

## **The Correlation Analysis of ISO 22000:2018 Food Safety Management System on the Family Companies Performance**

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### **Abstract**

This study aims to determine the level of satisfaction of Family Business employees with the implementation of ISO 22000:2018 applied by the company, to determine the level of satisfaction of Family Business employees to the company's performance with the BSC perspective and to determine the effect of implementing ISO 22000:2018 on the achievement of company performance. This research is conducted by distributing questionnaires. Online Questionnaires were distributed to employees from several departments who represented and understood the condition of the company. Based on its nature, this research is descriptive, namely describing and explaining the effect of implementing ISO 22000:2018 on company performance. The respondents in this study were 444 Family Business employees from several departments who were considered to understand well the application of ISO 22000:2018. Sampling using purposive sampling technique, which is a sampling technique based on certain criteria with certain considerations. Based on the results of the analysis and discussion that has been carried out, the following conclusions: The level of employee satisfaction with the implementation of the ISO 22000:2018 food safety management system which consists of the application of the basic requirements program, the application of HACCP principles, the application of interactive communication and the application of the resource management system. The level of employee satisfaction with the achievement of company performance which consists of financial perspective, customer perspective, internal business process perspective and learning and growth perspective. The effect of implementing ISO 22000:2018 on the achievement of company performance is very significant and has a positive value, which means that there is a positive influence on company performance. The real effect can be seen in the number of Family Bisnis customers before implementing ISO 22000:2018 the number of customers, and after implementing ISO 22000:2018 there was a drastic increase in the number of customers. Implementation of the basic eligibility requirements program has the highest impact on company performance from financial performance, customer performance, internal business process performance and learning and growth performance.

**Keywords:** Food Safety, Food Safety Management System, ISO 22000:2018 , Performance , Family Company

### **Introduction**

Increased demand and consumer awareness of good food safety make companies engaged in food improve their quality and competitiveness in order to meet customer needs and be able to compete in the global market. This condition encourages companies to have internationally qualified quality standards such as ISO or the International Organization for Standardization. Family Bisnis implements the ISO 22000:2018 Food Safety Management System as the company's commitment to maintain the quality of its products. According to Başaran et al. (2021) The application of ISO 22000:2018 will change the behavior or habits that are embedded and develop in employees within the company. According to Wicaksono (2006), that the application of ISO can change the behavior and habits of employees in a company which in turn can improve the performance of the company. The failure or success of the company's performance can be known by measuring how much the level of employee satisfaction with the system implemented in the company.

The company's performance measurement aims to determine the extent to which the company's development has been achieved. Various models have been created by experts for performance measurement systems. Currently the most popular method and widely used by companies in measuring performance is the Balanced Scorecard (BSC) method. According to Başaran et al. (2021); Elizabeth et al. (2021); Stoyanova et al. (2022) BSC is a strategic approach with the aim of improving the performance measurement system of a company in the long term, which is then measured and monitored on an ongoing basis. The BSC approach is based on four perspectives, namely financial, customer, internal business processes and learning and growth perspectives. These four perspectives offer a balance between short-term and long-term goals, the desired outcomes (outcomes) and the performance drivers of these results. According to Sayed et al. (2021) realize that basically their business improvement is based on a system that is implemented consistently and efficiently so as to produce better company performance. According to Elizabeth et al. (2021); Matsumoto et al. (2021) with the implementation of ISO will have an impact on the performance of a company. Therefore, a study was conducted on the effect of ISO 22000:2018 on company performance using the BSC perspective which will be carried out in Family Bisnis. This study aims to determine the level of satisfaction of Family Business employees with the implementation of ISO 22000:2018 applied by the company, to determine the level of satisfaction of Family Business employees to the company's performance with the BSC perspective and to determine the effect of implementing ISO 22000:2018 on the achievement of company performance.

### **Method**

This research is conducted by distributing questionnaires. Online Questionnaires were distributed to employees from several departments who represented and understood the condition of the company. Based on its nature, this research is descriptive, namely describing and explaining the effect of implementing ISO 22000:2018 on company performance. The respondents in this study were 444 Family Business employees from several departments who were considered to understand well the application of ISO 22000:2018. Sampling using purposive sampling technique, which is a sampling technique based on certain criteria with certain considerations.

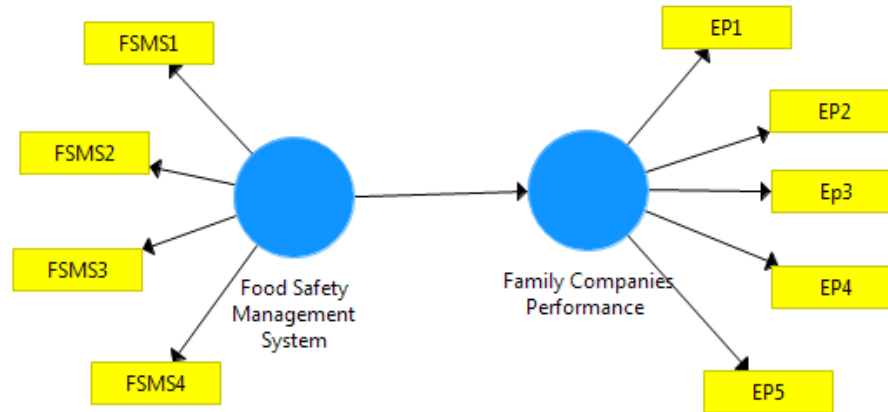


Fig 1. Research Model

## Result and Discussion

### The Effect of ISO 22000:2018 Implementation on Performance from a Financial Perspective

The World Health Organization describes prerequisite programs as practices and conditions that are necessary before and during the implementation of HACCP and which are essential for food safety. The importance of basic eligibility requirements programs for food safety is clear, as the presence of food hazards is more often driven by failure of basic eligibility requirements programs (cross-contamination processes or an unhealthy production environment) rather than failure of critical control points in the HACCP plan (FAO and WHO, 1997). According to Djekic et al. (2022); Ren et al. (2022); Sayed et al. (2021); Stoyanova et al. (2022) As a basic prerequisite program, it is certainly a benchmark in maintaining food safety. By increasing the quality factor will increase production costs, the increase in quality costs is offset by increased acceptance by consumers. Implementation of the basic eligibility requirements program will help management to increase employee awareness during food production activities and accurately identify costs incurred. Accurately identifying the costs incurred will assist management not only in lowering the costs of implementing the program's basic eligibility requirements, but also in increasing productivity and profitability. Various reports in the literature indicate that the main barriers to implementing prerequisites are errors in timing and temperature, production room facilities, critical control points, poor or incomplete documentation of monitoring and ultimately result in financial constraints. If the program of basic eligibility requirements is implemented optimally, it will avoid the level of damage to the product so as to minimize losses and increase finances for the company.

### The Effect of Implementing ISO 22000:2018 on Performance from a Customer Perspective

The four ISO 22000:2018 variables that have the highest coefficient value and have the greatest influence on the customer perspective, the basic eligibility requirements program variable is 0.419. In research According to Matsumoto et al. (2021); Nguyen et al. (2022); Ren et al. (2022); Sayed et al. (2021); Stoyanova et al. (2022) for a food industry it is important to ensure that their industry has good food safety, with food safety control programs not only causing customer disappointment or dissatisfaction, but can also lead to foodborne illness. The basic eligibility requirements program is considered as the initial prerequisite program that provides the basis for HACCP in the overall food safety management program and prior to the implementation of the HACCP system, the basic eligibility requirements program is

indispensable (Seward, 2000). Poor implementation of prerequisites in leading food safety for disease in the food industry and has suggested that the establishment of a program of basic eligibility requirements can provide a solid foundation for developing HACCP. Customer satisfaction measures provide feedback on how well the company is conducting and managing the business. In meeting customer satisfaction, it is not enough just to get high loyalty or profitability. Only if customers rate their buying experience as a very satisfying experience can the company expect customers to make repeat purchases

### **The Effect of the Implementation of ISO 22000:2018 SMKP on Performance from the Internal Business Process Perspective**

According to Matsumoto et al. (2021); Nguyen et al. (2022); Ren et al. (2022); Sayed et al. (2021); Stoyanova et al. (2022) an internal business process is an effort in an activity so that the objectives of the activity can be achieved efficiently and effectively. Efficient can be defined as the use of resources and the selection of appropriate activities that include the amount, type or time of use of other resources. While effective in this case is where the results of the use of resources and activities are in accordance with the targets which include quality, cost, and time. Without internal business processes, activities will be difficult to carry out in accordance with good expectations, namely on time, in this case there is no delay in the completion of a project; appropriate costs, so that there are no additional costs from the budgeted cost planning; quality in accordance with the requirements; and the process of activities can run smoothly. One of the problems in internal business processes is the problem of possible pollution to the environment, so it needs to be taken into account if the countermeasures are less effective. According to Başaran et al. (2021); Benyettou et al. (2022) argue that basic eligibility requirements programs are jointly managed through a quality management system and have management responsibilities and a food safety culture that are essential in ensuring a fully operational and sustainable program.

### **The Effect of ISO 22000:2018 Implementation on Performance from a Learning and Growth Perspective**

The four variables of the ISO 22000:2018 food safety management system which has the highest coefficient value and has the greatest influence on the learning and growth perspective, the basic eligibility requirements program variable is 0.447. According to research According to Başaran et al. (2021); Benyettou et al. (2022); Chen et al. (2021); Dhivya et al. (2021); Djekic et al. (2022); Stoyanova et al. (2022) stated that most managers and employees have limited knowledge of basic eligibility requirements. Knowledge of basic feasibility requirements is a basic prerequisite that must be known by all parties in the company which is then used to determine the feasibility of hazard analysis and critical control points (HACCP). It is necessary that the company provides clear and adequate learning and information to fully guarantee food safety. Sufficient knowledge and training of employees and managers on food safety such as implementation of the basic eligibility requirements program is very important in the initial steps for the implementation of food safety management systems in the food industry. Because individuals with food safety certification will perform tasks more precisely regarding food safety. Sun and Ockerman (2018) recommend learning and knowledge about food safety and proper food handling in food service areas to help food service personnel (workers and managers) gain a better understanding of food service and better hygiene practices that will result in better food. which is safer. The prerequisite program includes employee personal hygiene sanitation that truly represents employee knowledge and compliance with good hygienic practices (GHP) and good manufacturing practices (GMP).

### **Conclusion**

Based on the results of the analysis and discussion that has been carried out, the following conclusions: The level of employee satisfaction with the implementation of the ISO 22000:2018 food safety management system which consists of the application of the basic requirements program, the application of HACCP principles, the application of interactive communication and the application of the resource management system. The level of employee satisfaction with the achievement of company performance which consists of financial perspective, customer perspective, internal business process perspective and learning and growth perspective. The effect of implementing ISO 22000:2018 on the achievement of company performance is very significant and has a positive value, which means that there is a positive influence on company performance. The real effect can be seen in the number of Family Bisnis customers before implementing ISO 22000:2018 the number of customers, and after implementing ISO 22000:2018 there was a drastic increase in the number of customers. Implementation of the basic eligibility requirements program has the highest impact on company performance from financial performance, customer performance, internal business process performance and learning and growth performance.

Companies should improve employee satisfaction by providing learning and training facilities on food safety quality to increase employee skills and motivation. Companies need to involve employees in decision making and provide recognition or awards that are used to increase employee satisfaction so that company performance increases. To improve food safety and employee satisfaction, companies should pay more attention to the implementation of basic eligibility requirements programs that have the highest impact on company performance by reviewing environmental and worker health, sanitation and Good Manufacturing Practices (GMP).

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