# DEVELOPMENT STRATEGY OF MICRO, SMALL, AND MEDIUM INDUSTRIES BASED ON CREATIVE INDUSTRY CENTERS IN SIDOARJO REGENCY: A CASE STUDY

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#### **ABSTRAK**

Beragam industri kreatif yang dikembangkan masyarakat Sidoarjo berbasis pada industri mikro, kecil, dan menengah. Hal ini berdampak positif terhadap perekonomian masyarakat. Sektor-sektor tersebut dihadapkan pada berbagai permasalahan dalam mengembangkan usahanya, seperti pemasaran, sumber daya manusia, material, mesin, modal dan keuangan, produk, teknologi, pendukung, penelitian dan pengembangan, distribusi, promosi, pesaing, dan kebijakan. Tujuan penelitian ini adalah untuk mengetahui strategi pengembangan sentra industri kreatif berbasis industri mikro, kecil, dan menengah di Kabupaten Sidoarjo dalam upaya meningkatkan perekonomian masyarakat. Alasannya, Kabupaten Sidoarjo banyak memiliki kegiatan perekonomian masyarakat dalam skala industri mikro, kecil, dan menengah. Sentra industri berbasis industri mikro, kecil, dan menengah yang berkembang di Kabupaten Sidoarjo antara lain: Sentra Industri Logam Ngingas, Sentra Industri Batik Tulis Jetis, Sentra Industri Kerajinan Sepatu Kulit Tanggulangin, Desa Anyaman Bambu Seketi Balongbendo, Desa Ikan Asap di Penatar Sewu, dan Sentra Industri Kerupuk di Desa Biting. Metode kualitatif dan kuantitatif diterapkan dalam penelitian ini untuk memecahkan masalah penelitian. Hasil penelitian menunjukkan bahwa kunci keberhasilan strategi pengembangan industri mikro, kecil, dan menengah adalah sebagai berikut: (i) pembentukan badan usaha milik desa untuk mendukung pengembangan industri mikro, kecil, dan menengah; (ii) motivasi berusaha lebih kuat karena usaha tersebut bersifat turun-temurun; (iii) meningkatkan aspek keunggulan kompetitif bisnis; (iv) pemberdayaan masyarakat untuk meningkatkan perekonomian desanya melalui pengembangan sentra industri; dan (v) peran pemerintah dalam mengembangkan pusat-pusat industri.

Kata kunci: industri kreatif; strategi pengembangan; sentra industri; industri mikro, kecil, dan menengah

#### **ABSTRACT**

The variety of creative industries developed by the Sidoarjo people are based on micro, small, and medium-sized industries. It has a positive impact on the people's economy. These sectors are faced with various problems in developing their businesses, such as marketing, human resources, materials, machinery, capital and finance, products, technology, support, research and development, distribution, promotion, competitors, and policy. The aim of this research is to determine the strategy for developing micro, small, and medium-sized industry-based creative industrial centers in Sidoarjo Regency in an effort to improve the community's economy. The reasons are that Sidoarjo Regency has a lot of community economic activities on a micro, small, and medium-sized industry

scale. Micro, small, and medium-sized industry-based industrial centers that are developing in Sidoarjo Regency include: Ngingas Metal Industrial Center, Jetis Written Batik Industrial Center, Tanggulangin Leather Shoe Craft Industrial Center, Seketi Balongbendo Bamboo Woven Village, Smoked Fish Village in Penatar Sewu, and Cracker Industry Center in Biting Village. Both qualitative and quantitative methods were applied in this research to solve the research problem. The research results indicated that the successful keys of micro, small, and medium-sized industries's development strategies are as follows: (i) forming village-owned enterprises to support the development of micro, small, and medium-sized industries; (ii) the business motivation is stronger because the businesses are hereditary; (iii) improving business aspects of competitive advantage; (iv) empowering communities to improve their village economies through the development of industrial centers; and (v) the role of governments in developing industrial centers.

Keywords: creative industries; development strategy; industrial center; micro, small and medium-sized industries

#### INTRODUCTION

The industrial sector plays a significant role in the growth of Indonesia's national economy. It serves as the foundation and engine of the economic establishment. The industrial sector may generate foreign exchange profits from exports and is capable of supporting the labor force. The following are some of the industrial field's key characteristics: First, it will assist industries that depend heavily on workers, on assets, and on cutting-edge, science-based technology. It then produces a somewhat higher output. Finally, it strengthens the capacity to deliver providers and connects ties to many areas. The goal of government policy guidance is to recover and transfer national industries through the creation of an industrial field with facilities that are user-friendly for all parties involved. It consists of certain economic zones and ligature logistic territory (Putri, 2022; Putri, 2024).

Micro, small, and medium-sized industries (MSMIs) are the engines powering the Indonesian economy. The development and expansion of this nation's economy have benefited immensely from MSMIs. At 99.9% of all business units, there are MSMIs. A monetary crisis in 1998 and a global financial crisis in 2008 are the two economic downturns Indonesia has faced. Throughout the two economic downturns, MSMIs were able to retain their strength and continue to provide employment for the country's workforce. The consequences of the worldwide financial and economic crises during the COVID-19 pandemic, on the other hand, do not follow this pattern (Putri & Putri, 2021a).

In general, MSMIs face various obstacles in developing their business. These obstacles are explained below. First is the challenge of breaking into the international market. High export expenses, paperwork, administration, and logistics are the things that are holding you back. Generally speaking, the majority of MSMIs in the creative sector still know very little about exporting. Second, due to their lack of mass manufacturing, MSMIs in the creative economy sector still have a limited capacity for output. Third, lack of standardization in production machine capacity, challenges in obtaining information about possible markets, and insufficient tools for investigating export markets. Fourth, insufficient proficiency in digital marketing, non-adherence to e-commerce platform guidelines for export operations, and substantial financial consequences. Fifth, the requirements for certification and licensing are complicated and costly for MSMI actors (Putri, 2023).

Sidoarjo Regency is one of the districts in East Java Province, Indonesia. Sidoarjo Regency is included in the Gerbangkertosusila area and is the main support for the City of Surabaya (Purwanto, 2021). Gerbangkertosusila is an urban area that includes Gresik, Bangkalan, Mojokerto, Surabaya, Sidoarjo, Lamongan, and parts of the coastal waters of East Java Province. This area has strategic advantages in terms of economic growth (Jdih, 2022).

Sidoarjo is one of the districts with the largest number of micro, small, and medium industries (MSMIs) in Indonesia. More than 206,000 small and medium industries and 6,000 micro, small, and medium-sized industries exist in this city. While the number of large industries reached 664, the number of the number of medium industries reached 297. Based on data from the Central Statistics Agency (2019), these various companies are spread across 18 sub-districts. Most are located in Waru District, which includes 138 large industries and 60 medium industries (Taufik, 2021).

The Sidoarjo Regency has seen rapid development. This success demonstrates how the region's numerous potentials, including those of micro, small, and medium-sized industries (MSMIs), may be efficiently packaged and directed for industry, trade, and tourism. Sidoarjo Regency has the potential to be one of the strategic locations for regional economic growth due to its many potentials and sufficient human resource support. The City of Indonesian MSMIs is another name for Sidoarjo Regency. Here are a few of the reasons why: (i) it has the highest concentration of MSMIs in Indonesia; (ii) a large number of people engage in MSMIs sectors for economic purposes; (iii) it has approximately 82 MSMIs that are part of the creative industry; and (iv) it has creative business villages (Putri & Putri, 2021b).

The aim of this research is to determine the strategy for developing MSMI-based creative industry centers in Sidoarjo Regency in an effort to improve the community's economy. The underlying reason is that Sidoarjo Regency has a lot of community economic activities on a micro, small, and medium industrial scale. This advantage makes Sidoarjo often referred to as Indonesia's MSMI City. For future benefits, the Sidoarjo MSMIs development strategy can be used as a reference for developing MSMIs in other areas. In this research, the discussion of MSMI-based industrial centers that are developing in Sidoarjo Regency consists of (i) Ngingas Metal Industrial Center; (ii) Jetis Written Batik Industrial Center; (iii) Tanggulangin Leather Shoe Craft Industrial Center; (iv) Seketi Balongbendo Bamboo Woven Village; (v) Smoked Fish Village in Penatar Sewu; and (vi) Cracker Industry Center in Biting Village.

## MATERIALS AND METHODS

#### **Business Development Strategy**

The development strategy is an attempt to analyze the opportunities and threats that will be faced as well as the internal and external environmental conditions, including strengths and weaknesses. Based on the analysis, a decision is made regarding which course of action to take. The practice of evaluating a company's strategic advantage components in order to identify its strengths and weaknesses is known as environmental analysis. As a result, the following strategies were developed: (i) for the company to use effectively; (ii) to create a profile of excellence and resources; (iii) to compare the profile with the secret to success; and (iv) to identify the primary strengths from which the industry can create strategies to take advantage of opportunities, minimize weaknesses, and avoid failure. In order to accomplish prosperous commercial growth, organizations require a plan to oversee the endeavor. As a result, the business

will be able to make its biggest profit. These are the five business development strategies: (i) market share strategy, which involves selling goods or services within the same market; (ii) hunt strategy, which involves selling goods or services outside the same market; (iii) farm strategy, which involves seeking out new clients to sustain long-term sales; (iv) new product strategy, which involves creating a new product to increase company competitiveness; and (v) merge or acquisition to increase market share (Putri & Putri, 2021c).

#### **Creative Industries**

Every nation's creative economy developed in a way that enhanced the talents already present in the nation. The growth of the creative sector can be directed in three ways that are more industry-focused, depending on: Creative industries include the (i) creative and cultural business area; (ii) creative industry; and (iii) intellectual property rights industry as copyright industry (Putri & Abdulrahim, 2019). One way to use creativity, abilities, and unique talents to generate wealth and jobs is through the creative industry, which produces people's original works of art. Innovative work produced in the creative industry is dependent on creativity. The art has a distinct aspect of freshness and is incredibly diversified. The creative economy is driven by the following factors, which also benefit the creative industry: (i) employing people's individual creativity, skills, and talents; (ii) leveraging these attributes to create welfare and employment through individual innovation and creativity; (iv) elevating local wisdom and developing potential that has cultural values to be developed into a value-added product; and (v) expanding and coordinating creative areas (Putri & Putri, 2021b).

#### **Industrial Centers**

Policies promoting regional autonomy can establish district, city, and province-level local administrations, enabling them to explore the region's excellence and potential for optimal development. A center of excellence in a commercially competitive region might therefore offer value to the region's economic growth. The creation of industrial centers is a tactic to support regional growth. The underlying reasons are as follows: (i) the region's potential can develop more effectively and be focused because it will be thoroughly examined; and (ii) the industrial cluster is a tool of industrial policy, which serves as a useful platform for achieving both successful industrial development and economic decentralization (Putri et.al, 2016).

#### Micro, Small, and Medium-Sized Industries

Micro-industries are profitable companies with yearly sales of no more than IDR 300 million or a net worth of IDR 50 million (excluding land and buildings) that are held by individuals or individual business entities (Putri et.al, 2017). The profitable, independent firms are the small industries. Every small industry is a separate legal entity and is not a division or subsidiary of a larger corporation. The following criteria apply to small industries: (i) their net worth is between 50 million and 500 million IDRs (five hundred million and fifty million rupiahs); this amount does not include land and buildings; or (ii) their yearly sales revenue is between 300 million and 2.5 billion IDRs (two billion and five hundred millions of rupiahs). The productive, independent firms that make up the medium industry. The person or organization is not a small or large business's subsidiary or corporate branch. The following criteria apply to medium-sized industries: One of two possibilities exists: (i) Their net worth is between 500 million and 10 billion IDR (five hundred million and ten billion rupiahs), excluding land and

buildings; (ii) Their yearly sales fall between 2.5 billion and 50 billion IDR (two billion and five hundred million rupiahs) (Putri & Abdulrahim, 2017).

## Research Methodology

Both qualitative and quantitative methods had applied in this research. Document and text studies are used as qualitative research methods. Statistical data processing (quantitative method) was also implemented in this research. Table 1 presents a detailed discussion of the research stages.

Table 1. Research Stages

No.	Aspects	Data Collection	Data Processing	Analysis
1	Large and	Number of sub-districts	Percentage of	Analysis of the
-	Medium Industries of Sidoarjo Regency	Number of MSMIs Distribution of MSMIs in various sub-districts.	the MSMIs contribution to the GRDP. Percentage of the real growth of processing industry business.	strategic role of MSMI for the economic growth of Sidoarjo Regency.
2	Medium Industry Based on District	Number and Name of Subdistrict Number of Companies distributed in various sub- districts.	Calculate the percentage of each medium industrial companies by sub-district.  Make the pie graph based on the percentage of each medium industrial companies by sub-district.	Analysis of the percentage of each medium industrial companies by sub-district. Analysis of the largest percentage of companies of medium industrial companies by sub-district.
		Number and Name of Subdistrict Number of Workers Absorbed distributed in various sub-districts.	Calculate the percentage of workers absorbed by subdistrict. Make the pie graph based on the percentage of workers absorbed by subdistrict	Analysis of the percentage of the worker absorbed by medium industrial companies by sub-district.  Analysis of the largest percentage of the worker absorbed by medium industrial companies by sub-district.
3	Classification of Large Industrial and Medium Industrial Companies	Type of classification. Number of companies in classification	Calculate the percentage of number of companies in classification.	Analysis of the percentage of large and medium industrial companies based on classification.

			Make the pie graph based on the percentage of number of companies in classification.	Analysis of the largest percentage of companies based on classification.
		Type of classification. Number of workers in classification	Calculate the percentage of number of workers in classification. Make the Pie graph based on the percentage of number of workers in classification.	Analysis of the percentage of the workers in large and medium industrial companies based on classification. Analysis of the largest percentage of the workers in large and medium industrial companies based on classification.
4	SMEs' Development Strategy Based on Industrial Centers	MSMI's development strategy concept	Qualitative data processing	Analysis of industrial center development Analysis of industrial centers formation.
5	Keys to Success of Industrial Centers	Factors that lead to success	Qualitative data processing	Analysis of keys to success of industrial centers
6	Small and Medium Industry Centers in Sidoarjo Regency	Information on business development in Sidoarjo Regency industrial centers, including: Ngingas Metal Industrial Center, Jetis Written Batik Industrial Center, Tanggulangin Leather Shoe Craft Industrial Center, Seketi Balongbendo Bamboo Woven Village, Smoked Fish Village in Penatar Sewu, and Cracker Industry Center in Biting Village.	Qualitative data processing	Analysis of business development in Sidoarjo Regency industrial centers
7	Government Program in Developing Sidoarjo Industrial Center	Regional and Provincial Government Program	Qualitative data processing	Analysis of Regional and Provincial Government Program

Source: Data Processing

There are three stages to solving the problems in this research, namely (i) Stage 1: identification of the problem; (ii) Stage 2: data collection, data processing, and analysis; and (iii) Stage 3: conclusion. Stage 2 consists of 7 discussions, namely: (i) Large and

Medium Industries of Sidoarjo Regency; (ii) Medium Industry Based on District; (iii) Classification of Large Industrial and Medium Industrial Companies; (iv) SMEs' Development Strategy Based on Industrial Centers; (v) Keys to Success of Industrial Centers; (vi) Small and Medium Industry Centers in Sidoarjo Regency; and (vii) Government Program in Developing Sidoarjo Industrial Center. The main points of conclusion consist of: (i) The largest percentage of companies and workers in total; (ii) The largest percentage of companies and workers in large and medium industrial companies based on classification; (iv) MSMI's development strategy concept; (v) Some of the underlying reasons to make Sidoarjo Regency as the SMIs City in Indonesia; and (vi) The key to a successful SMIs development strategy.

#### RESULTS AND DISCUSSION

#### **Large and Medium Industries of Sidoarjo Regency**

The processing industry is the leading sector of economic activity in Sidoarjo Regency. The added value generated by this sector in 2018 reached 88 trillion rupiah. Over the last 3 years, the performance of the processing industry business field has been stable, providing the largest contribution to the Gross Regional Domestic Product (GRDP) value of 47%. The real growth of processing industry business fields in 2018 was 7.70%, up from 5.7% in 2017. This is supported by a conducive investment climate and improvements in transportation facilities in line with the rate of public consumption. In terms of financing, credit support from banks has also increased. The overall performance of this business field is quite good because it is driven by foreign exports. The number of large and medium-sized industrial companies in Sidoarjo Regency is 961. Taman, Waru, Gedangan, and Sedati subdistricts are industrial centers. More than 400 companies produce industrial products in these four sub-districts. Meanwhile, the number of large and medium-sized industrial companies in sub-districts in the central region, such as Candi, Porong, Tanggulangin, and Jabon sub-districts, does not reach 200. This area has more micro- and small-business activities, which are MSMI centers (BPS, 2020).

#### **Medium Industry Based on Sub-Districts**

A total of 297 medium industries are spread across 18 sub-districts, namely: Tarik, Prambon, Krembung, Porong, Jabon, Tanggulangin, Candi, Tulangan, Wonoayu, Sukodono, Sidoarjo, Buduran, Sedati, Waru, Gedangan, Taman, Krian, and Balongbendo. The existence of this medium industry is able to absorb a workforce of 138,042 people. The distribution of medium industrial companies and the workforce absorbed is presented in Table 2 (BPS, 2019a; BPS, 2019b). Next, from this data, the percentage values can be determined.

The percentage of medium industrial companies by sub-districts is presented in Figure 1. Three sub-districts have the largest percentage of companies, namely: Waru (20.20%), Taman (15.15%), and Gedangan (13.13%). The percentage of the workers absorbed by medium industrial companies by sub-districts is presented in Figure 2. Three sub-districts have the largest percentage of workers, namely: Waru (16.03%), Gedangan (14.08%), and Candi (11.84%).

Table 2. Medium Industrial Companies by Sub-Districts

No.	Sub-	Number of	(%)	Number of Workers	(%)
	Districts	Companies		Absorbed	

1	Tarik	1	0.34	10,090	7.31
2	Prambon	1	0.34	200	0.14
3	Krembung	2	0.67	789	0.57
4	Porong	1	0.34	1,655	1.20
5	Jabon	3	1.01	3,126	2.26
6	Tanggulangin	10	3.37	1,984	1.44
7	Candi	19	6.40	16,346	11.84
8	Tulangan	1	0.34	135	0.10
9	Wonoayu	13	4.38	8,075	5.85
10	Sukodono	6	2.02	1,588	1.15
11	Sidoarjo	13	4.38	6,814	4.94
12	Buduran	27	9.09	13,031	9.44
13	Sedati	16	5.39	8,078	5.85
14	Waru	60	20.20	22,126	16.03
15	Gedangan	39	13.13	19,431	14.08
16	Taman	45	15.15	12,547	9.09
17	Krian	20	6.73	6,504	4.71
18	Balongbendo	20	6.73	5,523	4.00
	Jumlah	297		138,042	

Source: Data Processing

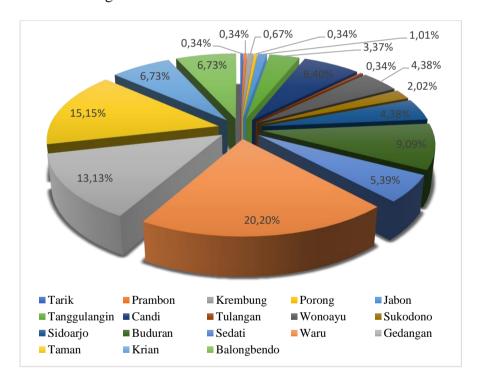


Figure 1. Percentage of Number of Medium Industrial Companies (Source: Data Processing)

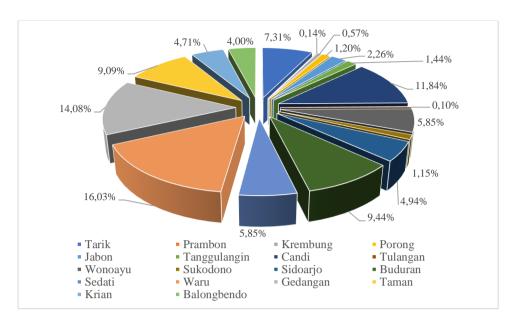


Figure 2. Percentage of Total Workers Absorbed in Medium-Industrial Companies (Source: Data Processing)

#### Classification of Large Industrial and Medium Industrial Companies

Large and medium industrial companies are classified into 16 categories, namely: Coal and Oil - Gas Refineries (C-1), Food and Drink (C-2), Tobacco Processing (C-3), Textiles and Apparel (C-4), Leather, Leather Goods, and Footwear (C-5), Goods made from wood, cork, woven bamboo, rattan and the like) (C-6), Paper, Paper Goods, Printing and Repro Records (C-7), Chemistry, Pharmacy and Pharmaceutical Drugs (C-8), Rubber, Rubber and Plastic Goods (C-9), Non-Metal Excavated Goods (C-10), Base Metal (C-11), Metal Goods, Computers, Electronics, Optics and Electrical Equipment (C-12), YTDL machine tools and equipment (C-13), Transportation equipment (C-14), Furniture Industry (C-15), dan Other Processing Industries (C-16). A total of 961 large and medium industrial companies with an absorption of 164,650 are in this classification. The distribution of the number of companies and workers in this classification is presented in Table 3 (BPS, 2019c; BPS, 2019d). Next, from this data, the percentage values can be determined.

The percentage of large and medium industrial companies based on classification is presented in Figure 3. Three classifications have the largest percentage of companies, namely: C-2 (Food and Drink), C-9 (Rubber, Rubber, and Plastic Goods), and C-12 (Metal Goods, Computers, Electronics, Optics, and Electrical Equipment). These three types of classification have a presentation of 25.91%, 11.86%, and 10.82%, respectively. The percentage of the workers in large and medium industrial companies based on classification is presented in Figure 4. Four classifications have the largest percentage of the workers, namely: C-2 (Food and Drink), C-5 (Leather, Leather Goods, and Footwear), C-7 (Paper, Paper Goods, Printing, and Repro Records), and C-9 (Rubber and Plastic Goods). The four types of classification have a respective presentation of 21.67%, 14.99%, 10.83%, and 10.30%.

Table 3 Classification of Large Industrial and Medium Industrial Companies

No.	Table 3. Classification of Large Classification			%	Workers	%
110.	Classification	Classification	Company	70	vvorkers	70
1	Coal and Oil - Gas Refineries	C1	2	0.21	93	0.06
2	Food and Drink	C2	249	25.91	35,678	21.67
3	Tobacco Processing	C3	33	3.43	5,328	3.24
4	Textiles and Apparel	C4	37	3.85	4,033	2.45
5	Leather, Leather Goods, and Footwear	C5	74	7.70	24,689	14.99
6	Goods made from wood, cork, woven bamboo, rattan and the like)	C6	24	2.50	2,581	1.57
7	Paper, Paper Goods, Printing and Repro Records	C7	64	6.66	16,961	10.30
8	Chemistry, Pharmacy and Pharmaceutical Drugs	C8	71	7.39	9,473	5.75
9	Rubber, Rubber and Plastic Goods	C9	114	11.86	17,831	10.83
10	Non-Metal Excavated Goods	C10	38	3.95	4,798	2.91
11	Base Metal	C11	25	2.60	3,389	2.06
12	Metal Goods, Computers, Electronics, Optics and Electrical Equipment	C12	104	10.82	16,328	9.92
13	YTDL machine tools and equipment	C13	32	3.33	2,266	1.38
14	Transportation equipment	C14	29	3.02	4,539	2.76
15	Furniture Industry	C15	43	4.47	10,710	6.50
16	Other Processing Industries	C16	22	2.29	5,953	3.62
	Jumlah		961		164,650	

Source: Data Processing

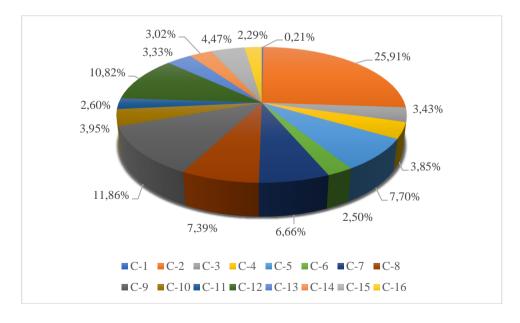


Figure 3. Percentage of Large and Medium Industrial Companies Based on Classification (Source: Data Processing)

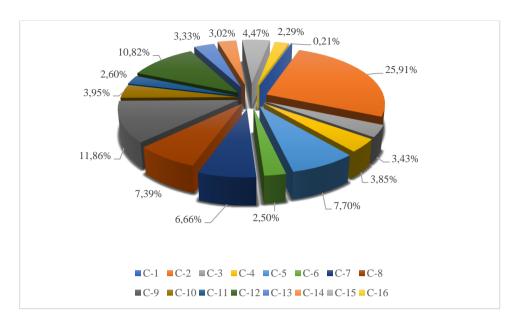


Figure 4. Number of Workers in Large and Medium Industrial Companies Based on Classification (Source: Data Processing)

#### MSMEs' Development Strategy Based on Industrial Centers

The MSMI development strategy in Sidoarjo Regency is based on industrial centers. Industrial centers are one solution for an area to become economically established. This center consists of a group of SMIs in one location, consisting of at least five business units that produce similar products, use similar raw materials, and/or carry out the same production process. The existence of industrial centers aims to accelerate industrial growth, provide convenience for industrial activities, provide local industrial facilities that are environmentally friendly, and encourage industrial activities located in industrial centers. The same concept is actually also promoted by the One Village. One Product (OVOP) program, which aims to identify the characteristics of industry in an area. In the process of formation, industrial centers can be formed from two approaches, namely the natural approach and the artificial approach. In the natural approach, industrial centers are usually formed because of the unique characteristics associated with certain natural resources in an area. Apart from coming from natural resources, the natural approach can also come from hereditary culture in the form of skills to make a product. Usually, industrial centers will be formed because there is a large economic activity, which then creates groups of groups to supply that economic activity, which is usually a labor-intensive industry (Smartsentra, 2023).

#### **Keys to Success of Industrial Centers**

It is important to promote the growth of industrial centers. The synergy between upstream and downstream operations, or between primary and auxiliary activities, as well as between raw material suppliers and marketing outlets, would quicken the centers' commercial dynamics. The foundation of the strategy is the establishment of strong, integrated centers that work together to provide a broad basis of synergy for economic growth. At this stage, regional autonomy is evidence that the MSMI sector is crucial to the growth of the national economy. It gives members access to local government facilities for the creation of prospective territories for regional excellence, including the MSMI. The MSMI's development is centered on advancing regional economic

organizations, such as the MSMI's new initiative, the SMI export-oriented group, and its supporters. The sort of industrial developmental purpose, the degree of industrial and technical development, and the potential and state of the region must all be taken into consideration if the anticipated goals are to be met. The following are the main elements and drivers that provide the SMI centers with a competitive edge in their development and make them dynamic and successful: (a) Factor conditions: information technology, infrastructure, capital resources, human resources, and natural carrying capacity (a) The demand for SMI products (c) Correlated and Concurrent Sectors Related Industries: Capital Institution; Institute of Education and Training; Research and Development; Cooperative of SMI Craftsmen. Among the supporting industries are those that produce machinery, equipment, and raw materials. (d) Competition, Structure, and Firm Strategy (e) change, which encompasses both international and domestic policy; and (f) the government's involvement (Putri, 2016).

## Small and Medium Industry Centers in Sidoarjo Regency

Sidoarjo is a supporting city for the city of Surabaya and has a very vital functional capacity. Even with the establishment of several industrial centers, Sidoarjo has become part of the national and international industrial scale. The variety of creative industries developed by the people of Sidoarjo based on SMIs will have a positive impact on the economy of the people of Sidoarjo in particular (Surabayanewsweek, 2016). MSMI-based industrial centers that are developing in Sidoarjo Regency include: (i) Ngingas Metal Industrial Center; (ii) Jetis Written Batik Industrial Center; (iii) Tanggulangin Leather Shoe Craft Industrial Center; (iv) Seketi Balongbendo Bamboo Woven Village; (v) Smoked Fish Village in Penatar Sewu; and (vi) Cracker Industry Center in Biting Village.

## A. Ngingas Metal Industrial Center

Sidoarjo Regency, East Java, is one of the suppliers of metal components for agricultural machinery, household equipment, and motor vehicles. Several SMIs in Ngingas Village have collaborated with national automotive companies. The Ngingas Village Government has formed village-owned enterprises (BUMDes) since 2017 to support these metal SMEs. BUMDes aims to facilitate business development for SMIs, both in terms of financial management and marketing metal products in Ngingas. Currently, there are 320 SMIs in Ngingas. Some of them have a large scale and have collaborated with national companies to supply their needs. Metal SMIs in Ngingas vary in size, from small-scale with an average of three employees to large-scale with 80 employees. Ngingas SMIs face various obstacles in developing their businesses. However, they were able to overcome their business problems so that they could survive until now. Problems and ways to overcome them are presented in Table 4 (Laoli & Triatmodjo, 2023).

#### B. Jetis Written Batik Industrial Center

Indonesian Batik was recognized as an intangible cultural heritage by UNESCO on October 2, 2009, which was then celebrated as National Batik Day. Indonesian batik is known to be closely related to the depiction of customs and culture in various regions. Almost every region has its own unique batik motifs, characteristics, and colors. Apart from that, batik also has high artistic value, so it is very fashionable for use in various events or activities, both formal and casual (Kemenperin, 2022). Jetis Written Batik is a cultural work that continues to be developed in Jetis and Pekauman Hamlets, Lemahputro Village, and Sidoarjo District. The Jetis batik industry has been around since 1675. Batik

that still exists today is Batik Kamsatun, Batik Amri, Batik Daun, Batik Adam, Batik Namiroh, Batik Yassaroh, Batik Maduratna, and many others. The blackish-red-brown color is characteristic of Jetis Batik. The Jetis batik motif contains ornaments in the form of flora and fauna. There are five Jetis Sidoarjo batik motifs, namely: Burung Merak, Beras Wutah, Kembang Tebu, Kembang Bayem, and Sekardangan or Sekar Jagad. An explanation of each motif is presented in Table 5. The development of the Jetis batik industry has had various positive impacts on the community, including: (i) increasingly close relations and communication between residents; (ii) increasing the welfare of Jetis batik craftsmen; and (iii) the Jetis community is starting to become aware of cultural insights in the surrounding environment to be developed (Hapsari, 2022).

Table 4. Business Problems and Solutions in the Ngingas Metal Industry Center

	•	Problems and Solutions in the Ngingas Metal Industry Center
No.	Problem	Solution
1	Production	IKM Ngingas managed to survive during the COVID-19 pandemic.
		Even though demand has fallen, these SMEs continue to produce
		because they are the main source of income for local residents. The
		products are temporarily withheld to reduce the capital of SMIs.
2	Raw material	The availability of raw materials is not cheap. It is difficult for SMEs
_	110000	to obtain raw materials at affordable prices. If you buy available raw
		materials, the price tends to be expensive, which erodes profit
		margins, and production costs can exceed the sales value. To
		overcome this problem, we are looking for alternative raw materials
		that do not violate the rules, such as barrels that are split using a
		pressing machine, so that the results are exactly the same as iron
2	ъ :	sheets.
3	Business	Metal SMIs also have to compete with iron products from China,
	Competition	which are cheaper. To overcome this problem, Ngingas entrepreneurs
		are trying to improve the quality of their products.
4	Environmental	Environmental problems are caused by the impact of hazardous and
	Pollution	toxic waste used by SMIs. To overcome this, BUMDes Ngigas has
		produced an environmentally friendly waste-burning incinerator with
		sprayer technology. This burning machine is environmentally friendly
		because it can reduce the amount of smoke from burning waste. The
		presence of this machine can also overcome the chaos of household
		waste management, which is a classic problem in Sidoarjo.

Source: Laoli & Triatmodjo (2023)

Table 5. Motifs and Meanings of Jetis Sidoarjo Batik

No	<b>Motif Type</b>	Meaning
1	Burung Merak	Symbolizes the view of life about where the human soul goes after
		death.
2	Beras Wutah	Symbolizes the abundance of rice in Sidoarjo Regency. This district
		is one of the largest rice producers.
3	Kembang Tebu	Symbolizes Sidoarjo Regency, which used to have hundreds of
		hectares of sugar cane plantations as raw material for making sugar.
4	Kembang Bayem	Describes the many spinach plants in Sidoarjo.
5	Sekardangan or	It has the meaning of beauty, so when other people see it, they will
	Sekar Jagad	be amazed. This batik motif has floral or plant patterns and
	-	ornaments that symbolize the diversity of the world.

Source: Hapsari (2022)

#### C. Tanggulangin Leather Shoe Craft Industrial Center

Indonesia has many cities that are famous for their leather crafts, such as Garut, Yogyakarta, and Sidoarjo. However, one of the cities that stands out the most as a producer of quality leather shoes is Tanggulangin, a sub-district in Sidoarjo Regency, East Java. This city has been known as a center for leather shoe crafts since the 1930s and is still the main destination for leather shoe lovers in the country. Leather shoe crafts in Tanggulangin have several advantages that make them popular with many people. These aspects of excellence include the quality of raw materials, product design, and product price. An explanation of each of these aspects is presented in Table 6 (Rohmah, 2023).

Table 6. Product Advantage Aspects of Tanggulangin Leather Shoe Craft

No	Aspects	Advantage
1	Quality of	Leather craftsmen use quality genuine leather, such as cow, goat, and snake
	raw	skin. This leather material is carefully selected and processed in the right
	materials	way, resulting in durable, comfortable, and long-lasting leather shoes.
2	Product	Leather craftsmen not only follow existing trends but also create unique
	design	and distinctive designs. Some examples of popular Tanggulangin leather
		shoe designs are snakeskin shoes, batik motif leather shoes, embroidered
		leather shoes, and ethnic leather shoes. Apart from that, leather shoe
		craftsmen also accept custom orders, so buyers can get leather shoes
		according to their tastes and needs.
3	Product	Even though they have good quality and attractive designs, Tanggulangin
	Price	leather shoes are not sold at high prices. This is because the craftsmen
		produce leather shoes independently, without going through intermediaries
		or third parties. Apart from that, craftsmen also use local materials that are
		easily available, thereby saving production costs.

Source: Rohmah (2023)

#### D. Seketi Balongbendo Bamboo Woven Village

Even though it is located on the outskirts of Sidoarjo City, the economy of the people of Seketi Village, Balongbendo District, is very active. In this village, which is between Krian and Prambon Districts, there is a small and medium industry center (SMI) for making tampah (bamboo crafts). Judging from its history, it turns out that tampah making in this village has been passed down from generation to generation. Local villagers have started knitting woven bamboo into tampah since the 1930s. From the beginning until now, this bamboo-woven craft has remained sustainable. This condition creates livelihoods for some residents. Various kinds of products from bamboo craftsmen are available, including tampah, rice baskets, and rice sifters. Because it is produced by ourselves, the selling price is cheaper than on the market. On the other hand, many middlemen take crafts from Seketi Village to sell at the market. The village government facilitates various craftsmen's needs because this product is legendary (it has become an icon of Seketi Village) and is the main livelihood for some village residents. These facilities include: (i) providing capital assistance from BUMDes; (ii) facilitating marketing and raw materials; and (iii) providing training for village youths in developing woven bamboo products (Hurek, 2018).

#### E. Smoked Fish Village in Penatar Sewu

Sidoarjo Regency has a smoked fish village. The activity of smoking fish can improve the economy of its residents. The smoke village is located in Penatar Sewu

Village, Tanggulangin, Sidoarjo. When you enter the village, you can see smoke in every house; there is a chimney. If the chimney emits smoke, it indicates that the resident is smoking fish at home. Since 1975, Penatar Sewu Village has been known as the smoked fish village. Until now, there have been around 95 village residents whose daily work is smoking fish. Every day, they are able to smoke at least 1 to 3 quintals of fresh fish. Smoked fish include tilapia, catfish, milkfish, and even shrimp. The smoked fish is marketed in several cities, such as Gresik, Surabaya, Pasuruan, Mojokerto, and Sidoarjo itself. Smoking fish is one form of income that can boost the economy of the residents of Penatar Sewu Village. Every day, this village requires 12 to 15 quintals of fresh fish of various types. But the most sought-after tilapia fish is (Suparno, 2023).

## F. Cracker Industry Center in Biting Village

The Cracker Industry Center in Sidoarjo is located on Jl. Biting Kedungrejo Village, Biting, Kedungrejo, Jabon District, Sidoarjo Regency. The center for the Cracker Industry Center can be accessed very easily; even when you enter the village, you are greeted with the smell of crackers, and you are shown the sight of wet crackers being dried in the sun on every road. The cracker village started with the livelihood of the residents of Kedungrejo Village, most of whom were cracker entrepreneurs. Kerupuk village is located on the border of Sidoarjo and Pasuruan. This village has a dynamic and balanced living atmosphere between industry and the welfare of its residents. The cracker village is used as an economic center for producing national quality crackers. One of the crackers produced is Puli crackers. The way to make it is very easy, namely: just use rice made from puli, and then it will become crackers. This is a savory and delicious snack that fits our pockets at a very friendly price. The advantage of crackers in Kedung Rejo village is that they are produced without using preservatives. Even though it competes with cracker factories that have sophisticated technology, they cannot replace cracker villages that make them naturally (Kompasiana, 2022).

## Government Program in Developing Sidoarjo Industrial Center

The development of micro, small and medium industries (MSMIs) is included in the 17 priority programs of the Sidoarjo Regency Government. This program is an effort to develop MSMEs, which includes access to development, financing, and increased assets. The increase and financing for MSMIs aim to accelerate economic growth in Sidoarjo Regency. For this reason, the Sidoarjo Regency Government is carrying out cross-sector collaboration in the economic sector, namely with BPN, in order to increase MSMI's assets. Land Rights Certificate Program for micro-industries. This is an effort to increase the assets and business capital of MSMI players. Increasing the assets of microbusiness actors aims to increase the stability of microbusinesses, including their capital. KURDA Sayang program with 3 percent interest per year through BPR Delta Artha. This program has a target of 20 thousand MSMEs to increase over the next 5 years. Stall renovation program to improve the quality of micro-scale stalls. This microeconomic sector is very important for strengthening regional economic stability (Tobari, 2023). Apart from that, the East Java Provincial Government supports programs, including: (i) Labor certification program that is in line with the central government's job creation program; and (ii) Providing mentors and digital IT experts. This is to guide crafters and bag sellers so they can continue to exist and compete in the era of digital technology (Baihaqi, 2020).

#### **CONCLUSION**

The research results indicate the following points. A total of 297 medium industries are spread across 18 sub-districts in Sidoarjo Regency. The largest percentage of companies consist of Waru (20.20%), Taman (15.15%), and Gedangan (13.13%). The largest percentage of workers consists of Waru (16.03%), Gedangan (14.08%), and Candi (11.84%). Large and medium industrial companies are classified into 16 categories. The largest percentage of companies consist of C-2 (Food and Drink), C-9 (Rubber, Rubber, and Plastic Goods), and C-12 (Metal Goods, Computers, Electronics, Optics, and Electrical Equipment). These three types of classification have a presentation of 25.91%, 11.86%, and 10.82%, respectively. Four classifications have the largest percentage of the workforce, namely: C-2 (Food and Drink), C-5 (Leather, Leather Goods, and Footwear), C-7 (Paper, Paper Goods, Printing, and Repro Records), and C-9 (Rubber and Plastic Goods). The four types of classification have a respective presentation of 21.67%, 14.99%, 10.83%, and 10.30%.

The SMI development strategy in Sidoarjo Regency is based on industrial centers. Industrial centers are one solution for an area to become economically established. This center consists of a group of SMIs in one location, consisting of at least five business units that produce similar products, use similar raw materials, and/or carry out the same production process. Sidoarjo Regency has been named MSMIs City in Indonesia. Some of the underlying reasons are: (i) it has the highest concentration of SMIs in Indonesia; (ii) a large number of people engage in SMIs sectors for economic purposes; (iii) it has approximately 82 MSMIs that are part of the creative industry; and (iv) it has creative business villages.

MSMI, based on the Creative Industry Center, is growing rapidly in Sidoarjo Regency. The research results indicate that the key to a successful SMIs development strategy is as follows: (i) Forming village-owned enterprises (BUMDes) to support the development of IKM. BUMDes aims to facilitate business development for SMIs, such as financial management and the marketing of SMI products; (ii) In general, SMIs are hereditary businesses that have survived in business to this day. Hence, the motivation to develop the business will be stronger; (iii) Improving aspects of competitive advantage, including raw material quality, product design, and product price; (iv) Empowering communities to improve their village economies through the development of industrial centers; and (v) The role of regional and provincial governments in developing industrial centers in their regions.

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Development Strategy of Micro, Small, And...

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