CREATING A SUSTAINABLY IMPACTFUL PROJECT: ORGANIZATIONAL PREREQUISITES

Akbota AKZAMBEKKYZY[a)], Darren DALCHER[b)], Shynara SARKAMBAYEVA[c)], Jeffrey YI-LIN FORREST[d)]

[a)] Narxoz University, Almaty, KAZAKHSTAN
e-mail: akbota.akzambekkyzy@narxoz.kz, ORCID: 0000-0002-8546-3834
[b)] Lancaster University, Lancaster, UNITED KINGDOM
e-mail: d.dalcher@lancaster.ac.uk, ORCID: 0000-0001-8447-0453
[c)] Satbayev University, Almaty, KAZAKHSTAN
e-mail: sh.sarkambayeva@satbayev.university, ORCID: 0000-0001-8509-3688
[d)] Slippery Rock University, Slippery Rock, UNITED STATES
e-mail: jeffrey.forrest@sru.edu, ORCID: 0000-0002-5124-9012

Abstract: History suggests that some projects enjoyed lasting impacts on the development of the creators' organization. However, no consensus exists on how an organization can create such projects to achieve desired long-term sustainable impacts. This article is devoted to a comprehensive study of ways to create a sustainably impactful project, taking as a basis the general criteria for "great projects" as successful projects in the long term. Reviewing the literature, we identify environmental factors for great projects and correlate these factors with criteria that characterize excellent organizations. The characteristics of excellent organizations known from current literature were enlarged to build a cohesive model of organization capable of creating a sustainably impactful project. Hence, we develop a conceptual model that demonstrates the process of creating sustainably impactful projects one after another. Based on the results of this study, organizations will be expected to be able to develop their roadmaps of growth with a focus on strengthening the conditions under which sustainably impactful projects can be developed for their long-term development and superior performance.

Keywords: great project, "excellent organizations", project impact, project success, project lifecycle.

JEL Classification: M19.

1 Introduction

Every organization requires stability, operational sustainability, and certain guarantees of future needs. However, the constant and increasingly accelerating changes in the market caused by structural processes, such as a pandemic crisis, keep intensifying the competitive requirements for companies that desire magnificent performance. The key for an organization to experience sustainable impact(s) can be achieved by developing projects that directly influence the organization's and its environment's development. Accepting commonly recognized values and focusing on value creation are prerequisites for the orderly existence of organizations. Sustainably impactful project means a project's impact on organization and/or its environment has been continued over a long run.

Projects have a dual nature: on the one hand, they are considered temporary organizations, while on the other hand, they are also firmly built into the underlying firm as part of its organizational components. This duality often shifts the focus of project management toward short-term objectives, even though projects are typically initiated to implement broader strategic goals and address long-term sustainability challenges. It is essential to consider the extended life cycle of a project's product, where the long-term impacts can significantly influence the organization and its environment beyond the project's formal conclusion. Thus, while a project may conclude, its sustainably impactful effects may endure for years, changing the organization and fostering its sustained growth (Silvius and Schipper, 2020).

There are a lot of verdicts regarding what project is considered impactful and how such a project can be possibly achieved, along with the long-term positive impacts of such a project. In addition, approaches to assessing success are fundamentally different. Therefore, each ability to achieve a common understanding of a successful project can be identified with an iterative process. Each step of the process offers step-specific solutions, factors, and criteria for determining success. In any case, although a project may end, its influence and impact may be sustainably felt years later (Soares, et al., 2023). In other words, a successful and sustainably impactful project will have a long-term effect and, in some cases, permanent effect on the organization and/or its environment. In other words, successful and sustainably impactful projects change the organization for the better and positively affect the organization's growth and its industry.

The challenge, however, lies in defining what constitutes a sustainably impactful project. Traditional project success metrics, such as scope, quality, and time, cannot capture the full range of factors needed to achieve lasting impact. Approaches to success evaluation vary widely, and achieving sustainable impact can be understood as iterative, requiring step-specific solutions and criteria. A sustainably impactful project not only enhances the organization's immediate performance, but also drives its long-term evolution, generating enduring value both within the firm and across its industry.

For sustainable practices to be effectively applied, organizations must adapt and evolve. Overcoming barriers like slow green technology adoption and lack of expertise requires organizations to foster a culture of continuous learning and flexibility, making sustainability an integral part of their operations (Orieno, et al., 2024).

To achieve lasting impact, organizations must foster a culture of adaptability, continuously evolving in response to sustainability demands. The missing link in the current literature is a comprehensive understanding of the organizational characteristics required to produce such impactful projects.

The subject of this study is the organizational prerequisites, such as characteristics necessary for creating sustainably impactful projects. The primary purpose is to identify the characteristics within an organization that enable it to consistently deliver projects with long-term positive effects on the organization and its environment. To achieve this, the study sets out several objectives:

1. To review and synthesize the existing literature on project impact and organizational excellence.
2. To identify and correlate environmental factors that contribute to creating sustainably impactful projects.
3. To develop a conceptual model that illustrates how organizations can create impactful projects repeatedly.

This paper seeks to establish a connection between two parallel domains of management and describe the theoretical foundations of sustainably impactful projects and excellent organizations in conjunction, thereby identifying the logical relationships that exist between them. These organizational traits align with the environmental factors identified in the literature as critical for long-term success.

Understanding the organizational prerequisites for creating impactful projects is highly relevant in today's fast-paced market environment. As businesses seek to differentiate themselves and achieve sustainable competitive advantages, the ability to produce projects with lasting influence becomes a key driver of success. This study fills a critical gap by linking organizational characteristics with the ability to generate long-term project impacts, offering a roadmap for organizations striving to thrive in a volatile market landscape.

2 Literature review and hypotheses development

The criteria for project success are intrinsically connected to the development of sustainably impactful projects, as both focus on delivering value beyond the project's completion. The study of project success criteria has evolved significantly over recent decades, particularly with the increasing focus on long-term impacts and sustainable outcomes. Traditional approaches to project success often emphasize the short-term completion of objectives related to scope, time, and cost, but more recent frameworks have extended this view to include long-term organizational benefits and sustainability.

Dalcher (2014) pays attention to a change in understanding of the success of a project in both short- and long-term views. He suggested the concept of "success of the 4th level," where success is checked in a long-term view. It explains what impact a project makes on the further development and improvement of the organization and its environment. The future potential of a project implies long-term, continuous improvement, where new approaches to doing things and markets, as well as new skills and opportunities, are generated during the implementation and/or after the project's conclusion. This concept of projects' future potential extends the time horizon of consideration into a longer-term use of a project's immediate outputs and results.

Sebestyen (2017) divided the knowledge of project success into the following aspects: stakeholders and perceptions, financial, human, extensions, traditional, and advanced. Later studies also include the concept of positive effects and the impact of a project on the future, while others point to an interesting contradiction regarding economics and ethics, which affect a project's sustainable success (Mishra, et al., 2011). Models developed for project evaluation have begun to include criteria over time to measure the long-term success of a project. Then these criteria were expanded to acquired skills and capabilities after the conclusion of a project, the utilization of the project's results, customer satisfaction, commercial success, stakeholder satisfaction, and project effectiveness (Meredith and Zwikael, 2019).

Most studies in which time played an important role in determining the success of a project lead us to understand projects with sustainable impact. In other words, time can change the concept and determine the success of a project. Time horizons also play a role because some stakeholders, like the project manager, have short-term interests, while others, such as the project sponsor, the senior executive, and the CEO, who allocate funds for a project, have long-term interests and perspectives (Zwikael and Meredith, 2018). In addition, one can observe a positive effect in the relationship between the criteria of sustainability and success, stakeholder satisfaction, future preparedness, and controlled project implementation (Silvius and Schipper, 2016).

Some studies emphasize approaches that support a dynamic view of sustainability that encompasses the continuation of the project's goods and services, the durability of the changes achieved, and the feasibility of independent growth (Cieslik, Dewulf and Foggin, 2022). Furthermore, some studies highlight the importance of integrating sustainable project planning as a critical component of project management, particularly in contributing to the long-term success of manufacturing firms (Chow, et al., 2021). Sustainable project management ensures that the benefits extend beyond the immediate project life cycle, influencing the organization's performance and ability to adapt and thrive in changing environments. Thus, by focusing on value creation and sustainability, organizations can foster projects with long-lasting impacts, reinforcing their strategic goals and competitive advantage.

Several studies on sustainable project management underscore the role of enterprises in successfully applying sustainable practices, thus ensuring long-term success (Forrest and Liu, 2021). These studies highlight that sustainability is not just an outcome, but a process that organizations need to embed into their project management frameworks. By reviewing the criteria for great projects and the organizational assets needed for sustainability, this research provides a comprehensive view of how organizations can foster projects with lasting impacts.

A sustainably impactful project generates long-lasting value for its stakeholders, not only achieving its immediate objectives but also contributing to the organization's and its surrounding environment's broader, enduring success. In studying the sustainable impact of projects, which is fully demonstrated in the long term, there is a concept that includes most of the criteria of projects that can influence their environment. Dvir and Shenhar (2015) introduced the concept of "great projects," defining them as those that achieve exceptional long-term success and create lasting value for both the organization and its environment. These projects are not merely temporary efforts but are deeply integrated into the strategic fabric of the organization, influencing its development trajectory over time. They developed the general characteristics based on such "great projects" selected from various industries since 1950 (Dvir and Shenhar, 2015). A great project can be regarded as a sustainably impactful project, as it inherently involves creating exceptional value and long-term benefits for stakeholders. These projects are characterized by their ability to innovate and maintain relevance over time. Projects, regardless of their characteristics, are associated with organizations, as their creators that created them. Each project is firmly connected with the organization that carries it out, and environmental factors and assets of the organization play a key role in completion of the project (Project Management Institute, 2017a).

The sustainable impact of projects on organizations can have a key role in understanding the development of an organization through projects. However, to achieve this effect, organizations need to possess a certain set of characteristics and assets of processes. These characteristics are necessary for an organization to establish a relationship between predecessors and successors to create a sustainably impactful project.

The question of which organizational characteristics enable the creation of sustainably impactful projects is studied from various perspectives. Researchers have explored this topic by examining organizational structures, leadership, and cultural factors contributing to long-term project success.

Organizational characteristics are crucial in determining the success and sustainability of projects, particularly those with long-lasting impact. The selection and implementation of an appropriate organizational structure significantly influence project performance. Büschgens, et al. (2013) examined how different organizational cultures influence innovation strategies. They found that a developmental culture, which emphasizes external flexibility and adaptability, is more common in organizations pursuing radical innovation strategies. In contrast, companies with long-term objectives focused less on innovation may benefit from a more efficiency-oriented or group-based culture. This research highlights the importance of aligning organizational culture with the broader strategic objectives of the firm, particularly when undertaking innovation-driven projects.

In addition, Cobo-Benita, et al. (2016) found that variables such as R&D investment per employee or company seniority had little effect on project outcomes. This suggests that external partnerships and the internal capacity for innovation play more critical roles in driving project success. Santos, et al. (2019) investigated the influence of organizational culture on project success, identifying "organizational culture" as the most impactful factor, followed by "change management" and "top management support." Their research demonstrates that organizations fostering a flexible and innovation-supportive culture tend to perform better in project environments. A climate that encourages adaptability and creativity becomes essential for achieving high levels of project success, particularly in dynamic and competitive markets.

Nizma, et al. (2024) explored various project management theories and organizational structure concepts, highlighting how a well-aligned structure can enhance coordination, communication, and decision making within project teams. Their findings emphasize that a mismatch between organizational structure and project requirements can hinder progress, creating obstacles that are difficult to overcome. This underscores the importance of strategic organizational design to ensure the seamless execution of projects.

In their extensive study, Peters and Waterman (1982) analyzed the management methods of 43 successful American companies across various sectors, formulating eight principles for business success. Their research provides foundational insights into the characteristics of high-performing organizations and continues to influence studies on organizational effectiveness.

The criteria for "excellent organizations" proposed by Peters and Waterman (1982) are the most generalized characteristics of companies. They are:

- a bias for action;
- close to the customer;
- autonomy and entrepreneurship;
- productivity through people;
- hands-on, value-driven;
- stick to the knitting;
- simple form, lean staff; and
- simultaneous loose-tight properties.

Sustainably impactful projects exert a wide-reaching influence on their environment, and the criteria for great projects offer a solid framework to define these impactful initiatives. Organizational characteristics, though studied extensively, are best understood when viewed through the lens of the "excellent organizations" concept. The principles outlined in this concept, along with the criteria for great projects, provide a comprehensive understanding of the traits required for organizations to create projects with lasting impact.

3 Methodology

The present study represents a conceptual analysis of organizational characteristics that contribute to creating projects with a sustainable impact. Given the exploratory nature of the research and the need to assess complex and multifaceted relationships between organizational characteristics and project outcomes, a qualitative methodology allows for a more in-depth analysis of the various factors influencing "great projects." The research synthesizes existing literature to propose a conceptual model that links organizational attributes to the factors shaping great projects, ultimately leading to sustainable impact.

A systemic literature review examined the organizational characteristics that influence great projects. The literature was drawn from various academic databases, including peer-reviewed journal articles, books, and conference proceedings published from 1982 to 2024. Keywords used for the search included "great projects," "sustainable impact," "organizational characteristics," " project success," and "value creation."

The aim of this review is to not only provide a comprehensive understanding of the features that define "great projects," but also explore the organizational characteristics that enable the creation of such projects. By identifying the factors that distinguish great projects and then correlating them with organizational traits, we can reason and build a conceptual framework that demonstrates how organizations can repeatedly create sustainably impactful projects. This reverse approach is intentional, allowing for a clear mapping of project success factors into the organizational environment that fosters them. The selection process was iterative and aimed at filtering the most relevant sources to form a comprehensive overview of the existing body of knowledge. The review identified seven key criteria for great projects proposed by Dvir and Shenhar (2015).

The decision to present the literature review about great projects in the "generalization of the main statements" section is driven by methodological considerations. As such, it forms part of the research process and contributes directly to the analysis.

Based on the findings from the literature review, the research synthesized the identified organizational characteristics and project factors to develop a conceptual model. This model outlines how certain organizational attributes – such as company flexibility, leadership, corporate culture, and knowledge sharing - influence the factors that shape great projects. The synthesis process was iterative, comparing organizational traits with project outcomes to identify patterns and relationships. The conceptual model illustrates how these organizational traits create value and impact the project factors contributing to sustainable outcomes.

4 Generalization of the main statements

Below are selected studies for each of the seven criteria of "great projects" that most possibly help achieve the goal of this work.

Involve the creation of a unique competitive advantage and/or an exceptional value for its stakeholders. The factors of company flexibility, readiness for change, irreplaceable company resources, and human resources contribute significantly to creating a competitive advantage and exceptional value for stakeholders. Strategic flexibility, encompassing production, competition, and resource flexibility, has been empirically shown to have a positive relationship with competitive advantage, as evidenced by field studies such as those conducted in the cement industry. These studies highlight that adaptability in production and resource management enables companies to maintain an edge in dynamic environments, further enhancing their market position (Bakhelili, 2020).

In addition, quality human resources and an organization's ability to embrace and adapt to change are critical in achieving long-term success. An organization's preparedness for change, along with self-confidence in leadership, ensures that it can effectively respond to external challenges and opportunities. As Rismansyah, et al. (2022) emphasize, the most valuable assets for an organization are its human resources, whose flexibility and adaptability are key in driving continuous improvement and competitive advantage. From a resource-based view, irreplaceable company resources also play a crucial role in establishing sustainable competitive advantage. These resources must be valuable, rare, and inimitable, contributing to unique processes that competitors cannot replicate. Developing core competencies based on these resources allows organizations to create processes that are difficult to imitate, providing long-term strategic benefits (Kabue and Kilika, 2016). Together, these factors foster a unique competitive advantage and contribute to sustained value creation for stakeholders.

The terms “company flexibility” and “readiness for change” are treated separately from the broader Agile concept because they emphasize specific aspects of adaptability. While Agile promotes responsiveness and iterative improvements, company flexibility refers to the structural capacity to adjust rapidly and readiness for change focuses on the cultural and psychological willingness to embrace new approaches. Both are essential in implementing Agile, but represent distinct organizational traits that support its effectiveness.

Begin with a long period of project definition that is dedicated to defining a powerful vision and clear need and selecting the best execution approach. The vision, determination of the goal, the need for the project, and the approach to execution are covered by good project management, in particular, good project planning. Most authors have recognized time, cost, and quality as a foundation in assessing the project's success. For example, Frödell, et al. (2008) showed an empirical result that describes indicators of success, such as maintaining the project on time and budget, maintaining the costs and goals of the project, and ensuring profitability. For more successful planning and identification of not only the project's requirements but also its needs, it is possible to achieve effective interaction with the project stakeholders, especially in the early stages of the project. By using a systemic approach, a suitable project implementation plan can be implemented and coordinated with the goals of the organization in which it is carried out (Hamada and Akzambekkyzy, 2022).

Create a revolutionary project culture. A revolutionary project culture is grounded in shared values, beliefs, and practices, shaping the interactions within an organization (Lin and Forrest, 2011). Each organization cultivates its own project culture, influencing relationships between employees and customers (Wei and Miraglia, 2017), and the absence of a cohesive project culture can impair organizational performance. Projects often involve specialists from diverse fields, each with a professional culture, which may conflict with the overarching project culture. However, these cultural differences can be harmonized by synthesizing organizational and professional cultures facilitated by effective communication, negotiation, and joint decision making (Ajmal and Koskinen, 2008).

The project manager plays a critical role in standardizing project practices and disseminating project culture across teams (Wang, et al., 2019). By fostering a strong culture, organizations enhance stakeholder engagement and improve their external reputation (Zheng, et al., 2017). The sustainability of this culture depends on two key factors. First, an agile organizational culture, which focuses on flexibility and adaptability across all levels of the organization, enabling teams to continuously improve and respond to external changes dynamically. This culture fosters decentralized decision making and encourages innovation throughout the entire structure. Second, a highly qualified project manager ensures alignment between evolving practices and the project’s core values.

Need a highly qualified project leader who is unconditionally supported by top management. The need for a highly qualified project leader unconditionally supported by top management is driven by two critical factors: the effective use of networks and knowledge sharing. Given the temporary nature of projects and the ongoing nature of organizations, the project manager plays a pivotal role in aligning project goals with the organization’s long-term strategy (Project Management Institute, 2017a). This role is essential, directly influencing the organization’s sustained development (Medina and Medina, 2014). Establishing strong networks and facilitating knowledge exchange are key to enhancing project effectiveness, as these activities foster better coordination and integration of project and organizational objectives (Hyväri, 2007).

Knowledge sharing significantly enhances project managers' skills and capabilities, contributing to their projects' overall success. By transferring insights, lessons, and innovations from one project to another, the organization builds a continuous learning environment that reinforces the professionalism of its project managers (Sundqvist, 2019; Project Management Institute, 2017b). Moreover, leadership competencies, including emotional intelligence and problem-solving, are crucial for project managers, and these skills can be further developed through coaching and mentoring (Fatoki, 2023; Afzal, et al., 2018). Thus, a network-based approach and a culture of knowledge sharing serve as factors for cultivating highly qualified project leaders who can secure top management support and drive organizational success.

Maximize the use of existing knowledge, often in cooperation with outside organizations. Maximizing the use of existing knowledge, particularly through cooperation with outside organizations, depends on several critical factors: clear and concise project goals, the organization's risk orientation, and effective knowledge sharing. In a rapidly evolving environment, organizations that seek to remain competitive must engage in strategic alliances to gain new knowledge and skills (Forrest and Liu, 2021). These collaborations promote the exchange of diverse experiences, create synergies between partners, and enhance mutual understanding of different approaches to joint development (Silvius and Schipper, 2014).

A clear and well-defined project goal is essential as it facilitates alignment between partners, fostering the trust needed for effective knowledge exchange (Zheng, 2017). In addition, the likelihood of forming successful alliances is closely tied to an organization's risk orientation, including its willingness to innovate and proactively seek partnerships (Rupčić, 2013). Companies that are more risk tolerant and entrepreneurial tend to be more successful in leveraging strategic collaborations for mutual benefit.

Knowledge sharing is fundamental to the success of these alliances, and effective knowledge management between organizations enables the continuous flow of information and the creation of new value (Drewniak and Karaszewski, 2020). However, challenges like motivational barriers in knowledge exchange exist, particularly in project-oriented organizations. These challenges can be mitigated through strong leadership and a supportive project management structure, which are key to overcoming obstacles and facilitating effective collaboration (Mueller, 2014).

Have integrated development teams with fast problem-solving capabilities and the ability to adapt to business, market, and technology changes. The importance of self-organizing teams has been recognized, and such teams have been studied in various forms – as autonomous groups in socio-technical systems, as means of providing organizational theories, knowledge management agents, and as examples of complex adaptive systems (Hoda, et al., 2013). A self-organizing team makes its own decisions about how to respond to environmental changes. There are suggestions that the alternation of a long period when a stable infrastructure allows only gradual adaptation and a short period of revolutionary upheaval creates self-organizing mechanisms (also known as teams) (Gersick, 1991). In other words, self-organizing teams are created in an unstable environment through innovations initiated by team members. They are also believed to influence performance (Moe, et al., 2008). If the position of Agile is considered, where people are prioritized over processes, then an Agile corporate culture becomes essential. This corporate culture establishes an overarching strategic framework that empowers self-organizing teams while aligning them with the company's vision and business goals. It promotes leadership that supports autonomy while ensuring consistency with the organization's broader values and long-term objectives. Agile organizational culture emphasizes internal flexibility and decentralized adaptability, whereas Agile corporate culture refers to a broader, strategically aligned environment that supports the implementation of Agile methodologies.

The transformation of traditional teams into a flexible team requires the organization of energetic actions, such as (1) awareness activities that make the involved situation and problems known to all employees, the team, and the organization; (2) intervention activities that create an open environment within which employees can freely communicate; (3) group dynamics that create a teamwork culture; (4) changes in the work environment; and (4) Agile practices training and adoption (Espinosa-Curiel, et al., 2018). In other words, a self-organizing team is a joint achievement of the Scrum master, members of the development team, and top managers of the organization. Li and Zhou (2010) show that the behavior of a self-organizing team can be significantly influenced by encountered scenarios.

Teams have a strong sense of partnership and pride. Trust among team members is fundamental, as it directly impacts productivity and cohesion (Ashleigh and Prichard, 2012). High levels of trust minimize internal conflicts and promote better coordination, essential for cross-cultural and multidisciplinary teams (Langfred, 2007; García-Cabrera and García-Soto, 2010). Effective teamwork also relies on the collective intelligence and skills of individual members, where each member's competence contributes to the overall performance and stability of the team (El Baroudi, et al., 2019; Moura, et al., 2019).

An Agile corporate culture further enhances team effectiveness by fostering a flexible and adaptive working environment. This culture, guided by strong leadership, supports continuous communication and the sharing of knowledge, which is essential for achieving project goals (Aronson, 2015; Mathew, 2019). The project manager plays a crucial role in creating and maintaining this culture, acting as a leader who not only guides the team toward shared objectives, but also instills the energy and team spirit required for successful project completion (Shokory and Suradi, 2018).

Effective leadership combined with a supportive corporate culture creates the foundation for strong team dynamics. A project manager's leadership helps maintain clarity in goals and alignment within the team, which, in turn, builds a sense of pride and partnership. This synergy within teams is key to project success and, ultimately, the organization's success (Bąk and Sukiennik, 2019; Tulembayev, et al., 2019).

Therefore, several critical factors drive the development of a strong sense of partnership and pride within project teams: trust, team members' competencies, an Agile corporate culture, and the presence of a highly qualified project manager or leader.

Building on this approach, the review focuses on a detailed examination of the individual attributes that define "great projects". Analyzing each property in depth, this section identifies the key factors required for their successful creation and sustained impact. This step is crucial for understanding how projects can achieve exceptional long-term results and sets the foundation for the subsequent exploration of the organizational conditions that support these outcomes.

The literature review identified 14 key factors that significantly influence the development and formation of the attributes for "great projects." Through an analysis of the research findings from various authors, 14 distinct influencing factors were determined. These factors, when combined, contribute to the development or formation of seven major features that define "great projects" (Table 1).

For instance, factors such as company flexibility, readiness for change, irreplaceable company resources, and human resources play a pivotal role in creating a unique competitive advantage and exceptional value for stakeholders. In contrast, factors like the application of project management methodology, the presence of a highly qualified project manager, and clear and concise project goals are essential for ensuring a long period of project definition, which is necessary for establishing a powerful vision, clear needs, and selecting the optimal execution approach. In addition, company flexibility and Agile corporate culture help integrate development teams with fast problem-solving capabilities and the adaptability required to respond to business, market, and technological changes. These integrated teams are crucial for fostering effective project execution.

Supposedly, companies deemed excellent have another view on success and value creation, which is generally defined by the natural endowments of the companies. Their focus on value creation leads them to an understanding of the sustainable impact of projects. For example, a powerful vision, clear need, selection of the best execution approach, and the creation of a revolutionary project culture are contributing factors that can possibly be created and developed by a highly qualified project manager. The productivity of such a project manager through his/her team is included in the characteristics of "excellent organizations." For self-organizing teams, flexibility in managing a company is also necessary, and it takes place in the characteristics of "excellent organizations." Using such a logic we define the correspondence between the characteristics of "excellent organizations" and the factors that affect the attributes of "great projects" (Table 2).

Certain factors traditionally defining organizational excellence may no longer fully address the evolving demands for creating sustainably impactful projects. Considering the significant global changes, it has become crucial to identify additional organizational characteristics that are essential for generating projects with lasting impact. Revising the characteristics of "excellent organizations" is thus warranted, as some existing factors show limited relevance to contemporary challenges.

Table 1. Factors affecting attributes of "great projects"
(*Source:* Own study)

Factors		Attributes of "great projects"
F1	Company flexibility	These factors are involved in creating a unique competitive advantage and/or an exceptional value for its stakeholders (Bakhelili, 2020; Rismansyah, et al. 2022; Kabue and Kilika, 2016)
F2	Readiness for change	
F3	The presence of irreplaceable company resources	
F4	Human resources	
F5	Application of project management methodology	These factors help with the definition of a long period, powerful vision, and clear needs, so that the best execution approach can be selected (Frödell, et al, 2008; Hamada and Akzambekkyzy, 2022)
F6	The presence of a highly qualified project manager	
F7	Clear and concise project goal	
F8	An Agile organizational culture	These factors help to create a revolutionary project culture (Lin and Forrest, 2011; Wei and Miraglia, 2017; Ajmal and Koskinen, 2008; Wang, et al., 2019; Zheng, et al., 2017)
F6	The presence of a highly qualified project manager	
F9	Usage of networks	A highly qualified project leader can obtain the unconditional support of the top management (Project Management Institute, 2017a; Medina and Medina, 2014; Hyväri, 2007; Sundqvist, 2019; Fatoki, 2023; Afzal, et al., 2018)
F10	Knowledge sharing	
F10	Knowledge sharing	These factors jointly maximize the use of existing knowledge, often in cooperation with outside organizations (Forrest and Liu, 2021; Silvius and Schipper, 2014; Zheng, 2017; Rupčić, 2013; Drewniak and Karaszewski, 2020; Mueller, 2014)
F7	Clear and concise project goal	
F11	Organization's risk orientation	
F1	Company flexibility	These factors help integrate development teams with fast problem-solving capabilities and the ability to ride business, market, and technology changes (Hoda, et al., 2013; Gersick, 1991; Moe, et al., 2008; Espinosa-Curiel, et al., 2018; Li and Zhou 2010)
F12	Agile corporate culture	
F13	Trust	These factors help project teams to develop and maintain a strong sense of partnership and pride (Ashleigh and Prichard, 2012; Langfred, 2007; García-Cabrera and García-Soto, 2010; El Baroudi, et al., 2019; Moura, et al., 2019; Aronson, 2015; Mathew, 2019; Shokory and Suradi, 2018; Bąk and Sukiennik, 2019; Tulembayev, et al., 2019)
F14	Good competencies of team members	
F12	Agile corporate culture	
F6	The presence of a highly qualified project manager, leader	

Table 2. Correspondence between the characteristics of "excellent organizations"
and the factors that affect the attributes of "great projects"
(*Source:* Own study)

№	*Characteristics of "excellent organizations"*	*Factors that affect the attributes of "great projects"*
1	A bias for action	F2, F11
2	Close to the customer	F1, F9, F10
3	Autonomy and entrepreneurship	F6
4	Productivity through people	F4, F14
5	Hands-on, value-driven	F5, F12
6	Stick to the knitting	F7, F8, F13
7	Simple form, lean staff	F3, F8, F14
8	Simultaneous loose–tight properties	F1, F5

Based on the relationship between these characteristics and the factors influencing them, three additional characteristics have been identified that modern organizations should incorporate into their frameworks to maintain their capacity for producing "great projects." These characteristics include:

- strong corporate and design culture;
- well-established communications and networking; and
- easy knowledge sharing.

Opportunities for the exchange of knowledge both within and beyond an organization provide a chance to build up strong staff and leaders for leading individual project teams. The project culture, supported by the underlying organizational culture, is the basis for strengthening the team spirit and creating comfortable emotional conditions for the implementation and completion of projects. Special attention also needs to be given to communications and networks created by the organization and project managers for subsequent management and successful implementation of projects.

The literature review on the attributes of "great projects" has allowed us to pinpoint the most cited antecedents and factors contributing to sustainably impactful projects. These factors collectively drive the sustainable impact of projects within organizations that exhibit the essential characteristics of "excellent organizations."

In this context, our conceptual framework (Figure 1) demonstrates the critical link between organizational characteristics and project outcomes, highlighting how projects can generate long-term value for the organization and its broader ecosystem. The framework underscores that the sustainable impact of projects is only possible when an organization meets all the criteria for excellence and applies these factors effectively to its projects. Thus, it provides a comprehensive understanding of how organizations can achieve sustained project success through alignment with the principles of organizational excellence.

The basis of this conceptual framework is that every excellent organization or firm that strives to become excellent must focus on creating value for both short term and long term. This focus is realized through projects. Projects, in turn, that have a focus on value creation have the potential to become "great projects." In addition, it is these great projects that can sustainably impact the present and future of the organization. Determining how a sustainable impact of a certain range of projects could potentially emerge provides opportunities for a company to materially create some projects. Knowing the factors of great projects and how their combinations might lead to the emergence of "great projects" helps managers and entrepreneurs determine the conditions under which these factors may arise. Our created conceptual framework provides an understanding of the cycle of creating value. The hypothetical relationships identified between the criteria of excellent organizations and the factors of great projects provide more accurate answers to questions about the long-term impact of projects on organizations. The question considered here when looking at our conceptual framework is how a company can make its organization meet these criteria now or soon.

5 Discussion

Our research logic is built around the theories of "great projects" and "excellent organizations" with the desire to find ways to create a sustainably impactful project. This study represents a commitment to exploring how to generate value through projects for the next chapter of humanity.

In discussing the organizational prerequisites for creating sustainably impactful projects, it is important to extend the conversation beyond Peters and Waterman's eight principles by considering additional contemporary characteristics critical for organizational success in complex, rapidly changing environments. The three supplemental characteristics, strong corporate and design culture, well-established communications and networking, and easy knowledge sharing, align with modern demands for agility and innovation.

Corporate culture plays a pivotal role in influencing organizational performance. According to the study by Asikhia, et al. (2020), utilizing Schein's model of organizational culture, which emphasizes shared values, beliefs, and underlying assumptions, management has a responsibility to embed a strong culture from the inception of an organization. The research found a significant relationship between corporate culture and organizational success, suggesting that a well-established culture is crucial for continuous development.

Regarding communication and knowledge management, Riege (2005) underscores that well-established communication networks are essential for agile decision making and efficient collaboration within organizations. Complementing this, Oseko (2017) presents the “PAR model” of knowledge management, developed from a field study in a social development project in Bangladesh. This model highlights how knowledge creation and sharing occur through dynamic processes, demonstrating the importance of knowledge flow in project success.

These organizational characteristics – corporate culture, communication, and knowledge sharing – not only complement, but also extend Peters and Waterman's principles of organizational success by emphasizing modern demands for flexibility, efficiency, and human capital. These foundational traits are increasingly recognized as critical for fostering sustainably project impacts, especially in dynamic and complex environments.

Building on these insights, this research addressed key questions about the factors that enable organizations to create sustainably impactful projects. Specifically, the study focused on questions such as the following:

1. How are sustainable project impact(s) created? Sustainable project impacts are created through a combination of organizational characteristics that foster long-term value creation. These characteristics include cross-functional collaboration, strong leadership, trust, and the ability to adapt to market, technological, and environmental changes. Projects with sustainable impact leverage these traits to not only meet immediate objectives, but also to influence their surroundings positively over time, aligning with the broader organizational strategy and delivering value to stakeholders.
2. What is needed to create a great project, and what factors affect the creation of such projects? Creating a great project requires a set of key factors that align organizational capabilities with project goals. These factors include the presence of a highly qualified project manager, a clear project vision, a strong corporate culture, the ability to adapt to change, and effective knowledge management. In addition, trust within the project team, as well as support from top management, plays a critical role in ensuring that the project meets its criteria for greatness, such as delivering exceptional stakeholder value and establishing a unique competitive advantage.
3. Can a so-called “excellent organization” create a great project(s)? An “excellent organization” is well positioned to create great projects, as it embodies the necessary characteristics for fostering a culture of innovation, collaboration, and adaptability. By aligning its internal structures and leadership with the key factors that influence great project creation, an excellent organization can implement processes and strategies that enhance project performance and long-term impact.
4. What does an excellent organization need to create a great project? To create a great project, an excellent organization needs a combination of strategic leadership, flexible and adaptive corporate culture, and access to critical resources. The organization must also ensure cross-functional integration and strong team dynamics, focusing on continuous learning and knowledge sharing. Moreover, a project management methodology that supports innovation and effective decision making is essential.
5. How can the stream of sustainable project impact(s) associated with “excellent organizations” and “great projects” be visualized? The stream of sustainable project impacts associated with excellent organizations and great projects can be visualized through a conceptual model, where organizational characteristics drive the development of key factors for project success. These factors, in turn, influence the creation of great projects that deliver sustainable impact. The process begins with a focus on value creation, where organizational characteristics foster the right conditions for successful project outcomes, which then lead to sustained positive influence on both the organization and its broader environment.

The study fills a gap in the literature regarding determining sustainably impactful projects while only including a small portion of the literature on each criterion and factor.

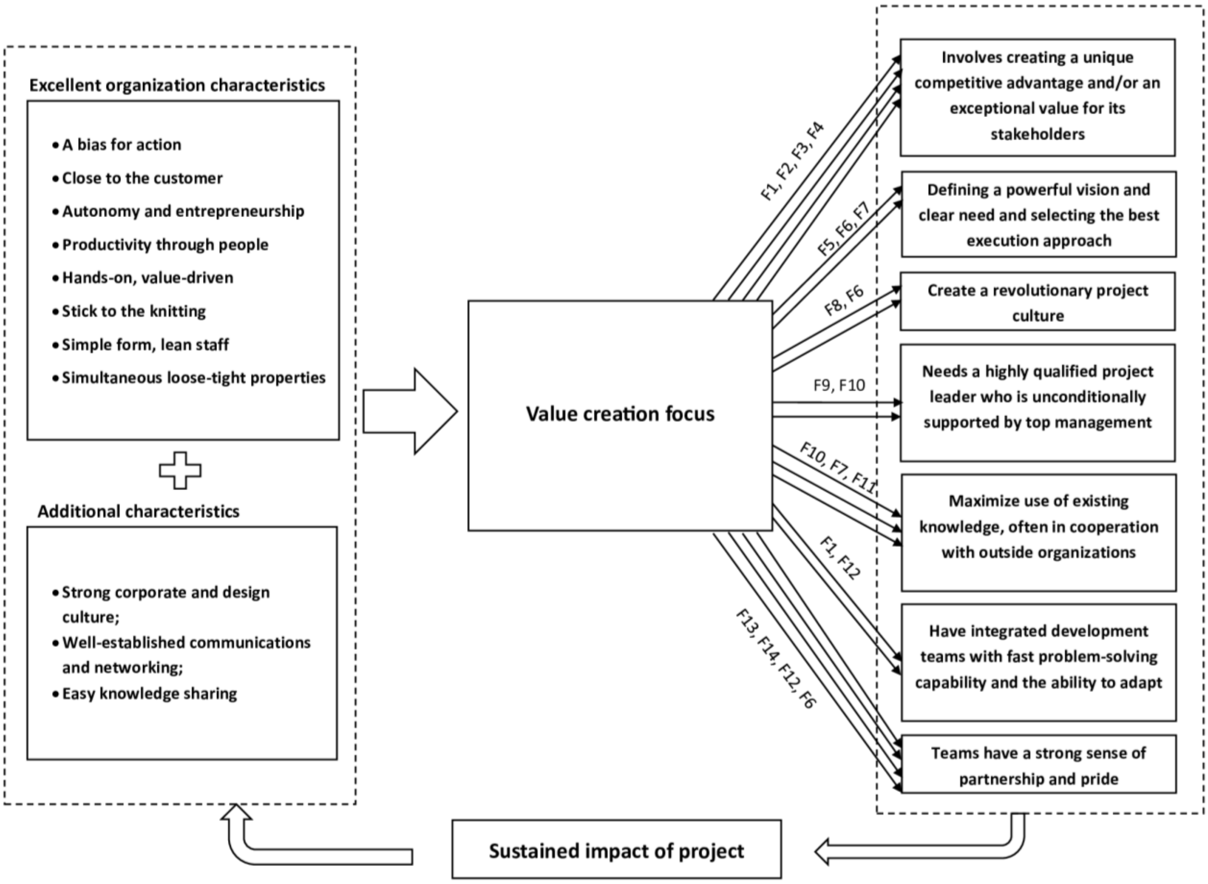

Figure 1. Organizational value creation through projects
(*Source:* Own study)

At the same time, the list of factors considered here can be enlarged. Future works need relevant empirical evidence to determine the degree of influence and sustainability of our proposed conceptual framework by adjusting the effects of various criteria. It must be acknowledged that our model has not been empirically verified, which represents the main limitation of this study and the basis for future works.

6 Conclusion

The main purpose of this study is to identify ways to create sustainable impact(s) for projects by defining sets of organizational prerequisites. To this end, it turns out that obtaining such impact(s) is the result of the desire of organizations to create value for their environment and focus on creating value. The findings show that characteristics such as a strong corporate and design culture, effective communication, and easy knowledge sharing are critical factors in project success, aligning with the broader themes of flexibility, efficiency, and human capital. This study confirms that organizations with well-established structural and cultural characteristics (as described by Peters and Waterman's principles and supplemented by contemporary traits) are more likely to create projects with sustainable impact.

Moreover, the research highlights that the principles of excellence, including autonomy, value-driven leadership, and lean organizational structures, remain relevant in today's complex environments. The combination of these characteristics provides a robust framework for achieving great and sustainably impactful projects, further reinforcing the importance of organizational excellence in driving long-term success.

These insights contribute to the broader understanding of how specific organizational characteristics support the creation of sustainably impactful projects, offering practical recommendations for organizations seeking to enhance their project outcomes.

Obtaining a sustainable impact from projects' implementation in the long term is the result of an organization's desire to create benefits for its environment and for future generations. This cyclical relationship identified in this study can help organizations to practically develop their strategies and shape their visions, while strengthening their business structures to meet the necessary criteria for them to become excellent and to achieve their goal of obtaining a long-term positive impact from the implemented successful projects. Finally, our deepened understanding of the topic considered in this study – the creation of value for society by organizations – can practically help organizations achieve project success within the boundaries of modern business realities.

To validate the proposed conceptual model, the results were compared with existing frameworks in the literature on high-performing organizations and sustainable project management. This step helped ensure the model is grounded in established theories, while contributing new insights into the relationship between organizational characteristics and project criteria.

The primary limitation of this study lies in its reliance on secondary data from literature sources. While the systematic review provides a robust foundation, the lack of empirical testing of the conceptual model suggests that future research should involve quantitative validation through case studies or surveys. In addition, the study is limited to the existing body of knowledge, and newly emerging factors may not yet be reflected in the analysis.

7 Funding

This research has been funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Grant No. AP23489358).

8 References

[1] Afzal, A., Khan, M.M. and Mujtaba, B.G., 2018. The impact of project managers' competencies, emotional intelligence and transformational leadership on project success in the information technology sector. *Marketing and Management of Innovations*, 8(2), pp. 142–154, https://doi.org/10.21272/mmi.2018.2-12.

[2] Ajmal, M.M. and Koskinen, K.U., 2008. Knowledge Transfer in Project-Based Organizations: An Organizational Culture Perspective. *Project Management Journal*, 39(1), pp. 7–15, https://doi.org/10.1002/pmj.

[3] Aronson, Z.H., 2015. An Investigation of the Role of Project Culture in Team Efficacy and Success in Project-Based Work. *International Journal of Innovation and Technology Management*, 12(6), pp. 1550027, https://doi.org/10.1142/S02198770 15500273.

[4] Ashleigh, M. and Prichard, J., 2012. An integrative model of the role of trust in transactive memory development. *Group and Organization Management*, 37(1), pp. 5–35, https://doi.org/10.1177/ 1059601111428449.

[5] Asikhia U,O.,J, Abimbola, A.,C, Alexander O. and Timilehin, A., 2020. Corporate Culture and Organisational Performance: A Review of Literature. *The International Journal of Business & Management*, 8(12). https://doi.org/10.24940/theijbm/2020/ v8/i12/BM2012-041.

[6] Bakhelili, M., 2020. Strategic flexibility and sustenable competitive advantage. Economic and Management Research Journal. 14(3), pp.267-288.

[7] Bąk, P. and Sukiennik, M., 2019. Impact of Corporate Culture on Business Goals of Energy Sector Companies. *IOP Conference Series: Earth and Environmental Science*, 214(1), pp.012066, https://doi.org/10.1088/1755-1315/214/1/012066.

[8] Büschgens, T., Bausch, A. and Balkin, D.B., 2013. Organizational culture and innovation: A meta-analytic review. Journal of Product Innovation Management, 30(4), pp.763-781. http://dx.doi.org/10.1111/ jpim.12021.

[9] Chow, T.C., Zailani, S., Rahman, M.K., Qiannan, Z., Bhuiyan, M.A. and Patwary, A.K., 2021. Impact of sustainable project management on project plan and project success of the manufacturing firm: Structural model assessment. PLoS ONE 16(11):e0259819. https://doi.org/10.1371/journal.pone.0259819.

[10] Cieslik, K., Dewulf, A. and Foggin, J.M., 2022. Investigating project sustainability: technology as a development object in a community-based project in Naryn, Kyrgyzstan. Oxford Development Studies, 50(4), pp.289–306. https://doi.org/10.1080/1360 0818.2022.2039607.

[11] Cobo-Benita, J.R., Rodríguez-Segura, E., Ortiz-Marcos, I. and Ballesteros-Sánchez, L., 2016. Innovation

projects performance: analyzing the impact of organizational characteristics. Journal of Business Research, 69(4), pp.1357-1360. http://dx.doi.org/10.1016/j.jbusres.2015.10.107.

[12] Dalcher, D., 2014. Rethinking Success in Software Projects: Looking Beyond the Failure Factors. *Software Project Management in a Changing World*, *9783642550*(October), pp. 27–49, https://doi.org/DOI 10.1007/978-3-642-55035-5_2.

[13] Drewniak, R. and Karaszewski, R., 2020. Diffusion of knowledge in strategic alliance: empirical evidence. *International Entrepreneurship and Management Journal*, 16(2), pp. 387-416, https://doi.org/10.1007/s11365-019-00589-2.

[14] Dvir, D. and Shenhar, A., 2015. What Great Projects Have in Common. In: *IEEE Engineering Management Review*, 43(3), pp. 71-73, https://doi.org/10.1109/EMR.2015.7433290.

[15] El Baroudi, S., Khapova, S.N., Jansen, P.G.W. and Richardson, J., 2019. Individual and contextual predictors of team member proactivity: what do we know and where do we go from here? *Human Resource Management Review,* 29(4), pp. 100671, https://doi.org/10.1016/j.hrmr.2018.10.004.

[16] Espinosa-Curiel, I.E., Rodríguez-Jacobo, J., Vázquez-Alfaro, E., Fernández-Zepeda, J. A. and Fajardo-Delgado, D., 2018. Analysis of the changes in communication and social interactions during the transformation of a traditional team into an agile team. *Journal of Software: Evolution and Process*, 30(9), pp. 1–24, https://doi.org/10.1002/smr.1946.

[17] Fatoki, O., 2023. Participative Leadership and Employee Job Satisfaction: The Mediating Effects of Psychological Empowerment and Work Engagement. Foundations of Management, 15(1), pp.161-176, https://doi.org/10.2478/fman-2023-0012.

[18] Forrest, J.Y.L. and Liu, Y., 2021. *Value in Business - A Holistic, Systems-Based Approach to Creating and Capturing Value*. New York: Springer, ISBN: 978-3-030-82897-4.

[19] Frödell, M., Josephson, P.E. and Lindahl, G., 2008. Swedish construction clients' views on project success and measuring performance. *Journal of Engineering, Design and Technology*, 6(1), pp. 21–32, https://doi.org/10.1108/17260530810863316.

[20] García-Cabrera, A.M. and García-Soto, M.G., 2010. The impact of cultural resources on multicultural team performance. *Innovar*, 20(38), pp. 141–160.

[21] Gersick, C.J.G., 1991. Revolutionary Change Theories: a Multilevel Exploration of the Punctuated Equilibrium Paradigm. *Academy of Management Review*, 16(1), pp. 10–36, https://doi.org/10.5465/amr.1991.4278988.

[22] Hamada, M.A. and Akzambekkyzy, A., 2022. Innovative governance strategy to enhance the performance and the efficiency of IT project management activities, *Int. J. Project Organisation and Management*, 14(2), pp.144–175.

[23] Hoda, R., Noble, J. and Marshall, S., 2013. Self-organizing roles on agile software development teams. In: *IEEE Transactions on Software Engineering*, 39(3), pp. 422-444, https://doi.org/10.1109/TSE.2012.30.

[24] Hyväri, I., 2007. *Project Management Effectiveness in Different Organizational Conditions Project Management Effectiveness*. Helsinki School of Economics.

[25] Kabue, L. and Kilika, J. 2016. Firm Resources, Core Competencies and Sustainable Competitive Advantage: An Integrative Theoretical Framework. Journal of Management and Strategy. 7(1) https://doi.org/10.5430/jms.v7n1p98.

[26] Langfred, C.W., 2007. The downside of self-management: A longitudinal study of the effects of conflict on trust, autonomy, and task interdependence in self-managing teams. *Academy of Management Journal*, 50(4), pp. 885–900, https://doi.org/10.5465/AMJ.2007.26279196.

[27] Li, J. and Zhou, Y., 2010. Experimental analysis of self-organizing team's behaviors. *Expert Systems with Applications,* 37(1), pp. 727-732, https://doi.org/10.1016/j.eswa.2009.05.084.

[28] Lin, Y. and Forrest, B., 2011. *Systemic Structure behind Human Organizations: From Civilizations to Individuals*. New York: Springer.

[29] Mathew, J., 2019. Organisational culture and effectiveness: A multi-perspective evaluation of an Indian knowledge-intensive firm. *Employee Relations*, 41(3), pp. 538–551, https://doi.org/10.1108/ER-09-2017-0219.

[30] Medina, R. and Medina, A., 2014. The project manager and the organisation's long-term competence goal. *International Journal of Project Management*, 32(8), pp. 1459–1470, https://doi.org/1

0.1016/j.ijproman.2014.02.011.

[31] Meredith, J. and Zwikael, O., 2019. When is a Project Successful? *IEEE Engineering Management Review*, 47(3), pp. 127–134, https://doi.org/10.1109/emr.2019.2928961.

[32] Mishra, P., Dangayach, G.S. and Mittal, M.L., 2011. An Ethical approach towards sustainable project Success. *Procedia - Social and Behavioral Sciences*, 25, pp. 338–344, https://doi.org/10.1016/j.sbspro.2011.10.552.

[33] Moe, N.B. and Dingsøyr, T., 2008. Scrum and team effectiveness: Theory and practice. In *Agile Processes in Software Engineering and Extreme Programming: 9th International Conference, XP 2008, Limerick, Ireland, June 10-14, 2008. Proceedings 9*. Springer Berlin Heidelberg. pp. 11-20.

[34] Moura, I., Dominguez, C. and Varajão, J., 2019. Information systems project teams: factors for high performance. Team Performance Management: An International Journal, 25(1/2), pp.69-83, https://doi.org/10.1108/TPM-03-2018-0022.

[35] Mueller, J., 2014. A specific knowledge culture: Cultural antecedents for knowledge sharing between project teams. *European Management Journal,* 32(2), pp.190-202, https://doi.org/10.1016/j.emj.2013.05.006.

[36] Nizma, C., Bangun, R., Benhur, B., Cahyoginarti, C., and Zuardi, M., 2024. The Role of Organizational Structure in Project Management. Jurnal Syntax Transformation. 5. pp.590-597. https://doi.org/10.46799/jst.v5i2.928.

[37] Orieno, O.H., Ndubuisi, N.L., Eyo-Udo, N.L., Ilojianya, V.I. and Biu, P.W., 2024. Sustainability in project management: A comprehensive review. World Journal of Advanced Research and Reviews. 21(01), p. 656–677, https://doi.org/10.30574/wjarr.2024.21.1.0060.

[38] Oseko, M., 2017. Knowledge Sharing and Creating Process in a Social Development Project: Developing a Model for Intra-Project Knowledge Management. *Open Journal of Social Sciences*, 5, pp.117-127. https://doi.org/10.4236/jss.2017.510011.

[39] Peters, T. and Waterman, R.H., 1982. In Search of Excellent: Simultaneous Loose-Tight Properties. *In Search of Excellent: Lessons from America's Best-Run Companies*.

[40] Project Management Institute, 2017. *A guide to the project management body of knowledge (PMBOK guide)* (6th ed.). Project Management Institute, Inc.

[41] Project Management Institute, 2017. Project Manager Competency Development Framework Project. PMI.

[42] Riege, A., 2005. Three-Dozen Knowledge-Sharing Barriers Managers Must Consider. Journal of Knowledge Management, 9, pp.18-35. https://doi.org/10.1108/13673270510602746.

[43] Rismansyah, R.A., Mohamad, H.A., Yuliani, Y. and Mansyah, R., 2022. Readiness for Organizational Change. Advances in Economics, *Business and Management Research*, volume 647.

[44] Rupčić, N., 2013. Cooperative Learning Business Partnerships and Knowledge Networks. *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.2232712.

[45] Santos, I.A.M., Barriga, G.D.C., Jugend, D. and Cauchick-Miguel, P.A., 2019. Organizational factors influencing project success: an assessment in the automotive industry. Production, 29, e20180108. https://doi.org/10.1590/0103-6513.20180108.

[46] Sebestyen, Z., 2017. Further Considerations in Project Success. *Procedia Engineering*, 196(June), pp. 571–577, https://doi.org/10.1016/j.proeng.2017.08.032.

[47] Shokory, S.M. and Suradi, N.R.M., 2018. A multilevel study of the impact of project manager's leadership on extra-role performance of project team members. In: *AIP Conference Proceedings*, 1940(1), pp. 020129, https://doi.org/10.1063/1.5028044.

[48] Silvius, G. and Schipper, R., 2014. Sustainability in project management: A literature review and impact analysis. *Social Business*, 4(1), pp. 63–96, https://doi.org/10.1362/204440814x13948909253866.

[49] Silvius, G. and Schipper, R., 2016. Exploring the relationship between sustainability and project success - conceptual model and expected relationships. *International Journal of Information Systems and Project Management*, 4(3), pp. 5–22, https://doi.org/10.12821/ijispm040301.

[50] Silvius, G. and Schipper, R., 2020. Sustainability Impact Assessment on the project level; A review of available instruments. The Journal of Modern Project Management, 8 (23), pp. 241–277. https://doi.org/10.19255/JMPM02313.

[51] Soares, I., Fernandes, G. and Santos, J.M., 2023. Sustainability in Project Management Practice: A Literature Review. 2023 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC), pp.1-9.

[52] Sundqvist, E., 2019. The Role of Project Managers as Improvement Agents in Project-Based Organizations. *Project Management Journal*, 50(3), pp. 376–390, https://doi.org/10.1177/8756972819832784.

[53] Tulembayev, A., Jumadilova, S., Adilova, A. and Seidaliyeva, D., 2019. Introducing project management system into enterprises of defense industry in Kazakhstan. Problems and Perspectives in Management, 17(2), pp.527-540.

[54] Wang, H., Bai, L., Huang, N., Du, Q. and Zhang, T., 2019. Social project culture: A new project management culture to promote the sustainable development of organizations. *Sustainability (Switzerland)*, 11(1), pp. 202-217, https://doi.org/10.3390/su11010202.

[55] Wei, Y. and Miraglia, S., 2017. Organizational culture and knowledge transfer in project-based organizations: Theoretical insights from a Chinese construction firm. *International Journal of Project Management*, 35(4), pp. 571–585, https://doi.org/10.1016/j.ijproman.2017.02.010.

[56] Zheng, J., Wu, G., Xie, H. and Xu, H., 2017. Ambidextrous leadership and sustainability-based project performance: The role of project culture. *Sustainability (Switzerland)*, 9(12), pp. 2336, https://doi.org/10.3390/su9122336.

[57] Zheng, T., 2017. A Literature Review on Knowledge Sharing. Open Journal of Social Sciences, 5, pp.51-58. https://doi.org/10.4236/jss.2017.53006.

[58] Zwikael, O. and Meredith, J.R., 2018. Who's who in the project zoo? The ten core project roles. *International Journal of Operations and Production Management*, 38(2), pp. 474–492, https://doi.org/10.1108/IJOPM-05-2017-0274.