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Overview of Projects Challenges to Achieve Transformations in Food Industry

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Abstract:

The present research represents the first structured research of the challenges when using projects to achieve transformation in the food industry in a rapidly developing economy with ambitious and fast-growing companies. The analysis also indicates, but does not generalize, that there are challenges related to bottom managing the individual projects and top managing, the relationships between the projects and their environment. Some environmental issues as: food safety, waste management and sustainable development were widely approached in the foreign literature, have been made many attempts by stakeholders, but issues raised for the food industry should more carefully study. In this case, effective monitoring and evaluation is needed, which requires not only data, but also building institutional capacity, clarifying the functions of various structures, creating new structural units as necessary and maintaining research activities within the framework of policy priorities and activities for the development of Kazakhstan food industries.

Keywords: food industry, project; sustainability; project management.

JEL Classification: Q18; Q19; L66.

Introduction

In the new economical and geopolitical context, given the important role of sustainability and insurances of economic and strategic security, employment of able-bodied population and improving living standards, it is necessary to pay special attention to the food industry as important mean in having a healthy population. More support for any and in any kind of environmental issues, more advanced tools and devices for agriculture to provide raw material for food industry, last but not least sustainable systems and policies, are needed, following the examples of others countries which already do.

The food industry is facing challenges that require the current and future workforce to adapt in order for the sector to remain sustainable and competitive (Lazaro-Mojica and Fernandez 2021). Providing key services and meeting the vital needs of society, food systems today carry a certain value, consisting in: responsibility for a third of global greenhouse gas emissions (Crippa *et al.* 2021); loss of biodiversity, degradation of ecosystems (Benton *et al.* 2021); impacts on human health, including nutritional malnutrition (Willett 2019); play a role in social injustice and power imbalances. Therefore, the transformation of the food system, where projects are of no small importance, is of great importance for ensuring sustainability (Bock *et al.* 2022).

The agro-industrial complex is, on the one hand, the most vulnerable branch of the economy and subject to the influence of many factors, but, on the other hand, the most significant for sustainable development. The level of development of the agricultural sector affects the profitability of the agro-industrial complex and the development of rural areas as economic units, affecting the development of rural areas as economic units and determining the level of food security. In this context, state support measures are an important factor affecting the food industry, as well as a factor affecting the global demand for food.

1. Literature Review

When conducting research in the field of project management in the food industry system, it should be noted that sustainable product innovation is a key issue that agri-food companies face in order to maintain and increase their competitiveness by applying and implementing projects using debt financing (Beatriz *et al.* 2022).

According to Karipova (2020), Batkovskiy and Kravchuk (2019) a system for applying projects in the activities of enterprises is due to the insufficient development of the scientific and methodological base for monitoring the activities of enterprises, because currently there is no generally accepted concept, common terminology, etc., which reduces the effectiveness of their application in practice. When a system for designing is introduced, the activity of an innovatively active enterprise, the problem of determining the basic principles for creating this system is acute. Based on the analysis of various sources and the practice of creating monitoring systems, Shiryaeva *et al.* (2017) proposes to use principles that significantly increase the level of decision-making risk in the process of implementing a monitoring system at innovation-active enterprises.

Zhuravlyov *et al.* (2019) proposed an improved model that determines the relationship between the strategic management of investment policy and sustainable economic development of the company, which represents an algorithm for managing the process of developing investment strategies in industry.

Cuevas-Vargas *et al.* (2019) give us insights into the monitoring-based strategy and decision-making processes of industrial enterprises, emphasizing the importance of both encouraging the development of foreign economic relations opportunities and focusing efforts on corporate social responsibility to improve business indicators, as well as the use of project management in their activities. Therefore, the project management system should be of a signaling, warning nature, the essence of which is to identify, as a result of systematic diagnostics, the likelihood of insolvency or bankruptcy of enterprises.

Project management is the coordination of the use of human and material resources throughout the life cycle of the project using modern management methods and techniques to achieve certain results related to the scope and scope of work, the cost of resources, time, product quality and the achievement of the required level of profit for project participants. Projects are considered successful when they manage to achieve their goals while meeting the established deadlines and budget. The need for professional project management is caused by a massive increase in the scale and complexity of projects, an increase in requirements for the timing of their implementation, for the use of material, labor and financial resources, for the quality of work performed and the results achieved (Vrchota *et al.* 2021, Turabian *et al.* 2021).

Sustainability has recently become a phenomenon, as small and medium-sized enterprises (hereinafter - SMEs) are increasingly emphasizing the principles of sustainable development in their corporate governance, realizing these changes through project management. Project management does not deal with routine, repetitive activities. A feature of the project is its uniqueness associated with a significant degree of uncertainty and risk. It is project management that has the prerequisites for managing such a risk (Fuentes-Bargues *et al.* 2020, Chan *et al.* 2018), focusing on critical success factors and increasing the competence of project management (Isik *et al.* 2019, Oh and Choi 2020) to new adaptive organization capable itself to handling and share skills and knowledge (Popîrlan and Ștefănescu 2011)

Sustainability is an integral part of project management practice that supports economic, environmental and social (triple bottom line) benefits into the future. According to Stanitsas, Kirytopoulos and Leopoulos (2021), sustainable project management should contribute to the three dimensions of the triple bottom line, the project life cycle, stakeholder requirements and the sustainability of the organization's society. For the successful implementation of the project, managers must consider the following critical factors:

- top management support, effective communication channels, correct project financial budget (Fortune and White 2018),
- appropriate qualifications,
- troubleshooting project issues
- motivation and stimulation of the team project, where the joint efforts of all team members are in the desire to successfully implement the project.

With effective change management associated with the implementation of project management, an enterprise can gain the following competitive advantages:

- Creation of a unified organizational approach to change, which implies the establishment of all processes, the use of the necessary tools, the formation of a unified system of goals.
- Reduced resistances to change, resulting in the avoidance of performance degradation and conflicts.
- Consistency and sustainability of change, accelerated learning, ability to continuously improve, change implementation processes and develop an organizational development strategy which could be business reengineering as solution to redesign activities and processes (Ștefănescu *et al.* 2008);
- useful and effective tool for planning and organizing processes, anti-crisis management and time management.

2. Projects and Project Management: Standard and Emerging Perspectives

Projects are used to make changes happen and are used as transformative devices for many different types of ambitions and objectives but to capture learning from the past, we need to have a framework to analyze projects and project management (Koners and Goffin 2017).

Projects and project management has been studied as an engineering concept to facilitate construction and building works (Chan and Kumaraswamy 1997) but has since 1960'ties gained more and more ground as a form of temporary organization that is suited to achieve something special for companies in many different sectors and many different purposes. These include: information and communication systems (ITC) (Hyväri 2018); large business systems and manufacturing control systems (Bernroider *et al.* 2018); intelligent tools for improvement processes and sub-processes (Ștefănescu *et. al* 2009), quality management and lean manufacturing and new production facilities (Pacagnella *et al.* 2019); opportunities for the development of the business model (Di Muro and Turner 2018); mergers of companies (Gomes *et al.* 2017); development of new products and services (Lindkvist 2018). Hence, projects are a transformative form of organization used to achieve change, improvement, and innovation in companies (Kenny 2017).

The definition of projects is stated by Winter (2018) to be as listed below here:

- A project involves a group of people working on completing a particular end-product or on achieving a specific result, by a specified date, within a specified budget, and to meet a specified standard of performance (quality).
- A project achieves a clear objective against a time scale and implies an endeavour in which the human, material, and financial resources are organized in a novel way to undertake a unique scope of work, within constraints of cost and time.
- A project is an endeavour to accomplish a specific objective through a unique set of interrelated tasks having a well-defined objective usually defined in terms of scope, schedule, and cost.

Other authors, such as Boronina (2015) focused on three distinctive features of projects and characterized them as unique, temporary, and purposeful.

- *Unique*: the exact project has not been performed before. The project has a degree of novelty in terms of time, place, team carrying out the task, product, or service.
- *Temporary*: the project does have a beginning and an end, as for our earlier definition, and requires a group of people to carry out the task (establishing a temporary organization). When the project finishes, the team moves on. The financial resources available to the project are also temporary and almost always finite – when the project is completed, the funding stops.
- *Focused*: the task of the project is to deliver a particular product, service, or result (the specific mission). This is not to say that all project has a complete and clear idea of precisely what will be achieved and how.

Projects are used to create value for companies and organizations–both private and public–in multiple ways. Project priorities and trade-off between those (often time, quality, and cost) are often illustrated with the so-called iron-triangle. Projects are supposed to transform the situation. They are transformative. They help in achieving something that we want or need. A better system. A better organization.

The advantage of using projects is that they can be designed to accomplish a desired and focused transformation - a change, an improvement, a new artifact, or a new design. At the core of projects is the desire for change and innovation. Standard assumptions in project management assume that knowledge about the desired change exists and that it is possible to some extent to prepare a plan based on analysis of the activities to be carried out. This is an administrative view on project management.

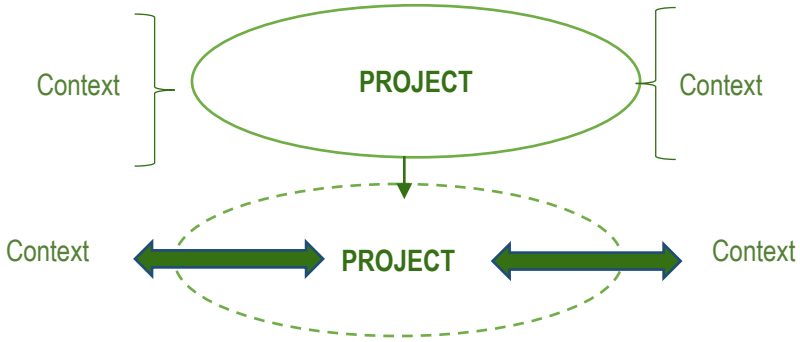
A list of compiled challenges in projects and with project management, based on a review of prior research on an administrative perspective, includes these challenges: "a clear definition of goals, prescriptions of formal organizational arrangements - typically comprising a project group, a steering committee, and committees to ensure user influence, and links to top management. Furthermore, there is a need for planning, information, and control mechanisms" (Borum and Christiansen 2018).

Some authors are challenging the traditional concept of projects and project management. As Winter *et al.* (2018) point out, the standard approach to project management seem to put too much attention on 'production' and planning and execution and not so much on new emerging themes in project management stemming from multiple areas:

- The focus has changed from delivery as planned to delivery as needed (relevance)
- The focus has changed from a delivery project to projects as an organizational form that helps us achieve change and transformation.
- The focus has changed from seeing projects as something to be executed to something that is also an intervention as it (mostly) requires the organization and people to change.
- The focus has changed from regarding projects as a technical engineering effort to transformations and services. As the classical, highly structured engineering approach does not meet the project management needs of business projects.
- A recognition that organizations and change processes is better understood from a network process perspective rather than a planning perspective that project management need to be flexible and agile today to adapt to changes in the context (Leybourne 2019) and have a flexible approach on which projects to undertake (Stettina and Hörz 2018).

These new emerging themes are broadening and expanding the prior perspective on project management. Thus, projects have emerged from being focused on pre-planning, analysis, the structure of the single project and its internal workings, and factors that consider the relationship between the single project and its environment. This is represented in Figure 1 below here.

Figure 1. The project and the context



Source: compiled by authors

The context is a source of resources, information and has multiple complex relationships with the project. A standard for performance measurement of projects is to consider project objectives, time, and cost. However, with the introduction of the project context, performance management becomes an issue of how well the project's delivery fits the context (Kreiner 2017). Is the delivery relevant accordingly to the stakeholders' needs and expectations?

Thus, two views on projects can be found in prior research. A traditional or standard view and a new view. In the traditional (or standard) view, the project is planned and develops as a self-contained unit bracketing off the context to protect itself from disturbance. Never research on project management has pointed to the need to consider projects as not only being dependent on the 'context as the provider of objectives and resources but also that the project is an open organization that continually exchanges with the context and should adapt to changes in the context. Projects are also formed by their historical background and context (Engwall 2018).

This implies that a project and its performance are not only based on how well it delivers according to plans but also if what it delivers is useful and relevant for the context, which usually is the sponsor or main organization. An open view on projects and project management also introduces the view that there are potentially many different success criteria possible in projects, rather than the traditional cost, time, and quality. Already Atkinson (2019) pointed towards the need to consider other stakeholders than those inside the project. Atkinson wants us to consider many possible stakeholders, *e.g.*, users of projects, project sponsors, or receivers

of products delivered by realizing a project, such as consumers that buy a product from a new manufacturing plant. These stakeholders will consider a project as successful by other measurements. They might evaluate a project as successful if the products produced are nutritious, tastes okay, and the price is competitive. Users of a project will assess a project to deliver a new IT system based on how well the IT system delivers that data as expected and how easy it is to interact with the system.

Yang and Yeh (2018) argue that there is a need for a systemic view on projects and project management, and they mainly focus on the management of risk as part of the interrelationship between the project and its context. The present study adopts the open systems view here also. However, the context is not considered a source of risk here, but as a natural part of projects.

Given this study's explorative nature an open framework has been chosen to assist in analyzing the projects. Prior research has indicated that it is not easy to capture what actually happens in projects (Blomquist *et al.* 2017) therefore an open framework has been selected for the analysis here. A standard presentation of project management includes the concept of phases in projects over projects' lifecycle. From defining the project, designing the project, delivering the project, and evaluating the project by development activities to improve future projects. Author describes the content of each phase and the critical challenges associated with these, and the key questions to be addressed:

- *Define the project* – this is when it is determined what the project is about, its reasons for existence, and the intentions it intends to progress. It is a time to explore the possibilities, find alternatives to the problems presented. What is to be done? Why is it to be done?
- *Design the project process* – construct models to show how the needs will be developed, evaluate these to determine the optimum process for the task, and minimize risk. How will it be done? Who will be involved in each part? When can it start and finish?
- *Do It! or deliver the project* – carry out the project in line with the models or plans generated above. How should the project be managed on a day-to-day basis?
- *Develop the process* – improve the products and processes in the light of the experience gained from the project. How can the process be continually improved?

These four phases represent an abstraction and generalization that can, and should, be discussed (Blomquist *et al.* 2017), but these four phases can be helpful when we want to analyze projects and their challenges. Of course, such a phase model is also useful when preparing and planning a new project, but that is beyond the scope of the present paper. In the next section, the method for data collection, analysis, and reporting with be presented.

3. Research Framework and Data Collection

Data were collected from companies of food industry in order to achieve some important transformations and the selection of case companies and projects are based on theoretical sampling (Eisenhardt 2018). Using theoretical sampling, the researchers rely on a selection process that is not random but focuses efforts on theoretically useful cases, *i.e.,* those cases that can help produce insights and knowledge from a range of cases that differ concerning companies' focus, project objectives, and types of projects. The ambition was to apply the case study method, which is a relevant approach when there are many variables and many information sources. Case studies are relevant when it is not possible to clearly define the boundaries between the event and its associated factors (*i.e.*, the project environment). Case studies can be related to both theory generation, verification, and explorative studies. The present study is an explorative one, being the first structured research on challenges in the food industry projects.

The decision to adopt a case-based approach was motivated by the relative absence of existing knowledge and the diversity of theories, and the desire to gain rich and critical insights into the context and processes of transformative projects in a new context. The projects researched in the present analysis are concluded by now. Their results in the form of a unique product or service have been introduced into the company's business activities. The collection of data in the selected cases is based on several sources. One of the authors had internships in the companies for several weeks. During the internship, observations were made and entered into a logbook with daily reflections.

Semi-structured interviews with key informants to collect information about projects and contextual information about the companies. Participants in and outside of projects were interviewed. Representatives from the various departments such as accounting, marketing, operations, and procurement were interviewed together with 1 or 2 top-managers in each company. Interviews were conducted at companies' locations. Interviews focused on three main issues: Company background, information about project management approaches in the

company, and detailed information about the selected project(s), their objectives, processes, and challenges. When conducting interviews, a dictaphone was used, followed by a verbatim transcription of the audio recording. The audio recording of the interviews was conducted only with the consent of the respondents.

Company and project documentation. Company websites and project plans, reports, and other material. Strategic and operational reports, regulatory documents, reports of managers on the various issues related to projects and innovations. Modern computer technologies offer great opportunities for systematization and storage of information. So, the computer organized all research information and made it possible to share data between the involved researchers.

Following a moderate constructivist approach (Järvensivu and Törnroos 2020), we employed the different data sources and used triangulation for the material's first order coding. Inspired by Gioia, Corley, and Hamilton (2018), the analysis was carried out in three steps: First, identifying first-order concepts, aggregating them into second-order themes, and then considering third-order aggregate dimensions. First-order concepts were identified directly from the interviews, internal documentation, and field notes. 2nd order themes are based on an abstraction of the first order concepts into categories, *e.g.,* optimistic project estimates or unclear project goals. The aggregate dimensions turned out to indicate that the identified themes should be related to either project issues or relational issues.

The first order coding results provided an opportunity to discuss the interpretation among researchers in a continuously developing process (Eisenhardt, 2018). As a result of the first analysis, we listed the challenges in transformative projects and aligned the author's understanding and interpretation of topics (DeCuir-Gunby *et al.* 2018). This first round was followed by a second and the third round of classification, internal debate, and comparison of results among researchers.

4. Projects' Analysis for the Companies from Food Industry

The analysis first presents the three case companies to provide background information, and after that, we analyze seven selected projects by applying the presented phase model for projects. Subsequently, the challenges in each project are analyzed and discussed.

Table 1. Overview of the three case companies from food industry

Company	Characteristic	Production focus
Rakhat (4 projects)	▪ Rakhat JSC (until the end of 1992 — Almaty confectionery factory) is one of Kazakhstan's largest confectionery enterprises. Since 2015, most of Rakhat JSC shares belong to the multinational company from South Korea, Lotte Confectionery.	Production of confectionery
FoodMaster (2 projects)	▪ In 1995, having leased a dairy plant in the city Esik, FoodMaster was the first in Kazakhstan to produce yogurt. In 2015, the company celebrated its 20th anniversary.	Production of dairy products
Raimbek Bottlers (1 project)	▪ Raimbek Bottlers was established in 1998 based on the Almaty fruit canning plant: modern workshops were built, Tetra Pak technological equipment was purchased, and the manufacturing of juices, nectars, and juice-containing beverages launched. The company is part of the Raimbek Group.	Production of juices and beverages

Source: compiled by authors

Rakhat (4 projects) is one of the largest confectionery companies in Kazakhstan, which has become part of the company Lotte from South Korea in 2015. Rakhat produces a wide range of confectionery products, including sweets, caramel, marmalade, dragées, chocolate, marshmallows, cookies, waffles, cocoa powder, and semi-finished products. Products are offered throughout the Kazakhstan market and far beyond as Russia, Uzbekistan, Tajikistan, Kyrgyzstan, Germany, China, Afghanistan, and Mongolia. The total number of employees is more than 4.700. Over the past three years, there has been a significant increase in exports. Revenue has improved by 5-10%, followed by a similar increase in profits. The company reinvests profit through innovative projects. Projects include both the improvement of management and new products and production facilities. Upcoming new products include conceptually new chocolate products, while new manufacturing lines include a new line for cookies production. Management innovation has included projects to implement an electronic document management system and an information system to consolidate financial data from seven different management systems into key performance indicators. Besides, several projects introduce new manufacturing technologies.

FoodMaster (2 projects) produces dairy-based products to international standards put on the market with several brand names in Kazakhstan and the Russian Federation and countries in Central Asia and recently

central Europe. The company employs 330 people and are since 2004 part of the international group Lactalis which is the second-largest producer of dairy products in Europe and incorporates more than 200 enterprises in different countries. FoodMaster has experienced a 10% annual growth in the past years.
The company has employed a range of various innovative projects and expanded its international trade. FoodMaster and Lactalis have introduced an open innovation approach. Innovation projects include introducing new methods to improve dairy production processes, milk procurement, improving the quality of dairy products, and introducing new technologies in associated dairy farms. More than 173 milk collection points in South Kazakhstan, Pavlodar, and Almaty regions provide fresh milk for the production. Among new product-innovations is the creation of drinking yogurt in innovative packages and manufacturing innovations as microbial enzyme production. Raimbek Bottlers (1 project) is a leading producer of juices in Kazakhstan with a market share of 32% and employs around 60 people. Market served are Kazakhstan, Central Asia, and the Russian Federation.
The company has been using a strategy of intensive growth in the Russian market. Revenue consists mainly of sales of juices, juice-containing beverages, and soft drinks, and 35% from sales of tea, milk, and other products. The revenue has increased by around 15-20% while profit has shown an annual increase of around 10%. Raimbek Bottlers is actively reinvesting accumulated funds to develop the company's key brands and strengthen its sales and distribution system. The company is actively pursuing the development of new products–search for free niches in the market and introduce new products, an expanded focus on own brands, and product development capabilities.
Using the framework with four project phases, the seven projects are analyzed concerning the focus for each phase and the main activities carried out within each phase. This is shown in a table for each project, followed by the identified challenges that emerged during the projects. According to the introduction, the challenges are considered as being either related to the internal workings of the project or to the relationship between the project and its context.

Table 2. Project 1: IT system project for operational analysis of the activities of Rakhat

Indicator	Define it	Design it	Do it	Develop it
Focus	▪ Goal: Develop an IT system using the QlikView business intelligence system.	▪ Preparing plans and search for external knowledge.	▪ Signed an agreement with external partner RBC Group.	▪ Monitoring of the implementation of the project and learning.
Activities	▪ Consolidate data and efficiency of business processes. Reduce the complexity of data collection and significantly speed up information consolidation.	▪ Detailed planning for various areas to be included: sales, contractors, inventory balances and items, settlements with contractors, multi-currency accounting.	▪ RBC Group developed analytical applications for QlikView software. Data was consolidated into fewer systems.	▪ Objectives were met. Increased transparency of the company and new processes created that showed a robust multiplicative effect.

Source: compiled by authors

Challenges related to project workings: It was mentioned several times by managers that employees were not so motivated for this project as expected. This could be due to the lack of clear goals, as employees did not fully understand what was expected from them.

Table 3. Project 2: Merger project Rakhat with Korean company

Indicator	Define it	Design it	Do it	Develop it
Focus	▪ Goal: Prepare and initiate the merger process.	▪ Project analysis with draft planning.	▪ Merger processes initiated.	▪ Evaluation of project efficiency and next steps.
Activities	▪ To strengthen the synergistic effect with the complementary effect of the combined assets.	▪ Contacting a consulting company for detailed planning of the process.	▪ The merger of all functional areas and improve cross-unit information.	▪ Evaluation of the merger process for preparing improvement activities.

Source: compiled by authors

Challenges related to project context and relationships: Among the most severe challenges in this project was the lack of strategic goals and unrealistic deadlines. The IT system was implemented throughout the

company. An application was chosen, not a strategy. The model was implemented without a pilot project. Managers did not develop a common terminology. Besides, the company aims to use digital transformation and business process automation to overcome a 'five-year plan in three days' - to solve problems that have been accumulating for months.

Challenges related to project workings: The preparations and pre-planning worked as expected, and a coordination team managed the processes.

Challenges related to project context and relationships: The detailed planning had underestimated the role of diverse cultures between the companies. During the process of merging companies, the number of employees with duplicate functions increased, as a result of which some employees were at risk of dismissal or demotion. This caused some motivational issues, and some employees left the company.

Table 4. Project 3: Reengineering and new manufacturing technology at Rakhat

Indicator	Define it	Design it	Do it	Develop it
Focus	▪ Goal: Development of a business process reengineering project	▪ Planning and development of technological maps	▪ Purchasing a new production line with new - improved - technology	▪ Optimization
Activities	▪ Identification of relevant areas and units. Process and structure processes to be simplified.	▪ Holistic system modelling and improvement of flows. Reduce time and improve quality.	▪ Improved production facilities installed and better-quality control using more IT to assist.	▪ Optimizing installed equipment and put control systems in place.

Source: compiled by authors

Challenges related to project workings: Deadlines were unrealistic for implementing the reengineering project—inefficient use of business process modelling tools.

Challenges related to project context and relationships: Lack of understanding and hindrance by the organization's personnel to business processes changes. Low participation in the implementation of the business process by senior managers of the company. Problems with new technology reduced quality and reduced sales. Reduced sales required external funding to be increased.

Table 5. Project 4: New manufacturing technology and new products at Rakhat

Indicator	Define it	Design it	Do it	Develop it
Focus	▪ Goal: Do a project for the reconstruction of a confectionery factory.	▪ Search for external knowledge and prepare detailed plans.	▪ Introduction of cooling technology for waffle production.	▪ Calculation and control of project effectiveness.
Activities	▪ It is intended to expand the range of products and enrichment of products with functional additives.	▪ Planning for new product development of new products and technological re-equipment of the existing production.	▪ Expand the range of products. Intensification of the cooling process and reduce energy consumption. Improved product quality and packaging. New products. Marketing campaign.	▪ More focus on quality control and planning. Improve marketing.

Source: compiled by authors

Challenges related to project workings: Implementation of new technology worked as planned.

Challenges related to project context and relationships: Pricing and positioning for the new products not working as expected, and the marketing campaign did not help.

Table 6. Project 5: Computer business model for dairy plant FoodMaster

Indicator	Define it	Design it	Do it	Develop it
Focus	▪ Goal: Develop a complete business model to plan, operate and analyze modern dairy plant	▪ They are preparing plans with external experts.	▪ Developing a business model framework and performance and production analysis.	▪ A corporate information matrix used for assessment and testing of the developed software.
Activities	▪ Explore lean thinking and looking for external knowledge for software development.	▪ Identify the main components and improvement potential.	▪ The computer model analyses production inventory, sales, customers, what-if analysis, multi-currency budgeting and accounting, and more.	▪ Evaluate software to identify needs for further developments. The company finds the model useful after a short time in use.

Source: compiled by authors

Challenges related to project workings: A business simulation and planning model were successfully developed.

Challenges related to project context and relationships: Long-term use will show if the model works as expected and will help management.

Table 7. Project 6: Merger FoodMaster and the French company Lactalis

Indicator	Define it	Design it	Do it	Develop it
Focus	▪ Goal: Mergers and acquisitions project.	▪ Analyzing and planning.	▪ Practical merger processes.	▪ Evaluating
Activities	▪ Identify how to integrate new knowledge from one partner with production facilities.	▪ Detailed screening, develop a business plan, and plan for integration activities.	▪ Coordination, negotiations, integration, integrating (on many levels.	▪ Assessment and scanning for potential new products due to new capabilities.

Source: compiled by authors

Challenges related to project workings: Indications of a lack of coordination between different units during the merger.

Challenges related to project context and relationships: Needed changes in the two organizations seem to take longer than expected and planned for. This might indicate a lack of communication and integration.

Table 8. Project 7: New production technology and production flow at Raimbek Bottlers

Indicator	Define it	Design it	Do it	Develop it
Focus	▪ Automatization reduces time and cost.	▪ Risk analysis, technology, and implementation planning.	▪ Installation and testing.	▪ Assessment and learnings from the process.
Activities	▪ Identify possible technologies and processes to be considered.	▪ What types of risk should be considered? ▪ Detailed planning for automatization and supply chain and production flow.	▪ Install new equipment: test runs and quality control. ▪ Work with new workflows - from farms to sales points.	▪ New technologies were successfully implemented, but still some organizational issues must be improved.

Source: compiled by authors

Challenges related to project workings: Estimates put pressure on the project to complete in a short time. Some resourceful employees left the project with essential knowledge.

Challenges related to project context and relationships: Organizational management processes and company structures are not sufficiently developed and unclear for some employees. Indicates a lack of communication and integration.

5. Findings and Results of Project Management

The findings are amassed for the seven projects and show in Table 9. The present research project is explorative and does not want to generalize beyond the cases as the sample is limited, and the first research project to map the challenges experienced in the studied projects in the food sector in Kazakhstan. However, the findings are valuable, as they might indicate issues that other projects in the food industry should consider. The results represent preliminary results that have implications for both managers and future research. As this research is explorative and with a limited number of observations, we have not been able to test the relationships between these issues. That would require a different type of research.

Table 9. Amassed overview of identified challenges in the seven projects

Need for structured reflection and learning processes (ex-post project evaluation).	
Challenges related to the workings of projects	▪ Unrealistic deadlines; ▪ Estimation of activities to optimistic or rudimentary; ▪ Unclear communication of plans and objectives; ▪ Coordination between units (in larger projects); ▪ Employee motivation.
Communication to the organization about potential implications from projects for employees	
Challenges related to the relationships between projects and their environment (context).	▪ Lacking or unclear strategic goals; ▪ Company managers need to accept/understand the relevance of the project; ▪ Focus on solutions rather than on goals; ▪ Much focus on implementation (without pre-test or pilot); ▪ Interorganizational communication between units and managers; ▪ Understanding different cultures and norms to facilitate collaboration.

Source: compiled by authors

The condensed overview of challenges shows an interesting allocation between internal and external issues. As mentioned earlier, standard project management textbooks have often focused on managing the project itself, while the relationship between projects and their environment represents a newer orientation. Table nine shows that the challenges are equally distributed between internal and 'external' issues. Some of these are probably interrelated, *e.g.*, unclear, or lacking goals for a project might affect both the ability to make realistic estimates and the poor communication between the projects and the rest of the organization. One of the most frequently raised issues is the responsibility allocation for the achievement of certain target indicators or the implementation of measures (Lemechshenko *et al.* 2022).

The role of lack of motivation is critical issue as transformative projects is intended to change and improve something in the company. This requires learning of new skills and practices. Learning can't be directed by managers (Milić *et al.* 2021). Learning in organizations requires the active participation and commitment of employees. Analyzing the condensed cases also made the researchers aware that there seemed to be a focus on rapid implementation in several of the projects. There is a sense of urgency in projects. This is not necessarily bad, as it can signal high commitment, but it can lead to a focus on the selection of solutions without sufficient deliberation. This means that deciding becomes more important than making the right decision and subsequently will that chosen solution guide the project rather than the company's need. Finally, there seemed to be developed standards for starting new projects or assessing these with ex-post project reviews in none of these organizations. However, there were examples of learning and ex-post reflections.

Conclusion

The indicative findings show that project management and project management challenges are best understood using an 'open perspective.' Project management is not only about goal setting, estimation, and planning. It is also about managing the project in its context and understanding how to become–and stay–relevant.

Further development of research on project management can learn from this. A recent new trend has been to study *strategy as practice* (Vaara and Whittington 2018). That research claims that we need to consider how strategy emerges and what activities organizations, managers, and employees do to make a *strategy*. This call for practice-oriented research has been addressed within project management also (Cicmil *et al.* 2018; Blomquist *et al.* 2017). We can hope that future research on project management in Kazakhstan learns from this and continue to study projects and project management from a practice perspective, focusing on what companies do when they do projects and what they do to manage projects. Not based on the textbook's normative

suggestions but based on a close study of the empirical practices of project managers and others involved in projects. Such a process-oriented practice perspective with "an understanding of projects as social processes, which take into account the complexities of human life" (Blomquist *et al.* 2017) could produce more detailed studies than the one presented here, *e.g.*, longitudinal studies, and would make the research even more relevant for managers and companies.

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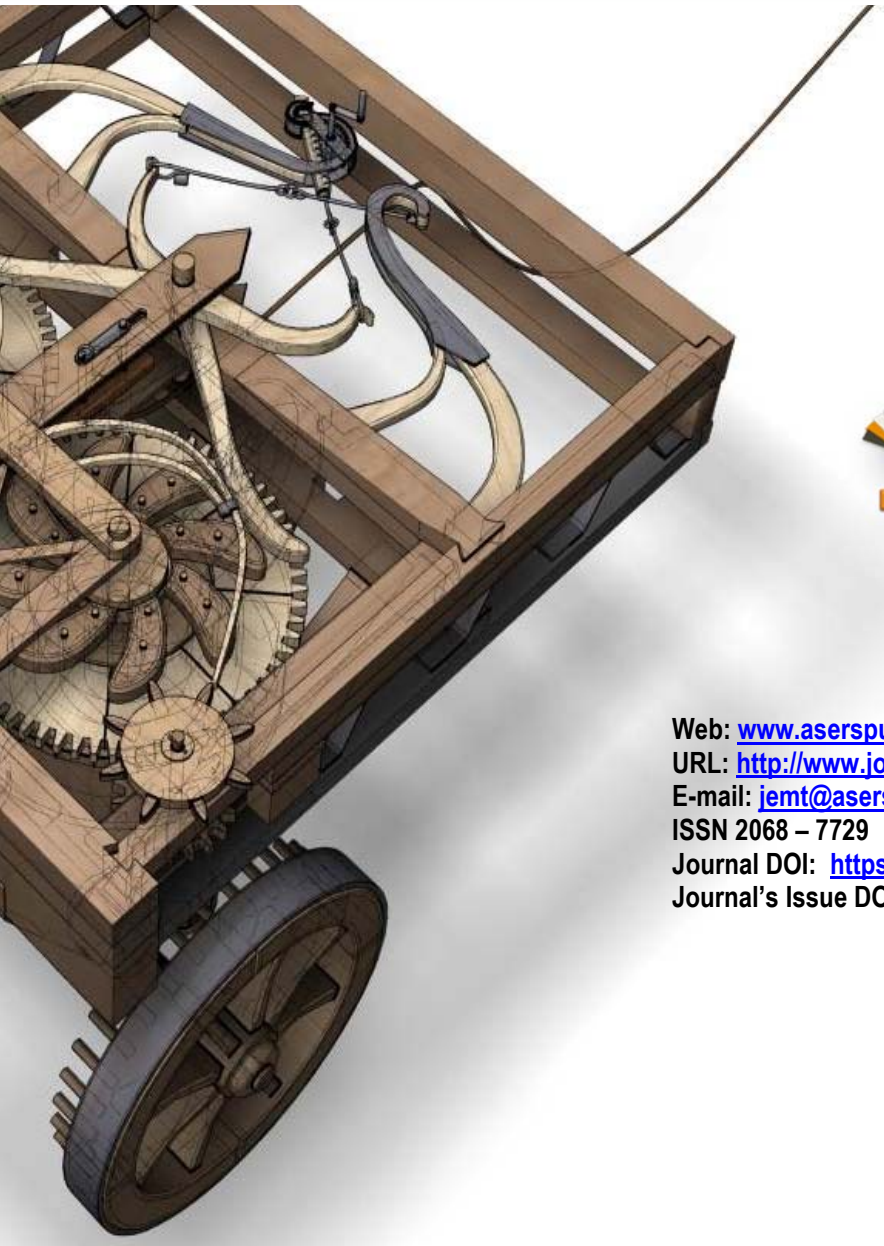

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