

BULACAN FEEDMILL PLANT TOWARDS BUSINESS OPERATIONS SUSTAINABILITY FRAMEWORK

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ABSTRACT

The exigency for businesses to embed sustainability within their operational ethos is increasingly pronounced against the backdrop of the contemporary global landscape's environmental and social exigencies. This research focuses on the Bulacan Feedmill Plant, a significant entity in the Philippines' animal nutrition industry, illustrating the plant's journey towards integrating sustainability into its operations. It addresses a notable gap in the literature regarding the application of sustainability principles specifically within the animal nutrition sector, and more so, in the context of feed mill operations. By proposing a tailored Business Operations Sustainability Framework for the Bulacan Feedmill Plant, this study endeavors to furnish a bespoke roadmap conducive to fostering a sustainable operational paradigm. Employing a mixed-method research design, this study melds quantitative insights gleaned from surveys and Likert-scale questionnaires with qualitative depths uncovered through interviews and focus group discussions. This dual approach facilitates a holistic understanding of the challenges, risks, and perceptions surrounding the adoption of a sustainability framework in the feed mill's operations. The empirical findings underscore the imperative of formulating a comprehensive Business Operations Sustainability Framework that harmonizes economic, environmental, and social sustainability objectives with actionable strategies and plans. Recommendations derived from the study advocate for a concerted effort to engage and educate employees on sustainability's significance, alongside fostering customer involvement in sustainable practices. This research contributes a novel, industry-specific perspective to the sustainability discourse, offering a pragmatic pathway for the Bulacan Feedmill Plant and, by extension, the broader animal nutrition industry towards achieving sustainable operational excellence.

Keywords: sustainability framework, business operations, feed mill plant, sustainability strategy

INTRODUCTION

The Bulacan Feed Mill Plant, as a key player in the agribusiness sector, faces various risks, including natural disasters, supply chain disruptions, and market uncertainties. As the company recognizes the importance of safeguarding its operations, there is an increasing need to develop and implement a

robust Business Operation Sustainability Framework that addresses the specific risks and vulnerabilities relevant to the plant's day-to-day operations. Akpan, I. S., & Hamed, T. B. (2018) provide insights into sustainable practices in feed milling, offering valuable lessons and best practices that can inform the development of the Bulacan Feed Mill Plant's

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sustainability framework. Additionally, Bos-Brouwers, H. E. (2010) explores corporate sustainability practices in small and medium-sized enterprises, offering practical examples and strategies that can inform the development of sustainability frameworks for organizations similar to the Bulacan Feed Mill Plant. Furthermore, Pojasek, R. (2007) presents a framework for business sustainability, offering a conceptual foundation and guiding principles that can assist in developing and implementing a robust business operating sustainability framework tailored for the Bulacan Feed Mill Plant.

The background study aims to fill this gap by investigating the management process of developing and implementing a tailored business operating sustainability framework for the plant. This research will contribute to the body of knowledge on effective Business Operation Sustainability Framework management strategies, providing valuable insights for similar agribusinesses and organizations facing similar challenges.

OBJECTIVE OF THE STUDY

The objective of this study is to:

1. Identify and analyze the key challenges faced by the management of the Bulacan Feedmill Plant in implementing a business operation sustainability framework.
2. Identify and assess the potential risks and vulnerabilities specific to the Bulacan Feedmill Plant that need to be identified and addressed through the creation of a business operation sustainability framework handbook.
3. Explore the importance and benefits of having a business operation sustainability framework handbook for Bulacan Feedmill Plant
4. Creation and implementation of the business operation sustainability framework handbook

METHODOLOGY

The study will employ a mixed-method research design, combining both quantitative and

qualitative data collection techniques. The quantitative data will be gathered through surveys and Likert-scale questionnaires to assess the key challenges faced by the management and identify risks and vulnerabilities. Qualitative data will be collected through interviews and focus group discussions to gain deeper insights into the experiences and perceptions of stakeholders regarding business operation sustainability framework planning.

In-depth interviews and focus group discussions with key personnel involved in the implementation and management of the business operation sustainability framework at Bulacan Feed Mill Plant were conducted. The Likert scale survey assessed various aspects of the business operation sustainability framework, such as its responsiveness, adaptability, communication effectiveness, and overall impact on business continuity. The survey was distributed to a 30-representative sample of employees (Supervisors) across different departments at Bulacan Feed Mill Plant.

RESULTS AND DISCUSSION

1. Key challenges faced by the management of the Bulacan feed mill plant in implementing a business operation sustainability framework

Table1
Objective 1 Likert Data

Likert Scale Analysis				
Objective	Variable	Questions	Mean	Description
Objective 1	Q1	Lack of Top Management Support made the implementation difficult.	4.23	Agree
	Q2	Inadequate communication and coordination among different departments.	3.93	Agree
	Q3	Resistance to change among employees hindered the implementation.	4.40	Agree
	Q4	Lack of standardized procedures and documentation for the plan.	4.50	Strongly Agree
	Q5	Communication channels were effective in disseminating plan information.	2.27	Disagree
Overall Weighted Mean			3.87	Agree



The overall weighted mean across all variables is 3.87, indicating that respondents perceive that the company has a lot of key challenges faced by the management of the Bulacan Feedmill Plant in implementing a business continuity plan.

This suggests that there's a failure to create a proper communication channel so that dissemination of information would be easier and faster. Further, the company must have a Sustainability Plan as their basis on how to properly spread the information, and not to create barriers among departments.

These results highlight the areas where the company should focus its efforts to communicate as a primary concern and as well as a key to creating a good environment.

Table 2
Objective 1 Themes

Objective	Variable	Interpretation	Theme
Objective 1	Q1	It might lack details, and integration with all departments, and might not been tested thoroughly	Challenges in Implementing Business Operation Sustainability Framework
	Q2	Gaining full commitment and buy-in from all departments and employees.	
	Q3	Conducting awareness sessions and workshops to communicate the importance of the BCP.	
	Q4	The percentage of critical supplies covered by backup suppliers.	

The respondents believe that the importance of this business operation sustainability framework has been taken for granted. The lack of information, communication, and dissemination has been compromised along the way by the company.

In addition, the resistance from its employees has been a challenging task as well to implement or apply what is in the BOS Framework Handbook. With technology advancements, organizations perceive more threats and risks, making the

framework more critical for preventive and resilient measures.

2. Potential risks and vulnerabilities specific to the Bulacan Feedmill Plant that need to be identified and addressed through the creation of a business operation sustainability framework handbook

The respondents perceived that the company has not adequately identified potential risks, and there is a lack of comprehensive understanding among employees regarding the vulnerabilities of the plant.

Table 3
Objective 2 Likert Data

Likert Scale Analysis				
Objective	Variable	Questions	Mean	Description
Objective 2	Q6	The Bulacan Feed Mill Plant has adequately identified potential risks.	2.07	Disagree
	Q7	There is a comprehensive understanding of vulnerabilities at the plant.	2.07	Disagree
	Q8	The current risk management strategies are sufficient and robust.	1.73	Disagree
	Q9	The plant has adequate resources to develop and implement the handbook.	3.40	Agree
	Q10	The existing risk assessment process is thorough and effective.	1.83	Disagree
	Overall Weighted Mean			2.22

This suggests that there is a need for the company to prioritize identifying potential risks and ensuring that all employees have a common and comprehensive understanding of the vulnerabilities, which may lead to positive outcomes

The overall weighted mean of 2.22 further supports the need for improvement in the company's approach to risks and vulnerabilities.

While there are areas of strength, such as



productive and indulgent employees and leaders, there is still room for improvement and prioritization in other areas, particularly in assessing risks and vulnerabilities in all areas and departments of the company.

Table 4
Objective 2 Themes

Objective	Variable	Identified Themes	
		Interpretation	Theme
Objective 2	Q5	Engaging in brainstorming sessions and workshops with relevant stakeholders to identify potential risks.	Risks and Vulnerabilities
	Q6	Conducting risk workshops and discussions to capture insights from subject matter experts.	
	Q7	We will prioritize risks based on their potential impact and likelihood of occurrence.	
	Q8	Equipment breakdowns lead to production downtime. Supply chain disruptions affect the availability of raw materials.	

The participants stressed the importance of identifying critical equipment and assessing their vulnerabilities to disruptions. Analyzing historical data on equipment failures and their impact on feed mill operations is necessary to mitigate risks effectively.

The study emphasizes assessing risks in logistics and transportation to ensure the availability of raw materials. Identifying potential equipment failures and maintenance risks helps maintain smooth operations and minimize disruptions.

3. Importance and benefits of having a business operation sustainability framework handbook for the Bulacan Feedmill Plant

Table 5
Objective 3 Likert Data

Objective	Variable	Likert Scale Analysis		
		Questions	Mean	Description
Objective 3	Q11	The handbook improves the organization's ability to respond to disruptions.	4.40	Agree
	Q12	The handbook ensures the safety and well-being of employees during crises.	4.40	Agree
	Q13	Having a well-structured handbook streamlines recovery efforts efficiently.	4.33	Agree
	Q14	A handbook improves communication and coordination among teams.	4.40	Agree
	Q15	The handbook helps minimize potential financial losses during crises.	4.57	Agree
Overall Weighted Mean			4.42	Agree

One of the most significant findings is that the handbook helps minimize potential financial losses during crises. Respondents perceived the handbook as a crucial tool in safeguarding the company from substantial financial losses, further underscoring the necessity of its development and implementation.

The overall weighted mean of 4.42 suggests that the handbook is seen as a central resource providing standardized procedures, guidelines, and protocols for effectively managing disruptions and ensuring business continuity.

Table 6
Objective 3 Themes

Objective	Variable	Identified Themes	
		Interpretation	Theme
Objective 3	Q9	Having a BOS handbook is important because it serves as a centralized and comprehensive guide.	Importance and Benefits of Business Operating Sustainability Framework Handbook
	Q10	Streamlined communication and coordination during disruptions, downtime, and product quality issues.	
	Q11	The determination of specific factors that need to be addressed in the business operation sustainability framework handbook for sales and marketing involves a collaborative effort.	
	Q12	Relevant stakeholders, supervisors and managers, and subject matter experts, must be involved in the development and creation of the business operating sustainability framework handbook	



The data emphasizes that the Feedmill plant faces various risks that can threaten its survival. Implementing a sustainability framework approach can help understand and address these risks, ensuring business continuity and resilience.

Participants highlight the significance of a Business Operating Sustainability Framework handbook. It serves as a centralized guide, outlining essential procedures, contacts, and response protocols during disruptions or emergencies. The handbook ensures all employees are aware of their roles and responsibilities, facilitating a coordinated and efficient response.

5. Essential components, best practices, and recommended strategies that should be included in a business operation sustainability framework handbook tailored specifically for the Bulacan Feedmill Plant

Table 7
Objective 4 Likert Data

Likert Scale Analysis				
Objective	Variable	Questions	Mean	Description
Objective 4	Q16	The need for a business operating sustainability framework handbook is well-understood.	2.47	Disagree
	Q17	There is a designated team responsible for creating the handbook.	1.83	Disagree
	Q18	The handbook includes a comprehensive risk assessment and analysis.	4.40	Agree
	Q19	The plan incorporates employee training and awareness programs.	4.57	Agree
	Q20	There is a process for regular testing and updating of the handbook.	4.47	Agree
Overall Weighted Mean			3.55	Agree

The findings of the survey reveal that while the need for a Business Operating Sustainability

Framework Handbook is recognized, there is a lack of understanding among the respondents regarding its main purpose and how it can benefit the company.

Another significant result is the absence of a designated team responsible for creating the Business Operating Sustainability Framework Handbook.

The overall weighted mean indicates that the respondents perceive the Business Operating Sustainability Framework as essential for ensuring the quick recovery of employees, assets, and business processes during disruptions. It is recognized as a vital element in the company's recovery strategy, aimed at mitigating risks and minimizing their impact, allowing the company to continue its operations as usual.

Table 8
Objective 4 Themes

Identified Themes			
Objective	Variable	Interpretation	Theme
Objective 4	Q13	The focus was on identifying critical processes, potential vulnerabilities, and key dependencies that could impact the plant's operations.	Creation and implementation of the handbook
	Q14	Tracking changes in the business environment, regulations, and industry standards.	
	Q15	Factors and needs addressed in the business operating sustainability framework handbook were determined through a comprehensive risk assessment, consultation with relevant stakeholders, and analysis of historical data and industry best practices	

Participant 1 emphasizes how the handbook helps the plant meet regulatory requirements and industry standards, demonstrating the organization's commitment to business continuity and stakeholder protection.

To ensure the effectiveness of the handbook, regular reviews and needs analysis of the personnel's requirements are essential

The data strongly advocates for the adoption of a

comprehensive Business Operating Sustainability Framework handbook for the Bulacan Feedmill Plant and emphasizes its importance in addressing business interruption losses and ensuring continuity during crises and emergencies.

CONCLUSION

The research highlights the importance of sustainability in the operations of the Bulacan Feed Mill Plant. While progress has been made in certain sustainability aspects, challenges remain in fully implementing a robust Business Operation Sustainable Framework. Identifying and addressing specific risks and vulnerabilities is essential for strengthening sustainability efforts. The findings align with the importance of creating a Business Operation Sustainability Framework, as emphasized in the review of related literature. By adopting the framework and raising awareness among employees, the plant can position itself as a responsible and resilient organization committed to sustainability and a positive impact on the environment and society.

RECOMMENDATIONS

To enhance sustainability practices within the organization, the following actions are recommended:

1. Develop a comprehensive Business Operation Sustainable Framework aligned with sustainability principles, including clear goals, strategies, and actionable plans for economic, environmental, and social sustainability.
2. Engage and educate employees through awareness programs, training, and workshops to ensure their understanding of the importance of sustainability and their role in driving positive change within the organization.

3. Actively involve customers in sustainability initiatives by providing information about sustainable products and encouraging them to make environmentally conscious choices.
4. Prioritize sustainable procurement practices by collaborating with suppliers who adhere to sustainable principles to ensure an environmentally responsible and socially conscious supply chain.
5. Engage with local communities, listen to their concerns, and involve them in sustainable development projects to foster mutual understanding and support.

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AUTHOR’S PROFILE



Engr. Mark Anthony Laviña is a distinguished IT professional currently serving as the Senior Manager – ITS Solution Delivery at a leading retail conglomerate situated in the Mall of Asia Business complex.

With a robust foundation in IT and Project Management, Mark Anthony has solidified his position as a respected expert in the field. Over the course of his illustrious career, he has spearheaded the successful execution of end-to-end implementations for a variety of projects, encompassing IT hardware and software initiatives, CAPEX projects, and process improvement endeavors across diverse industries such as FMCG, animal feeds, and F&B manufacturing. Mark Anthony holds a Bachelor of Science degree in Computer Engineering, complemented by several prestigious technology certifications. Notably, he is a Certified Project Management Associate (CPMA), Certified Lean Six Sigma Green Belt (CLSSGB), and Certified Agile Scrum Master (CASM), underscoring his dedication to continuous learning and professional advancement. He has completed both his Masters in Business Administration and Doctor of Philosophy in Business Management Major in Strategic