USING SWOT ANALYSIS TO DESIGN ORGANIZATIONAL STRUCTURE IN SMALL ENTERPRISE

Litasari Widyastuti Suwarsono
Industrial Engineering Department, Telkom University, Indonesia
litasari@telkomuniversity.ac.id

Atya Nur Aisha*
Industrial Engineering Department, Telkom University, Indonesia
atyanuraisha@gmail.com

Dwi Wahyuni
Industrial Engineering Department, Telkom University, Indonesia
dwiwahyuni@student.telkomuniversity.ac.id

Fida Nirmala Nugraha
Industrial Engineering Department, Telkom University, Indonesia
fida1619@gmail.com

*Corresponding author

Abstract
One of the biggest challenges of MSMEs is how to manage its resources to increase their business. Ani's Craft, already survives for 6 years now faces challenges to growth because lack of strategic planning, ineffective of HR management and unstructured organizational design. This study aims to design an organizational structure based on strategy that will help the small enterprise to growth. The study began with identifying the internal and external factors that influence its business. Result shows the strategy that fits the conditions was the WO strategy. New organizational structure was proposed that emphasize the importance of company’s needs by adding marketing and finance divisions.

Keywords: organizational structure, SWOT, MSME

INTRODUCTION
Micro, small, and medium enterprises (MSMEs) in developing countries are main components of economic drivers. MSMEs are entities that contribute to employment, export volume and GDP in the country. There were 65 million MSMEs in Indonesia in 2019, which were able to absorb 119 million workers, and contributed to the achievement of GDP of 60.5%, which grew by 6.7% compared to the previous year (Asian Development Bank, 2020). Although the potential of MSMEs is very large, it turns out that the existence of MSMEs is vulnerable to failure with a risk of reaching 50-60% in the initial five years of establishment. Some of the causes of business failure in MSMEs include lack of financial management capabilities, planning
preparation, limited production capacity, weak marketing capabilities, and ineffective human resource management (Aisha et al., 2016).

One of the trends in business sectors is creative economy. In ASEAN the growth of the creative economy sector reached 11%, while specifically in Indonesia this sector experienced growth of 9.5% (ASEAN, 2021; Creative Economy Agency, 2018). The growth of the creative economy sector is supported by the growth in the number of internet users and the influence of social media. The creative economy sub-sector that has the potential to develop is the craft sub-sector. Nationally, the handicraft sub-sector contributes to 39.01% of the export value of the creative economy and employed 22.03% of the total workers in the creative economy sector (Creative Economy Agency, 2018). Most players in the handicraft industry sub-sector are micro and small scale. Various programs have been carried out by the Central Government and Regional Governments to be able to support this craft sub-sector so that it can develop.

Ani’s Craft is one of the SMEs that produces handicraft products in the form of vases, bags and handicraft products made from waste raw materials. These handicrafts require creativity to produce attractive designs and the supply of plastic and paper waste raw materials. According to Kartika et al. (2020) demand for products made from recycled materials has increased, due to buyer awareness of industrial waste to the environment. In addition, according to Daryanto et al. (2021) the existence of MSMEs contributes to its surrounding environment because it generates economic value from handicraft products, minimize pollution levels due to waste burning, and can provide jobs opportunity.

Due to the positive impact of the existence of MSMEs, the government has made various efforts to develop MSMEs. Ani’s Craft had been given the opportunity to participate in exhibition activities as a means of promotion. Marketing and sales activities are also carried out through souvenir shops near to tourist locations as well as word of mouth. Ani’s Craft earns up to 200 million rupiah from the sale of bags and vases annually. However, due to limited production capacity, many requests cannot be fulfilled. It is shows that Ani’s Craft has the potential to be developed.

The course of Ani’s Craft development should be done properly and start with the identification of existing conditions. It is carried out according to the stage of the organization’s life cycle. Dodge and Robbins (1992) divide the organizational life cycle into four stages, namely formation, early growth, later growth, and stability. Each stage in the organizational cycle has a different focus and challenges faced. Therefore, it is important for the organization to be able to identify on which stage it currently in.

Covid-19 pandemic at the end of 2019 had its impact on the global economy, including those of MSME. More than 80% of them experienced a decrease in income during the crisis (UNDP Indonesia, 2020). Various challenges faced by MSME during the pandemic, such as difficulties in obtaining raw materials, decreased demand, high costs, and limitations in distributing the products produced (Zutshi et
Appropriate organizational management strategy is needed to deal with the situation.

It was identified that Ani's Craft is currently in the early growth stage, because it already has products with stable sales. However, along with the increasing number of requests, organizations at this stage are faced with challenges regarding production capacity, supply of raw materials, and human resource management. Currently, Ani's Craft does not have a formal organizational design because the number of workers is less than 5 people and decision making is still centered on the owner. MSMEs can no longer sell their products through souvenir shops, due to restrictions on access to tourist sites. This led to the decrease of income. These even bring more urge to design a proposed strategy that enable Ani’s Craft to overcome the challenges during the pandemic and the direction of its development.

Changes in the organization’s strategy will lead to changes in organizational design as well. Strategy affects the design of structures, processes and human resource requirements needed to achieve organizational goals and effectiveness (Foster, 2018). According to Daft (2021) in choosing an appropriate organization design, organization needs to take into account its strategy, environment, technology, size/life cycle and organizational culture. Previous studies that discuss organizational design in the context of MSMEs, including Lemus-Aguilar et al. (2019) who designed organizational designs for micro-scale software businesses based on strategic and environmental aspects; Karami and Gustomo (2020) developed an organizational structure for publishing businesses based on aspects of strategy and business processes. In this research, the development of organizational design for small businesses in the craft sector will be carried out by considering aspects of the strategy and organizational life cycle. The SWOT Analysis approach is used to design strategic proposals that are relevant to the object of research. The results of this study are expected to provide input for MSMEs regarding the direction of organizational development to be able to survive and grow in a competitive situation and dynamic environment.

LITERATURE REVIEW
In this section, several concepts that support research will be explained, including organizational design, organizational structure, and organizational life cycle.

Organizational Design

There are several definitions of organizational design. Organizational design refers to a set of talent management activities within the organization to achieve sustainable organizational performance (Foster, 2018). Daft (2021) describes organizational design as a process of aligning internal and external factors of the organization to achieve organizational goals. Meanwhile, Ivancevich and Konopaske (2013) define organizational design as the process of selecting alternative job and departmental frameworks to produce an organizational structure that can facilitate strategy implementation for the organization.
There are two dimensions that need to be considered in organizational design, namely the contextual dimension and the structural dimension. The contextual dimension describes the factors that influence the composition of the organizational structure, such as goals and strategies, technology, environment, size/life cycle of the organization, and organizational culture. Meanwhile, the structural dimension describes the internal characteristics of the organization that describe the interrelationships between positions in the structure, consisting of formalization, specialization, standardization, authority hierarchy, complexity, centralization, professionalism, and personnel ratio (Daft, 2021).

Organizational Structure

According to Ivancevich and Konopaske (2013) there are three important elements needed for effective organizational management, namely mission and strategy, organizational structure, and human resource management. Organizations that are able to formally structure can increase the organization's ability to survive.

Daft (2021) mentioned three key components in the organizational structure, namely describing formal positions and reporting relationships, identifying individual groupings into departments and departments within the overall organization, and including effective communication, coordination and integration between departments. The ideal organizational structure encourages employees to be able to share information horizontally and coordinate across departments.

There are several alternatives in designing the organizational structure, namely functional structure, divisional structure, geographic structure, matrix structure, virtual network structure, and holacracy team structure. The choice of organizational structure is influenced by the activities performed, reporting relationships, and the need for grouping. The organizational structure used in many organizations is a functional structure and a divisional structure. However, along with the need for flexibility and the demands for a fast response in the face of environmental changes, some organizations have begun to implement a holacracy team structure (Daft, 2021).

Strategy

Strategy reflects the direction of the organization to compete in the environment by aligning company resources (Daft, 2021). Foster (2018) viewed strategy as a series of superior organizational capabilities needed to achieve strategic goals. To be able to develop these capabilities, it is a must to align the structure, processes, rewards and potential of human resources.

In designing the strategy, it is necessary to carry out a SWOT analysis that aims to identify the key factors that come from the internal and external environment. Internal factors reflect aspects of strengths and weaknesses that come from the organization's internal environment. While external factors are opportunities and threats that come from the external environment of the organization (Rangkuti, 2016).

Based on the results of the identification of internal and external factors, the TOWS matrix can then be compiled. This matrix describes how the external opportunities and
threats faced by the company can be adjusted to the strengths and weaknesses of the organization. From this matrix there are four alternative strategies that can be generated, namely: (1) SO Strategy (Strengths – Opportunities), (2) ST Strategy (Strengths – Threats), (3) WO Strategy (Weaknesses – Opportunities), (4) Strategy WT (Weaknesses – Threats) (Rangkuti, 2016).

Organizational Life Cycle

The organizational life cycle describes the stages of organizational development with each stage facing different internal and external factors faced (Dodge and Robbins, 1992). Meanwhile, according to Mosca et al. (2012) the organizational life cycle reflects a series of development stages in an organization's life span. Dodge and Robbins (1992) identified four stages in the organizational life cycle, with detailed characteristics shown in Table 1.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Life Cycle Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td></td>
</tr>
<tr>
<td>Conversion of idea into reality; providing product / services for selected markets</td>
<td>Commercial feasible product, show positive growth</td>
</tr>
<tr>
<td><strong>Development</strong></td>
<td></td>
</tr>
<tr>
<td>Gaining customer acceptance or upgrading production capabilities</td>
<td>Ensure organization performance and maintain supplier support</td>
</tr>
<tr>
<td><strong>Challenges</strong></td>
<td></td>
</tr>
<tr>
<td>Determine market, develop business planning, gather business knowledge</td>
<td>Design customer service, manage inventory &amp; cost controls, determine organization design &amp; personnel</td>
</tr>
</tbody>
</table>

Table 1.

Organizational Life Cycle (Dodge and Robbins, 1992)

RESEARCH METHODS

This research was conducted in three stages: preliminary stage, the strategic design stage, and the organizational design stage, as shown in Figure 1. In the preliminary stage, preliminary observations and interviews were conducted on Ani’s Craft which were used to identify existing conditions, organization goals, and the organizational life cycle. Due to pandemic situation, the interview was conducted using phone interview. Meanwhile the preliminary observation was carried out through searching for supporting data via the internet related to Ani’s Craft. According to the result of
In the second stage, an interview with the owner of Ani's Craft was conducted to explore further about the internal and external factors that play a role in the organization. Each internal and external factor obtained from the SWOT analysis is then given a rating and weight assessment to determine the relevant strategic priorities. Furthermore, the preparation of the TOWS matrix is carried out to identify strategies that are relevant to the object of research. In the third stage, based on the results of the strategy and the characteristics of the organizational stage, the next step is to design an organizational design that includes the proposed organizational structure.

RESULTS & DISCUSSION
From the results of interviews and observations obtained internal factors identified include financial capabilities, aspects of human resources, production processes, types of products, prices, marketing and sales schemes. While the relevant external factors include the market, competitors, suppliers, government, labor market, and technology. The results of the SWOT analysis identification are shown in Table 2 below.
Table 2.
Identification of SWOT Analysis

<table>
<thead>
<tr>
<th>Internal Factors</th>
<th>Weaknesses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths:</strong></td>
<td>1. Financial statements are not yet available, they are still mixed with the owner's personal finances</td>
<td></td>
</tr>
<tr>
<td>1. The location of the employee's residence and the place of work are close together</td>
<td>2. There are no formal work rules for employees</td>
<td></td>
</tr>
<tr>
<td>2. Flexibility of working hours for employees</td>
<td>3. Limited skills from employees, so when complex designs take a long time or are handled directly by the owner</td>
<td></td>
</tr>
<tr>
<td>3. Does not require many machines, because most products are hand made</td>
<td>4. The role of the dominant owner (one man show), as management manager, marketing staff, financial manager, to quality control</td>
<td></td>
</tr>
<tr>
<td>4. Implement a make to order system, so that the product is always sold</td>
<td>5. Limited sewing machine specifications, cannot be used for products that are too thick</td>
<td></td>
</tr>
<tr>
<td>5. Diverse product variations and designs</td>
<td>6. Do not have a specific production planning or marketing strategy</td>
<td></td>
</tr>
<tr>
<td>6. Accept the manufacture of products according to customer orders</td>
<td>7. Limited production capacity</td>
<td></td>
</tr>
<tr>
<td>7. Quality assurance through double quality control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Partnering with souvenir shops for sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Various marketing channel such as word of mouth, WhatsApp stories, and exhibitions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Affordable product prices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>External Factors</th>
<th>Threats:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunities:</strong></td>
<td>1. There are 33 handicraft business in the surrounding area</td>
<td></td>
</tr>
<tr>
<td>1. High interest in handicraft products</td>
<td>2. Variations of substitute products for high-quality handicrafts, for example those made from natural ingredients</td>
<td></td>
</tr>
<tr>
<td>2. Implementation of exhibitions from government assistance or other agencies</td>
<td>3. Limited access to financial capital</td>
<td></td>
</tr>
<tr>
<td>3. Partnering with several other craftsmen</td>
<td>4. Limited access to assistance for training for MSMEs from the Government</td>
<td></td>
</tr>
<tr>
<td>4. Raw materials are easy to obtain</td>
<td>5. Dynamic market situation</td>
<td></td>
</tr>
<tr>
<td>5. The location of MSMEs in tourist attraction areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Availability of labor, can empower housewives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Utilization of internet technology for product marketing and sales</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The next step is to determine the rating and weight for each element so that a score can be obtained. The results of the calculation of scores for each element of the SWOT analysis on Internal Factors are shown in Table 3. Rating and weight for each element was determined by the owner of Ani’s Craft and sample of employee who already work two years in Ani’s Craft. According to the final score, the strength element of Ani’s Craft are flexibility of working hours for the employees and various marketing channel. Meanwhile the highest score on weaknesses related to limited of production capacity.
### Table 3.
### Scoring for Internal Factors

<table>
<thead>
<tr>
<th>Internal Factors</th>
<th>Strengths: Final Score</th>
<th>Weaknesses: Final Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The location of the employee's residence and the place of work are close together</td>
<td>0.089</td>
<td>1. Financial statements are not yet available, they are still mixed with the owner's personal finances</td>
</tr>
<tr>
<td>2. Flexibility of working hours for employees</td>
<td>0.169</td>
<td>2. There are no formal work rules for employees</td>
</tr>
<tr>
<td>3. Does not require many machines, because most products are handmade</td>
<td>0.089</td>
<td>3. Limited skills from employees, so when complex designs take a long time or are handled directly by the owner</td>
</tr>
<tr>
<td>4. Implement a make to order system, so that the product is always sold</td>
<td>0.102</td>
<td>4. The role of the dominant owner (one man show), as management manager, marketing staff, financial manager, to quality control</td>
</tr>
<tr>
<td>5. Diverse product variations and designs</td>
<td>0.127</td>
<td>5. Limited sewing machine specifications, cannot be used for products that are too thick</td>
</tr>
<tr>
<td>6. Accept the manufacture of products according to customer orders</td>
<td>0.127</td>
<td>6. Do not have a specific production planning or marketing strategy</td>
</tr>
<tr>
<td>7. Quality assurance through double quality control</td>
<td>0.125</td>
<td>7. Limited production capacity</td>
</tr>
<tr>
<td>8. Partnering with souvenir shops for sales</td>
<td>0.119</td>
<td></td>
</tr>
<tr>
<td>9. Various marketing channel such as word of mouth, WhatsApp stories, and exhibitions</td>
<td>0.169</td>
<td></td>
</tr>
<tr>
<td>10. Affordable product prices</td>
<td>0.053</td>
<td></td>
</tr>
<tr>
<td><strong>Total Score for Strengths</strong></td>
<td><strong>1.169</strong></td>
<td><strong>Total Score for Weaknesses</strong></td>
</tr>
</tbody>
</table>

Similar step was also conducted to determine score of external factors. The results of the calculation of scores for each element of the SWOT analysis on External Factors are shown in Table 4. According to the final score, the strong opportunity for Ani’s Craft is assistance from the government to participate in exhibition activities or related activities conducted by other agencies. Meanwhile the majority threats that faced by Ani’s craft related to limited access for financial aspect, training to develop SME capabilities, and dynamic market situation.
Following the SWOT analysis is developing a TOWS matrix to obtain alternative strategies that fit the organization. The results of the developed TOWS matrix can be seen in Table 5. From the calculation results in Table 3, the total score for strength is 1.169, while the total score for weakness is 1.266. These results indicate that the weakness aspect is more dominant in internal factors. As for external factors (in Table 4), the total score for opportunities is 1.558 and the total score for challenges is 1.084. On external factors, the opportunities owned by the organization are more dominant than the challenges. Based on these two scores, the alternative strategy chosen is the WO (Weaknesses - Opportunities) strategy, where organizational weaknesses will be overcome by taking advantage of various available external opportunities.

Based on the proposed WO strategy, it is necessary to increase the number of workers who will hold two new functions, namely finance and marketing. In addition, in accordance with the characteristics of the Early Growth organizational stage and considering the results of the selected strategy proposals, it is necessary to add a position as Supervisor in production who will carry out the preparation of production plans and monitoring of production processes and results.

Table 4.
Scoring for External Factors

<table>
<thead>
<tr>
<th>External Factors</th>
<th>Opportunities:</th>
<th>Final Score</th>
<th>Threats:</th>
<th>Final Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High interest in handicraft products</td>
<td>0.25</td>
<td>1. There are 33 handicraft business in the surrounding area</td>
<td>0.167</td>
<td></td>
</tr>
<tr>
<td>2. Implementation of exhibitions from government assistance or other agencies</td>
<td>0.308</td>
<td>2. Variations of substitute products for high-quality handicrafts, for example those made from natural ingredients</td>
<td>0.167</td>
<td></td>
</tr>
<tr>
<td>3. Partnering with several other craftsmen</td>
<td>0.133</td>
<td>3. Limited access to financial capital</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>4. Raw materials are easy to obtain</td>
<td>0.25</td>
<td>4. Limited access to assistance for training for MSMEs from the Government</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>5. The location of MSMEs in tourist attraction areas</td>
<td>0.25</td>
<td>5. Dynamic market situation</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>6. Availability of labor, can empower housewives</td>
<td>0.117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Utilization of internet technology for product marketing and sales</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Score for Opportunities</td>
<td>1.558</td>
<td>Total Score for Opportunities</td>
<td>1.084</td>
<td></td>
</tr>
</tbody>
</table>
Table 5.
TOWS Matrix Strategy

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Strengths (SO)</th>
<th>Weaknesses (WO)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expand and add marketing methods</td>
<td>Create structured financial reports which are handled finance function and new employee</td>
</tr>
<tr>
<td></td>
<td>Change the system from make to order to make to stock system</td>
<td>Develop production plan, includes production capacity and production targets</td>
</tr>
<tr>
<td></td>
<td>Make production targets by adjusting market demand</td>
<td>Adding employees in the production division as supervisor, to monitor production process</td>
</tr>
<tr>
<td></td>
<td>Take advantage of technology by selling products online</td>
<td>Adding marketing function, to increase the marketing of MSME products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threats</td>
<td>Producing unique handicrafts as the hallmark of Ani's Craft</td>
<td>Conduct more training for employees to increase skills</td>
</tr>
<tr>
<td></td>
<td>Adding souvenir shops partners</td>
<td>Implementing a special business strategy as a guide for MSMEs</td>
</tr>
<tr>
<td></td>
<td>Expand and add marketing methods</td>
<td>Make production plans according to market conditions</td>
</tr>
<tr>
<td></td>
<td>Conduct independent training by employees who are proficient in the craft</td>
<td></td>
</tr>
</tbody>
</table>

The proposed organizational design for Ani's Craft considers contextual and structural dimensions, with the following explanations:

1. Contextual dimension
   a. Objectives and Strategies: Developing MSMEs by improving in each field.
   b. Organizational Technology: The type of organization for Ani's Craft from a technological aspect includes the type of Small-batch production. Therefore, organizations can use functional and divisional forms of structure.
   c. Environment: Owners and employees have a good relationship with each other
   d. Size: The size of the organization is still on a small scale, with a workforce of less than 10 people
   e. Organizational Culture: Organizational culture is familial but it is necessary to build standardization related to the division of labor

2. Structural dimensions
   a. Formalization: Work formalization is determined by the MSME owner
b. Specialization: Division of duties according to the responsibilities of each division, namely the production division is responsible for all production activities, the finance division is responsible for financial activities, and the marketing division is responsible for marketing activities.

c. Standardization: Standardization is adjusted to the needs of each function

d. Hierarchy of Authority: The highest authority is owned by the owner, all MSME activities are owner-centered, and the production supervisor has authority over the operator.

e. Complexity: Complexity at a simple organizational level

f. Centralization: All MSME activities are owner-centered

g. Professionalism: Professionalism required includes production supervisors preferably from production graduates, marketing staff are experienced in marketing or marketing-related education graduates, finance staff have an educational background related to finance, while production staffs have skills in making crafts or participating in MSME training

h. Personnel ratio: Based on the chosen strategy, the personnel ratio in the production division is five people, the finance function is one person, and the marketing function is one person

Referring to the identification of the organizational design, the proposed organizational structure was selected using a functional structure. In the proposed organizational structure, there are additional positions for the finance function, marketing function, and production supervisor. The proposed organizational structure is shown in Figure 2.

From the proposed organizational structure, there will be a clear division of roles for organizational management. Through the addition of finance and marketing functions, Ani’s Craft owners can focus on formulating a strategic plan for business development and forging partnerships in the context of organizational development. With the addition of financial positions, it is hoped that it can help financial management for MSMEs that are separate from the owner's finances, and structured financial reports can be prepared to make it easier to apply for funding assistance. The addition of employees for marketing positions can be directed to start marketing through digital media and e-commerce, so that they can overcome the obstacles faced in a pandemic situation and also be used to reach and add customers from other regions. The research was carried out in the COVID-19 pandemic situation which created limitations for MSMEs. However, the proposals designed can still be applied to deal with situations during and after the pandemic. So that the proposed organizational structure can provide benefits for MSMEs so that they can be better prepared in dealing with post-pandemic situations and develop better to the next stage of the organizational life cycle.
CONCLUSION
Identifying the organization’s environment and organization’s life cycle had help Ani’s Craft to create specific path to follow. W-O strategy was the one to be pursued to develop its business. As for the organizational design, adding new function or department was done based on a series of structured and scientific steps that will lead to more adequate results. Marketing and finance were two functions needed to run professionally and put into organizational structure even in the smallest business organization as MSME. Further research can be directed to explore the business processes that need to be carried out by Ani’s Craft as well as the preparation of job analysis documents to assist the documentation process and technical implementation of the proposed Ani’s Craft organizational structure.

REFERENCES


