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IMPLEMENTATION QUALITY MANAGEMENT SYSTEM (QMS) MODEL AND PARTICIPATORY RURAL APPRAISAL (PRA) MODEL TO INCREASE PERFORMANCE SMALL MEDIUM INDUSTRIES (PSMIs) IN DILI-TIMOR LESTE

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Abstract: The research carried out was motivated by four indicators that can support (1) Implementation of the Quality Management System (QMS) model in small medium industries to improve the quality of the products produced so that they are truly able to compete in marketing both locally and globally, (2) model participatory rural appraisal (PRA) to empower the community in advancing regional small medium industries (SMIs) involving community social institutions, (3) The performance Small Medium Industries (PSMIs) must be carefully considered so that it can encourage workers to advance small medium industries in Dili- Timor Leste. The problem experienced by SMIs in improving the quality of the products and services they produce is that they do not have good management. This research uses interfaces (I/F), including: Interface (I/F) Supplier which consists of 8 indicators, Interface (I/F) Company which consists of 28 indicators, Interface (I/F) Community which consists of 6 indicators, and Interface (I/F) Customer which consists of 8 indicators. Model testing was carried out on 50 small medium industries or respondents, so that in general the development of the QMS model for SMIs created in this research was good. This can be seen from the average score obtained by small medium industries in fulfilling the QMS indicators which is above 4, where all SMIs apparently fall into the Class B group, which means management system. good quality. This can be seen from the average KPI score of the Supplier Interface (I/F) is 4.44, the average Interface (I/F) KPI Top Down with the highest 4.54, the average Key Performance Indicator (KPI) value of the Interface (I /F) Community with is 4.44, while the KPI Interface (I/F) Customer score is 4.52, which means work performance is good. Once these two models are combined, they can support the development of Small medium industries and the performance of small industries, they can increase labor productivity in meeting consumer satisfaction, producing quality products even though all labor is dominated by workers from outside.

Keywords: Implementation Quality Management System Model, Participatory Rural Appraisal model, Performance Small medium industries

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Introduction

Small Medium Industries is a sector that plays a strategic role in encouraging national economic movement (Bahkri, 2020). One of the sectors that plays an important role in economic growth and development in Timor Leste is the small medium industries (SMIs) sector. To fulfill this industry must pay attention to regulatory, process, human resource and environmental aspects in producing products and services, small medium industries development policies as an effort to face the era of free trade (Nu'man, 2005). The products produced by the industry must be of high quality in order to compete in the global market. (Olusanya, 2014) using primary data from questionnaire analysis and the aim of this research is to examine the impact of total quality management practices on small medium industries in Nigeria and to identify the challenges faced by small medium industries in adopting successful quality management programs. (Nwabuokie, 2018) Globalization of production systems must overcome limitations arising from variability and complexity the due to globalization and technological progress. To survive however executives are at different levels of decision making.

Ultimately, these decisions will contribute to the actualization of organization's strategic objectives. Classified performance measures into focused measures and tense measures. The first consists of financial and operational data, while measurements require studying the past to improve the present of these challenges, important process steps must be carefully monitored to ensure improved system performance. Global competition does not only apply to large and multinational companies, but also to small industries. The complexity of industrial competition means that every company must always strive to improve its quality in order to achieve consumer satisfaction. This process is very important for the progress of Small medium industries in a region or nation. (Haryono, 2017) provides direction, educates and trains the change team by identifying the flow of the change process carried out by top management must understand the principles of change in the basis for developing small medium industries, resource capabilities and organizational capacity. Globalization trade is an opportunity to develop business and marketing for small medium industries that are able to compete, but it will also be a challenge for companies or countries that do not have high competitiveness and the government is not yet maximally focus to domestic small medium industries. Various small medium industries have spread their wings to other countries, besides making variations in to their products, services and company management (Kartawinata, 2014). Quality is a characteristic related products, services, people, processes and environments that meet consumer needs quality of a product. (Juran, 2022) quality is conformity to customer needs or conformity to specifications. (Kotler and Keller, 2008) state that product quality is related to the functional ability of a product which produces benefits for its users. Generally, product quality refers to product strength, convenience, improvement (meaning the product can be updated so as to reduce costs) and other values that provide benefits.

According to the American National Standards Institute standards are a collection of guidelines and technical specifications used to regulate and improve the quality and safety of products, services, processes, and systems in the United States. These standards were developed by experts in various fields, including information technology, construction, manufacturing and more. The use of American National Standards Institute standards is very important because it can help improve the efficiency, compatibility and safety of products and services. (Oliveira et al, 2017) quality management is closely related to the strategic management of an organization, it is surprising that the 2015 version of ISO 9001 the reference standard for the implementation of Quality Management Systems (QMS) does not have a mandatory requirement to link quality management with organizational strategy. American National Standards Institute following standards, companies can ensure that their products and

services are safe for consumers to use, reducing the risk of accidents or injuries that could result from unsafe products. Using American National Standards Institute standards also makes communication and interoperability between various systems easier. American National Standards Institute standards also play a role in standardizing new technologies, thereby helping companies and government agencies create compatible products and services. (Adrianto et al, 2012) with the existence of the Malcolm Baldrige National Quality Award (MBNQA) and also European Quality Award, it is hoped that it will be able to encourage and motivate companies, both those that are already successful and those that are developing, to always improve quality and performance, as well as being the key to power. competitive. In this paper, we will discuss quality awards regarding their objectives, benefits and developments, and current trends. (Al-Shabibi, 2019) to test the application of total quality management (TQM) in small medium industries by enabling measuring progress in overcoming obstacles and facing challenges that test the total quality management practice performance relationship by investigating the impact of TQM practices on Small medium industries performance. A broader approach in improving organizational quality is Total Quality Management and community participation which is important in identifying raw materials that will be made into products to support the progress of small medium industries in the village with the aim of being a breakthrough in the progress of a region or nation. Continuously to get results, namely obtaining good performance (Fandy and Gregorius, 2005). Judging from the definition (Juran and Gryna, 2014) states that quality is fitness for use. Quality is the degree or level of characteristics inherent in a product that meets requirements or desires. (Taskov, 2015) To build a management team in designing and implementing a Total Quality Management system for small and medium industries with all the advantages and disadvantages as well as its application in practice. Meanwhile, conventionally, quality usually describes the direct characteristics of a product, such as: appearance, reliability, ease of use, esthetics, and so on.

Efforts to absorb energy work cannot be separated from the factors that influence it, such as population growth, the number of university graduates increasing every year and the workforce continuing to increase, economic growth, and the trade system dominated by traders from other countries China, Pakistan, India, Indonesia, Bangladesh, Vietnam, Singapore and other countries. Development and growth of small medium industries is one of the driving forces for development and economic growth in many countries in the world. Small medium industries play a role in strengthening the national economy. Economic actors in Timor Leste are dominated by other countries, especially in the industrial sector. The guidance and development of small medium industries needs to be carried out by local governments, especially the department of industry and Trade (Filima, 2017). Combining the two models QMS and PRA employee performance and improvement small industries pastries Pão, brick production, mineral water, tofu and tempe, tais weaving, furniture and others as a breakthrough for small medium industries in maintaining their products continue to exist in marketing , then the Ministry of Industry has formed the Autoridade Inspeção e Fiscalização da Atividade Económica, Sanitária e Alimentár (AIFAESA), Empreza Publica (EP) or the authority for inspection and supervision of economic and food activities) Repùblica Demokrática de Timor-Leste (RDTL) with the aim of controlling products supplied from outside. However, this control effort has not been optimal. The industry itself has not grouped small and medium industries that carry out their operational activities in Timor Leste. This grouping is intended to support increasing the productivity of small medium industries in Timor Leste. Apart from that, there is also a government control agency (AQTL), which was established in 2015 and is also not optimal in controlling the performance of all small industrial activities, that carry out their business activities. There are several benefits that can be obtained by organizations or companies

that implement quality management system ISO 9001 and increase cost efficiency. Increasing morale, motivation and performance of employees in the organization. (Setyadi et al, 2022) implements a standard quality management system to ensure that several superior pillars or indicators are in line with the desires and expectations to be able to compete with other countries. The new form of colonization in the era of globalization is no longer just physical and psychological colonization. This new form of colonization could include technological colonization, economic control, and the influence of foreign culture on Timor Leste way of life. The colonization of this new form is reflected in the configuration of consumer culture and society with consumer goods, telemobiles, Youtube, applications, Tictok and computerized information becoming the dominant form throughout the developed world and increasingly spreading to developing societies. In this technological development, which is called the industrial revolution 4.0 and society 5.0, it has become a spectacle and is colonizing everyday life and changing political, economic and social relations. The concept of industrial revolution 4.0 is a concept that was first introduced by Professor (Schwab, 2017) he is a famous economist and technician from Germany as well as the initiator, founder and Executive Chair of the World Economic Forum (WEF) who through his book, The fourth industrial revolution, stated that Industrial revolution 4.0 can fundamentally change the way we live, work and relate to one another. Accuracy, speed, efficiency and quality of production are the differentiators from the revious era of the industrial revolution. In this case, Timor Leste as a new country founded in the era of globalization is certainly a poor country, which is a country whose economy is controlled globally through the formation of a market social structure with negative continuity. (Sutami, 2021) the world has not only entered the stage of industrial revolution 4.0, which has given rise to what is called artificial intelligence it has launched a social revolution 5.0 which talks about the use of digital technology in human life. In facing the era of global competition, there is no choice but to increase national competitiveness. To maintain and increase national competitiveness in order to realize sustainable development, a national development policy direction with a new paradigm is needed (Nu'man, 2005). The continuity of information and how the process of controlling the development and development of the Timor Leste nation is left more to the social super structure, such as how government institutions have an independent role, but their role is less dominant than that of capital owners who control the nation's trading system, as well as how government institutions are intervened by capital owners. (Taleem et al, 2018) to achieve sustainable performance, organizations must use various strategies, of which Total Quality Management is recognized as the most well known.

What should happen is that the government is more dominant in intervening in market mechanisms and capital owners. Low managerial ability, owner or manager experience, no experience in running a business, ability to access input and output markets, production technology and resources, capital is still weak, small entrepreneur capital, government or private support, technological progress is controlled by entrepreneurs from outside gives birth to pros and cons in nation building (Elzaki, 2009). Why did this colonization occur is there no way out of this form of economic colonialism and small medium industries colonialism which is dominated by foreign countries. (Rifky et al, 2023) science and technology and arts (IPTEKS) is a field of science related to the development of knowledge and technology to meet human needs. Science and technology can be considered as a part of science that allows humans to master nature and achieve progress in various fields. One of them is mastering Science, Technology and arts, for example other countries have made modifications to Tais so that they are indirectly (Vincent, 2015) states that quality is anything that is able to fulfill customer desires or needs. (Montgomery, 2013) defines quality as something related to one or more desirable characteristics that a product or service must have. Concept quality has evolved over time involves small medium industries in carrying out nano paracticles regarding work

roles in employing and expressing themselves physically, cognitively, emotionally while carrying out their role as small medium industries. Quality control is a technique and planned activity or action carried out to achieve, maintain and improve the quality of a product and service so that it conforms to predetermined quality standards and can meet consumer satisfaction. (Amaral and Pecas, 2019) said that the era of globalization has changed small medium industries with the marked progress of industry 4.0 technology and society 5.0, which can provide guarantees for product safety and quality by proactively preventing errors before they occur in the process of making a product. (Nazmi and Izwaan, 2023) empirical studies showing that ISO certification has no effect on performance continue to raise doubts about the effectiveness of quality management systems on performance. The decentralization of the Central Government means that Regional Governments have not developed small medium industries in the regions and on the other hand, Regional small medium industries are one of the business motors for encouraging regional economic growth that involves regional communities. (Mendrofa, 2022) Companies everywhere will definitely face intense global competition, very fast developments in the technological and digital world and changes that cannot be controlled, so every company is required to adapt to existing developments and changes.

Efforts to absorb energy work cannot be separated from the factors that influence it, such as opulation growth, the number of university graduates increasing every year and the workforce continuing to increase, economic growth, and the trade system dominated by traders from other countries China, Pakistan, India, Indonesia, Bangladesh, Vietnam, Singapore and other countries. Development and growth of small medium industries is one of the driving forces for development and economic growth in many countries in the world. Small medium industries play a role in strengthening the national economy. Economic actors in Timor Leste are dominated by other countries, especially in the industrial sector. The guidance and development of small medium industries needs to be carried out by local governments, especially the department of industry and Trade (Filima, 2017). Combining the two models QMS and PRA employee performance and improvement small industries pastries Pão, brick production, mineral water, tofu and tempe, tais weaving, furniture and others as a breakthrough for small medium industries in maintaining their products continue to exist in marketing , then the Ministry of Industry has formed the Autoridade Inspeção e Fiscalização da Atividade Económica, Sanitária e Alimentár (AIFAESA), Empreza Publica (EP) or the authority for inspection and supervision of economic and food activities) Repùblica Demokrática de Timor-Leste (RDTL) with the aim of controlling products supplied from outside. However, this control effort has not been optimal. The industry itself has not grouped small and medium industries that carry out their operational activities in Timor Leste. This grouping is intended to support increasing the productivity of small medium industries in Timor Leste. Apart from that, there is also a government control agency (AQTL), which was established in 2015 and is also not optimal in controlling the performance of all small industrial activities, that carry out their business activities. There are several benefits that can be obtained by organizations or companies that implement quality management system ISO 9001 and increase cost efficiency. Increasing morale, motivation and performance of employees in the organization. (Setyadi et al, 2022) implements a standard quality management system to ensure that several superior pillars or indicators are in line with the desires and expectations to be able to compete with other countries. The new form of colonization in the era of globalization is no longer just physical and psychological colonization. This new form of colonization could include technological colonization, economic control, and the influence of foreign culture on Timor Leste way of life. The colonization of this new form is reflected in the configuration of consumer culture and society with consumer goods, telemobiles, Youtube, applications, Tictok and computerized information becoming the dominant form throughout the developed world and increasingly spreading

to developing societies. In this technological development, which is called the industrial revolution 4.0 and society 5.0, it has become a spectacle and is colonizing everyday life and changing political, economic and social relations. The concept of industrial revolution 4.0 is a concept that was first introduced by Professor (Schwab, 2017) he is a famous economist and technician from Germany as well as the initiator, founder and Executive Chair of the World Economic Forum (WEF) who through his book, The fourth industrial revolution, stated that Industrial revolution 4.0 can fundamentally change the way we live, work and relate to one another. Accuracy, speed, efficiency and quality of production are the differentiators from the previous era of the industrial revolution. In this case, Timor Leste as a new country founded in the era of globalization is certainly a poor country, which is a country whose economy is controlled globally through the formation of a market social structure with negative continuity. (Sutami, 2021) the world has not only entered the stage of industrial revolution 4.0, which has given rise to what is called artificial intelligence it has launched a social revolution 5.0 which talks about the use of digital technology in human life. In facing the era of global competition, there is no choice but to increase national competitiveness. To maintain and increase national competitiveness in order to realize sustainable development, a national development policy direction with a new paradigm is needed (Nu'man, 2005). The continuity of information and how the process of controlling the development and development of the Timor Leste nation is left more to the social super structure, such as how government institutions have an independent role, but their role is less dominant than that of capital owners who control the nation's trading system, as well as how government institutions are intervened by capital owners. (Taleem et al, 2018) to achieve sustainable performance, organizations must use various strategies, of which Total Quality anagement is recognized as the most well known. What should happen is that the government is more dominant in intervening in market mechanisms and capital owners. Low managerial ability, owner or manager experience, no experience in running a business, ability to access input and output markets, roduction technology and resources, capital is still weak, small entrepreneur capital, government or private support, technological progress is controlled by entrepreneurs from outside gives birth to pros and cons in nation building (Elzaki, 2009). Why did this colonization occur is there no way out of this form of economic colonialism and small medium industries colonialism which is dominated by foreign countries. (Rifky et al, 2023) science and technology and arts (IPTEKS) is a field of science related to the development of knowledge and technology to meet human needs. Science and technology can be considered as a part of science that allows humans to master nature and achieve progress in various fields. One of them is mastering Science, Technology and arts, for example other countries have made modifications to Tais so that they are indirectly able to control the economy and culture, where this can be prevented by building the character of the Timor Leste nation and developing local intelligence. apart from that, building policies and control by the government that prioritize science, technology and arts, domestic economy, and maintaining the nation's cultural values (Vivaldy, 2023). Decentralization of the central government means that regional governments have not developed small medium industries in the regions. The understanding of decentralization is actually the transfer of authority from the central government to regional governments to take care of human resource empowerment matters based on the initiatives and aspirations of the people within the framework of developing regional small medium industries as one of the businesses that encourage growth. regional economy through regional community participation (Syamsudin, 2007). (Laily,2021) to determine the influence of entrepreneurial orientation on market orientation and small medium industries business performance, indirectly the influence of entrepreneurial orientation on business performance through market orientation as a mediator. (Hashim et al, 2022) found nine schemes for implementing Malaysian halal certification for small medium industries based certification procedures

in developing food and beverage products, cosmetic products, pharmaceuticals, fine products, food premises, logistics, slaughterhouses and equipment medical. The development of small and medium industries in the regions is closely related to the central government's plan to establish regional autonomy and the central government has prepared the workforce through training and sending workers to other countries. Expanding employment opportunities is an effort to develop sectors that are able to absorb labor. Small medium industries sector has various strategic roles, but this sector is also faced with various problems. Obstacles and problems include aspects of capital, business management capabilities, and the quality of human resources managing them. Other obstacles and problems for small and informal businesses are also caused by difficulties in accessing information and productive resources such as capital and technology, which results in limited ability of small businesses to develop (Faisal, 2019). According to data from the Ministério do Comércio, Turismo e Indústria there are 1,349 small medium industries in 13 districts, not including large industries such as Heineken and Timor Leste Cement, but a number of these small medium industries are controlled by other countries. (Othman et al, 2017) performance will be influenced by many factors such as motivation factors, government and organizational policies, organizational factors and work life balance. This research (Benjamin, 2023) was carried out using an interface consisting of 50 indicators in small medium industries, namely the Supplier interface (I/F) which consists of eight indicators, the Company interface (I/F) (Top Down) which consists of 28 indicators, Interface (I/F) Community which consists of six indicators and Interface (I/F) Customer which consists of eight indicators. The research was conducted in 50 small medium industries in Dili District spread across four sub-districts, namely: Dom Aleixo, Cristo Rei, Nai Feto, and Vera Cruz Sub Districts.

Literature Review

Implementation Quality Management System General

The Quality management system model is a formal system that documents the company structure, duties and responsibilities of employees and management, procedures required to realize product or service quality. Seek to understand quality support sub-systems and general quality practices in small medium industries or manufacturing companies and evaluate the contribution of existing quality systems to overall company performance. (Akhmetova, 2018) functional models and process creation mechanisms including identification, formation, management and improvement to be developed. This shows that the interface between one sub system and another influences each other and the main objectives in question are as follows:

1. Ensuring that the sub system can advance the performance of small and medium industries is important in implementing quality management system at the regional level.

2. Understand the impact of implementing the quality management system and participatory rural appraisal model on small medium industries performance at the regional level.

3. Identify the implementation of the quality management system model to improve the performance and productivity of small medium industries at the regional level.

4. Conduct a survey on whether the certification body has an impact on the performance of regional small medium industries by implementing the quality management system model in all activities.

5. Following up on obstacles in implementing the quality management system model to achieve small medium industries performance at the regional level and support the progress of the manufacturing industry nationally.

(Zhao, 2023) investigated the quality management system in an organization helps achieve environmental innovation and sustainable development goals. Quality Management System has an important meaning in an organization's strategic competence. (Khamidillayevich, 2023) discusses the impact of digitalization on the economy of the Republic of Uzbekistan regarding the development of a quality management system for the textile industry. Analyzing the scientific degree of problem development shown makes it possible to conclude that this research has been considered in several aspects, namely theoretical aspects and methodological issues to determine the specific implementation of the quality management system being investigated. (Susanto, 2020) research results show that service quality has an influence on consumer satisfaction at Astra Internasional is still in the medium category, and the influence of service quality has a significant effect on consumer satisfaction and is positive. (Nazmi and Izwaan, 2023) empirical studies showing that iinternational standard organization certification has no effect on performance continue to raise doubts about the effectiveness of quality management systems on performance. Implementation of the quality management system model is a set of elements consisting of human interfaces, tools, concepts and procedures that become one for a common goal that is implemented by the system. (Mane, 2015) the best quality, time and cost are important aspects of the success of construction projects that meet the main objectives of the construction industry. Quality management must provide an environment in which tools, techniques and related procedures can be applied effectively thereby leading to the operational success of construction projects (Nurdin and Rindam, 2011).

Implementation of a product quality supervision and control system and Application of quality standards to the implementation of product quality supervision and control and identifying factors that cause defects in products and formulating the necessary strategies to make corrections to product quality supervision and control. Quality management system in the construction industry refers to quality planning, quality assurance and quality control. System characteristics consist of: (a) Components (elements) are components of a system known as sub-systems. (b) The system part (boundary) is the area that limits one system to another/to the external environment. (c) The external environment is everything outside the system that influences the operation of a system, for example: vendors, customers, owners, government, banks, competitors. (d) System interface is a connecting medium between 1 sub system and another sub system. (e) Input is the energy put into the system. In an information system, input can be transaction data, non-transaction data and instructions.

(f) Output is the result of processing, it can be useful output (information, product) or useless output (waste). In an information system, output can be: information, suggestions or printed reports. (g) The system target is a goal that a system wants to achieve. (h) PRA focuses more on community involvement in increasing the productivity of small industries with the aim of improving the performance of small medium industries based on human resources, by implementing this model which can ultimately satisfy consumers. Using a connecting system Interface in a system that is certain for a goal or target and if a system does not have a target, then the system operation will not be sustainable. Businesses and organizations become more efficient and increase customer satisfaction.The revised version of the ISO 9001:2015 standard, is customer focus, leadership, people involvement, process approach, improvement, evidence based decision making and relationship management. The fact that customer focus has become a very important business issue became very

clear when (Human Resource Institute, 2004) conducted a survey regarding the latest major issues impacting people management. It was found that European respondents focused on customers and respondents. Since then, other surveys on issues such as leadership and innovation have supported the importance of customer focus in today's business.

a. Organizational sources are data, facts, and figures collected from the organization, especially from employees, or from online assessments and questionnaires by end users.

b. The sources of experience are the professional experience and judgment of executives and employees.

c. Stakeholder resources are the organizational values, concerns, and decisions of the people involved in the organization.

d. Scientific evidence is the findings from published scientific research regarding the concept of customer focus.

General Industrial Quality Concept

(Fandy and Gregorius, 2005) defines service quality as a measure of how good the level of service provided is so that it meets customer expectations. Based on this definition, service quality can be realized through fulfilling customer needs and desires and the accuracy of delivery to match customer expectations. (Agung, 2020) The research results show that service quality has an influence on consumer satisfaction which is still in the moderate category, and the influence of service quality has a significant effect on consumer satisfaction and is positive.

(Jaiswal, 2008) states that service quality is not only involved in the final product or service, but also in the production and delivery processes, which requires measuring customer perceptions after consumption. (Gronroos, 2007) using a comprehensive perceived service quality model, compares customer expectations of services and their experiences after receiving the service. Factually, quality is proven to provide consumer/customer satisfaction (Sembiring, 2014). There are identification of five gaps in the quality of services required in service delivery five gaps are:

a. The gap between customer expectations and management perceptions.

b. The gap between management's perception of customer expectations and service quality specifications.

c. Gaps in service quality specifications and service delivery.

d. The gap between service delivery and external communications.

e. The gap between perceived services and expected services

Characteristics of Quality

(ISO/IEC 25012. 2008) defines quality characteristics as the extent to which subject data associated with an entity has values for all expected attributes and related entity instances in a particular context of use. (Mao and Wan, 2017) state that measuring product quality, quality characteristics are attributes inherent in a product which consist of various parameters that influence and determine the level of

quality. Implementation quality management system is a set of documents and processes that help organizations bring products to market that are safe, effective, competitive, meet regulatory requirements, and consistently meet customer expectations. (Olusanya, 2014) this research uses primary data from questionnaire analysis and the aim of this research is to examine the impact of total quality management practices on small medium industries in Nigeria and to identify the challenges faced by small medium industries in adopting successful quality management programs. Understand the meaning of quality in this context a fundamental level, quality means that a product or service meets applicable requirements. For products, quality is often verified by inspecting the product and confirming size, color, etc. and also looking at material notes to ensure the product is made from the correct materials.

(Prayhoego, 2013) conducted research on the implementation of overall quality management in small medium manufacturing industries. It is informed that the implementation of overall quality management in small medium industries can increase the company's competitive advantage. Implementing a quality management system (QMS) is key for most companies, even companies in manufacturing and other service business lines can benefit from having an implemented quality management system, it is time consuming and expensive. However, when implemented effectively it can result in cost savings for all businesses. (Gunasekaran and Shandhu, 2010) state that the formal structure of quality management system is defined by formal relationship patterns and tasks and formal rules, implementation of policies, work procedures, supervision procedures, preparation of compensation. So it can be understood which is an indicator of structure.

(Pawitan, 2012) states that there are eight factors that indicate the performance characteristics of QMS in the ASEAN China Free Trade Area (ACFTA). The eight quality interfaces are interconnected with each other which is described as follows:

1. Competition in making designs that are better, cheaper, larger volumes, and more accessible to all small medium industries.

2. Factors indicating production aspects which include the availability of human resources in the development of information technology, the application of IT in product advertising and raw materials which continue to support the development of small medium industries.

3. Show an assessment of business performance which includes small medium industries growth, business growth, profits, number of customers or work orders, and also sales volume.

4. Shows negative competitors who reduce profits and sales volume.

5. Demonstrate product development that includes innovation and diversity of products created.

6. Shows small medium industries finances and capital, which includes sources of financial support or loans and trust in the banking sector.

7. Demonstrate marketing aspects which include opportunities for small medium industries products to enter international markets, and opportunities to participate in international exhibitions.

8. Demonstrate production aspects which include processing technology, while still empowering small and medium industries to procure raw materials at low costs.

Benefits of Industrial Quality Inspection and Assurance

Quality assurance offers many benefits, not only for customers, but also for companies. Some of the reasons for implementing quality assurance are as follows:

1. Increase Production Efficiency

Production efficiency occurs when every production element is in good condition. This means high quality materials, no defects, working machines, a good warehouse, and competent workers.

2. Creating Cost Efficiencies

Carrying out quality assurance will create cost efficiencies. Quality Assurance prevents quality problems in the first place, preventing errors, returns, repairs and other cost-related issues.

3. Maintain customer trust

Product quality determines the level of customer trust in a brand, product and company.

4. Encourage Business Growth

Growing a business requires consistent levels of quality and cost efficiency. Carrying out Quality Assurance regularly helps maintain these important factors in running a business, including in the manufacturing sector.

5. Create a Better Work Environment

Quality assurance is the most important thing in the world of work, the workforce always works based on set times and is supported by a good work environment. This reduces risks and hazards and ensures workers and the environment are in the best conditions for production. A good small industry must have good quality according to consumer expectations. This will provide an advantage for the industry in setting higher prices, which will ultimately lead to an increase in total sales which is an indication of market share growth. (Phillips, 2015) states that ISO 9000:2015 explains:

a. Organizations that seek sustainable success through the implementation of a quality management system.

b. Customers seek confidence in an organization's ability to consistently provide products and services that meet their needs.

c. Organizations seeking confidence in their supply chain that their product and service requirements will be met.

d. Organizations and interested parties seeking to improve communication through a shared understanding of the vocabulary used in quality management.

e. Organizations that carry out conformity assessments against ISO 9001 requirements.

f. Provider of training, assessment or advice in quality management.

g. Development of related standards.

Quality Management System Concept

Quality Management System is an increase in understanding ISO 9001:2015 through technical guidance. Quality management system is a comprehensive system to ensure that business processes have been implemented in accordance with established procedures and continuous improvement efforts have been made to meet customer requirements and be able to form an effective organization. The aim of implementing a quality management system in an organization is to manage various activities with a systematic approach and continuously improve effectiveness in accordance with international standards that prioritize the needs of stakeholders. (Hashim et al, 2022) the three main benefits of halal certification are, consumers are confident that the products they eat or use are clean, pure from prohibited substances and include environmental cleanliness, Halal certification provides advantages in selling power and Halal certification can provide a competitive advantage over competitors who do not apply for halal certification. This has been dominated in a quality policy that is committed to protecting people at risk from provisions and continuously strives to improve supervision and provide services to all stakeholders, by implementing the principles of good governance in a clean government. (Vincent, 2015) a quality management system is a set of documented procedures and standard practices for system management which aims to ensure the suitability of a process and product to the needs or certain requirements. Quality Management System defines how organizations implement quality management practices consistently to meet customer and market needs, where regional communities play an important role in carrying out regional small industries activities and improving community prosperity through empowering small industries. Some general characteristics of a quality management system include the following: Quality management systems cover a wide scope of activities in modern organizations. Quality can be defined through five main approaches, including: transcendent quality, namely an ideal condition leading to excellence, product based quality, namely a product attribute that meets quality, user based quality, namely suitability or accuracy in using the product, manufacturing based quality, namely conformity to requirements. standard requirements,value based quality, namely the degree of excellence at a competitive price level.

• Quality management systems focus on the consistency of work processes.

• The quality management system is based on error prevention so it is proactive, not on reactive error detection.

• The quality management system includes the elements, objectives, customers, outputs, processes, inputs, suppliers, and measurements feedback.

Method Research

The framework of this research will integrate two models, namely the Quality Management System in improving the quality of the products produced, while the Participatory Rural Appraisal Model involves involving the community in developing small medium industries. The model development carried out in this research was through the conceptual and theoretical model stages. The conceptual model is an analytical model, which states product quality and the product life cycle and analyzes the relationship between quality, product cycle and consumers' reasoning power regarding the products being marketed. The theoretical model describes a framework of thought that is based on relevant

theories and supported by data analysis. Will be explained better so that later we can achieve production targets made by researchers will be understood thoroughly by industrial owners and the end this research can formulate quality management system and participatory rural appraisal models which can help to develop home industries, with small medium industries built with two model measure of consumer satisfaction. The next step is distributing the questionnaire and after that collecting the data again for processing. Based on the data, a hypothesis can be drawn as follows:

1.Implementation of the quality management system model can improve product quality in small medium industries.

2. Implementation of the participatory rural appraisal model in community empowerment through pooling opinions on Small Medium Industries that will be developed.

3. Analyze and combine two models QMS and PRA models which are able to improve the performance of Small and Medium Industries in Dili-Timor Leste.

4. Increase the productivity of small medium industries in Dili-Timor Leste.

Model Development for Small Medium Industries

The Quality Management System and Participatory Rural Appraisal Model in this research uses the term I/F (Interface) which is a connecting medium between one subsystem and another. This link allows resources to flow from one subsystem to another. The output from one subsystem will become input for another subsystem through a link. Connecting one subsystem can integrate with other subsystems to form a single unit.

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Figure 1. QMS and PRA models for Small medium industries

The most influential indicators shown in Figure 1 are:

1.Interface (I/F) Supplier

The criteria formed in interface (I/F) Supplier are the criteria in the quality management system which consists of:

a. Quality is assessing the Supplier in terms of the quality of the products produced by the Supplier. Raw materials are one of the inputs for small medium industries that is absolutely necessary. For small medium industries that do not make their own raw materials, meaning the raw materials are obtained from third parties (Suppliers), then the quality of materials from Suppliers must be the main control in order to produce quality products. Quality must be strictly maintained so that the products produced remain of good quality.

b. Cost is an indicator of the cost of materials supplied by the Supplier. Cost is a financial indicator that is the main consideration for every small medium industries in choosing a supplier.

c. Delivery is an indicator for assessing suppliers in terms of raw material delivery services.

d. Flexibility is an indicator for assessing Suppliers in terms of the Supplier's ability to meet requests for changes in quantity and time.

e. Responsiveness is an indicator for assessing Suppliers in terms of their ability to respond to problems and requests.

2.Interface (I/F) Top Down

Small Medium Industries will make several efforts to improve their company's performance and success or failure of this performance will be measured by:

1. Financial performance consisting of: company profitability level, number of sales in a year, level of operating cost efficiency.
2. Internal performance of small medium industries which consists of: percentage of defective products, level of speed in the production process, number of process and product innovations developed in a year, number of products/services delivered on time, or number of Standard Operating Procedures.
3. Small medium industries Organizational Performance consisting of: employee satisfaction level, average employee competency level, organizational culture index, or number of hours of training and development per employee.

3. Interface (I/F) Community

a. Competition advances sustainability
b. Analysis of materials and marketing systems
c. Community participation
d. Home industries

4. Interface (I/F) Customer

a. Customer satisfaction level
b. Level of customer loyalty
c. Number of customer complaints
d. Product return rate

From four main variables and several main indicators, several more indicators will be created which are elaborations of the main indicators. The indicators that will be created will later be adapted to the company that is the object of research and will be validated by promoters and experts in the field of quality management systems, so that the QMS and PRA models created can later be applied by small medium industries and validation process carried out by:

a. Researchers create indicators first by referring to existing QMS and PRA indicators.

b. The indicators that have been created are then compared with the situation in small medium industries whether they can differentiate the level of achievement based on opinion pooling or not.

c. If the small medium industries understands the questionnaire, then it is considered that the indicators are in accordance with the small medium industries. The questionnaire was first given to only a few small medium industries as a trial with the initial assumption that the contents of the questionnaire could not be understood by the respondents.

QMS MODEL CONCEPT FOR Small Medium Industries

A quality assurance system is defined as the structure, responsibilities, procedures, processes and resources of an organization to implement quality management. ISO 9000:2015 explains the elements of quality assurance that can be applied to various businesses regardless of the products and services offered. Meanwhile, Participatory Rural Appraisal can empower communities to improve regional small and medium industries to support the progress of large industries and treat small industries as a network of interconnected processes. A good quality system can meet ISO requirements, its processes must emphasize the areas identified in the ISO standards, and it must be clearly documented and put into practice. Process documentation helps organizations understand, control, and develop a network of processes that can provide the greatest benefit to organizations that design and implement quality systems that comply with international organizational standards. The advantage of ISO 9000:2015 is that it explains the elements of a quality assurance system in general including elements,

structures, procedures, processes, organizations and resources for implementing quality plans, quality control, quality assurance and quality development. The resulting output must meet Customer Satisfaction and Community Participation. The development of two models was carried out, then a Supplier Interface (I/F) was added whose indicators consisted of supplier compliance with materials ordered by the company, cost and delivery. From a company perspective, Interface (I/F) a Company was developed which contains indicators that involve employees in setting direction and meeting customer expectations. If all the indicators in the Interface (I/F) Company's have been met, the Interface (I/F) Community's fulfills the desire to empower the community in advancing regional small medium industries and the Interface (I/F) Customer which is the output of the company to meet customer satisfaction. The framework used for this research can be seen in Figure 2.

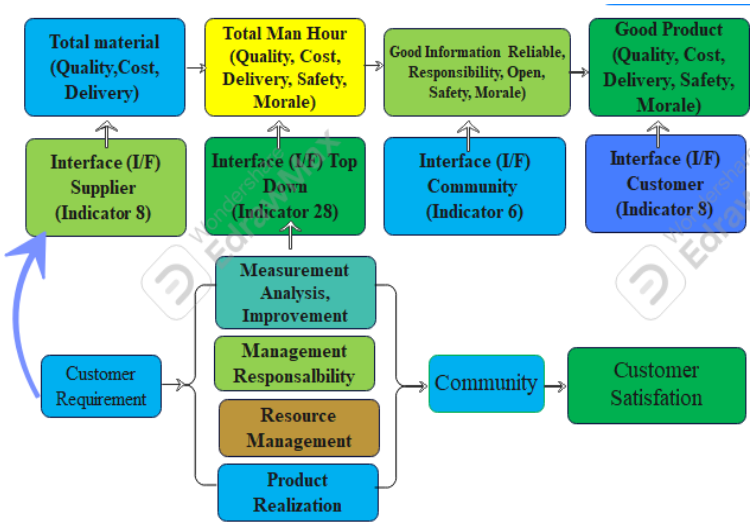

Figure 2. Framework QMS and PRA for Small Medium Industries

Quality Management System indicators that are in accordance with Small Medium Industries are as follows:

1. Interface (I/F) Supplier

a. Implementation The quality of the material and performance provided is very good.
b. The price of the material provided is in accordance with the expected quality.
c. Material delivery time is always on time.
d. Suppliers always meet changes in quantities and delivery times from the company very well.
e. Suppliers always respond well to every complaint submitted by the company.
f. Suppliers always improve the quality of services and products delivered which are always implemented using the system.
g. Suppliers always maintain good performance and relationships with the company.
h. Suppliers always innovate materials.

2. Interface (I/F) Top Down

a. Company leaders always promote the implementation of product quality to consumers.
b. Leaders communicate and re-emphasize quality implementation to all employees.
c. The company always has information that is useful in improving the quality of products implemented with changes.
d. Planning for quality improvement is carried out very well and implemented.
e. Quality improvement always involves customers very well.
f. All employees are challenged in making improvements and reengineering the products produced.
g. All employees are trained in quality improvement skills.
h. All employees are challenged to make improvements and innovations to the products produced.
i. All employees are trained in quality improvement skills.
j. All employees are recognized in terms of quality improvements implemented with the system (P10).
k. The company always motivates employees regarding the implementation of product quality towards consumer desires (P11).
l. The company manages its implemented human resources very well.
m . Customers are the main focus in process planning for producing products and services.

n. Companies control quality directly in producing goods and services.
o. The company also includes suppliers in quality improvement.
p. The company is always implemented with marketing, accounting, administrative services, in improving its processes to meet or exceed customer requirements.
q. There is continuous improvement in the implemented product and service processes.
r. There is continuous improvement in support services.
s. There is continuous improvement in terms of suppliers.
t. The company always maintains good relations with customers.
u. The company always responds well to customer complaints.
v. The company always provides the right information to customers.
w. The company knows the indicators of customer
x. The company always makes improvements to errors in the delivery process.
y. The company always pays attention to customers in service.
z. The company always improves the quality of the products
f. The community is very satisfied with the development of home industries in improving small and medium industries to help regional economic growth.
aa. The company always makes customers satisfied with products and services.
bb. The company always prioritizes customer satisfaction which is implemented with a marketing system.

3. Interface (I/F) Community

a. People do not yet understand how to change semi-finished raw materials into appropriate products or finished goods.
b. The community really needs the transformation of existing raw materials in order to develop regional small medium industries as a breakthrough for national small medium industries.
c. The community really hopes for training to help improve home industries in the region.
d. Community desires in the development of home industries that need to be improved.
e. Community participation in developing regional Small medium industries based on the amount of raw materials available, namely from the smallest raw materials to the highest raw materials.

4. Interface (I/F) Customer

a. Customers are very satisfied with the quality of the products provided, implemented with consumer desires.
b. Customers do not blame the price of products from the company.
c. Customers rarely complain about product delivery times from the company.
d. Customers always get products that suit their needs and are implemented with changes.
e. There is no product returned by the customer to the company.
f. Customers always get products with the expected quality and also get the best service from the implemented company system.
g. Customers feel satisfied with the products and services provided by companies that are implemented with products and services in line with customer expectations.
h. Customers always find product innovations from companies that are implemented with consumer desires. The indicators interface (I/F) Supplier, interface (I/F) Top

Down, interface (I/F) Community and interface (I/F) Customer are related to each other. One example of this linkage is if the quality of the material provided is very good (indicator S1) and company leaders always promote product quality to consumers (indicator P1), the public does not understand converting existing raw materials into products or finished goods (C1) then the customer will be very satisfied with the quality of the product provided (C1).

Model QMS dan PRA untuk SMIs

The QMS and PRA models for small medium industries in this study are presented in Figure 3.

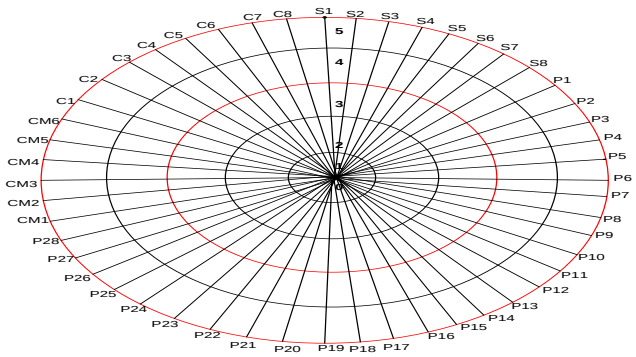

Figure 3. QMS and PRA models for SMIs

Figure 3. QMS and PRA models for SMIs Based on Figure 3. the QMS model that is suitable for SMIs consists of four variables, namely Interface (I/F) Supplier, Interface (I/F) Company (Top Down), Interface (I/F) Community (PRA), and Interface (I/F) Customer. For each variable, there are several indicators of a quality management system that must be small medium industries in order to be said to be an small medium industries that has a quality management system. Fulfillment of these indicators will definitely vary for each small medium industries owned by the Small Medium Industries and also the understanding of the Small Medium Industries owner and management regarding the quality management system. Based on this QMS model, an assessment can be made using the maturity model in order to find out to what extent the implementation of quality management system by the small medium industries. There are 2 ways to create maturity levels, namely:

1. In method 1, the existing indicators will become parameters for the maturity level. Meanwhile, in method 2, existing indicators will be parameterized at the maturity level. The parameters created for each indicator must be the same such as ignore for level 0, aware for level 1, plan for level 2, execute for level 3, measure for level 4 and excel for level 5.

2. In method 1, the existing indicators must be able to show the maturity level directly. Meanwhile, in method 2, the indicators do not have to show the maturity level.

3. In method 1 there must be five indicators for one research variable or at least according to the number of maturity levels you want to establish. Meanwhile, in method 2, the number of indicators formed for each variable may not be the same. the advantage of the maturity model created by (Garini and Mahendrawathi, 2017) is that the existing indicators will become parameters for the maturity level and must be able to show the maturity level directly. Meanwhile, the weakness is that there must be five indicators for one research variable or at least in accordance with the number of maturity

levels you want to establish. In this research, there are quite a lot of indicators formed for each variable and can represent the level of maturity that you want to create later so that the maturity model created can be used as a reference in preparing the maturity level.

Trial Of QMS Model And PRA Model

Preparation of the questionnaire was carried out by including quality management system indicators in the questions that would be distributed to respondents. In this research, what is meant by small medium industries is a coordinated set of activities to direct and control an organization to continuously increase the effectiveness and efficiency of its performance. Good quality management system will do the following: Set direction and meet customer expectations, improve control processes, reduce waste, Lower costs, Increase market share, facilitate training, involve staff, empower communities, and Improve morale.

• Location of small medium industries.

A total of 23 small medium industries who were respondents were located in the Dom Aleixo Sub District. 11 small medium industries are located in Cristo Rei Sub District, 7 small medium industries are located in Vera Cruz Sub District, and 9 small medium industries are located in Nain Feto Sub District.

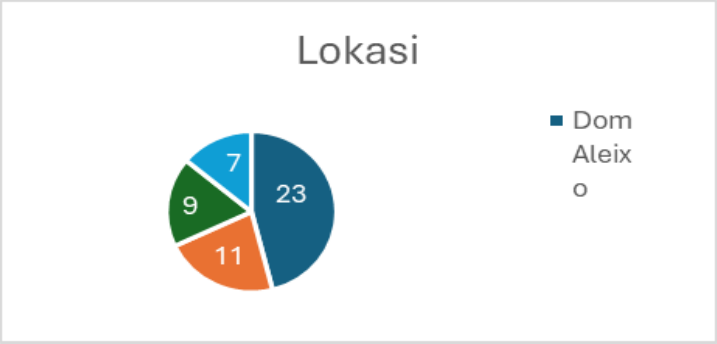

Figure 4. Pie Diagram of SMIs Locations

Application Of The QMS Model For small medium industries

The following application of the QMS Model by small medium industries is an illustration of the extent of QMS implementation by the respondent small medium industries. To simplify analysis, the average respondents' answers can be grouped as follows:

a. If the average respondent's answer to the QMS indicators in the model is $1 \leq x < 1.5$, then they can be grouped into Grade E.
b. If the average respondent's answer to the QMS indicators in the model is $1.5 \leq x < 2$, then it can be grouped into Grade D.
c. If the average respondent's answer to the QMS indicators in the model is $2 \leq x < 3.5$, then they can be grouped into Grade C.
d. If the average respondent's answer to the QMS indicators in the model is $3.14 \leq x < 4.44$, then it can be grouped into Grade B.

e. If the average respondent's answer to the QMS indicators in the model is $x \geq 4.66$, then it can be grouped into Grade A.

Respondents' answers to Part II of the questionnaire can be modeled as follows:

1. Small medium industries Model for Numbers 1 to 50

The average value of Small medium industries 1 is 4.44, which means that the implementation of the quality management system by small medium industries 1 is good (close to a value of 5). Can be grouped in Grade B. Likewise, the implementation of a quality management system by SMIs 2, 3, 4, and 5 is also included in Grade B (average 4.44 for Small medium industries 2, average value 4.3 for Small medium industries 3, average value of 4.5 for Small medium industries 4 and average value of 4.4 for Small medium industries 5. small medium industries 1 to 5 are small medium industries in the Dom Aleixo Sub District. These small medium industries produce coffee, furniture, and the five small medium industries produce quality products, prices that are affordable for buyers, sellers who are friendly and understand the products well. Small medium industries 1 and 3, the owner is always on site every day. This makes it easier for buyers to negotiate prices. However, there are times when the buyer is a distributor, making further collaboration possible. So it can be concluded that for small medium industries 1 to 5, the existing QMS is actually good. However, owner is a citizen of another country in the form of business collaboration.

Combined Analysis Application Oo The QMS and PRA Models for Small Medium Industries

In Small medium industries 1, 2, 3, 4, 6, 22, 23, 24, and 28 the average fulfillment of the Interface (I/F) Supplier indicator is the same, namely 4.54. This means that the assessment of supplier performance is actually quite good. Meanwhile for small medium industries 5, the average fulfillment of the Interface (I/F) Supplier indicator is 4.3. This means that the assessment of supplier performance is quite good, and this value is the lowest value given by all SMIs who were respondents. small medium industries 7, 8, 20, and 21 gave an assessment of supplier performance of 4.4, which means the supplier's performance was good, as did small medium industries 9, 24, 34, 43, and 44 which gave a score of

4.48. Several other Small Medium Industries even gave an average score of 4.3 to 4.66 for supplier performance. This shows that overall supplier performance in the eyes of small medium industries is good.

The minimum average value for fulfilling the Company Interface (I/F) indicator (Top Down) in this study is 4.48, namely at small medium industries 23. This shows that the implementation of QMS in SMIs is good (close to a value of 4). small medium industries 1, 3, 14 and 15 averaged a score of 4.48, while other small medium industries who were respondents even gave a score of 4 to 4.66. This shows that the implementation of QMS by the small medium industries who are respondents is very good in the Interface (I/F) Company variable (Top Down). This value is given because small medium industries feel they have implemented each indicator in the QMS model very well. The closeness between small medium industries owners and employees, most of whom are neighbors in the area, means that the delivery of product quality improvements and employee training as well as supervision of employees can be carried out well. Even though the management system has not actually been implemented well.

The minimum average value for fulfilling the Indicator (I/F) Community in this study is 3.38, namely at Small Medium Industries 4. This shows that the implementation of QMS in small medium industries is good (close to a value of 4). small medium industries 1, 2,3 and 5 averaged a score of 4.44, while other small medium industries who were respondents even gave a score of 4 to 4.34. This shows that the implementation of PRA by the small medium industries who are respondents is very good in the Interface (I/F) Community variable. This value is given because Small medium industries feel they have implemented each indicator in the PRA model very well. The closeness between Small medium industries owners and the community, who are generally their own neighbors in the area, means that the delivery of empowerment to the community regarding the development of SMIs based on the order of existing raw materials from the priority matrix or opinion pooling that has been carried out among the community can be carried out well. Even though the Participatory Rural Appraisal Model has not actually been implemented well. In the third variable of the QMS and PRA Model in this research, the best indicator fulfillment is the Interface (I/F) Customer. The minimum average value for this variable is 4.48, namely by small medium industries 8, 6, and

8. Meanwhile, other small medium industries gave a value of 4.52, which means that customers are satisfied with the quality of the products and services provided by small medium industries. This assessment was given because small medium industries felt that buyers never complained or returned the products they had purchased, in fact buyers tended to help promote the products sold by small medium industries and were also happy with the service provided by the small medium industries.

Productivity of Small Medium Industries Dili-Timor Leste

Researchers stated that 50 small medium industries spread across four sub districts have different management, but with the same goal of increasing the productivity of small medium industries. Researchers conducted research in 50 Small Medium Industries spread across four sub districts in Dili, namely: Dom Aleixo, Cristo Rei, Vera Cruz, and Nain Feto Sub Districts.

Figure 5. Four Sub Districts in Dili District

After conducting research, several things were found that were related to decreasing and increasing productivity as follows:

1. 23 Small Medium Industries spread across the Dom Aleixo area

23 Small Medium Industries spread across the Dom Aleixo area were also respondents and 2 Small Medium Industries grinding coffee, all activities from the milling to packaging process were carried out by local workers. 21 small medium industries, namely furniture, bread, brick production, mineral water, are dominated by external workers. This states that the product produced is good, where the workforce mixes with workers from outside. This also shows that there has been an increase in

productivity in the products produced and having quality work is the most important key to the company's existence.

2. 11 Small Medium Industries spread across the Cristo Rei area.

11 Small Medium Industries spread across the Cristo Rei area were also respondents and 3 bread making small medium industries all manufacturing process activities had external workers as well as owners and sales were carried out by local workers. 9 small medium industries, namely furniture, mineral water, brick production, skilled workers from outside. This states that the product produced is good, where local workers mix with workers from outside. This also shows that there has been an increase in productivity in the products produced and the quality of work is the most important key to the company's survival.

3. Small Medium Industries 9 spread across the Nain Feto area.

9 Small medium industries spread across the Nain Feto area were also respondents and 4 small medium industries making bread all manufacturing process activities with external workers and at the same time as owners and sales were carried out by local workers. 1 small medium industries producing Virgin Coconut Oil, all done by local workers up to marketing, 1 small medium industries making marble, all done by local workers, 3 small medium industries namely furniture, mineral water, skilled workers from outside. This states that the product produced is good, where local workers mix with workers from outside. This also shows that there has been an increase in productivity in the products produced and the quality of work is the most important key to the company's survival.

4. 7 spread across the Vera Cruz area

7 Small medium industries spread across the Vera Cruz area were also respondents and 3 small medium industries making bread all manufacturing process activities with external workers and at the same time as owners and sales were carried out by local workers. 1 small medium industries producing Tais Weaving, everything is done by local workers right down to marketing. 1 small medium

industries produce chairs, tables, rubber vascoms, all done by external workers and local workers. 1 small medium industries, namely furniture with skilled workers from outside, this indicates that the product produced is good, where local workers mix with workers from outside. This also shows that there has been an increase in productivity in the products produced and the quality of work is the most important key to the company's existence.

Conclusion

The conclusions of this research are as follows:

1. The problem experienced by small medium industries in improving the quality of the products and services they produce is that they do not have good management. The results of research on 50 Small medium industries spread across four sub districts, namely: Dom Aleixo, Cristo Rei, Nain Feto, and Vera Cruz Sub Districts, can be seen that the S1 6, S2, 4, S5 4 indicators are still low to the lowest value of S7 3 on the Supplier Interface (I/F), P28 30, P19 20, P10 19, P1 18, P13 17, and P14 17 to

the smallest number P3 16 15 on the Company I/F, CM6 3, CM1 3 to the smallest number CM2 2 and C1 4, C2 4, C5 4 to the smallest number C3 3 on the Customer Interface (I/F).

2. Low identification of raw materials in the development of CM1, CM2 and CM6 home industries at the Interface (I/F) Community. This is due to a lack of knowledge and human resources in empowering the natural resources around them.

3. The obstacles or obstacles experienced by Timor Leste Small Medium Industries in implementing a quality management system are a lack of knowledge about the quality management system so the use of labor dominates all small medium industries activities in Dili and its surroundings.

4. Quality variables that are appropriate and important for Small Medium Industries in achieving quality standards at the Interface (I/F) Supplier, Interface (I/F) Company, Interface (I/F) Community and Interface (I/F) Customer. Interface (I/F) Supplier, consisting of the supplier's fulfillment of the materials ordered by the company. The Company's Interface (I/F) consists of employee (man) involvement in setting direction and meeting customer expectations. Interface (I/F) Community consists of empowering the community in creating a priority matrix for home industries which will be developed based on raw materials which involves the community in determining the development of home industries as a breakthrough for Small Medium Industries nationally. Interface (I/F) Customer produces good products and maintains relationships with customers. Model testing has been carried out on 50 small medium industries or respondents, so in general the development of the quality management system model for small medium industries created in this research is good. This can be seen from the average score obtained by Small Medium Industries in fulfilling the quality management system indicators which is above 4, where all small medium Industries apparently fall into the Class B group, which means the quality management system is good. This can be seen from the average key performance Iindicators score from the Supplier Interface (I/F) is 4.44, the average KPI Interface (I/F) Top Down with the highest 4.54, the average KPI value at the Interface (I/F) Community with is 4.44, while the key performance

indicators score on the Customer Interface (I/F) is 4.52, which means work performance is good. Once these two models are combined, they can support the development and performance of small medium industries so that they can increase labor productivity in meeting consumer satisfaction, producing quality products even though all workers are dominated by external workers.

Suggestions

Suggestions that can be given for further research are:

1. Add variable components to the quality management system and variable components for community empowerment in terms of developing regional small medium industries to encourage the development of national small medium industries so that they develop well.

2. Add indicators to each variable component of the quality management system.

3. Adding participatory rural appraisal indicators to identify raw materials in the highest or highest and lowest quantities so that it is easier to develop based on a priority matrix.

4. Increase the number of respondents so that the data obtained can represent 50 small medium industries in four sub-districts: Dom Aleixo Sub District, Cristo Rei, Vera Cruz, and Nain Feto District Dili Timor Leste.

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