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## **Enhancing Business: Incorporating Enterprise Architecture into Project Management in the Food Manufacturing Industry**

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### **ABSTRACT**

The present research examines the incorporation of Enterprise Architecture into project management in the food manufacturing sector with the aim of enhancing operational efficiency and corporate accountability. This study investigates the use of an integrated Enterprise Architecture strategy with project management in the food industry to improve production processes by using the crucial role of information technology. The aim of this approach is to enhance operational frameworks, customize information systems, and guarantee the congruence between business strategic aims and technology implementation. Within this framework, the analysis centers on the potential of integrating Enterprise Architecture to enhance transparency, interoperability, and scalability in the food manufacturing industry. Enterprise Architecture offers a comprehensive perspective on the technological infrastructure needed to ease effective and adaptable business operations. The implementation of Enterprise Architecture yields advantages in elucidating system architecture, enhancing coordination among diverse business components, and easing the more adaptable assimilation of modifications. Enterprise Architecture is crucial in project management as it eases improved decision-making and more efficient risk management. This study emphasizes the significance of incorporating Enterprise Architecture into the management of projects in the food industry as a strategic basis for ongoing operational advancement and enhancement while simultaneously prioritizing product quality, production efficiency, and responsiveness to evolving market demands.

**Keywords:** Enterprise Architecture; Food Industry; Project Management; Product Quality; Production Efficiency

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### **INTRODUCTION**

The food manufacturing sector is currently experiencing substantial growth because of the increasing demands of discerning consumers who place a premium on nutritional value and product quality. Consumers' growing consciousness about the health and quality attributes of food serves as a driving force for companies in this sector to persistently innovate and adjust to ever-changing market dynamics. Amid a dynamic business landscape and intensifying competition, food companies must prioritize operational efficiency to thrive. Efficiency is essential not only for sustaining a competitive edge but also for satisfying increasing market requirements. An effective strategy for improving operational efficiency and adaptability in the food manufacturing industry involves incorporating Enterprise Architecture (EA) (Prawira et al., 2023), (Afarini & Hindarto, 2023) into project management. EA supplies a comprehensive perspective on technology infrastructure and business operations, allowing companies to merge information systems, enhance processes, and reach coherence in strategic decision-making. With enterprise architecture, food companies can improve their ability to adjust their operational structure, show synchronized information systems, and help rapid response to market fluctuations. The integration of enterprise architecture in project management can show a solid strategic basis for the long-term growth of a business. This helps the clarification of system architecture, enhances coordination among different business components, and enables companies to adapt to changes promptly and efficiently. Hence, the emphasis on enterprise architecture integration in project management within the food manufacturing sector is not solely aimed at enhancing operational efficiency but also at proving a robust groundwork for sustainable expansion and adaptability to dynamic markets.

The food manufacturing industry (Titi et al., 2023), (Bakin et al., 2023) is heavily reliant on information technology, which serves as the bedrock for streamlining product development, supply chain administration, and production processes. Nevertheless, the seamless integration of this technology with project management often needs to be improved. The integration of intricate information systems with routine operational requirements presents challenges, particularly in the food industry, which is distinguished by its stringent quality control, inventory

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management, and regulatory engagement. A fundamental issue appears concerning the extent to which one understands the genuine advantages of integrating Enterprise Architecture in the context of the highly particular food industry. Finding the extent to which EA, an integrated method for the design and administration of information technology infrastructure, can be changed to suit the specific requirements of the food industry presents certain difficulties. The potential of EA to enhance operational efficiency across the supply chain and production process while also bolstering business accountability for critical factors, including customer satisfaction, regulatory compliance, and product safety. It is essential to have a comprehensive understanding of the ways in which the integration of EA affects operational efficiency and business accountability in the food industry. By doing so, obstacles in the integration of information technology with project management can be surmounted, and the complete potential of technology for enhancing processes, product innovation, and overall quality throughout the production chain to the end consumer can be fully realized. As a result, conducting more research and gaining a greater understanding of EA integration in the food industry will be crucial to the development of effective strategies for enhancing operational performance and addressing the industry's challenges.

By employing a case analysis method, the aim of this research is to examine the incorporation of Enterprise Architecture (Hindarto, 2023a) into project management, concentrating on the food manufacturing industry. By adopting this method, scholars can get an in-depth comprehension of EA implementation within the operational milieu of the food sector. The data collection phase of this research approach consists of conducting direct interviews with a diverse range of industry stakeholders, including managers, information technology experts, and other relevant parties. Direct observation at the production site is a crucial part for responding to and understanding the challenges, opportunities, and dynamics of Enterprise Architecture (Hindarto & Indrajit, 2023) implementation in real-world scenarios. In addition to conducting interviews and observations, a meticulous document analysis was performed concerning the pre-existing technological infrastructure within the food industry. The aim is to get a comprehensive comprehension of the current system, potential vulnerabilities, and the ability of EA integration to surmount these challenges. This approach to case analysis offers a comprehensive view of the effects that EA implementation has on food industry business processes and project management. Through the engagement of critical stakeholders, careful examination of pre-existing technology infrastructure, and direct observation, the principal aim of this research endeavour is to supply an all-encompassing comprehension of the ways in which the integration of enterprise architecture can augment operational efficiency and business accountability within the food industry.

The potential integration of Enterprise Architecture and the influence of integrated EA strategies in conjunction with project management on operational efficiency and business accountability are significant inquiries within the ever-evolving food manufacturing sector. Due to the critical role that information technology plays in streamlining production processes, the degree to which EA integration can enhance operational efficiency in the food manufacturing sector is a significant concern. Furthermore, when assessing the degree to which this integration can aid in expecting business dynamics and expanding market demands, the critical question of how the implementation of an integrated EA strategy with project management will affect business responsibility becomes a central focus. This study looks to offer a comprehensive comprehension of the potential and pragmatic ramifications of integrating EA in the food manufacturing sector, with the intention of enhancing operational efficiency and promoting greater corporate accountability. To achieve this, the research questions will be specified in detail. Enterprise Architecture integration in the food manufacturing sector: How can this be done to increase operational efficiency? (RQ 1). Regarding business responsibility in the food manufacturing sector, what are the effects of integrating an EA strategy with project management? (RQ 2).

The aim of this research is to offer a comprehensive analysis of the potential of enterprise architecture integration within the food industry. By doing so, it looks to show a connection between project management (Hindarto, 2023b) and information technology, with the goal of enhancing operational performance and business accountability. Enhanced comprehension of the ramifications associated with this integration is expected to give businesses using in the food industry with a solid groundwork for reaching a competitive edge and adapting to ever-changing market requirements.

## LITERATURE REVIEW

The equilibrium between strategy, business, and information system levels is being disrupted as organizations undergo rapid change in a competitive and dynamic environment. Scalability and resilience to change are critical components of adaptive enterprise architecture and enterprise architecture. A meta-model is suggested to formalize the capability of a sensing model, which is essential for addressing uncertainty and learning (Daoudi et al., 2023). An

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investigation is conducted into machine learning (Hindarto et al., 2023) projects, and an ML project canvas is suggested for stakeholders' comprehension. The quality of the canvas model is frequently determined by the proficiency of business division practitioners, who frequently develop it without the assistance of data scientists (Takeuchi et al., 2022). An integrated IAM metamodel for secure digital enterprise architecture (EA) is developed in this research to model digital asset protection. Using the demonstration method and eight IAM patterns, the design science research metamodel is evaluated. It helps enterprise, IAM, and information systems architects and researchers create and implement situation-specific IAM models in secure EA for information systems (Nahar & Gill, 2022). The Enterprise Architecture (EA) paradigm develops investment models for EA projects to bridge the gap between businesses and IT. The research method analyzes published EA and IT architecture approaches, finds their pros and cons, and analyzes IT investment assessment practices in Russian infrastructure-intensive companies. Our models can calculate the effect of an integrated approach, accurately calculate project costs, and reduce architectural solution investment cycles (Ilin et al., 2021). The rapid development of digital technology requires organizations to adapt to stay competitive. EAM is essential for managing complex IT and IS landscapes. Few studies have examined EAM benefit realization. Survey results show that system changes and clear standards improve technical IT capabilities. This research enhances academic research on EAM benefit realization and EA digital strategy implementation investments (Pattij et al., 2022). The paper presents the Integrated Electronic Requirements Information Management Framework (IREM), an enterprise architecture framework for managing client requirements throughout a construction project. ICT/IS supports information management, which improves client requirements management efficiency and effectiveness. Operationalizing the framework requires more work (Pattij et al., 2022).

The research finds several critical gaps in enterprise architecture and IT management. In developing Machine Learning (ML) models, business practitioners, and data scientists need to be integrated. ML is increasingly being used in organizational projects, but business practitioners and data scientists have different skill sets that can hinder model development. Enterprise Architecture Management (EAM) benefits are also difficult to grasp. EAM is essential in managing complex IT environments, but research on the benefits of EA digital strategies is limited. The Integrated Electronic Requirements Information Management Framework (IREM) can manage client requirements in the construction industry, but it needs more work to operationalize. Finally, the importance of digital asset protection in the age of ever-changing digital technology needs further research into integrated metamodels that can model and protect digital assets. These gaps suggest that more research is needed to address challenges, deepen understanding, and improve enterprise architecture management, client requirements management, and digital asset protection frameworks and models.

### METHOD

The research method used in the framework is delineated in Figure 1. For a comprehensive examination and execution of an Enterprise Architecture endeavor, this method includes several interdependent phases that are vital. To understand existing theories, frameworks, and practices concerning EA, Information Systems (IS), and their integration with business strategy, the first phase consists of a comprehensive literature review. Obtaining insights, showing gaps, and constructing a solid theoretical foundation are the goals of this phase. The method progressed by undertaking surveys and interviews after the literature review. Empirical data, perspectives, and real-world experiences from stakeholders engaged in EA initiatives are gathered with the aid of these qualitative and quantitative techniques. Interviews capture a variety of insights and opinions from key stakeholders, such as business leaders, IT professionals, and other interested parties.



Figure 1. Research Methodology  
Source: Researcher property

In contrast, surveys enable the collection of a more extensive quantity of quantitative data. In addition, it is critical to hold meetings with all relevant stakeholders. Collectively held in these sessions, diverse perspectives are brought into harmony, business goals, and IT strategies are harmonized, and issues or demands from various organizational segments are resolved. Through the participation of stakeholders in workshops and discussions, project goals can be

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refined, findings can be confirmed, and the EA framework can be ensured to be in line with the needs and goals of the organization. To integrate insights from literature reviews, stakeholder meetings, interviews, and survey responses, a structured plan is developed during the Proposed Project Management (Sha, 2023), (Wen et al., 2023), (Lahane et al., 2023) Phase. To guarantee the successful implementation of Enterprise Architecture, this stage encompasses the establishment of the project schedule, allocation of resources, strategy for risk management, and overall project governance. The amalgamation of developed strategies, stakeholder input, and insights into a cohesive Enterprise Architecture framework occurs in the Enterprise Architecture proposal, which is a pivotal phase. This consists of showing architectural guidelines, standards, models, and principles that ensure the alignment of an organization's technology, business processes, data, and applications with its overarching strategy. The operationalization of the proposed Enterprise Architecture framework occurs during the final phase, Enterprise Architecture Implementation. In this stage, adjustments are made to organizational structure, systems, and processes to ease the implementation of the architecture feasibly. Ascertaining the efficacy and flexibility of the Enterprise Architecture framework entails pilot implementation, continuous monitoring, and feedback mechanisms. Overall, the field of research method Understanding, designing, and implementing Enterprise Architecture is conducted methodically and iteratively, as shown by Figure 1. The framework effectively supports organizational aims and shows adaptability to changing business environments by incorporating structured project management (Forcina et al., 2024), empirical data, theoretical foundations, and stakeholder collaboration.

### **Project Management**

Enterprise Architecture implementation (Ansyori et al., 2018) within the context of an electrical panel company causes comprehensive and methodical project management. Several critical elements include the Project Management scope for the implementation of Enterprise Architecture at this electrical panel company. To begin with, Project Scope Management serves as the cornerstone that guarantees a comprehensive comprehension of the aims, extent, and constraints of Enterprise Architecture implementation (Nikpay et al., 2017). This includes the identification of business requirements, the evaluation of current technology assets, and the determination of the scope that will be incorporated into the new architecture. It is critical to manage this scope to guarantee that the implementation of EA concentrates on pertinent elements and delivers substantial value addition for electrical panel companies. Project communication management then assumes significance in ensuring that all stakeholders have access to the most current and correct information. Effective and transparent communication about the advancement of projects, modifications in their scope, and strategic determinations guarantees essential congruence and comprehension throughout the entire organization. This eases effective collaboration among the project team, stakeholders, and executives of electrical panel companies. For the implementation of Enterprise Architecture, project time management is an added critical aspect of project management. Effective time risk management, correct scheduling, and efficient resource allocation all contribute to meeting the deadlines proven for each phase of Enterprise Architecture implementation. Excellent time management and efficient monitoring of the project's development are both outcomes of sound planning. Lastly, the primary emphasis is placed on Project Quality Management to guarantee that the implementation of Enterprise Architecture adheres to predetermined quality criteria. This requires the development of precise evaluation criteria and metrics to gauge the success of the implementation. By enabling ongoing monitoring and control of the project's outcomes, this feature guarantees that the developed architecture satisfies the electrical panel company's requirements and the highest possible standards. Managing an EA implementation project within the framework of an electrical panel company via these integrated components is critical for reaching intended business aims, enhancing operational effectiveness, and guaranteeing that the IT infrastructure sustains the company's overall expansion and viability.

### **Proposed Enterprise Architecture**

When formulating an Enterprise Architecture for food manufacturing (Hindarto et al., 2021) company, it is imperative to consider several distinct factors. Critical components that must be incorporated into the proposed EA for the food manufacturing sector are as follows:

1. Application Architecture: Design of an application that facilitates the manufacturing process of food manufacture, including resource planning, production automation system integration, and production management system and product quality analysis.
2. Data Architecture: Efficient data management to support food quality and reliability analysis, including production data, device performance monitoring, and sensor information.

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3. The technology architecture encompasses the infrastructure required to manufacture food. It comprises an Internet of Things (IoT) network for gathering sensor data, automated control systems, and state-of-the-art technologies utilized in the manufacturing process.
4. Security Architecture: A resilient security framework designed to safeguard critical information, ensure the integrity of networks and automation systems against cyber threats, and maintain operational security within manufacturing settings.
5. Business Process Architecture: Design integrated and structured business processes, including inventory management, delivery, and after-sales service, from the supply chain to final product distribution.
6. Interoperability and System Integration: The ability for diverse production-related systems, operational management systems, and other supporting systems to integrate seamlessly.
7. Scalability: A design that facilitates the expansion of food production capacity and the adjustment to changes in the market and industry.
8. Quality and Reliability: Concentrate on developing systems that guarantee the utmost dependability of food products through the implementation of cutting-edge manufacturing technology.
9. Conformity with Industry Standards: Guarantee that the suggested EA is in accordance with established benchmarks, environmental policies, and optimal methodologies within the food manufacturing sector.
10. Sustainable Development: Incorporate strategies for continuous research and development to enhance food technology, manufacturing processes, and product quality.

The proposed enterprise architecture can assist food manufacturers in optimizing production processes, increasing efficiency, and achieving higher product quality in a secure and integrated environment by considering these factors.

### **Implementation Enterprise Architecture**

Integrated project management is an essential component in implementing Enterprise Architecture to guarantee the success and precision of executing every phase of an EA undertaking. Prior to anything else, it is critical to delineate the phases of Enterprise Architecture implementation precisely. For instance, it is imperative to delineate robust business requirements, ascertain pre-existing IT infrastructure, and construct an EA blueprint encompassing data, technology, and application architecture during the initiation phase. After the preliminary planning phase, project management integration becomes crucial for the effective management of every implementation task. This requires the development of a comprehensive project schedule, the allocation of suitable resources, and the management of risks and expenses associated with each phase. During the architecture development phase, for instance, project management oversees the costs associated with developing the architecture, manages any changes that may occur, and ensures that the team stays on schedule. In addition, integration between EA and project management permits continuous monitoring of project progress during the architectural implementation phase. Project management ensures that every task is executed in accordance with the predetermined plan, handles any required modifications, and coordinates the configuration and integration of the systems necessary.

Additionally, project management is crucial during the evaluation and adjustment phase for assessing the performance of the implemented EA. They evaluate implementation outcomes in relation to initial objectives and ascertain whether modifications or adjustments are required to enhance EA performance. The integration of enterprise architecture and project management guarantees effective management of every phase of Enterprise Architecture implementation, adherence to predetermined plans for task execution, and alignment of the Enterprise Architecture project with the organization's business objectives. This facilitates efficient oversight, effective inter-team coordination, and flexible management of potential modifications—all of which are critical for the triumphant implementation of an Enterprise Architecture.

The enterprise architecture implementation work scope delineates the primary undertakings and emphasis that are required to be achieved throughout the implementation phase. Several crucial elements comprise the scope of work for Enterprise Architecture implementation:

1. Business Requirements Mapping: A comprehensive understanding of the business requirements is the initial step in implementing EA. This requires determining which operational requirements, challenges, and strategic objectives EA must fulfill to support the business vision of the organization.
2. Analysis of the Pre-existing IT Infrastructure: An essential initial stage involves the identification of the organization's current information technology infrastructure. This assessment facilitates the identification of strengths, weaknesses, and opportunities for additional development or consolidation.

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3. EA Blueprint Development: The primary objective is to produce an EA blueprint or plan that is both accurate and exhaustive. Assembling the standards and principles that will govern the development and management of the system entails creating the application, data, and technology architecture that supports the business vision.
4. Deployment and Integration: EA implementation entails the operational deployment of the designed architecture. This procedure may necessitate modifications to business processes, system integration, and application development in order to accomplish the intended architecture.
5. Monitoring and Evaluation: Ongoing tracking of EA implementation constitutes an additional critical phase. This entails assessing the architecture's performance, verifying the achievement of the initial objectives, and identifying modifications required to enhance the EA's adaptability and functionality.
6. Change Management: The implementation of an EA frequently necessitates modifications to organizational culture, business procedures, and policies. Consequently, change management, including communication, training, and assistance for employees to adjust to these modifications, is also encompassed within the scope of work.

An EA implementation must encompass all phases that are pertinent to the long-term objectives of the organization, with every stage aligned with the established business vision and strategy.

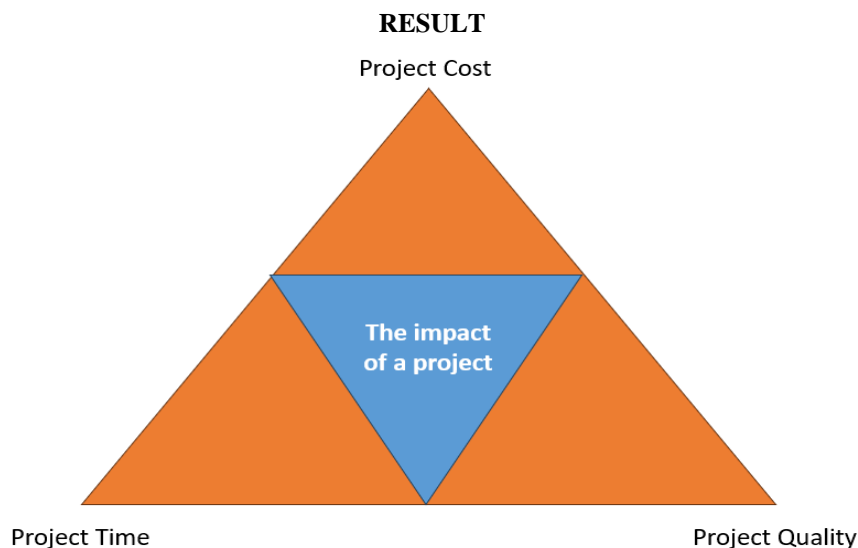


Figure 1. Impact project  
Source: Researcher Property

A critical aspect of project management is recognizing the close relationship that exists between cost, time, and quality in the world of projects. The term for this notion is the project management triangle or the project triangle. Each of these elements' interrelationships and influences are illustrated in Figure 1. Prior to anything else, project costs (cost) significantly affect both schedule and quality. An increase in the budget designated for a project may enable the utilization of supplementary resources with the intention of enhancing the quality of the resulting product or service. Nonetheless, increased expenditure may necessitate an extension of the time allotted to achieve the intended standard of quality. This may involve the implementation or integration of premium materials or technologies, which demand additional time. On the contrary, prioritizing cost savings over project completion timelines could potentially lead to compromised quality. When time is of the essence, hasty decisions are frequently executed, which may compromise certain aspects of quality. Time constraints could lead to an omission of exhaustive testing or verification phases, thereby exerting an influence on the overall quality.

Additionally, project quality can affect money and time. High-quality projects may necessitate an extended duration for development or implementation, potentially resulting in escalated expenses due to the procurement of supplementary resources or more sophisticated technology. It is essential, when managing projects, to achieve a harmonious equilibrium among these three components. Understanding the interplay between cost, time, and quality

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is critical for achieving successful planning. Establishing priorities that align with the objectives of the project and the requirement of the client is essential for ensuring optimal project execution without compromising other critical elements.

As an illustration, the Scope of Work (SOW) for the implementation of Enterprise Architecture could be expanded to include more precise time estimates and comprehensive descriptions.

Table 1. Scope of Work for the implementation of Enterprise Architecture Food Manufacture

No	Activity	Description	Estimated Time (days)
1	Business Requirements Mapping	Determine the operational requirements, business objectives, and obstacles of Enterprise Architecture. Participates in stakeholder interviews, analysis of user requirements, and documentation of said requirements.	10
2	Analysis of current Information Technology Infrastructure	Assess the current state of the Information Technology Infrastructure by conducting system audits, mapping applications, and determining the infrastructure's strengths and weaknesses.	15
3	Enterprise Architecture Blueprint Development	In addition to considering application architecture, data, and technology, develop an Enterprise Architecture strategy that specifies the required policies and standards. Identifying gaps, designing integration, and developing a road map for implementation are all components of this procedure.	30
4	Deployment and Integration	Operating environment implementation of Enterprise Architecture. This consists of testing and validation, framework development, data migration, and application integration.	45
5	Monitoring and Evaluation	Monitor architectural performance, assess the accomplishment of objectives, and identify any required modifications. Comprises measuring system performance, monitoring service quality, and analyzing the impact of implementation on business objectives.	25
6	Change management	A change management procedure comprising change-related communication, employee training, and assistance with	20

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navigating cultural and process  
changes.

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Table 5. that provides time estimates for EA implementation activities is a handy resource for outlining the necessary steps and establishing a schedule for each phase. The information provided in the table facilitates comprehension of the sequential processes entailed, including identification of requirements, analysis of infrastructure, development of blueprints, implementation, evaluation, and change management. Specified time estimates facilitate more precise scheduling and resource allocation, thereby enhancing the effectiveness of time management. Organizations can maintain project control by proactively anticipating challenges and adjusting strategies in accordance with the estimated time required for each step. In addition to providing a step-by-step guide, this table also functions as a comprehensive framework for efficiently and effectively managing the EA implementation process.

### DISCUSSIONS

How can this be done to increase operational efficiency? (RQ 1).

Specific measures can be undertaken to perfect operational efficiency within the domain food companies undergoing Enterprise Architecture implementation. It is essential to begin by showing and mapping the business processes. Learn how a food company's processes function by delving deeply into their inner workings and the relationships between them. One can discern opportunities for EA to perfect and harmonize said processes. The next step is to conduct a comprehensive assessment of the current IT infrastructure. This requires a review of the technological infrastructure, applications, and systems used by a food company. EA can ease the identification of deficiencies, redundancies, or overlaps in the existing IT infrastructure, allowing for more streamlined consolidation and more informed investments in suitable technologies. In addition, by creating a proper EA blueprint, organizations can strategize for more seamless system integration. This helps the smoother flow of data and information throughout the enterprise, thereby mitigating the communication obstacles and information loss that often happen in structures that lack integration. Additionally, it is critical to engage the proper stakeholders in the EA implementation procedure. Effective communication and active engagement from the management team and relevant departments are imperative for the achievement of a successful implementation. They must understand the added value that EA contributes by enhancing the operational efficiency of food companies, as well as the ways in which EA will affect and refine their work processes. Added requirements include the implementation of ongoing evaluation and monitoring of EA. EA ought to be regarded as a continuous procedure rather than a singular undertaking. Organizations can show critical changes, assess their effects on operational efficiency, and implement requisite modifications through consistent monitoring. In general, a food company-specific structured approach to implementing Enterprise Architecture, including process mapping and continuous change management, can show a robust framework for enhancing operational efficiency. This will help improved technology use, process alignment, and adaptability to business and technological environment fluctuations.

Regarding business responsibility in the food manufacturing sector, what are the effects of integrating an EA strategy with project management? (RQ 2).

The business responsibilities are profoundly impacted by the integration of Enterprise Architecture strategy and project management in food manufacturing. This integrated approach enables organizations to support alignment with long-term business goals while adopting a more comprehensive perspective of their IT infrastructure. By integrating EA with project management, organizations in the food manufacturing sector can discern the contributions of individual information technology projects and initiatives to overarching business objectives. In addition, the incorporation of standardized procedures and protocols during the development of novel systems and applications facilitated by the integration of EA and project management. Such outcomes may include enhanced operational processes, improved efficiencies in the development of new food products, or even the integration of technologies that boost product quality and production efficiency. Companies can also identify potential risks in IT projects associated with food manufacturing by utilizing EA to improve visibility. The incorporation of EA considerations into project management enables more efficient allocation of resources, costs, and timetables, as well as enhanced risk mitigation planning. A further point worthy of mention is that the correlation between project management and enterprise architecture facilitates comprehension of the connection between technological endeavors and corporate strategy. By gaining a more comprehensive understanding of the ways in which every IT project contributes to or affects business strategy, organizations can more effectively give resources, prioritize projects that are most pertinent to business objectives,

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and minimize redundancy or overlap among initiatives. In the food manufacturing industry, the use of EA in conjunction with project management enables organizations to formulate information technology strategies that are more precise, quantifiable, and congruent with organizational requirements. This practice contributes to the success and accountability of organizations in the food manufacturing industry by enhancing operational efficiency and potential risks associated with the implementation of new technologies while streamlining development processes.

### CONCLUSION

The incorporation of Enterprise Architecture with project management in the food manufacturing sector has a substantial influence on business growth. Integrating enterprise architecture with project management allows for a more comprehensive comprehension of the connections between technology projects and an organization's strategic objectives. This facilitates more focused strategizing, suitable distribution of resources, and enhanced risk mitigation in all Information Technology projects pertaining to food manufacturing. The implementation of uniform standards and protocols in the creation of novel systems and applications enhances operational effectiveness and expedites the advancement of manufacturing processes. Utilizing enterprise architecture in project management enhances risk identification and mitigation, as well as improves the efficiency of managing project costs and schedules. Moreover, this integration facilitates the comprehension of the influence of each Information Technology initiative on business strategy, enabling companies to prioritize projects that contribute to long-term expansion—in summary, integrating enterprise architecture with project management results in enhanced operational efficiency, enhanced product development, superior risk management, and a more distinct emphasis on initiatives that facilitate business expansion within the food manufacturing sector.

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