
The Development of Intensity Model on Technopreneurship to Improve Turnover in Micro, Small and Medium Enterprises (MSMEs) Culinary in Makassar, Indonesia

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Abstract:

This research is an applied research that aims to measure the practicality and measure the effectiveness of the form of the intensity model developed in entrepreneurship based on technopreneurship to increase MSME turnover. This research uses qualitative and quantitative methods. The research instrument was a questionnaire consisting of 4 types, namely: 1) used for instrument validation, 2) used for an initial study of the problems experienced by MSME actors, 3) for validating the developed model, 4) used during tryouts. Meanwhile, for the application of the developed model, interviews will be used about the achievement of entrepreneurship development to increase MSME turnover. The research subjects were Makassar typical culinary SMEs, selected incidentally, while the research participants were 2 experts in the fields of economics and technology as validators. Quantitative data analysis was carried out by calculating the percentage of respondents' answers, while qualitative data was analyzed by interpreting the answers from respondents about the practicality and effectiveness of the developed model. The results showed that the intensity model based on technopreneurship- is very practical for MSME to use and the intensity model has a very effective level of effectiveness in entrepreneurship so that it can increase the turnover of culinary UMKM typical of Makassar City

Keywords: *Intensity Model, Technopreneurship, Turnover and MSMEs*

1. Introduction

Micro, Small and Medium Enterprises (MSMEs) have a strategic role in economic growth in Indonesia, especially in Makassar City. This makes MSMEs the most dominant level of business in the business world, especially Makassar culinary specialties. However, the problems faced by MSMEs are still weak business management capabilities, limited quality of human resources (HR), weak technological innovation, and a lack of managerial and financial capabilities, (Surya et al., 2021).

There are several studies that have designed and implemented the entrepreneurial model, such as Chell et al. (2010) constructing the Social Entrepreneurship Model as

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an idea of social innovation for economic development. The results show the potential impact of social entrepreneurship on economic development. In addition, Rustam & Adiningrat (2021) have developed and implemented a synergy model which shows that the synergy model is very practical to use in entrepreneurship. Research by Sarasvathy (2001) developed the concept of effectuation as a model of entrepreneurship. His research describes how entrepreneurs think and act by using existing resources, taking measured risks, and forging relationships with the business environment to achieve their goals. Research by Osterwalder and Pigneur (2010) developed the Business Model Canvas framework, which enables entrepreneurs to visualize and design their business model by identifying key elements such as market segments, value proposition, distribution channels, key resources, and key partner. Research by Blank & Eucher (2018) developed a Lean Startup model, which emphasizes testing and fast iteration to reduce business risk. This model involves an experimentation and continuous learning approach by engaging customers in product or service development.

In this research, an innovative model will be designed and implemented, namely the technopreneurship-based intensity model to increase MSME turnover. The technopreneurship-based intensity model is used to strengthen human resources to have the agility to manage a business, creativity in creating a product innovation and marketing a product with digital marketing, for example social media and online applications (Pratiwi et al., 2022; Adi et al., 2017).

An increase in sales turnover can have an impact on increasing the complexity of managing transactions. The impact of the increase in turnover is the increase in the number of sales transactions that must be recorded, and must manage finances properly. Mutegi, et al., (2015) stated that in terms of business performance, MSME owners must understand the financial literacy required by the MSME that is being run, so that profits are maximized, anticipate losses and minimize costs incurred.

The design of an intensity-based technopreneurship model as an effort to accelerate the growth of businesses that make breakthroughs through changing the mindset of MSMEs by providing an entrepreneurial understanding with technology skills, namely the ability to innovate through the application of technology (technopreneurship) as an effort to synergize theory and practice from various competency fields science related to technology and marketing.

2. Theoretical Background

Intensity Concept

The word intensity comes from English, namely intense which means enthusiasm, enterprising. Speizer (2006) stated that 'Intensity' is the level of frequency with which a person performs a certain activity based on pleasure from the activity being carried out. So intensity can simply be formulated as the effort made by someone

with enthusiasm to achieve a goal. The word intensity is very closely related to motivation, intensity is the reality of motivation in order to achieve the expected goals, namely increasing achievement, because someone does business with enthusiasm because of motivation as a driving force for achievement (Bardi & Schwartz, 2003).

Entrepreneurship and Technopreneurship

Entrepreneurship is the process of organizing and managing risk for a new business. Kyrylov et al. (2020), An entrepreneur does the following things:

- a) Identify and evaluate market opportunities.
- b) Finding solutions to fill these market opportunities. C
- c) Acquire the necessary resources (money, people, and equipment) to run the business.
- d) Managing resources from the initial stage (start-up) to the survival phase and the development phase (expansion).
- e) Manage risks related to its business.

Technology is part of the solution needed to meet opportunities. Furthermore, technopreneurship is a method of combining technological expertise with entrepreneurial skills. It involves tech-savvy, creative, innovative individuals who have the ability to take calculated risks, unlike entrepreneurship, which can sometimes be a one-man gig (Soomro & Shah 2021). The success of a technopreneur depends on how well they can motivate a team of individuals. So, the success of every technopreneurship start-up involves a dedicated group of people with different skills and resources working together (Zein et al., 2021)

Intensity Model Design

Experts have developed various models of entrepreneurship. This research will develop a model, namely the Intensity model which aims at developing entrepreneurship by combining entrepreneurial principles with practice. Designing a model in an entity is an activity of compiling a new model to replace the old model as a whole or improve an existing model. People who want to become entrepreneurs see business opportunities and take action in developing entrepreneurship by applying the designed Intensity model. then our research team is trying to design an Intensity model that will be applied in entrepreneurship development.

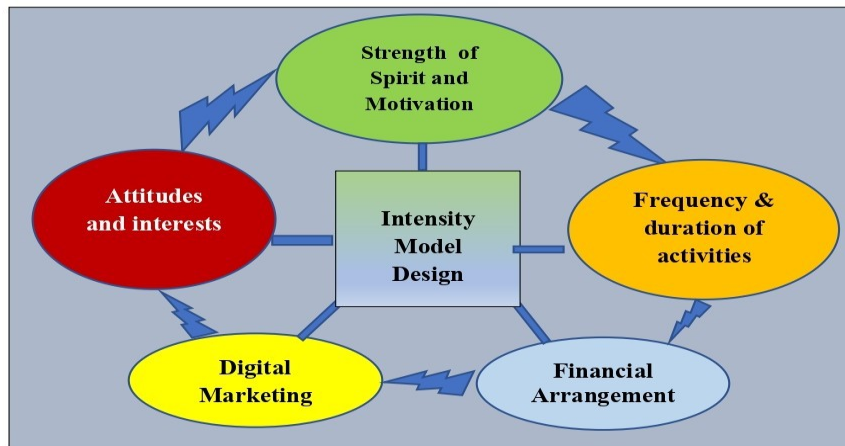


Figure 1. Intensity Model Design
Source : Designed by Author (2023)

3. Methodology

Place and time of research

This research takes place at the MSME Culinary Typical Food in Makassar City, which is located on Jalan Metro Tanjung Bunga and this research will be carried out for approximately 2 months in November 2022- January 2023

Population and Sample

The research population is a typical Makassar culinary MSME group in Makassar. The sampling technique in this study was quota snowball sampling. The quota snowball sampling technique is one of the techniques included in nonprobability sampling. Quota snowball sampling is a sampling technique that is initially small in number and gradually increases in size, like a rolling snowball, the longer it gets bigger and has a limit or quota for the number of subjects (Sugiyono, 2016).

Research Instruments

This study will use 3 types of questionnaires and interviews, namely as follows:

- a) Questionnaire
 1. Self-made and self-developed questionnaires. The questionnaire aims to analyze the problems faced by MSME players as a basis for developing an intensity-based model of technopreneurship and financial literacy.
 2. Questionnaire for instrument validation by 2 experts in economics.

3. Questionnaire for validating the model steps developed and carried out by 2 experts in the field of technopreneurship economics and financial literacy,
- b) Interviews with typical Makassar culinary MSME actors to find out the practicality and effectiveness of the developed model

Data Collection Techniques

Data collection was carried out by giving questionnaires to MSME actors to determine the problems faced, especially in increasing their turnover. The results of the problem analysis are the basis for designing an intensity model based on technopreneurship and financial literacy. The developed model will be validated by 2 experts in economics and technology. Furthermore, it was revised according to expert advice and then applied to MSME actors.

Data analysis method

To find out the initial problems of MSME actors, the results of the questionnaire responses were analyzed by accumulating the results of the respondents' answers qualitatively related to the problems experienced while implementing MSME. To measure model validation directed at construct validation which includes the steps for developing the developed model. Alternative choices from the questionnaire using a Likert scale (5,4,3,2,1) with alternative answers Very Valid (5), Valid (4), Moderate (3), Invalid (2), Very Invalid (1). The validator's answers will be classified and presented for each item of the questionnaire. To measure The practicality of a model refers to the degree to which users perceive the model to be clear, usable and cost-effective under 'normal' conditions. In addition, practicality leads to attractiveness, development process, interest/motivation, ease of use, functionality and usability, reliability and economic value. Alternative choices from the questionnaire also use a Likert scale (5,4,3,2,1) with alternative answers Very practical (5), practical (4), moderate (3), not practical (2), Very impractical (1). User answers will be classified and presented for each item of the questionnaire. To measure Effectiveness refers to the extent to which the developed experience model can consistently achieve the intended purpose. Interviews were conducted regarding assistance with the implementation of the steps of the model that has been developed, and the results of the respondents' answers will be interpreted qualitatively, especially in relation to increasing the turnover of Makassar culinary specialties.

4. Empirical Findings/Result

The results should be clear and concise, contains all scientific findings obtained as data processing results. This section is expected to provide a scientific explanation that can logically explain the reason for obtaining those results that are clearly described, complete, detailed, integrated, systematic, and continuous.

This research is applied research in developing a technopreneurship-based intensity model to increase the turnover of micro, small and medium enterprises (MSMEs) in the culinary sector of Makassar City.

Table 1. The Level of Practically Intensity Model Based on Technopreneurship

No	Technopreneurship	The Level of Practically
1	Understanding of technopreneurship	100 %
2	Optimizing advances in information technology.	100 %
3	Creative business ideas in the field of technology	100 %
4	Ability to analyze business risks	100 %
Rata-Rata		100 %

Source: Data processed, (2023).

Table 2. The Implementation of Intensity Model

No	Intensity Model	Persentase	Kategori
1	Strenght of spirit and motivation.	80 %	Effective
2	Frequency & duration of activities	100 %	Very Effective
3	Financial arrangements	100 %	Very Effective
4	Digital marketing	100 %	Very Effective
5	Attitudes and interests	100%	Very Effective
Average		96,2%	Very Effective

Source: Data processed, (2023)

Based on tables 1 and 2 above, it shows the level of practicality of using the intensity model with an average of 100% which is categorized as very practical, while the effectiveness level of implementing the intensity model with an average of 96.2 % is categorized as very effective. thus the techopreneurship-based intensity model is very practical and very effective for MSMEs to increase business turnover

The results showed that the technopreneurship-based intensity model is very practical for MSME to use and the intensity model has a very effective level of effectiveness in entrepreneurship so that it can increase the turnover of culinary UMKM typical of Makassar City. This means that the intensity model developed in technopreneurship-based entrepreneurship has the potential to increase MSME turnover, especially in the typical culinary sector.

The intensity model steps that have been applied to Micro, Small and Medium Enterprises actors:

1) Strength of spirit and motivation.

The enthusiasm and motivation of MSME actors is the main key in becoming a better entrepreneur. Every MSME actor has a vision and mission and the ability to develop business ideas in building a business that is innovative and different from other businesses. This can increase the enthusiasm and motivation of

MSME actors in developing their business. In addition, motivated MSME actors also set up businesses with the aim of helping people get jobs and creating jobs so that people can earn their own income.

2) Frequency & duration of activities.

MSMEs carry out business management of the duration of activities in a timely manner, by implementing teamwork in completing work. MSMEs make work plans that make it easier to organize work that can be done and estimate the time needed to complete it. Then MSME actors direct their employees to prioritize important and urgent tasks to complete work on time and MSME actors always communicate targets and expectations clearly to team members. MSME actors provide constructive feedback and appropriate rewards to their employees which can help improve their performance and motivate them to complete tasks on time.

3) Financial arrangements.

MSMEs have knowledge in managing finances so they can maintain their business. Managing finances is a very important aspect in maintaining MSME businesses. MSME actors who have knowledge and skills in managing finances so they can control costs, maximize income, and manage cash flow properly. The steps implemented by MSMEs in managing MSME business finances are making financial planning, understanding and monitoring cash flow properly, making realistic budgets, using a good accounting system, learning about taxes and taxation.

4) Digital marketing.

Understanding of digital marketing in carrying out entrepreneurial innovation. Digital marketing is a marketing strategy carried out through digital media, such as websites, social media, email, and so on. Digital marketing is more efficient and cost-effective compared to conventional marketing. Business actors can use various social media platforms or email marketing at a lower cost compared to television or print advertisements. MSME actors can use various types of content, such as images, videos or articles, that are relevant to their products. MSME actors interact with consumers through digital platforms that are used by introducing their products. By using digital marketing properly, MSMEs can increase business turnover and strengthen their brand awareness.

5) Attitudes and interests.

Good interest and attitude for MSMEs in entrepreneurship. Business actors must have a strong interest in the field of business they are interested in, so they can work with enthusiasm and obtain maximum results. Business actors must be able to establish good relationships with customers and business partners, in order to gain support and trust from them.

5. Discussion

The intensity model based on technopreneurship that has been implemented has a significant influence on MSME owners in increasing effectiveness and efficiency in running their business. This model is also very practical for use by MSMEs so that it helps culinary MSMEs to develop their technological and entrepreneurial capabilities. This means that the better information technology is in doing business, the higher the turnover (Todd & Javalgi 2007).

The results of this study can provide significant benefits for culinary MSME owners, because MSMEs can increase their business turnover and survive amidst increasingly fierce competition. Some of the benefits obtained through the intensity model based on technopreneurship include: 1. Increase Operational Efficiency: By implementing technology in business operations, culinary MSME owners can increase their efficiency and productivity. For example, using an integrated digital payment and order management system, MSME owners can manage orders more efficiently, reduce errors, and save time in the transaction process (Febriyantoro et al., 2022). 2. Reaching a Wider Market: Through technopreneurship, culinary MSME owners can use digital platforms and social media to promote and market their products to a wider audience. This opens up opportunities to reach customers beyond their geographic area, resulting in increased sales and business growth (Wahjono et al., 2021). 3. Improve Customer Experience: By leveraging technology, culinary MSME owners can provide a better customer experience. For example, using a food ordering application or online reservation system, customers can easily place orders or place orders, increasing their comfort and satisfaction in interacting with the culinary business (Egwakhe et al., 2022). 4. Product and Service Innovation: Technopreneurship encourages culinary MSME owners to innovate in product and service development. Through technology, MSME owners can develop attractive digital menus, add innovative features such as online orders, delivery, or digital discount coupons, and adopt new technologies such as automated machines or efficient order processing systems (Dutse et al., 2013). 5. Improve Data Management and Analysis: By using technology to manage and analyze business data, culinary MSME owners can get better insights into customer behavior, product preferences, sales trends, and overall business performance. This information can be used to make smarter decisions in developing marketing strategies, improving product quality, and optimizing business operations (Egwakhe et al., 2022). 6. Access to Resources and Support: Technopreneurship can open culinary MSME owners access to additional resources and support (Rizan et al., 2019). Through online platforms and communities, they can connect with investors, mentors and potential business partners. In addition, technopreneurship support programs provided by governments or organizations can provide assistance in the form of training, funding, and useful connections.

MSME partners play a very important role in business development, especially in terms of developing technopreneurship-based intensity models. Thus, the existence

of a technopreneurship-based intensity model can facilitate culinary MSMEs in carrying out business operational activities more effectively to increase their business turnover.

In addition, the intensity model also encourages MSMEs to strengthen collaboration networks with business partners and technology users. By utilizing technology and collaboration, MSMEs can more easily adapt to market changes and increase their business competitiveness. MSMEs interact with consumers while introducing their products both manually and digitally. The existence of digital marketing is very practical and very effective in helping MSMEs market their products so that business turnover can increase and strengthen their brand awareness (Nuryakin et al., 2021)

However, the success of this intensity model depends heavily on the willingness of MSME actors to learn and strengthen their technological and financial skills. MSMEs also need to ensure that the application of this intensity model has a positive impact on business turnover and business continuity

Thus, the intensity model in technopreneurship-based entrepreneurship can be a solution to help MSME actors increase their business turnover and expand market reach in this digital era.

The results of this study are in line with the research of Rustan, et.al. (2023), whose research title is regarding the application of a marketing management information system in increasing the turnover of MSMEs in Makassar culinary food, the results of the research show that the marketing information system has a positive impact on MSMEs in increasing business turnover. This means that business actors introduce a product manually (offline) or through an online system. In addition, MSMEs introduce individual products by word of mouth. The marketing strategy implemented by several MSME actors is quite effective in increasing sales turnover because it uses a marketing mix strategy

6. Conclusions

Based on the results of the research and discussion, it can be concluded that the intensity model based on technopreneurship is very practical to use by MSMEs and the intensity model has a very effective level of effectiveness in entrepreneurship so that it can increase the turnover of culinary MSMEs typical of Makassar City. This means that the intensity model developed in technopreneurship-based entrepreneurship has the potential to increase MSME turnover, especially in the typical culinary sector. This intensity model prioritizes the use of technology and digital marketing to expand market reach and improve operational efficiency. With the adoption of technology, MSMEs can more easily market their products through online platforms and social media, and can optimize inventory management and process transactions automatically

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