitions, dreams, expectations, targets are fulfilled, it can contribute to satisfaction. Knowing the motivational factors that drive people to entrepreneurship is important because it can provide valuable information to any government or institution to design suitable programmes and methods to be used in the improvement of entrepreneurship [7].

The determinants of business success as espoused and experienced by entrepreneurs empirically found that both internal and external factors are critical to small business success. They concluded by studying eight business success factors namely as External Environment, Market Accessibility, Entrepreneurial Qualities, Human Resources, and Market Support by Government Pricing, Delivery and Service [8]. Internal factors include characteristics of the business owner, size of the business and years in business, ability to attract outside capital investment, management, financing, planning, experience, and skills to execute each identified project. External or environmental factors are sales tax rates, and infrastructure spending [9]. Today, 3D printing technology is successfully applied in shaping the world and producing most of the products used today, from simple plastics to advanced ceramics and metals. 3D printing technology can print objects layer by layer, by directly depositing materials using computer software, with just a single click [10] It is necessary to determine the success model of printing businesses based on entrepreneurial characteristics, motivation and business capabilities.

The purpose of this study is to determine a qualitative model of business success variables based on entrepreneurial characteristics, motivation and business ability. The method used is descriptive and quantitative using SPSS tool.

2. Method

This research method uses descriptive and verification methods with a quantitative approach, with a total of 63 respondents. The data used comes from a printing company in the city of Bandung with data collection in 2021. The verification method is a method used to test hypotheses using statistics. Based on the type of research, namely descriptive verification research, the research method used is an Explanatory Survey. An explanatory survey is a survey that is used to explain the causal relationship between three variables through hypothesis testing. The survey is conducted by taking a sample from one population and using a questionnaire as a data collection tool.

3. Results and Discussion

Verification Analysis Multiple linear regression

From the results of the multiple linear regression equation in table 1, the interpretation for each variable is obtained as follows :

Table 1. Multiple Linear Regression Equations

Model	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
	B	Std. Error	Beta	Tolerance	VIF
1 (Constant)	.765	2.160			
Karakteristik Wirausaha	1.368	.204	.647	.226	4.422
Motivasi	.227	.093	.201	.312	3.205
Kemampuan Usaha	.207	.162	.169	.121	8.243

a. Dependent Variable: Keberhasilan Usaha

So the linear regression equation is obtained $Y = 0.765 + 1.368X_1 + 0.227X_2 + 0.207X_3$

- A constant of 0.765 indicates that when the three independent variables are constant and there is no change, then Business Success is predicted to be worth 0.765 times.

- b. The X1 variable, namely Entrepreneurial Characteristics, has a regression coefficient of 1.368, indicating that when Entrepreneurial Characteristics increases, it is predicted that it will increase Business Success as much as 1.368 times.
- c. Variable X2, namely Motivation, has a regression coefficient of 0.227, indicating that when motivation increases, it is predicted that it will increase business success by 0.227 times.
- d. The X3 variable, namely Business Ability, has a regression coefficient value of 0.207, indicating that when Business Ability increases, it is predicted to increase Business Success as much as 0.207 times.

Multicollinearity Test

From the table 2, it can be seen that all variables have tolerance values above 0.1 and VIF values below 10, so it can be concluded that the regression model in this study does not occur multicollinearity. That is, between the variables of Business Success there is no correlation with the variables of Entrepreneurial Characteristics, Motivation and Business Ability, so it can be stated that the independent variables in this study are independent or not related to each other.

Table 2. Multicollinearity Test Results

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Karakteristik Wirausaha	.226	4.422
	Motivasi	.312	3.205
	Kemampuan Usaha	.121	8.243

a. Dependent Variable: Keberhasilan Usaha

Simultaneous Correlation Analysis

It is known that the simultaneous correlation value obtained between Entrepreneurial Characteristics, Motivation and Business Ability in table 3 is 0.936 and is included in the category of high correlation which is in the correlation interval between "0.81-1". The correlation value is positive which indicates that the relationship between the three is unidirectional. The analysis of the data below can be interpreted that the better the entrepreneurial characteristics, motivation and business ability of the printing press company, followed by the increasing business success that will be achieved by business actors in the Printing Service company.

Table 3. Simultaneous Correlation Coefficient Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 ^a	.876	.869	2.92109

a. Predictors: (Constant), Kemampuan Usaha, Motivasi, Karakteristik Wirausaha

b. Dependent Variable: Keberhasilan Usaha

Simultaneous Determination Analysis

It is known that the coefficient of determination or (R) in table 4 is 0.936. Furthermore, the calculation of the coefficient of determination (KD) is used to determine the contribution of the entrepreneurial characteristics, motivation and business ability variable to Business Success.

$$KD = (r)^2 \times 100\%$$

$$KD = 0.936 \times 0.936 \times 100\%$$

$$KD = 0.8761 \text{ (87.61\%)}$$

Based on the calculation results above, it can be seen that the coefficient of determination obtained is 87.61%. This shows that the three independent variables consisting of entrepreneurial characteristics, motivation and business ability contribute to business success in business actors at the printing center by 87.61%, so it can be concluded that entrepreneurial characteristics, motivation and business ability have an influence to business success, so that if there is an increase in entrepreneurial characteristics, motivation and business ability, it will be followed by an increase in business success. While the other 12.39% are contributions from other variables studied.

Table 4. Simultaneous Coefficient of Determination

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 ^a	.876	.869	2.92109

a. Predictors: (Constant), Kemampuan Usaha, Motivasi, Karakteristik Wirausaha

b. Dependent Variable: Keberhasilan Usaha

Simultaneous Hypothesis Test

It is known in table 5 that the Fcount value is 138,400 with p-value (sig.) = 0.000. With = 0.05, df1 = k-1 = 3-1 = 2, and df2 = (n-k-1) = 60-4=59, then we get Ftable = 2.77. Due to the value of Fcount greater than Ftable (138.400 > 2.77) and a significance value of 0.000 < 0.05 then H0 is rejected and H1 is accepted, meaning that simultaneously Entrepreneurial Characteristics, Motivation and Business Ability have a significant effect on Business Success Printing Center company.

Table 5. Simultaneous Statistical Test Results (Test F)

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3542.820	3	1180.940	138.400	.000 ^b
	Residual	503.434	59	8.533		
	Total	4046.254	62			

a. Dependent Variable: Keberhasilan Usaha

b. Predictors: (Constant), Kemampuan Usaha, Motivasi, Karakteristik Wirausaha

If presented in the figure 1, the F-count and F-table values can be seen as follows:

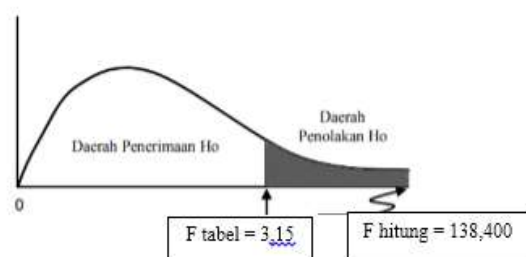


Figure 1. Simultaneous Hypothesis Testing Curves of Entrepreneurial Characteristics, Motivation and Business Ability to Business Success

4. Conclusion

The quantitative model of business success is most influenced by entrepreneurial characteristics of 1.368, motivation of 0.227 and business ability of 0.207. There is an influence of Entrepreneurial Characteristics, Motivation and Business Ability on Business Success simultaneously at Printing Center company. So, the better the motivation provided by the company and the business actors can realise themselves well and the business capability provided by the company, the better the success of the business will be. Figure 2 shows the success model of the printing business.

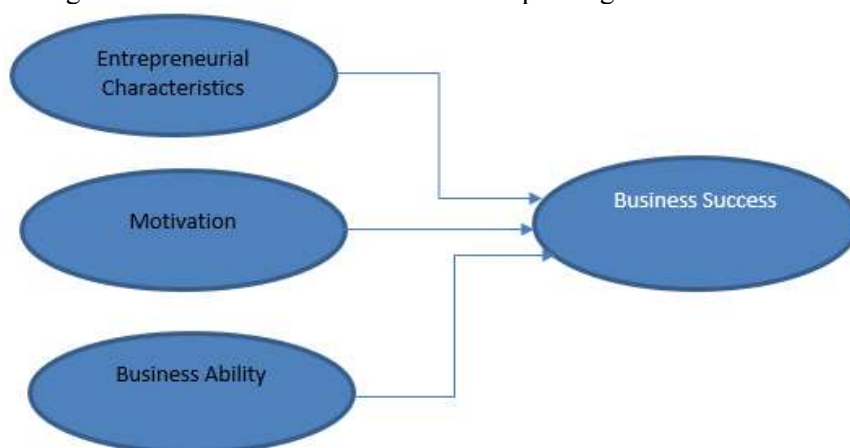


Figure 2. Model Success Business Printing

References

- [1] Agus Riyanto, Ina Primiana, Yunizar and Yudi Azis. (2018). Reengineering support for competitive advantage through organizational basis, information and communication technology: a literature review. *Problems and Perspectives in Management Journal*. Vol 16, Issue3. Pp. 464-476.
- [2] Kim, H. & Hwang, K. (2015) The shifting printing paradigm: A goodbye to traditional printing technology.in *IEEE Consumer Electronics Magazine*, 4(3), pp. 42-49. doi:10.1109/MCE.2015.2422847.
- [3] Anuradha Gaikwad.(2016). Need to link Business Capacity Building to Sustainability. Conference: "Capacity Building: Controllable & Uncontrollable Factors" At: Rajarambapu Institute of Technology, Islampur Sangli Maharashtra .
- [4] Ati Cahayani, Aristo Surya Gunawan, Kurnianing Isololipu. (2016). The Dimension of Entrepreneurial Characteristics in Young Entrepreneurs in the Creative Industry Field in Jakarta. *hina-USA Business Review*, Vol. 15, No. 7, 319-329. doi: 10.17265/1537-1514/2016.07.002
- [5] Mahadalle, A., & Kaplan, B. (2017). Entrepreneurial Characteristics and Competencies as Determinants of Corporate Performance: a Study on Small Enterprises in Mogadishu, Somalia. *International Journal of Research -GRANTHAALAYAH*, 5(5), 243–254. <https://doi.org/10.29121/granthaalayah.v5.i5.2017.1856>
- [6] Gheitani, A., Imani, S., Seyyedamiri, N., & Foroudi, P.(2019). Mediating effect of intrinsic motivation on the relationship between Islamic work ethic, job satisfaction, and organizational commitment in banking sector. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(1), 76–95. <https://doi.org/10.1108/IMEFM-01-2018-0029>
- [7] Syarifah, T., & Maya Putra, U. M. (2017). Motivation and Entrepreneurs Training for Tinggi Raja Society of Asahan Regency. 104(*Aisteel*), 1–5. <https://doi.org/10.2991/aisteel-17.2017.2>.
- [8] Radiah Abdul, Mohd Rosli, & Ab. Azid Hj (2009). Success Factors for Small Rural Entrepreneurs under the One-District-One-Industry Programme in Malaysia.*journal of Contemporary Management Research*, 5 (2), 147-162.
- [9] Rogoff, E. G., Lee, M. S., & Suh, D. C. (2004). Who done it? Attributions by entrepreneurs and experts of the factors that cause and impede small business success. *Journal of Small Business Management*, 42 (4), 364-376.
- [10] Nurhalida Shahrubudin, Lee Te Chuan, Rohaizan Ramlan. (2019). An overview of critical success factors for implementing 3D printing technology in manufacturing firms. *Journal of Applied Engineering Sciences* 17(618):378-384, DOI: 10.5937/jaes17-21526