

# The Integration Model of Small Craft Industry Development Strategy of Wood Carving In Bali Province, Indonesia

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**Abstract:** The island of Bali – Indonesia is famous of, in addition to its tourism industry, small craft industry of wood carving that is located in Gianyar regency, one of the nine regencies having strategic potency in sustaining local original revenue. Local Original Revenue of Gianyar has increased from Rp 57 billion in 2007 to Rp 261 billion in 2012 in which one of them was supported by craft industrial sector. This condition makes the craft of wood carving is very feasible and potential to be more empowered. In 2010, wood carving handicraft industry particularly experienced a decline in the value of export acquisition from year to year, dropping more than 2 percents in a significant way.

Explorative research into the field, Focus Group Discussion (FGD,2013)and integration model of VC (Value Chain), SWOT (Strength, Weakness, Opportunity and Threat), with AHP (Analytical Hierarchy Process) and the application of Good Corporate Governance (GCG) discovered how economic empowerment of small craft industry of wood carving increased sales significantly in Gianyar Regency both for domestic as well as export markets of Bali, Indonesia.

**Keywords:** Small Craft Industry Development, Wood Carving.

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## 1. INTRODUCTION

Gianyar Regency is one of the 9 (nine) regencies that is potential in economic growth in Bali Province. This area is located in the South East of Bali. As a hinterland tourist area, Gianyar Regency has a significant role in fostering tourism and small industries, such as, wood carving in Bali.

The contribution of industrial sector of wood carving to the economic growth of Gianyar Regency is paramount and as one of the industrial mainstays. This industry is able to absorb considerable amount of labors among other industries. In 2011, the investment value of this industry in wood carving export market reached 66.3% of the total exports of handicrafts. The absorption of labors reached 4725 persons/year. The potential of the community working on this venture of wooden craft industry is very significant in Bali Province (see Table 1).

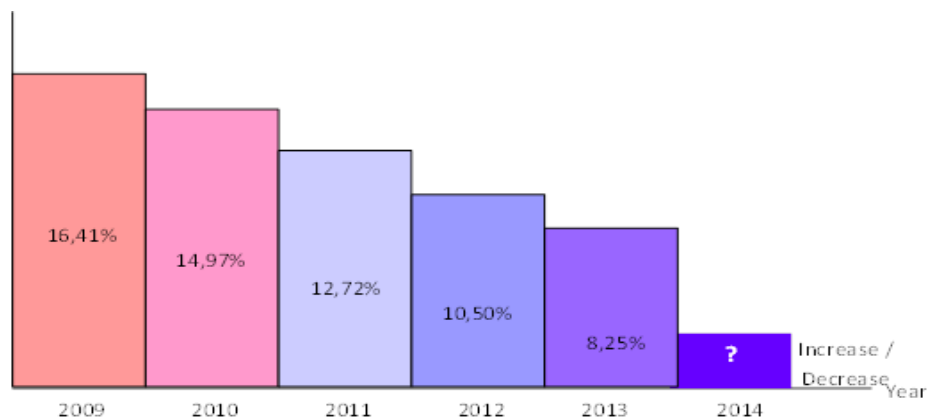
**Table.1: Top Ten order of Craft Industry Based on The Number of Total Industry in Gianyar Regency in 2011**

Type Of Industry	The Number Of Companies	The Number Of Labor	The value of the investment (in thousands of (Rp.))	Production Value	The average of Exports (%)
Wood Carving Craft Industry Except Furniture	248	4.725	338.057.218	100.608.319	66,3
Valuable Jewellery Industry For Personal Use Of Precious Metals	106	1.572	602.216.625	519.031.989	56,1
Craft Industry That Were Not Classified Elsewhere	45	611	239.250.066	54.733.600	56,2
The Industry Of Textile And Apparel Equipment	32	627	4.690.518	6.187.150	47,6
Tenun Ikat Fabric Industry	8	270	448.158	2.910.000	56
Tea And Coffee Processing Industry	6	28	40.792	3.900.000	28,3
Batik Industry	6	81	339.988	992.500	61,7
Printing Industry	5	34	25.194.537	4.500.000	30
Industrial Woven from Rattan and Bamboo	4	59	632.082	194.200	65
Industrial Goods For Household Use And Display	4	73	678.698	1.925.000	58,8

(Source: Department of Industry and Trade of Gianyar Regency, 2011)

Problems in this study are (1) How is the links of the value chain of wood carving craft industry in Gianyar?; (2) How is the strategic position of the wood carving craft industry in Gianyar?;(3) How is the empowerment strategy of wood carving craft industry in Gianyar?

But in its development woodcraft industry experienced ups and downs , Moreover in the last three (3) years export of Bali for wood carving handicraft to the total export value from year to year is decreased in 2009 by 16.41 percent, amounting to 14.97 percent in 2010, in 2011 was 12.72 percent, in 2012 was 10.50 percent, and in 2013 until 2014 have not predictedthe development (Department of Industry Prov. Bali, 2013)

**Figure.1: Wood carving craft industry decline in Gianyar Regency**

Source: Department of Industry and Trade of the Province of Bali, 2013

## 2. LITERATURE REVIEW

This study originated is from the study of theories which starting at economic development theory to review the multi-dimensional transition process that reflects the relationship among various processes of change in the region, and then followed by assessment review the structural changes theory reviewing fundamental change in the economic structure. Economic structure change has an impact on dominant contribution changes of each sector in the economy of a region. Furthermore, the theory of empowerment has an important role in improving the community's role both as individuals and as a businessman in their lives in order to maintain and develop community life as an independent and dignified.

The phenomenon of the existence of small industries which have a major role in sustaining the economy of the State, especially when a crisis occurs but ironically small industry in maintaining its existence in the increasingly tight competition often faces challenges both due to factors originating from the industry itself as well as the external factors. So it is important to conduct a study and deep analysis to the small industry in order to be able to be a highly competitive industry in the world competition. Then, it is necessary to conducted study of theory that lead to think deductively because the theory is universal the meaning is accepted by public and anywhere but only can be applied to specific cases. Further empirical studies that were examined in this study is intended to complement the insight in preparing this dissertation. The empirical study is a process of generalization of the specific things into the general conclusions. This means the study or empirical studies provide inspiration to think inductively. The review of previous studies as follows.

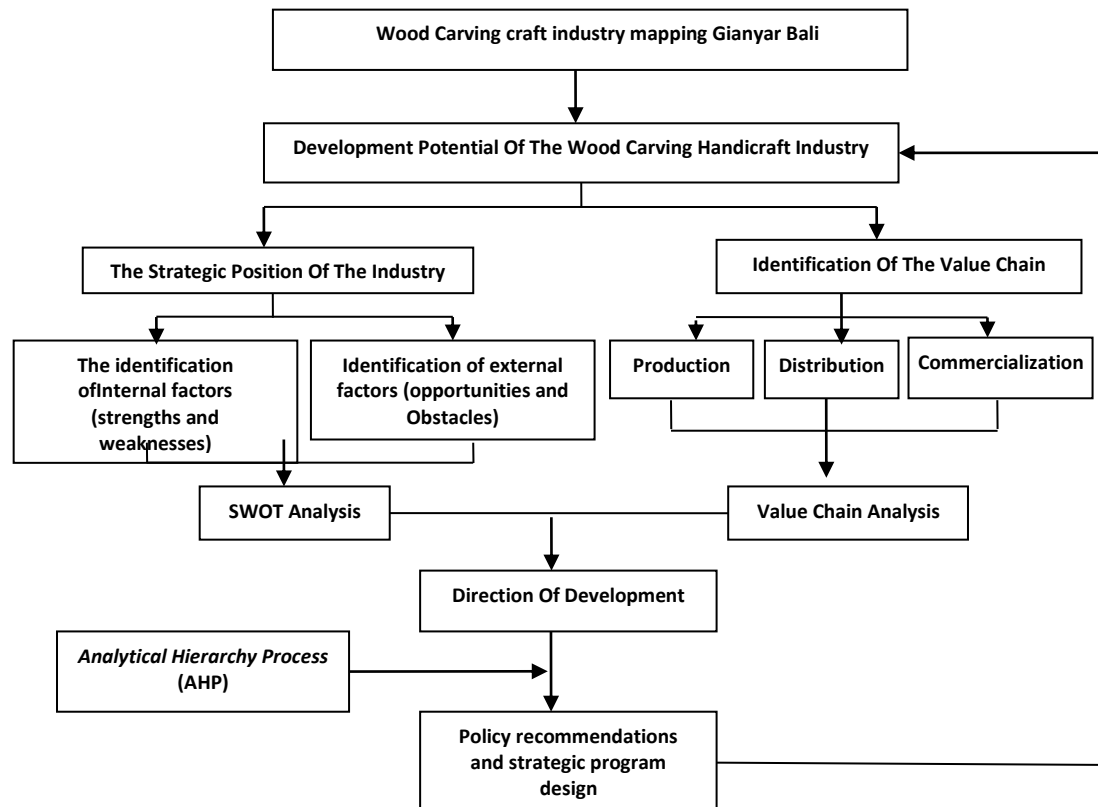


Figure.2: The Framework Of The Concept Of Research

### 3. RESEARCH METHODS

This study is explorative and quantitative descriptive by using Model of Value Chain (Porter, 1985; Kotler, Philip. 200). To identify the strategic position of industrial SWOT approach is applied (Rangkuti 1999; Lee, SF & KO, 2000; David FR, 1997; Bernroider, Edward., 2002; Nikolaou, IE, 2010; Manteghi&Zohrabi 2011; Thoha, Mahmud (2000). In formulating recommendation policy of empowment of craft industry used a qualitative approach quantified qualitative approach in the form of Analytical Hierarchy Process (Saaty, 2006; Saaty& Shang, 2011). The population in this research is 248 units with 151 businesses sample spread across several districts. The sampling technique using a stratified random sampling (purposive) based on the number of workers. The data used in this research consisted of primary data by conducting a field survey and secondary data as supporting data in the form of existing statistical data and the result of FGD (Focus Group Discussion). A questionnaire was used to obtain primary data from respondents.

### 4. RESEARCH RESULT

The high sales value of wood carving handicraft products is determined by added value obtained in each production chain of craft products. The economic value of the final product in the market is highly depend on the stages of production from production input supply, production processes as well as handling post-production. Product value chain is an activity that starts from raw material to handling post sales and include activities interrelated relationships with suppliers (suppliers linkage) and the relationship with the consumer (consumer linkage).

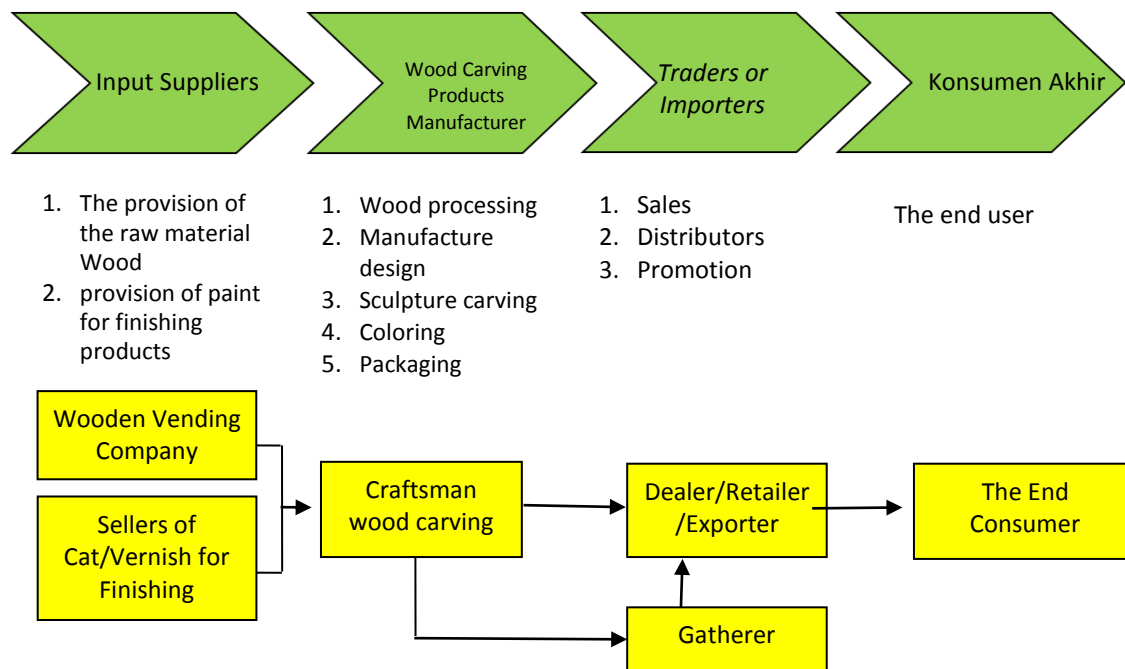


Figure.3: Mapping the value chain wood carving handicraft industry in the Gianyar Regency

Source: Research Results Being Processed, 2013

In the product value chain there are many organizations and networks are involved in important interrelated functions. Each actor in the value chain has a different role and function. Relations between functions reflects important strengths and weaknesses of the institutional system. The whole relationship occurred in the corridor policies, laws, incentives and a set of resources that allow the operation of a number of institutions, which consists of a core industry, supporting industry, industry service providers, and supporting institutions.

**Strategic Position Analysis of Wood Carving Craft Industry Gianyar Regency:**

Strength factor in SWOT matrix includes several components that become internal power of wood carving handicrafts industry namely, the existence of the cluster, labor availability, stability of product prices, the existence of that partnership, skills and simple production processes, market potential, raw material quality and flexibility of business diversification. On the other hand carving craft industry has some internal constraints includes limitation of accessibility of capital, low managerial quality and low of technology mastering, limited market and the low of product innovation. While the external side, wood carving handicrafts industry has a few chances that the improved economic conditions in order to increase demand, lack of government support and international market opportunities. On the other hand the threat faced by the industry will also include business and economic dynamics as well as more accelerate the global market dynamics and borderless countries.

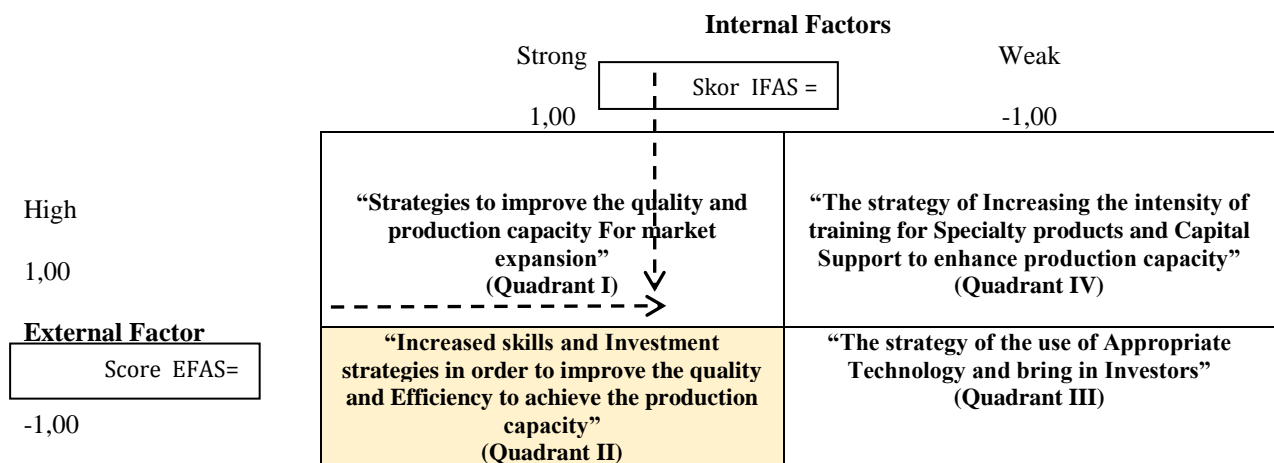


Figure.4: Industrial Development Strategy model of carving in the Gianyar Regency

Internal and external conditions facing by wood carving handicrafts industry demanded the importance of integrated and comprehensive of empowerment strategies, is not only to achieve short-term goals that benefit businesses but also for long-term goals is to have continuity of production and the market. Based on the results of the mapping industry in general strategic positions in the SWOT matrix obtained results that the presence of wood carving handicraft industry in Gianyar in quadrant II showed by internal factors and external factors are 0.31 -0.23, indicating the strategy of improving the skills and investments to improve the quality and production capacity to achieve efficiency. The Improvement of quality and capacity production can be achieved by supporting by government through mentoring, training and capital loans. It also requires the support of the banks to increase the amount of investment through loan with low interest rate or making relation between craftsmen and investors from outside the region, such as trade cooperation to increase production capacity to achieve production efficiency.

#### Analytical Hierarchy Process (AHP) produces as follows:

The Results of mapping the strategic position of the craft industry of wood carving by using SWOT analysis is quite optimistic scenario even though more intensively of empowerment efforts needed and efficiently in the facing various challenges, especially in line with the dynamics of the economy and business environment even without any borders between regions and countries. Future projected of empowerment of small and medium enterprises, especially wood carving handicraft industry in Gianyar is determined by a number of strategies in financial management, strategy in human resource empowerment, strategy in production management, marketing strategy and strategy of public services. Here is the hierarchical structure of the empowerment of the craft wood carving in Gianyar. Structure analysis of the development process can be illustrated in Figure 5 as follows.

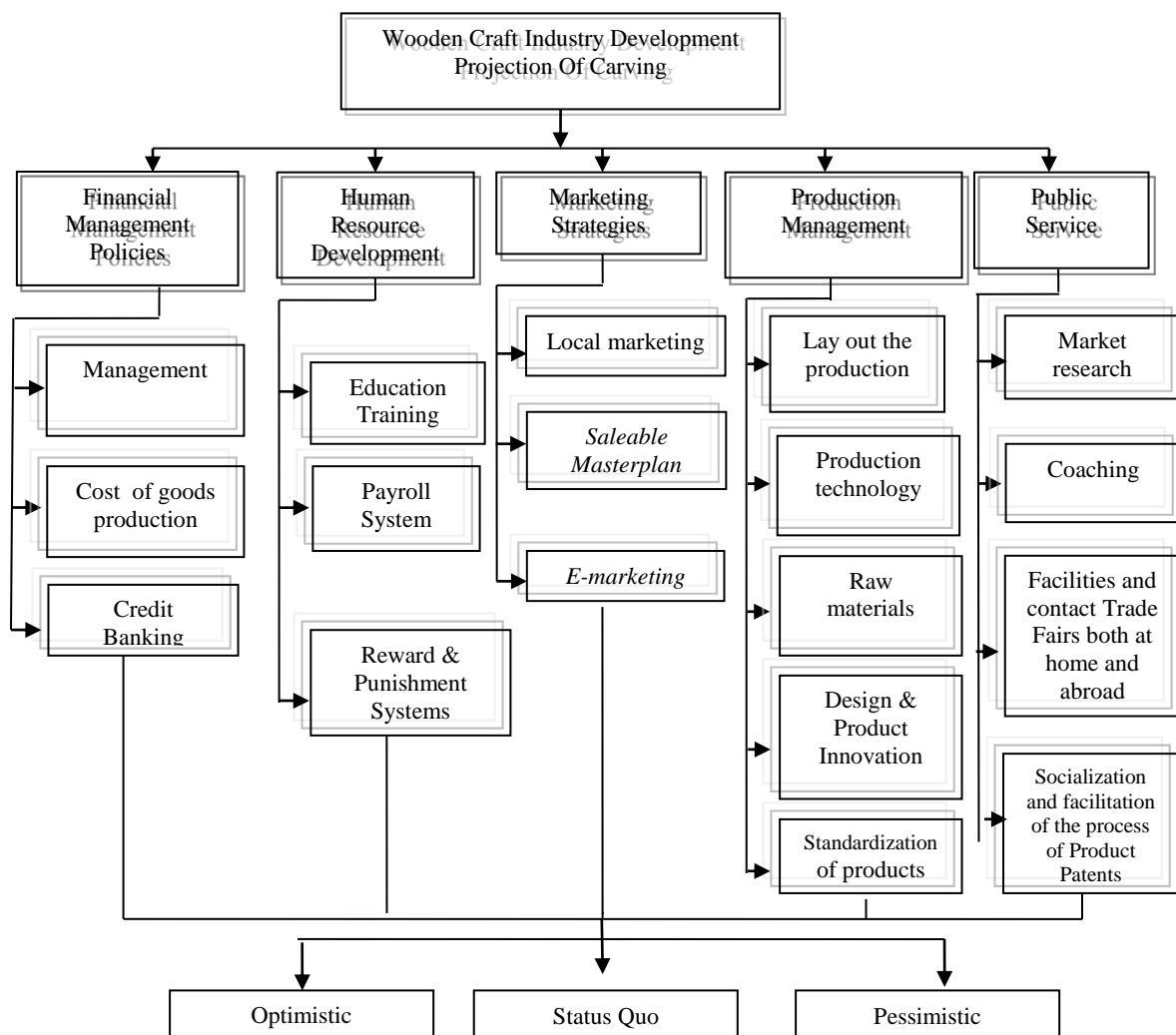
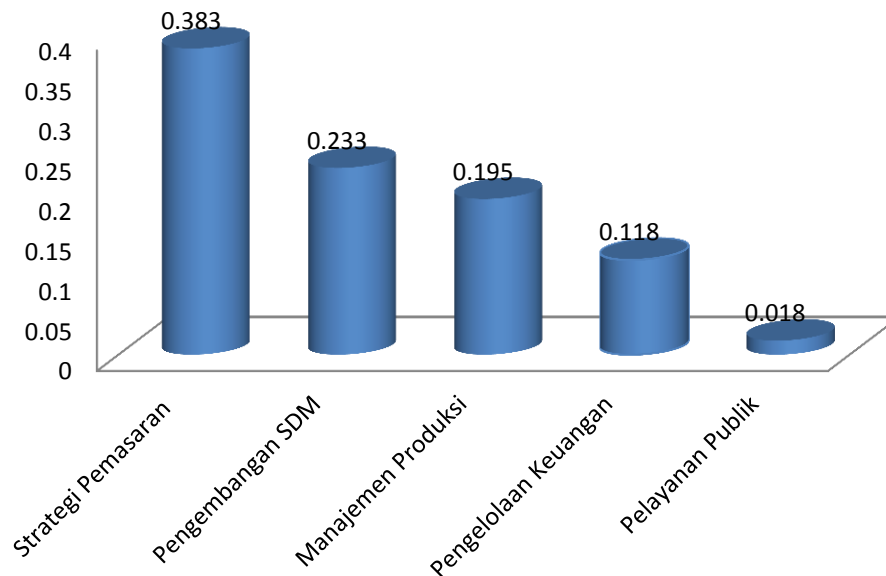


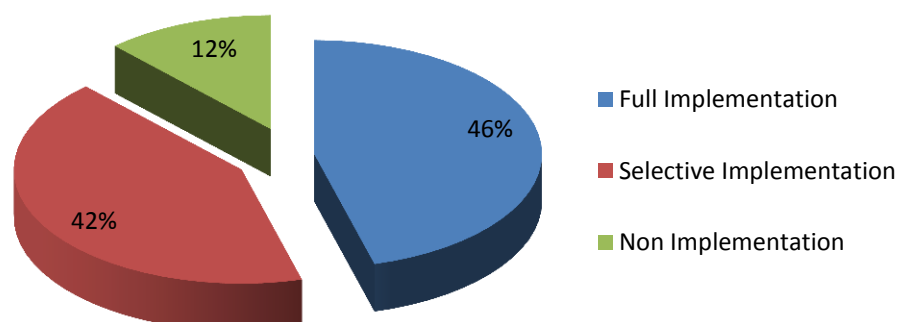
Figure.5: Hierarchical structure of the Small Craft industry development Projection of wood carving in the Gianyar Regency

Based on the calculation of the global weight of each factor, the result of marketing strategies obtained to be a priority factor which determining prospects of wood carving handicrafts in Gianyar with the weight of 0.3825 and followed by 0.2332 human resource development, production management 0.1945, 0.1184 financial management and public service 0.0715 with consistency ratio of less than 10 percent is 0.0246, which means the respondent's answer is quite consistent. As shown in Figure 6.



**Figure.6: The empowerment strategy the industry Crafts wood carving in the Gianyar Regency**

On the analysis of the future position of wood carving craft industry in Gianyar developed three scenarios of the implementation namely full implementation, selective and no implementation. Based on the analysis, the full implementation is a top priority that is run in the development of wood carving crafts industry is 0.4574, 0.4227 selective implementation and no implementation 0.1199. Full implementation of the action scenario is to carry out all the optimistic scenario and marketing strategies. Selective implementation of the action scenario is selectively implement optimistic scenario, because it is less optimistic for success for developing wood carving crafts industry. The strategy used selectively strategy does not generate rapid growth. While the last scenario there is no implementation in the development of wood carving craft industry and allowed to grow stagnant and even negative.



**Figure.7: Alternative Scenarios of the future wood carving handicraft industry in the Gianyar Regency**

To avoid a crisis in innovative craft product export, the government coordinate with entrepreneurs (artist) should apply the concept of Good Corporate Governance (GCG) was initiated in Cadbury Committee of the Bank of England (1992). As the initiative and forum for entrepreneurs (craftsmen carving wood) both a Regional-Owned Enterprises (enterprises)

as well as cooperation's that fulfill the rules of corporate transparency governance and has a good accountability, so they have high bargaining power (bargaining power) both for the suppliers and consumers.

## 5. CONCLUSION

From The results is obtained the premise of the integration of VCA (Value Chain SWOT and Analytical Hierarchy Process) and the application of Good Corporate Government (GCG), which provides maximum results for the economic empowerment of the wood carving craft industry in Gianyar. The empowerment will provide a significant increase in domestic and export markets results Bali Province, Indonesia. The chain of Wood carving craft value consists of: Suppliers, Manufacturers Wood Carving product final Trader and Consumer. Obstacles faced by craftsman in level is production processes, shortage supply of raw material comes from the island of Bali and the capital itself. While constraints in the downstream discovered their lack of support from the Department of Tourism (Government) in the marketing process and the allocation of means of handicraft products exhibition in Bali and national levels derived from Value Chain Analysis The result of SWOT analysis is obtained internal power factors of wood carving crafts industry is in the cluster, the stability of product prices, the availability of skilled labor, the simple production process is simple, as well as the flexibility of business diversification, the internal weaknesses namely: the lack of information system and R & D support, product quality is sensitive to market, lack of market information innovation, , limited capital, low managerial capability, and limited market share. While the external side of wood carving craft industry has few opportunities that the improvement in the national economy, population increases, government support for SMEs, communications and information infrastructure is and more supplier of society demand to the wood carving innovation product, competitor's product, the dependency on continuity of supplier as well as The results of the strategic position mapping of wood carving crafts industry is at a fairly optimistic scenario. To run an optimistic scenario in the empowerment of wood carving craft industry, special strategies are required; strategies in financial management, strategy of human resource development, strategy in production management, marketing strategy and strategic public services. From the calculation of the global weight of each factor obtained that marketing strategies be a priority factor which determines the prospects craft of wood carving in Gianyar and weighs 0.3825 obtained from AHP.

## 6. FURTHER RESEARCH

Based on the result of there a search, the research of direction in the future was to examine the marketing strategy and human resource development in small craft wood carving industry, in order to be competitive in the international.

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