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Authors: Ni Nyoman Kerti Yasa, Ni Wayan Mujiati, I G. A. Dewi Adnyani, Komang Ardana

Pages: 2117- 2124

Country: Indonesia, Subject Area: Management, Category: Research Paper

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Empowerment of Small and Medium Enterprise (SME) in Karangasem Regency

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Abstract: The purpose of this research is to develop a strategy of empowerment of SMEs in Karangasem regency based on the results of SWOT analysis. The respondents that were used in this study are the Head Department of Cooperatives and SMEs in Karangasem, academics / observer of SMEs and SMEs businessmen as many as 14 people. The data analysis technique used is a SWOT Analysis with Matrix Internal - External. The results showed opportunities for SMEs in Karangasem are: access to global market, economic growth is quite good, controlled inflation rate, government support, government regulations, culture, whereas that become threat is increasingly level of competition. Which to be strengths to empower SMEs in Karangasem are human skills, entrepreneurial orientation, the uniqueness of the product, quality of service, and good promotion, while there are still weaknesses of SMEs in Karangasem are: limited access of capital, limited mastery of information technology, and bookkeeping system that has not good enough. Based on the opportunities, threats, strengths, and weaknesses, then the strategy was chosen for the empowerment of SMEs in Karangasem is Growth and Build strategy, which is focused on program access to sources of capital, IT mastery improvement programs, and improvement of the accounting system.

Keywords: SWOT Analysis, Empowerment Strategy, and Growth and Build Strategy

1. Introduction

The problem of poverty is a strategic issue that should get the attention from everyone. Poverty is a complex and chronic problems that has found in many areas of the world. This phenomenon was revealed on several technical studies that have been done by skae and Barclay (2007), Kato et al. (2008), Tambunan (2011), and Ataguba et al. (2013). Likewise, there is still problem of poverty in the province of Bali. According to the Central Bureau of Statistics (2013) the number of poor people in Bali are 176,900 people, which is spread in both urban and rural (BPS Bali, 2013). These poor people need to continue to be reduced in order to achieve the "Millennium Development Goals Century" or the Millennium Development Goals (MDGs) by 2015. Therefore the provincial government of Bali with all stakeholders needs to pay attention to think about how the strategy will be implemented to alleviating poverty in all regions in the province of Bali. From the nine districts / cities in Bali, an area that shows a relatively high poverty rates is Karangasem regency (6.37% poor) according to BPS, Bali, 2013.

Karangasem regency consists of eight (8) districts, namely: 1) Abang, 2) Bebandem, 3) Karangasem, 4) Kubu, 5) Manggis, 6) Rendang, 7) Selat, and 8) Sidemen. According to Deputy Minister of Public Welfare (2010), there are several ways to address the problem of poverty, namely: 1) family-based integrated social assistance; 2) poverty reduction based Empowerment of Community; and 3) community development based on Small and Micro Enterprises (SMEs). Third target of the program group in 2015 is the establishment of participatory institutions in 78,000 villages. The third alternative strategic is namely empowerment-based micro and small enterprises, it often to be a choice to empower communities.

The optional strategic also has its advantages and disadvantages. They overcome poverty by empowering small businesses has been done. It is shown from the results of Dollar and Kraay (2002); Odd-Helge, et al., (2006); Saravanan et al. (2008), Marlow (2009); Akinboade and Kinfack (2012); and Yasa et al. (2013). From the research of Yasa et al. (2013), has showed that improving the performance of SMEs is capable of reducing poverty. Therefore, to alleviate poverty in the region of Karangasem regency, it needs to be done by a strategy of empowerment for Micro, Small and Medium Enterprises (SMEs) in order to continue to increase its performance. SMEs in Karangasem regency consist of small industry and handicraft. The small industry is dominated by 5,928 woven industry units and 3,627 agro industries (food and beverage) units (BPS, Karangasem, 2013).

Strategy formulation process can be done by analyzing the internal and external environment in order to find out what the opportunities, threats, strengths, and weaknesses of SMEs. This analysis is known as SWOT analysis. The use of a SWOT analysis as a basis for formulating strategies have been carried out by, such as the Al-Mubaraki and Busler (2010); Mapulanga (2013), Al-Busaidi (2014); Talib and Hamid (2014), Tsitisipati and Athanasios (2014). Through the SME profile shooting, it can be seen that there are potentials and problems of the SMEs and will be used as a reference in the formulation of strategies and empowerment programs. Through a variety of programs that will be developed, SMEs are expected to grow and increase its performance, and finally be able to increase the region's economic growth and alleviate poverty in Karangasem regency.

Based on the background of the problem and the formulation of the problem, the goals of this study are as follows. 1) To identify opportunities / threats that is faced by SMEs in Karangasem regency. 2) To identify the strengths /
opportunities (opportunities), and threats (threats) in a project to evaluate the strengths (strengths), weaknesses (weaknesses), SWOT Analysis is a method of strategic planning used to SWOT Analysis

2. Literature Review

SWOT Analysis
SWOT Analysis is a method of strategic planning used to evaluate the strengths (strengths), weaknesses (weaknesses), opportunities (opportunities), and threats (threats) in a project or a business venture. These four factors form the acronym SWOT (strengths, weaknesses, opportunities, and threats). This process involves determining the specific objectives of the business venture or project and identifying the internal and external factors that support and do not in achieving that goal. According to David (2011: 30) SWOT analysis is an activity to observe and analyzes the transformation of external and internal environment to determine whether that transformation in the environment provides opportunities, threats, strengths, and weaknesses. If transformation in the external environment provides an opportunity for SMEs to improve their performance then those transformations bring opportunities, and vice versa, if the external environment transformation presses companies in achieving higher performance that is called threat. For transformation of the internal environment is shown by the ability of its resources. If the ability of the company's resources exceeds its competitors, it can be said that the company has strength, and vice versa. If the ability of the company's resources lower than its competitors, it can be said that the company has a weakness.

Based on the SWOT notions, it can be concluded that the SWOT analysis is an analysis that can used for formulating strategy, which consists of the analysis of strengths, weaknesses, opportunities, and threats faced by a company to achieve the goal. Application of SWOT analysis has been widely used in studies that have conducted by: Proctor (2002), Ahmed and Almarri (2006), Coman and Ronen (2009), Evans and Wright (2009), Helms and Nixon (2010), Carlsen and Andersson (2011), and Koo et al. (2012). All of these researchers use SWOT analysis in order to identify opportunities and threats arising from the external environment changes, and determine the strengths and weaknesses of the company from existing resources as a basis for formulating business strategy (Antony, 2012).

Empowerment Strategy of SME
SME is a business that has many limitations relatively, both in human resources, capital resources, technological resources, as well as other resources. Therefore, to improve the achievement of the performance of SMEs, it needs to design strategies to empower that increases performance of achievement, and the strategic role of SMEs as one of the ways from the government to eradicate poverty that can be realized. The strategies that can be used as an alternative option to empower SMEs are as follows.

1) Integration Strategy (Backward integration, forward integration, and horizontal).

Integration strategy focused on improving the company ownership or control of the company's suppliers (backward integration), retailers (forward integration), and the company's competitors (horizontal integration. This strategy is generally carried out by companies that have started to develop, and examples of the application from this strategy by SMEs to increase its performance that has been investigated by Liinamaa and Gustafsson (2010); Cadeaux and Adrian (2012).

2) Market Penetration Strategy.
Business strategy has undertaken by the company by increasing market share through product / service currently on the market through greater marketing activities. This strategy is widely used in pure form or in the form of a combination (combined) with other strategies. Market penetration includes of increasing the number of sales personnel, increased spending on advertising, sales promotion product offerings are extensive, or folding doubling marketing efforts. Research was conducted by Murray and O'Neill (2012) showed that through the implementation of market penetration strategy, beer industry is able to increase its market share and able to achieve competitive advantage.

This strategy is implemented by the company by way of introducing the products or services that exist to areas that are geographically a new area. In a global perspective, the development of truly international scale market share has been done by companies (Solberg and Durrieu, 2006). This can be done if you have a distribution network; there is excess production capacity, revenue earnings in line with expectations and the new market share or not yet saturated.

4) Product Development Strategy.
Strategy used to increases sales by improving current products or developing new products, or also known as product innovation strategy (Jacobs and Herbig, 1998). Product innovation strategy can be applied to small business by way of partnerships with competitors, so that limited resources are a constraint in implementing product innovation can be overcome. This phenomenon was studied by Jong and Hulsink (2012) which showed that successful small businesses to innovate by building networks among small businesses. This model is also consistent with the results of previous studies conducted by Lichtenthaler (2008), and Van de Vrande et al. (2010). Product development usually requires greater research and development costs.

5) Partnership Strategy.
Partnership strategy is an option strategy in the global era, let alone very precisely chosen by small and medium enterprises with limited resources. Through the implementation of the partnership strategy, SMEs will have more value in the supply of raw materials, production processes, to product distribution, and able to reduce the intensity of competition (Yasa et al. 2013). Partnership strategy can be executed by establishing cooperation with suppliers, competitors, and customers.
3. Methods

This research was carried out on existing SMEs in Karangasem regency. The object of research is the development of MSME programs to alleviate poverty in Karangasem regency. Meanwhile, the fundamental reason for the selection of objects of research is SME businesses still weak in improving the performance that needs to be empowered to be able to be one of the options for the government to alleviate poverty.

In accordance with the framework of the preparation of the strategy, the first step is to identify strategic external and internal factors. In the external environment, strategic external variables are: competition, global market, economic growth, inflation, government support, government regulations, culture, and development of Information Technology (IT). In the internal environment, the internal variables are strategic HR skills, entrepreneurial orientation, product quality, capitalization, bookkeeping, quality of service, promotion, and mastery of IT. Strategic internal and external variables are identified by survey respondents who totaled 14 people consisting of entrepreneurs SME businesses, Head of Department of Cooperatives and SMEs in Karangasem, and SMEs observers, whose distribution is as follows, namely 11 SME entrepreneurs, two leaders of the Department of Cooperatives and SMEs observers, whose distribution is as follows, namely 11 SME entrepreneurs, two leaders of the Department of Cooperatives and SMEs in Karangasem, and 1 academy as observer. This is done for reasons of homogeneity of the respondents and the expected results can be more representative.

All variables in this study helps in making the formulation of strategies and empowerment programs. IE matrix helps in further analysis. Before making IE matrix, the SWOT analysis should be done first and its results are summarized in EFAS and IFAS Table. Application of SWOT analysis is done by considering the strength and weaknesses as internal factors and opportunities and threats as external factors of SMEs. Furthermore, the results that was obtained from the analysis is being transferred into IE matrix to be mapped in order to determine the position of SME business. Based on the position of these businesses, it can be formulated strategy of SMEs and be translated into various strategies / programs of SMEs empowerment to alleviate poverty in Karangasem regency.

4. Discussion and Analysis

Analysis and Diagnosis of External Environment Strategic

Various changes in the external environment are analyzed and diagnosed to determine opportunities or threats for the empowerment of SMEs in Karangasem regency. The process of determining the opportunities and threats begins with the identification of strategic external factors, then weighting, rating and giving weighted value. From the analysis and diagnosis of the existing external environment can be summarized as the following result as presented in Table 2

Based on Table 2, showed overall score is 4.0391. Total weighted value of 4.0391 (greater than the cut-off value = 3) it can be said that in the future (year 2015-2019), SMEs in Karangasem regency facing many opportunities, among others: the opening of the global market, economic growth, government support, government regulations, culture, and IT
ASEAN countries are venturing up to Bali and Karangasem competition. The more the presence of other SMEs from all Which pose a threat to SMEs in Karangasem is the intensity of Threat became independent society. It will make the public more insights about the business, so it will be more oriented culture through social media networks will be able to change the future is expected to change through people's interactions with the IT-based social media will feel communications to various areas of marketing with the help of Information technology is growing rapidly. It will also SMEs gain greater revenue. 6) The development of IT. Information technology is growing rapidly. It will also give SMEs the opportunity to conduct marketing communications to various areas of marketing with the help of IT, such as using a variety of social media such as facebook, twitter, instagram and others. IT-based social media will feel completely open network or market expansion of SMEs. These conditions are resulted in the achievement of sales performance is also higher. 7) Cultural society. Culture in the future is expected to change through people's interactions with the outside world, such as community interaction with tourists who come to Karangasem, as well as community interaction through social media networks will be able to change the insights about the business, so it will be more oriented culture became independent society. It will make the public more sought or open business opportunities. 8) Mastery of Information Technology

<table>
<thead>
<tr>
<th>Number</th>
<th>Strategic Internal Factor</th>
<th>Weight (%)</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HR Skills</td>
<td>13.44</td>
<td>4</td>
<td>0.5376</td>
</tr>
<tr>
<td>2</td>
<td>Entrepreneurial Orientation</td>
<td>12.00</td>
<td>3</td>
<td>0.3600</td>
</tr>
<tr>
<td>3</td>
<td>Product Quality</td>
<td>12.63</td>
<td>4</td>
<td>0.5052</td>
</tr>
<tr>
<td>4</td>
<td>Capital/Asset</td>
<td>11.82</td>
<td>3</td>
<td>0.3546</td>
</tr>
<tr>
<td>5</td>
<td>Bookkeeping</td>
<td>13.03</td>
<td>3</td>
<td>0.3909</td>
</tr>
<tr>
<td>6</td>
<td>Service Quality</td>
<td>12.84</td>
<td>4</td>
<td>0.5136</td>
</tr>
<tr>
<td>7</td>
<td>Promotion</td>
<td>12.84</td>
<td>4</td>
<td>0.5136</td>
</tr>
<tr>
<td>8</td>
<td>Mastery of Information Technology</td>
<td>11.40</td>
<td>3</td>
<td>0.3420</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td></td>
<td><strong>3.5175</strong></td>
</tr>
</tbody>
</table>

From Table 3 column 5 shows the weighted value, which is obtained by multiplying the weight by score, where the total score will be able to conclude whether the SMEs have the strength or weakness in general. And the total score results showed 3.5175. This means in the period 2015 - 2019, SMEs will indicate the strength or advantages compared with its competitors (SMEs in other regional areas).

**Description Strategic Internal Factors**
Based on the overview of the results as presented in Table 3, it can be described several issues related to strategic internal factors of SMEs in Karangasem regency in the future, as follows. Which are strengths to the empowerment of SMEs in Karangasem are: 1) HR Skills. HR Skills is predicted increases in the future. This is because the government in cooperation with other parties, such as open access for Universities to do service is one of the containers to enhance the skills of human resources, so that HR skills will increase in the future. 2) Entrepreneurial orientation. Entrepreneurial orientation is a mindset that is owned by SMEs in Karangasem regency to always be creative, innovative, and daring to risk that can be calculated. Through the improvement of skills and giving lectures on entrepreneurship SMEs, it will make the next higher entrepreneurial orientation. 3) The uniqueness of the product. A successful SME marketing depends on the uniqueness of the product that became the hallmark of different products with competitors' products. In Karangasem certainly, it causes this competition remains a threat to watch out for.

**Analysis and Diagnosis of Internal Strategic Environment**
The first step in analyzing the internal strategic environment same with the steps in analyzing the external environment. From the results, it appears that the weight of the variable predictions for future changes due to the assumptions underlying the company's future has been changed in accordance with the direction of the vision and mission of SMEs, which to achieve its goal of becoming SMEs are able to provide value to the welfare of society. The first step is to determine the level of importance of each factor in the future. The analysis showed that the weighting for each factor are shown in Table 3. Further analysis is to determine the weighted value of each indicator to obtain the total weighted value that will be presented in Table 3 below:
regency, it still have each region compared with other regions of SMEs still accommodate the uniqueness of the area so this makes the uniqueness of the product brings the power for SMEs to compete. 4) Capital. Capital for SMEs is very important, but with the help of the government in the future, it is predicted that access to sources of capital becomes easier. This is reflected in the government's drive to remain disburse credit for small people industry. 5) Bookkeeping. Bookkeeping is an activity record of all transactions that occur in the operation of business. SMEs in Karangasem regency, transaction records are often considered unimportant so bookkeeping system is worse. According to the informant's perception in the future, with the help of lectures and training on how to manage a small business bookkeeping system is expected for SMEs will become better. 6) Quality of service. Quality of service is the impact of human resource skills and knowledge of SMEs. With the attention of stakeholders, such as government attention and Universities is expected to make understanding of service quality become better and SMEs are able to implement in delivering services to the market. 7) Promotion or marketing communications. The intensity of communication between the seller and the buyer is an activity that results in relation to the SME market is getting close. With the support of the government in the promotion of SMEs, it makes promotional activities through the exhibition into force for improve sales performance. 8) The mastery of IT. Mastery of IT is one factor that can be a force for SMEs to compete. By increasing the skills of human resources, then IT mastery is also getting better. The mastery of this field is to help SMEs to network with suppliers, competitors, and consumers. Networks are becoming increasingly widespread capital strength of SMEs to compete.

Positioning SME Business
Positioning SME business in Karangasem is based on the results summary table EFAS and IFAS Table. Testing on the extent of strengths, weaknesses, opportunities and threats that are an integral part of the internal and external strategic factors of SMEs in Karangasem, performed using the Internal-External matrix. Internal-External Matrix is a matrix that helps make the mapping of the strategic position of SMEs in Karangasem with reference to the existing multivariable on each dimension, namely the external and internal dimensions. The references of internal dimension are: HR skills, entrepreneurial orientation, capital, accounting, product quality, service quality, promotion, and mastery of IT; and external dimensions are: competition, access to global markets, economic growth, inflation, government support, culture, and IT development.

Based on the analysis of internal strategic factors of SMEs in Karangasem regency showed that the total score of the internal strategic factor reaches at 2.6375 on current and reaches at 3.5175 on future, and be categorized in positions classified above average because less than value of 3.00 as the value cut off. Internal strategic factor analysis showed that SMEs in Karangasem is good enough, as in HR skills, entrepreneurial orientation, financing, accounting, product quality, service quality, promotion, and mastery of IT.

Analysis of external strategic factors of SMEs in Karangasem regency showed that the total score of the external strategic factors presents 3.4040 on current and presents 4.0391 in future. When incorporated into the matrix of external strategic factors in a position classified above average because it is greater than the value of 3.00 as the cut-off value.

These findings can be used as inputs for the Head of Department of Cooperatives and SMEs in Karangasem in decision making, both to analyze prospects and development in empowerment of SME program in the future. The strategic position of SMEs in Karangasem in the present and the future can be described to the Internal-External Matrix as follows.

**SME Internal**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Medium</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.00</td>
<td>3.67</td>
<td>2.33</td>
</tr>
<tr>
<td>High</td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>3.67–5.00</td>
<td>SME</td>
<td>III</td>
</tr>
</tbody>
</table>

**SME External**

<table>
<thead>
<tr>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.33–3.67</td>
<td>VII</td>
</tr>
<tr>
<td>1.0–2.33</td>
<td>VIII</td>
</tr>
</tbody>
</table>

Picture 1: Matrix Internal – External
5. Formulation Strategies for SME Empowerment

Based on the SWOT analysis and fitted by using the Internal-External matrix approach developed from General Electric models indicate that the strategic position of SMEs in Karangasem is classified in the top cut off. This condition indicates that SMEs in Karangasem is in rapid growth, it is showed by cells that are located in the upper left corner of the section. It is highly prospective for the development of SMEs. Thus, the relevant strategies that should implemented by the Department of Cooperatives and SMEs Karangasem is Growth Strategy (Growth Strategy) which growth strategy with several alternatives, such as vertical integration, market development, market penetration and product development. Strategic implications are still able to be directed to further improve the utilization of the factors that are part of the opportunities and strengths of SMEs selectively and at the same time always trying to improve creativity through careful planning in order to change the factors of threats and weaknesses become opportunities. Based on some alternative of growth strategy or program development of SME empowerment strategy in Karangasem most likely to be chosen is the market penetration strategy and product development strategies.

Integration Strategy
Integration strategies can be selected by the SMEs in developing Karangasem regency. This strategy choice shows that SMEs in developing Karangasem regency could increase the ownership or control of suppliers, retailers, or competitors. For SMEs who have an interest to maintain smooth raw material, they should choose the strategy of backward integration. For SMEs who want to maintain the smooth distribution of its products will choose the strategy forward integration, while SMEs who want to reduce the pressure of competition environment will choose the strategy of integration to the side (horizontal integration). All options of this integration strategy must carry on improving the achievement of the performance of SMEs. Application integration strategies that are already showing results in an increase in the company's performance has been investigated by Stross (2007); Cadeaux and Adrian (2012). Cadeaux and Adrian (2012) research showed results that by applying the results of forward integration strategy led to the company's performance as measured by the achievement of increased customer satisfaction, increase the rate of profit, and increase market share. Therefore, the strategy of integration, especially with the integration of the future such as the establishment of the SME Center as a transaction all existing SMEs is the right choice for SMEs in Karangasem to raise performance.

Market Penetration Strategy
SMEs in Karangasem district can reach a larger market share by implementing a market penetration strategy. Market penetration strategy can be translated into several programs, such as: a) increase the intensity of promotional activities undertaken by SMEs individually and collectively. SMEs in Karangasem could do more good promotion locally, nationally, and internationally. Through these promotional activities, Products of SMEs in Karang are better known by the market. Thus, the achievement of the performance of SMEs also increased. b) Utilizing IT development to market by creating a web site. This web site will be a media campaign for SME products internationally. Foreign markets more easily obtain product information, especially via the web site promotion activities are always updated according to the latest product developments. Market penetration strategy is generally reflected by spending increasing advertising costs (Nelson, 2005). Furthermore, Murray and O'Neill (2012) also conducted research on the craft beer industry that shows the results, the application of market penetration strategy can improve the acquisition of market share significantly.

Market Development Strategy
Alternatively, in addition to selecting a market penetration strategy to increase market share gains, SMEs in Karangasem also can choose a strategy to expand the target market. Especially now that it has entered the era of globalization, so the market of SMEs products is very broad. Moreover, the support of a growing IT development is huge expansion into overseas markets more easily done. In addition, also with promotions nationally by following the trade show in Jakarta. Market expansion is done both at the local, national, and international and certainly adds market share can be achieved so that the performance of SMEs increased and become more empowered. Many companies are already successfully implementing this strategy, as it had been examined by Solberg and Durrieu (2006).

Product Development Strategy
Based on the results of SWOT analysis, one of the SMEs empowerment in Karangasem is pursuing a strategy of product development. Product development strategy can be described through the improvement of existing products and new product development. This is possible due to the improvement of human resources skills and increase entrepreneurial orientation, SMEs in Karangasem trying to always make improvements and to find ideas for new product development. For example, small businesses that engaged in weaving sector in Karangasem always develop new motifs in the design of its products. In addition to the new motif, these businesses are also trying to find a combination of raw materials in order to raise the quality of the product. Product development strategy is the right choice for small business in order to still be able to thrive in an environment of increasingly fierce competition. This is consistent with the results of research conducted by Bhatt et al. (2011) and Al-Hakim and Hassan (2013). Product development is part of an ongoing process to achieve competitive advantage by providing a variety of products, providing quality products and unique local. All potential products developed by Karangasem are also supported by the availability of SME Center Karangasem regency.

Partnership Strategy
Partnerships can be done by SMEs in Karangasem by partnering with competitors, suppliers, and customers. Partnership with competitors could lead to an opportunity to
network in order to innovate. This has been studied by Gardet and Mothe (2012), which shows the results of SMEs in France, it can build networks to innovate with its competitors with the criteria that an existing SMEs trust and mutual guarantee, and poured in a formal agreement. In addition, it is also necessary to develop partnerships with a variety of funding sources, such as Village Credit Institutions (LPD), rural banks (BPR), as well as with other commercial banks, to overcome weaknesses in access to capital. Furthermore, it should also be developed partnerships with educational institutions, the Universities and educational institutions courses for improving skills and mastery of science and technology for SME businesses. Various strategies or development programs through partnerships has been widely studied, such as Zineldin (2005), Yasa et al. (2013) which showed that the partnership strategy is able to improve the achievement of the performance of small businesses.

6. Conclusions and Recommendations

Based on the results of research, discussion and interpretation which has been described in the previous chapter with reference to some theories and previous research results then it can draw some conclusions as follows. 1) The problem that is faced by SMEs in Karangasem, among others: the relatively limited access to capital and mastery of information technology is relatively not high, and bookkeeping system has not been good. 2) The opportunity for empowerment of SMEs in Karangasem is access to global market, economic growth is quite good, controlled inflation rate, government support, government regulations, culture, whereas the level of threat is increasingly fierce competition. 3) What are strengths to empowerment of SMEs in Karangasem? They are human skills, entrepreneurial orientation are already good, the uniqueness of the product, quality of service, and promotion, while there are still weaknesses for SMEs in Karangasem: limited access to capital, information technology mastery, and bookkeeping system that has not been good. 4) Based on the opportunities, threats, strengths, and weaknesses, then the strategy of empowerment of SMEs in Karangasem comprises a) Integration Strategy, b) Market Penetration Strategies, c) Market Development Strategy, d) Product Development Strategy, and e) Strategy partnerships.

Based on the results of the analysis can be suggested several things that need to be done in order to further develop SMEs in Karangasem are as follows: a) the need to establish cooperation with the Universities in improving the skills of human resources so as to improve the mastery of science and technology, good bookkeeping system, as well as other skills, b) cooperating with a variety of funding sources such as the Village Credit Institutions (LPD) and rural banks (BPR) in order to be able to overcome capital constraints.

References


Volume 6 Issue 2, February 2017

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Paper ID: ART20171255
DOI: 10.21275/ART20171255
2123


