## Ipteks Product for Export Industry Wood Crafts Furniture in the District Klaten Central Java, Indonesia

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### ABSTRACT

Free trade in the ASEAN region in 2013 has begun, which requires competencies of human resources and the quality of products. Post-crisis economic recovery effort is still underway. There are problems faced by SMEs Crafts Furniture Industry in the District Klaten. Preliminary results show that all the artisans have not had a chance to get facilities from the government so they need a helping hand from the college in the form of facilitation training: strengthening resources human resources, procurement of information technology facilities (website), international exhibition (such as PPE) and finishing training and furniture design. Problems include limitations of export markets, lack of technological innovation, weak networking business partnership and traditional business management and low utilization of information and communication Technology (considering the role of universities as agents of social change) so that SMEs will be in a stronger economic position. One form of accelerated transfer of technology and management from universities to SMEs is to develop and match the link between universities and SMEs through the Science and Technology Products for Export program that will last for 3 years (2014, 2015 and 2015).

Keywords: Science and Technology Products for Export.

#### 1. Introduction

Free trade in the ASEAN region in 2013 has begun, which required competencies of Human Resources and the quality of products. Post-crisis economic recovery effort is still underway. Indonesia's economic base increases the real sector. Real sector is the largest sector in contributing portion of GDP (Gross Domestic Product) of Indonesia. Manufacturing sector ranks first contributor to GDP with a contribution rate of 25.4%. Level of contribution to GDP is greater. SMEs accounted for a very large contribution to the GDP (Gross Domestic Product) is equal Indonesia 55, 56%. (Data Statistics, 2013). Klaten district consists of three plain that slopes of Mount Merapi, and the lowland plains of Limestone Mountains. Most residents of Klaten dependent agricultural sector with 51.6% of its territory is a rice field. Klaten district, which borders the district of Sleman, Yogyakarta province, Sukoharjo, Boyolali and Gunung Kidul. Klaten district has an area of 65 556 hectares composed of 26 districts and 401 urban village with a population in 2012 A total of 1,972,740 people, 46.95% Klaten economy is Agriculture economic shown with the use of 30 779 ha of land. For paddy

fields and 53.05% (34 777 ha) is not wetland. Juwiring Sub District consists of 19 villages spread over 29.79 km<sup>2</sup>. Data Klaten In Anggka in 2012 showed that the District has a population of 61,184 souls Juwiring consisting of 29 801 men and 31 535 women. The number of pre-prosperous families as much as 2,488 families. The number of workers in the district is 34 050 people Juwiring There are about 34 companies in the industry Serenan village Juwiring District of Klaten Regency Central Java Indonesia. Educated population is 19.4% of the whole population (high school, university or equivalent and college), while the rest has low education level. Firms with labor force between 1-3 people are about 80% at the same craftsmen collectors. Firms with manpower of 4-7 people are about 15% with a craftsman until finishing the production process. Firms with labor 8-20 people are about 4.5%. Exporters with workforce over 40 people are about 0.5%. Of the 750 households of wooden furniture craftsmen, Serenan village has about 0.5% of people who become exporters.

Some of the problems faced by SMEs in Industrial Craft Furniture Serenan Juwiring District of Klaten Regency, among other preliminary results surve craftsmen have not had a chance to get all the facilities from the government so they need a helping hand from the college in the form of facilitation training that is perceived urgent need and are needed: Reinforcement Human Resources (through training in management, banking), Procurement of information technology facilities (website), the International Exhibition (such as PPE) and training finishing and furniture design. Limitations of export markets, technological innovation, weak networking business partnership and business management are still traditional and low utilization of Information and Communication Technology (considering the role of universities as agents of social change) so that SMEs will be in a stronger economic position. One form of accelerated transfer of technology and management from universities to SMEs is to develop and mach link between universities and SMEs through the provision of entrepreneurial training and mentoring / advocacy in business managements.

#### 2. Literature Review

Cost Reduction Strategies According to Porter (1994) suggests there are three generic options strategies often used by a business, namely: differential, cost leadership and focus. Strategies to lower production costs (cost leadership) require companies to keep costs as low as possible by increasing the efficiency of operation or quality of product. Cost advantage is one of two types of competitive advantage held by the company. Export-oriented companies can achieve and sustain overall cost advantage the company will have above-average performance in the industry can master assuming an average price of industry (Porter, 1994). According to Porter (1994) to be a superior company from its competitors, the company continues to be able to produce goods or services similar to those produced by competitors with lower prices cheap. That firms to produce goods or services at a minimum cost, then the firm must the work optimally. . The success of product innovation requires compatibility between process and supportive environment, and constantly incidental and not implemented (Zakon, 1989). Besides innovations related to the time and speed are key success, innovation strategy and competitive advantage or competitive advantage that transform new technologies into new products quickly (Musselwhite, 1990). Innovation must be accompanied by a strategy of continuous improvement is the improvement of production processes and continuous innovation regardless of whether the process has been able to produce the appropriate product innovation targets or not, gradually and without limit, so expect the company to innovate, meet the demands of consumers and move more faster than competitors (Ellitan & anatan, 2009: 24). Technology can be a solution to a problem solving competition, but technology as well as a major factor driving competition. The advancement of technology is an innovation that can contribute to the creation of competitive advantage such as value added and value in use, where there is a relationship between market and product performance. Keep in mind that the furniture is a product that can increase value added and value in use, its usefulness is well recognized by consumers from abroad and within the country. Thus an important aspect in the formulation of innovation strategy for the company is an exporter of wooden furniture: 1) managerial competence, where product innovation will be successful if it is planned properly. 2) Commitment to leadership and subordinate participation is where the success of innovation-led company should introspect before diterapkan.3 strategy) competence of human resources, should receive serious attention, because human resources who will operate a strategy of innovation. 4) The control technology is a demand to immediately create a group of skilled and experienced technicians in large numbers. 5) In a sustainable, adequate, so that the company can conduct continuous assessment of production processes that produce products competitively and innovative in following the dynamics of consumer demand. 6) information system network, which the company must be customer oriented, the initial step to be taken in the company's innovation is well know who the actual consumer companies. 7) Innovation of time, to enter the market is one of the main reasons the success or failure of new product innovation, where the opportunities and risks of new products depends on several things such as changes in general economic conditions, changes in consumer preferences and industry life cycle.

#### 3. Research Methodology (formatting same as above)

Broadly speaking, the problems faced by SMEs include issues of organizational management and human resources, production issues, financial issues and marketing issues. To encourage SMEs to seize opportunities and to enter the export market IbPE program (Science and Technology for Product Export) in Year 1 (first) to strengthen SMEs in the field of management and organization, as well as improving the quality of the product. IbPE program (Science and Technology for Product Export). Cost Reduction Strategies According to Porter (1994) suggests there are three generic options strategies often used by a business, namely: differential, cost leadership and focus. Strategies to lower production costs (cost leadership) require companies to keep costs as low as possible by increasing the efficiency of operation or quality of product. Cost advantage is one of two types of competitive advantage held by the company. Export-oriented companies can achieve and sustain overall cost advantage the company will have above-average performance in the industry can master assuming an average price of industry (Porter, 1994). According to Porter (1994) to be a competitive company, it needs to be able to produce goods or services similar to those produced by competitors with lower prices firms to produce goods or services at a minimum cost, then the firm must the work optimally. . The success of product innovation requires compatibility between process and supportive environment, and constantly incidental and not implemented (Zakon, 1989). Besides innovations related to the time and speed are key success, because it is an innovation strategy competitive advantage or competitive advantage that is used to transform new technologies into new products quickly (Musselwhite, 1990).

Innovation must be accompanied by a strategy of continuous improvement is the improvement of production processes and continuous innovation regardless of whether the process has been able to produce the appropriate product innovation targets or not, gradually and without limit, so expect the company to innovate, meet the demands of consumers and move more faster than competitors (Ellitan & anatan, 2009: 24). Technology can be a solution to a problem solving competition, but technology as well as a major factor driving competitive advantage such as value added and value in use, where there is a relationship and product performance. Keep in mind that the furniture is a product that can increase value added and value in use, its usefulness is well recognized by consumers from abroad and within the country. Thus an important aspect in the formulation of innovation strategy for the company is an exporter of wooden furniture: 1) managerial competence, where product innovation will be successful if it is planned properly. 2) Commitment to leadership

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#### 4. Main Findings

Method of solving the problem is to organize IbPE Program (Science and Technology for Product Export) business training for SMEs have problems in the business aspects related to the function of providing assistance to SMEs. Performance Indicators. Purpose of Program Products For Export science and technology is expected to improve organizational management, product quality, technology development and marketing of furniture products so as to encourage SMEs to seize opportunities and export growth While details of specific goals and objectives are as follows: Table 1.

#### **5.**Conclusions

Expected program outcomes changes include: Value of assets and turnover of SMEs, number and quality of marketed products, market products, improvement of environmental health, and an increasing number of SMEs workforce. Are broken down as follows: Table 2. Produk generated by SME -1 (Cakra Antik Funiture) and SME -2 (Fauzi Jati Funiture) are: table, chair, cupboard, desk phone, bookshelves, shoe racks, shelves, (wood furniture) etc. are in great demand in the market. With a touch and guidance from our team expect the products competitive in the export market (based on turnover and the amount of production per year) will increase even more competitive level and can enter all the better market share in the global market. Market Potential after diintruduksikannya technology transfer / technology appropriate to the expected outcomes of SMEs products sold in the export market, will more quickly absorb product and market expansion occurs so that the quantity of production is expected to increase by 10% in pertama.serta increase in business in the manufacture of export products innovation can increase the rate of local income and can reduce unemployment. Once the business is running will open opportunities as possible for skilled labor.

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# 7. Appendix

# Table 1.

The Results Obtained After The Activities Ipteks Program Product For Export

THESTATEOFSME 1BEFORETHEACTIVITYIPTEKSPROGRAMPRODUCTFOREXPORT	THE STATE OF SME 2BEFORE THE ACTIVITY IPTEKSPROGRAMPRODUCTFOREXPORT	THERESULTSOBTAINEDAFTERTHEACTIVITIESIPTEKSPROGRAMPRODUCTFOREXPORT	
Organizational Management Financial Management, Taxation, and Human Resources has been no lack of knowledge and skills are still traditional	Organizational Management Financial Management, Taxation, and Human Resources has been no lack of knowledge and skills are still traditional	Organizational Management Financial Management, Taxation, and skilled human resources and knowledge into increased	
Less good quality Raw Materials	Less good quality Raw Materials	Have the knowledge and skills of Quality Raw Materials	
There is no office space and administrative	There is no office space and administrative	Layout and administrative office space.	
Completion of the order not timely because less energy	Completion of the order not timely because less energy	Use of Machine Dryer / Oven	
Damaged product due to the existence of raw material quality is not good	Damaged product due to the existence of raw material quality is not good	Quality Control Products	

Table 2. Target Achievement2014

	FIELD PROBLEMS / PERFORMANCE	BASE LINE	TARGET
	INDICATORS		ACHIEVEMENT
			2014
1	Management organization		
	a. Ability to Manage Business	50 %	60 %
	b. Leadership competencies	50 %	60 %
2	Human Resources		
	a. The number and quality of labor	50 %	60 %
	b. The number and quality of staff Exports	10 %	20 %
3	Finance		
	a. Develop the ability Financing Proposal	40 %	60 %
	b. Develop the ability of Financial Statements	40 %	60 %
	c. Ability Analyzing Financial Statements	10 %	30 %
	d. Implementation of Computerized Accounting	0 %	0 %
	System		
	e. Tax efficiency	20 %	40 %
	f. Implementation of Internal Control Systems	20 %	40 %
4	Production		
	a. Efficiency Production System	20 %	50 %
	b. Production Process Effectiveness	20 %	50 %
	c. Timeliness of Product Delivery	50 %	60 %
	d. Materials Cost Efficiency	50 %	60 %
	e. Certification Product Quality / Control	50 %	60 %
5	Marketing		
	a. Ability Develop a Marketing Plan	10 %	40 %
	b. Marketing Mix Effectiveness	10 %	20 %
	c. Effective Systems and Procedures of Export	10 %	20 %
	d. Export Market Share	10 %	20 %