

# Development of The Entrepreneurship Mentoring Model with The Great Technopreneur Principles for UMKM Affected by Covid-19 in Gunungkidul Regency

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## **ABSTRACT**

The purpose of this research is to: (1) develop the entrepreneurship mentoring model based on The Great Technopreneur (TGT) that is feasible to apply to UMKM affected by Covid-19; and (2) produce TGT-based entrepreneurship mentoring materials for UMKM. This research is research and development (R&D) using quantitative and qualitative approaches. Stages of research and development adapting the Plomp model include (1) initial study, (2) model designing, (3) model realization and validation, and (4) model revision and evaluation. Data collection instruments in the form of closed interview guidelines to explore information on the condition of UMKM, questionnaires to measure the feasibility of models, and mentoring teaching materials. Descriptive statistical analysis techniques are carried out on secondary data on the state of UMKM obtained from the Department of Industry and Trade Gunungkidul regency. The results showed that: (1) the entrepreneurship mentoring model with the TGT principle developed is feasible to apply to UMKM affected by Covid-19 with categories both reviewed from the aspects of supporting theory, syntax, social system, reaction principles, support systems, as well as instructional impacts; and (2) teaching materials that have been compiled and included in the category are very good with a value of 11.25 from a maximum value of 12. The entrepreneurship mentoring model with TGT principles and teaching materials is feasible to be applied for mentoring.

**Keywords:** Enterpreneurship Mentoring Model, the Great Technopreneur, Technopreneurship, UMKM.

# 1. INTRODUCTION

The economic sector is one of the sectors affected by the Covid-19 pandemic. This is reinforced by the Report of the Central Bureau of Statistics (BPS) in August 2020 mentioning that Indonesia's economic growth in the second quarter of 2020 was minus 5.32 percent. Previously, in the first quarter, BPS reported that Indonesia's economic growth only grew by 2.97 percent, down considerably from 5.02 percent growth in the same period in 2019. Restrictions on public activities affect business activities that then affect the economy.

UMKM are productive businesses owned by individuals and business entities that have met the criteria as micro-businesses. The number of UMKM spread across Indonesia as many as 62.9 million units includes trade, agriculture, livestock, forestry, fisheries, mining, processing, buildings, communication, hotels, restaurants, and services. Micro, Small, and Medium Enterprises (UMKM) are also affected by the Covid-19

Pandemic [1]. The impacts include decreased sales, difficulty in accessing capital, limited distribution of products, and difficulty in accessing raw materials. The government immediately acted by issuing policies to protect UMKM through several schemes, among others: providing social assistance for the poor, tax incentives, relaxation of credit, access to capital financing, placement of government representatives as a product buffer, and e-learning training.

Based on a survey conducted by the Office of Cooperatives and UMKM of Gunungkidul Regency involving 53 respondents showed that the spread of UMKM affected by Covid-19 includes 32% in the field of food and beverages, 22.6% in craft, 17% in clothing and clothing services, 11.3% of wood craftsmen, 9.4% in jewelry and accessories, 5.7% in the field of agricultural equipment sales, and the remaining 2% in cosmetics. Respondents provide input and hope for solutions to the handling of the Covid-19 problem with dominant answers including: the need for direction and assistance

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both in terms of management and also product marketing, the existence of capital assistance and policies on business credit installments, as well as relevant new breakthroughs (Data processed by researchers). UMKM in Gunungkidul regency are feeling the impact of Covid-19.

UMKM Gunungkidul regency is under the auspices of the Office of Cooperatives and UMKM. Before the pandemic, the Gunungkidul District Covid-19 Cooperative and UMKM Office regularly provided assistance in the form of training to UMKM. In general, training is given for 1 (one) day in a face-to-face mentoring scheme. In one month the frequency of training ranges from 4 to 5 times training with rotating participants. After the Covid-19 pandemic, mentoring was still implemented but the frequency was not as high as it was before the pandemic with the number of participants also limited. (Office of Cooperatives and UMKM of Gunungkidul Regency).

Previous research related to technopreneurship was applied to the learning and empowerment of local economies located in Gorontalo Province with the result of low competitiveness of UMKM products. One of the causes is the mastery of technology for businesses is also still low, if the technological innovation is still temporary [2]. In addition to technology, the thing that also plays a role in advancing business is the ability to think creatively and innovatively in increasing the added value of its products [3]. In order not only limited to theory, the concept of entrepreneurial development should be taught to businesses. The implications can be an entrepreneurial mentoring model. In line with this, at the vocational level has been applied Model of Craft Learning and Entrepreneurship with the Principle of The Great Young Entrepreneur. The results showed more participation and interest from students towards entrepreneurship [4].

The research was conducted with the aim to create an entrepreneurial mentoring model for UMKM affected by Covid-19 and produce entrepreneurial mentoring teaching materials.

## 2. METHOD

## 2.1. Types of Research

This research is research and development. The development model adapted the [5]. The research procedures used include: (a) initial assessment; (b) product design and realization; (c) evaluation and revision of products; and (d) final product review.

#### 2.2. Research Place and Time

This research was conducted in June-September 2020 in Gunungkidul Regency, Special Region of Yogyakarta.

# 2.3. Research Subjects

The subject of this study consisted of respondents and the subject of model assessment. The respondents during the initial data collection were UMKM affected by Covid-19 in Gunungkidul Regency. Respondents who netted numbered 89 businesses. This data was obtained from the Office of Cooperatives and UMKM of Gunungkidul Regency. While the subject of the assessment of the entrepreneurial mentoring model consists of 4 (four) experts where 3 (three) experts in the field of entrepreneurship and 1 (one) practitioner / entrepreneur.

# 2.4. Product Trial Design

The product produced in this research and development is the Manual of The Great Technopreneur (TGT) Based Entrepreneurship Mentoring Model for UMKM affected by Covid-19. The contents of this manual include: (1) TGT-based entrepreneurial mentoring model; (2) entrepreneurship mentoring teaching materials; (3) the evaluation instrument of entrepreneurial mentoring.

# 2.5. Data Collection Techniques

The technique used to obtain data is a non-test technique. Research instruments used in the form of: (1) Covid-19 impact questionnaire for UMKM; and (2) assessment questionnaire of entrepreneurial mentoring model with TGT principles. Analysis of questionnaire data in the assessment questionnaire model manual, aspects are assessed.

#### 2.6. Data Analysis Techniques

Data analysis was conducted on: (1) Covid-19 impact questionnaire for UMKM; and (2) assessment questionnaire of Entrepreneurship Mentoring Model Manual with TGT Principles. Analysis of the Covid-19 impact questionnaire for UMKM is conducted descriptively in the form of percentages. For the assessment questionnaire Entrepreneurship Mentoring Model Manual is conducted with steps including: (a) Tabulating all data obtained from each aspect of the assessment; (b) Calculate the average score of each aspect of all assessors using the following equation:

$$X = \frac{\sum x}{n}$$

Information:

X = average score

 $\sum x =$  the number of scores of each assessor

N = number of assessors



(c) Comparing the average total score with the rating category [6] as presented in Table 1."

**Table 1.** Product Assessment Poll Average Interval Conversion

Score Range	Category		
$\overline{\mathbf{X}} > \overline{\mathbf{X}}i + 1.8 \mathrm{SB}_{\mathrm{i}}$	Excellent (SB)		
$\overline{\mathbf{X}}i + 0.6\mathbf{S}\mathbf{B}_{i} < \overline{\mathbf{X}} \leq \overline{\mathbf{X}}i + 1.8\mathbf{S}\mathbf{B}_{i}$	Good (B)		
$\overline{\mathbf{X}}i - 0.6\mathbf{S}\mathbf{B}_{i} < \overline{\mathbf{X}} \leq \overline{\mathbf{X}}i + 0.6\mathbf{S}\mathbf{B}_{i}$	Enough (C)		
$\overline{\mathbf{X}}i - 1.8  \mathbf{SB}_{i} < \overline{\mathbf{X}} \leq \overline{\mathbf{X}}i - 0.6  \mathbf{SB}_{i}$	Less (K)		
$\overline{\mathbf{X}}\mathbf{i} \leq \overline{\mathbf{X}}\mathbf{i} - 1,8 \ \mathbf{SB}_{i}$	Very less (SK)		

Information:

X = Empirical score

(X\_i) = Ideal average

Formula: 1/2 (ideal maximum score+ideal minimum score)

S\_bi = Ideal standard deviation

Formula: 1/6 (ideal maximum score - ideal minimum score)

## 3. RESULTS AND DISCUSSION

# 3.1. Types of Research

The northern area of Gunungkidul regency is bordered by Klaten regency and Sukoharjo regency (Central Java province), south by Indian Ocean, east by Wonogiri Regency (Central Java Province), and west with Bantul and Sleman (DIY Province). Gunungkidul regency consists of 18 sub-districts and 144 villages (16 of which include the classification of Self-Sufficiency and 128 villages belong to the category of self-help villages).

The initial research was conducted by extracting information on problems faced by UMKM due to Covid-19. The data used is secondary data from the Cooperative and UMKM Office and the Department of Industry and Trade (Disperindag). There were 53 respondents who responded to the questionnaire. Respondents affected by Covid-19 are dominated by industries or businesses that produce food and then followed by handicrafts, accessories, souvenirs, and clothing. Covid-19 has an impact on the production process, it is shown that 55% of

production processes are stalled and 44% are decreasing with varying percentage declines. In addition to the production process, Covid-19 also impacts on the procurement and price of basic materials and auxiliary materials. The average price of raw materials has increased. This of course makes it more difficult for UMKM. The expected solution for UMKM in Gunungkidul regency is to expect the most government policy on installment waivers in banks, followed by the hope of providing business assistance and marketing optimization, as well as capital assistance and raw materials.

The responses given by respondents at least further strengthen that in addition to expecting policies related to installment waivers in banks, UMKM also expect business assistance that includes product diversification and marketing optimization for example by utilizing advances in social media technology. This finding was then used as the basis for developing an entrepreneurial mentoring model with the principle of TGT that is expected to overcome the difficulties of the mentoring process for UMKM affected by Covid-19 in Gunungkidul Regency.

## 3.2. Development Results

Based on the findings that UMKM affected by Covid-19 need assistance, an entrepreneurial mentoring model was developed. As a form of adaptation of Covid-19 conditions, the entrepreneurial mentoring model is designed based on technology under the name The Great Technopreneurship (TGT). In the field implementation, this model is combined with blended learning that is mentoring through face-to-face training and continuous mentoring by utilizing technology in the form of whats'app applications. In this application was formed a community group consisting of MSME actors and escorts from academics and officials such as the Cooperative and UMKM office and other related agencies.

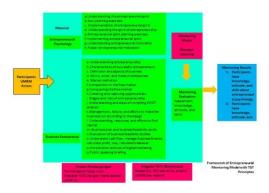
The model of entrepreneurial mentoring with the principle of TGT is packaged in the form of an Entrepreneurial Mentoring Model Manual with the format as presented in Table 2.



Table 2. Mentoring Model Manual Format

No.	Part	Description				
1	Cover	Consists of the title of the book and the author's name				
2	Foreword	Gratitude and hope for readers				
3	Table of Contents	Page information for the entire chapter and sub-chapter of the book.				
4	Chapter I (Introduction)					
	Background	Explanation of the background of the development of entrepreneurial				
		mentoring model.				
	Entrepreneurial Mentoring Model Theory	Explanation of the approaches and methods that serve as the basis for				
	with Principles TGT	the development of entrepreneurial mentoring models.				
5	Chapter II Contents					
	Entrepreneurial Mentoring Model with	Explanations of the elements of the entrepreneurial mentoring model				
	TGT Principles	with TGT principles include: syntax, social systems, reaction principles,				
		support systems, and instructional and companion impacts.				
6	Chapter III Mentoring Materials					
	Entrepreneurship Training Materials for	Exposure to training materials that include:				
	UMKM a) Entrepreneurial psychology;					
		b) Business entrepreneurship.				
7	Chapter IV Mentoring Evaluation					
	Written assessments and practices	Performed by providing essay tests and observations.				
8	Chapter V Closing	Summary of the results of the development of the entrepreneurial				
		mentoring model.				

The entrepreneurial mentoring model with the principle of TGT is prepared equipped with model components such as: (1) syntax (mentoring stage), (2) social system (pattern of relationship between the companion and participant, (3) the principle of reaction (a form of companion response to participants in the mentoring process, (4) supporting system (assistance tools and materials), and (5) instructional impact, namely the purpose of mentoring that can be achieved by TGT mentoring model. The framework of the entrepreneurial mentoring model with TGT is presented in Figure 1.



**Figure 1.** Framework of Entrepreneurial Mentoring Model with TGT Principles.

#### 3.3. Product Evaluation and Revision

product developed the The in form Entrepreneurship Mentoring Model Manual with the principle of TGT for UMKM Affected by Covid-19. This product is validated by expert judgement techniques involving 4 (four) experts as validators, namely 3 (three) experts in the field of entrepreneurship and one practitioner. This validator consists of academicians Siti Rohmah, S.E., M.M. (Lecturer of Gunung Kidul University), Sundari Dwi Astuti (UMKM Actor in Gunungkidul), Yuniarti Ekoningsih (Representative of Gunungkidul District Disperindag), and Ika Wulandari, S.Pd., M.Pd. (Founder of Gunungkidul Young Entrepreneur Community). Validation is done by providing assessment and input to the product Of Mentoring Model Manual.



**Figure 2** Documentation of The Validation Process of ModelIng with Focus Group Discussion (FGD) Scheme.



The results of the assessment of the Entrepreneurship Mentoring Model Manual are presented in Table 3. Assessment of TGT-based entrepreneurial mentoring model is reviewed from the theory of supporting mentoring model, syntax, social system, reaction principle, support system, as well as instructional impact.

Assessment of the supporting theory aspect of the mentoring model is done to find out if the supporting theory is relevant to the mentoring model developed. Supporting theory is the foundation in the development of entrepreneurial mentoring model. The foundation consists of mentoring theories and blended learning.

Table 3. Assessment of Entrepreneurship Mentoring Model Manual

TGT-based entrepreneurial mentoring model has been

No.	Assessment aspects	Total score of each aspect of observation								
		Assessment I	Assessment II	Assessment III	Assessment IV	Average Score	Criteria			
1	Supporting theory	9	12	10	12	10,75	Excellent			
2	Syntax	7	12	10	12	10,25	Excellent			
3	Social System	6	6	8	8	7	good			
4	Principle of reaction	6	7	8	8	7,25	Excellent			
5	Support system	9	10	11	12	10,5	Excellent			
6	Instructional impact	6	8	8	8	7,5	good			
7	Mentoring materials	9	12	12	12	11,25	Excellent			
8	Mentoring assessment	10	12	12	12	11,5	Excellent			
9	Grammar manual	9	12	12	12	11,25	Excellent			

Overall, four validators stated that TGT-based Entrepreneurship Mentoring Model products for UMKM affected by Covid-19 can be used after revision. There are several records of improvement including when mentoring needs a commitment to serve in totality; infoinfo facilitation of UMKM from agencies need to be done inventory; mentoring materials need to be added public speaking, sharing session, and marketplace; after roses mentoring to be clearer outside of it is to realize technopreneur who can be the successor of UMKM in Gunungkidul in particular. Improvements are made based on the record.

## 3.4. Final Product Review

Products in the form of Entrepreneurship Mentoring Model Manual with the principle of TGT has been prepared and improved based on the needs of UMKM affected by Covid-19. The characteristic of this mentoring model is to put forward technology to reduce physical contact during the Covid-19 pandemic. So the concept that is judged appropriate is The Great Technopreneurship. The concept of technopreneurship is an entrepreneurial activity in an intelligent and creative manner by utilizing technology to achieve its goals [7]. The Great Technopreneurship is an entrepreneurial mentoring concept for UMKM by experts and practitioners by utilizing technology in the form of whats'app applications.

## 4. CONCLUSION

Based on the research and development that has been carried out, the following conclusions are obtained: (1)

successfully developed using Plomp model, showing the category worthy to be applied to UMKM affected by Covid-19 in Gunungkidul Regency. The results of the assessment of the elements of the entrepreneurial mentoring model belong to the good category in each element by obtaining a value of 11.25 from a maximum

value of 12; and (2) TGT-based entrepreneurial mentoring materials are also successfully developed with assessment results included in the category worthy of use. Mentoring teaching materials have been equipped with materials about motivation and brainstorming, concepts and implementation of digital marketing and public speaking. In the great technopreneur community (TGTC) has also included resellers.

It is hoped that the results of the research can be implemented soon in the mentoring process of UMKM both conducted by the relevant agencies in Gunungkidul Regency and other parties as implementers of assistance. In order to maximize the mentoring process, agencies or related parties should accommodate the establishment of TGTC by recommending experts from related agencies and entrepreneurial practitioners who will be used as companions in the TGTC. More and more escorts who are members of TGTC are expected not only to provide perspectives but provide technical solutions related to problems faced by the mentoring participants.

## REFERENCES

[1] D. Sugiri, "Menyelematkan Usaha Mikro, Kecil dan Menengah dari Dampak Pandemi Covid-19," Fokus



- Bisnis Media Pengkaj. Manaj. dan Akunt., vol. 19, no. 1, pp. 76–86, 2020.
- [2] H. Mopangga, "Studi Kasus Pengembangan Wirausaha Berbasis Teknologi (Technopreneurship) di Provinsi Gorontalo," J. Trikonomika, vol. 14, no. 1, pp. 1–12, 2015.
- [3] H. Manurung, "Peluang Kewirausahaan Sekolah melalui Kreativitas dan Inovasi," J. Bus. Entrep. ISSN, vol. 1, no. 1, 2013.
- [4] C. W. D. Purbaningrum, "Pengembangan Model Pembelajaran Prakarya dan Kewirausahaan dengan Prinsip The Great Young Enterpreneur di SMK untuk Kurikulum 2013," J. Pendidik. Vokasi, vol. 6, no. 1, pp. 15–23, 2016.
- [5] T. Plomp, Educational and Training System Design. Enschede: Univercity of Twente Nederland, 1997.
- [6] E. P. Widoyoko, Evaluasi Program Pembelajaran. Yogyakarta: Pustaka Pelajar, 2011.
- [7] M. Selladurai, "Conceptual Framework on Technopreneurship," SELP J. Soc. Sience, vol. VII, no. ue 27, pp. 92–97, 2016.