

La cultura organizacional y transformación digital en la gestión de los proyectos de Tecnología de la Información: Un caso de estudio.

Organizational culture and digital transformation in the management of Information Technology projects: A case study.

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Resumen. El estudio analizó la influencia de la cultura organizacional y la transformación digital en la gestión de proyectos de tecnología de la información en la Superintendencia Nacional de Aduanas y de Administración Tributaria. El problema identificado reside en los desafíos para alinear estrategia, cultura organizacional y transformación digital en estos proyectos. La investigación destacó la importancia de aplicar buenas prácticas en dirección, calidad, gestión del tiempo y riesgos como elementos clave para alcanzar el éxito organizacional. Los esfuerzos se centraron en resaltar el papel crucial de la alta dirección y la infraestructura tecnológica como pilares para una gestión eficiente. La metodología utilizada fue cuantitativa, descriptiva y no correlacional, aplicando encuestas a 168 colaboradores del área de sistemas de información. Los resultados mostraron una influencia significativa de la cultura organizacional y la transformación digital en la eficiencia de la gestión de proyectos. El artículo incluye introducción, metodología, resultados, discusión y conclusiones.

Palabras Clave: Cultura organizacional, Transformación digital, Gestión de los proyectos de TI, Superintendencia Nacional de Aduanas y de Administración Tributaria.

Abstract: The study analyzed the influence of organizational culture and digital transformation on the management of information technology projects at the National Superintendency of Customs and Tax Administration. The identified problem lies in the challenges of aligning strategy, organizational culture, and digital transformation in these projects. The research highlighted the importance of applying best practices in leadership, quality, time management, and risk management as key elements to achieve organizational success. Efforts focused on emphasizing the crucial role of senior management and technological infrastructure as pillars for efficient management. The methodology used was quantitative, descriptive, and non-correlational, applying surveys to 168 employees from the information systems department. The results showed a significant influence of organizational culture and digital transformation on the efficiency of project management. The article includes an introduction, methodology, results, discussion, and conclusions.

Keywords: Organizational culture, Digital transformation, IT project management, National Superintendency of Customs and Tax Administration.

1. INTRODUCTION

Today, organizations face the urgent need to adopt digital technologies not only to optimize processes, but also to reinvest their business models and maintain a competitive advantage in an increasingly digitized environment. Digital transformation (DT) involves a comprehensive reorientation of the organization, not only in terms of technology, but also in terms of its organizational culture (OC), its processes and the way it interacts with customers. The reinvention of products and services, as well as the transition from multiple channels to omnichannel, are key aspects of this transformation, which seeks to provide a more consistent and efficient customer experience. This process is particularly relevant for entities such as the National Superintendency of Customs and Tax Administration (SUNAT), which plays a crucial role in the management of tax collection and compliance in Peru.

According to the Standish Group (2015), an information technology (IT) project is considered successful if it meets six key attributes: on-time delivery, on-budget, and meeting objectives, deliverables, results, value, and customer satisfaction. However, reality shows that a large proportion of these projects face significant challenges, such as delays and cost overruns, placing many projects in the "Challenged" category, as classified by the Standish Group. These findings, derived from years of research on failed IT projects, reflect the complexity and risks inherent in implementing technology solutions in large-scale organizations.

Adapting to a changing digital environment involves not only the use of new technologies, but also a reconfiguration of OC. In this context, leaders must manage cultural and organizational change effectively to ensure that DT is not only successful in technological terms, but also effectively embraced by all involved. Schein (2010) has highlighted the importance of OC as a decisive factor in change management, highlighting how cultural dynamics vary as an organization moves through its life cycle, from its founding to its maturity.

Moreover, DT is not an isolated process, but is part of a global trend that is part of the fourth industrial revolution. This revolution, characterized by the convergence of digital, physical and biological technologies, is redefining business models and organizational strategies in a variety of sectors. In this sense, IT project management at SUNAT must integrate not only the most advanced technological tools, but also a flexible and adaptable CO that promotes innovation and efficiency in public management.

This article examines how OC influences the management of IT projects at SUNAT and how DT can be a driver of change within the organization. SUNAT's ability to effectively manage DT will depend on its ability to align its OC with new technology

requirements, improving the management of its IT projects and ensuring that the expected results are achieved.

From this, it is important to note that OC plays a fundamental role in the long-term performance and success of organizations. According to Carro et al. (2017), OC is closely related to business continuity, highlighting the importance of three key dimensions: strategy, social and institutional. These dimensions are essential to ensure an effective integration between the organization's internal values and its business objectives, allowing the company not only to survive, but also to thrive in a competitive environment.

According to Robbins and Judge (2015), this culture can be defined as a system of meanings shared by the members of an organization, which allows it to be differentiated from others. This system is built on a set of fundamental characteristics that encompass several key aspects, such as innovation, risk-taking, attention to detail, focus on results, focus on people, teamwork, competitiveness and stability. These characteristics form the basis on which employees operate and collaborate, largely determining how decisions are made and objectives are achieved within the organization.

Chiavenato (2015) expands this definition by considering OC as a set of habits, values, norms, beliefs, expectations and attitudes shared among organizational members. These principles guide employee interactions and behaviors, ensuring consistency and alignment with organizational objectives. Thus, OC not only defines how members of the organization interact, but also how internal and external challenges are perceived and addressed, contributing significantly to organizational cohesion.

In this context, OC not only facilitates internal alignment, but also influences the way the organization relates to its environment and faces market challenges. This is especially important in a business environment that demands adaptability, innovation and a constant focus on the well-being of both employees and customers. OC then becomes a key pillar for long-term success and sustainability.

In the context of small and medium-sized enterprises (SMEs), Salas et al. (2017) highlight how OC such as "Clan" and "Adhocratic" can have a positive impact on organizational performance, while other cultures such as "Hierarchical" and "Market" can be detrimental. This finding highlights the importance of a flexible and collaborative culture in the success of SMEs, which rely heavily on creativity, adaptability and operational efficiency.

On the other hand, studies such as those by Gutiérrez (2016), Alarcón et al. (2018), Angulo (2022), Pérez (2023), and Hernández (2022), highlight that employee motivation and job performance are directly influenced by the relationship between OC and employee

engagement. When employees feel aligned with the organization's values and objectives, they experience greater job satisfaction, which in turn improves productivity and overall company performance.

Hernández (2022) reinforces this perspective, highlighting that the organizational climate, values, norms, symbols and internal philosophy are essential elements that shape organizational commitment. According to Pérez (2023), OC also plays a key role in the creation of value propositions for society, fostering positive interpersonal relationships that, in turn, contribute to the individual performance and success of employees.

In addition, studies such as Segovia (2019) indicate that OC is linked to competency-based management of personnel, an essential tool to ensure that employees develop the necessary skills to adapt to the challenges of a constantly changing business environment. The direct relationship between OC and employee productivity has been confirmed by Ramos (2022), who points out that a strong culture that is well aligned with organizational objectives can significantly improve operating results.

In turn, DT emerges as a phenomenon that is redefining organizations and their cultures. Schallmo and Williams (2018) highlight that DT is a continuous process that involves the adoption of new technologies and business models, which not only increases profitability, but also generates added value for companies. Halpern and Valderrama (2018) point out that leading DT requires high organizational adaptability, integrating emerging technologies and developing digital strategies that are aligned with business objectives.

In this context, the adoption of digitalization has also been linked to social inclusion, an aspect highlighted by Aguila (2023), who points out that digital services, digital skills and technological infrastructure are key elements for promoting greater social inclusion and equity. This is also reflected in the work of Celi (2022), who stresses the need to generate value and digital experience for users through appropriate structured communication.

Finally, DT not only affects organizational structures, but also drives the use of agile methodologies. Milla (2020) and Pineda (2023) suggest that the combination of digitalization and agile methodologies improves efficiency and adaptability in organizational processes. However, as Pola (2021) points out, one of the biggest challenges of DT is the cultural change necessary for its success, as organizational resistances can become significant barriers.

Understanding the interplay between OC and DT is therefore essential for organizations seeking to remain competitive and adapted to new market demands. The key is to create a culture that not only facilitates the adoption of new technologies, but also drives innovation, engagement and productivity at all levels of the organization.

In this context, DT, driven by the fourth industrial revolution (Industry 4.0), seeks to take advantage of technological trends to create new strategic opportunities for businesses, integrating digital tools into processes, products and services with the aim of improving organizational efficiency and effectiveness (Williams, 2021). This transformation requires not only the adoption of advanced technologies, but also a comprehensive approach that involves the entire organization, with a particular emphasis on senior management to train staff and redefine business processes. To achieve effective DT, it is necessary to build intelligent platforms that generate value for both the organization and its customers.

Chiu and Reyes (2018) point out that the DT of organizations takes place through three stages: the transformation of business models toward digital business, the transformation of organizational value, and the redefinition of value propositions. These processes are essential for organizations to adapt their operations to the new demands of the digital market. DT is based on four key elements of any organization: 1) Culture, 2) Insights, 3) Organization, and 4) Technology. However, the authors warn that there is no single formula to ensure the success of this transformation; each organization must adapt these elements according to its particularities.

In addition to structural transformation, the adoption of emerging technologies plays a key role in digitization. According to Sebastian et al. (2017), emerging technologies such as blockchain, artificial intelligence, cybersecurity, autonomous devices, and the Internet of Things (IoT), among others, are enabling new ways of doing business. An example of this is the concept of "data lake", which allows storing large volumes of data in its original format, without the need for pre-processing, which facilitates its subsequent analysis.

The use of technologies such as Big Data, Artificial Intelligence, collaborative robotics, and 3D printing are examples of key enablers for business DT. These technologies make it possible to automate processes, improve decision making, and foster innovation within organizations. By incorporating these tools, companies can better adapt to changes and new market demands, fostering competitiveness and growth in an increasingly digitized global environment.

The integration of digital and emerging technologies is essential for organizational evolution. According to Sebastian et al. (2017), DT not only involves the adoption of technologies, but also requires a profound change in organizational structure, business strategies, technological infrastructure, and work methods. In this context, it has been pointed out that digitization, although related, differs from DT because the latter requires a deeper and more disruptive change in the way organizations operate. This implies a

rearrangement not only of their technological resources, but also of their culture and their forms of interaction and production.

2. METHODOLOGY OR MATERIALS AND METHODS

The research approach is quantitative, which implies a systematic and empirical analysis of the numerical data collected in order to establish patterns or relationships between the study variables. According to Hernández and Mendoza (2008), quantitative studies are characterized by the application of procedures that allow obtaining objective and detailed information about a phenomenon, facilitating the interpretation of the data through statistical methods. In this case, the research seeks to determine how OC and DT influence the management of IT projects at SUNAT, using numerical data obtained from structured surveys applied to a representative sample of the population.

The research design is non-experimental and cross-sectional. Being a non-experimental design, the variables studied are not manipulated, but their behavior is observed as it occurs in their natural environment. In this case, the research aims to observe the relationship between OC, DT and IT project management without intervening in the internal processes of the organization. Moreover, being a cross-sectional design, data collection is carried out at a single point in time, which allows us to obtain a clear view of the state of the variables at the time of the research, without the need for long-term follow-up. This type of design is in line with the nature of the study, which seeks to explore and describe the relationships between variables without establishing a direct causal relationship, as indicated by Hernández and Mendoza (2008).

The unit of analysis is made up of employees in the information systems area of SUNAT, who actively participate in IT projects. This group includes both certified personnel in project management and those not certified, allowing a broad analysis of the perceptions of those involved in these processes. As for the study population, it is composed of 300 collaborators from the areas of Systems Development, Systems Quality, IT operations and the PMO (Project Management Office) of SUNAT. This population is relevant because the members of these areas are the main actors involved in the execution of technological projects within the organization.

The sample size was determined by probability sampling, using the standard formula for calculating sample size in descriptive and correlational studies (Hernández, Fernández & Baptista, 2016). The formula applied allowed obtaining a representative sample of 168 participants, ensuring that all members of the population had the same probability of being selected for the study.

The survey technique, a widely recognized method in quantitative research, was used for

data collection. The survey allows detailed information to be obtained from the participants through structured questionnaires, which were applied individually. According to Vara (2010), the survey is an effective tool for collecting specific data on a given topic, since it provides direct information from the participants without the intervention of the researchers during the application of the questionnaires.

In this case, three structured questionnaires were designed, each focused on one of the key variables of the study: OC, DT and IT project management. Each questionnaire was composed of multiple-choice questions, with a 5-point Likert-type scale, which allowed measuring the degree of agreement of the participants with respect to different statements on the dimensions of each variable. Each questionnaire was applied individually to the collaborators of the mentioned areas, thus allowing the collection of quantitative data on their perceptions and experiences.

Finally, data analysis was performed using descriptive and inferential statistical procedures. To analyze the information collected, measures such as mean, median, standard deviations, variances, ranges and mode were used. These procedures made it possible to obtain a clear view of the employees' perceptions of OC, DT and IT project management, as well as to identify possible patterns and relationships between the variables studied.

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The unit of analysis is made up of employees in the information systems area of SUNAT, who actively participate in IT projects. This group includes both certified and non-certified project management personnel, allowing for a broad analysis of the perceptions of those involved in these processes.

As for the study population (see Table 1), it is composed of 300 collaborators from the areas of Systems Development, Systems Quality, Information Technology Operations and the PMO (Project Management Office) of SUNAT. This population is relevant because the members of these areas are the main actors involved in the execution of technological projects within the organization.

Table 1.

Study population

Population Characteristics	Number of Collaborators
Systems Development	100
Systems Quality	80
IT Operations	70
PMO	50
Total	300

The sample size (see Table 2) was determined by probability sampling, using the following formula for calculating sample size in descriptive and correlational studies (Hernández, Fernández & Baptista, 2016):

- **N:** Sample size
- **Z:** z-value corresponding to the confidence level (1.96 for 95%).
- **p:** Expected proportion (0.5 in this case)
- **e:** Margin of error (5%)

This procedure ensured that all members of the population had the same probability of being selected for the study. The sample consisted of 168 collaborators (see Table 2).

Table 2.

Sample

Parameter	Value
Confidence level	95%
Margin of error	5%
Sample size	168 participants

For data collection, the survey technique was used, a widely recognized method in

quantitative research. The survey allows detailed information to be obtained from the participants through structured questionnaires, which were applied individually. According to Vara (2010), the survey is an effective tool for collecting specific data on a given topic, since it provides direct information from the participants without the intervention of the researchers during the application of the questionnaires.

In this case, three structured questionnaires were designed (see Table 3), each focused on one of the key variables of the study: OC, DT and IT project management.

Table 3.

Variables, dimensions and instruments applied

Variable	Dimensions	Instrument
Organizational Culture	Leadership, Structure	Structured questionnaire
Digital Transformation	Digital culture	Structured questionnaire
IT project management	Planning, Execution	Structured questionnaire

Data analysis was performed using descriptive and inferential statistical procedures. It was evaluated whether the data met the parametric assumptions (normality and homogeneity of variances), which determined the application of tests such as Spearman's correlation coefficient.

3. RESULTS Y DISCUSSION

This section presents the findings derived from the analysis of key variables related to OC, DT and IT project management at SUNAT. The results provide a detailed view of how employees perceive the efficiency and effectiveness of these aspects within the organization. Through the answers obtained in the surveys, trends, strengths and areas for improvement are identified to understand the impact of these factors in the execution of IT projects and adaptation to DT.

The analysis of the OC variable shows that the vast majority of participants (92.6%) perceive OC at SUNAT as "good", while a small percentage (7.4%) consider it "fair" (see Table 4). This result indicates that, from the employees' perspective, the organization has practices, values and a work environment that support and promote efficient performance, which is fundamental for the successful management of IT projects. However, the remaining percentage, although low, could reflect specific areas of improvement that could further optimize organizational processes and contribute to a total alignment towards DT's strategic objectives.

Table 4.

Descriptive results of the Organizational Culture variable.

Organizational culture					
		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Regular	13	7,4	7,4	7,4
	Good	162	92,6	92,6	100,0
	Total	175	100,0	100,0	

Regarding the OC dimensions, the results for the organizational structure are equally positive, with 93.7% of employees rating the structure as "efficient". Only 6.3% considered it "regular". These results reflect that the distribution of roles and responsibilities within SUNAT facilitates the execution of IT projects, promoting fluid communication and effective decision making. Although the majority perceives the organizational structure as efficient, the small proportion of regular opinions suggests that there are specific aspects that could be improved to optimize interdepartmental coordination and agility in decision making.

In the organizational function dimension, a similar trend is observed, with 93.7% of the participants considering the organizational functions "efficient" and 6.3% evaluating them as "regular". This reflects that the functions within the organization are well defined and aligned with the strategic objectives. Organizational function efficiency is essential to the success of IT projects, and the small proportion of regular opinions could point to the need to review certain processes to ensure their maximum effectiveness.

On the other hand, the analysis of the DT variable reveals that 91.4% of SUNAT employees perceive this aspect as "efficient", while 8.6% rate it as "regular" (See Table 5). This result reflects that the organization has effectively implemented digital tools, technologies and processes that support the management of IT projects. These results suggest that DT efforts are aligned with strategic objectives and have had a positive impact on organizational performance. However, there is a need to strengthen technology integration, training or adaptation to digital change to maximize project management benefits. These data confirm significant progress, although with opportunities for improvement to achieve fully effective DT.

Table 5.

Descriptive results of the digital transformation variable.

Digital transformation					
		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Regular	15	8,6	8,6	8,6
	Efficient	160	91,4	91,4	100,0
	Total	175	100,0	100,0	

In terms of the dimensions of DT, the involvement of top management is perceived as

"efficient" by 93.7% of employees, while 6.3% rate it as "regular". This result highlights the involvement of top management in the planning and supervision of IT projects. The small percentage that perceives this involvement as "regular" could point to the need to improve visibility or communication about leadership actions, which could strengthen the support of top management at all organizational levels.

In the technological infrastructure dimension, 94.3% of the participants consider SUNAT's technological infrastructure to be "efficient", while 5.7% evaluate it as "regular". This result suggests that the organization has adequate and modern technological resources to support the management of IT projects, although the small proportion that considers the infrastructure as "regular" may point to areas that require updating or improvement to maintain technological competitiveness.

The analysis of the IT project management variable shows that 93.7% of SUNAT employees perceive this management as "efficient", while 6.3% rate it as "regular" (See Table 6). This result shows that the organization has well-defined practices, methodologies and approaches for planning, executing and controlling IT projects, ensuring performance aligned with strategic objectives. The high perception of efficiency indicates that projects are managed with a significant level of effectiveness and goal achievement. However, the percentage that considers management as "fair" could point to specific challenges, such as the need to optimize resources, improve interdepartmental communication or reinforce project management training, aspects that could further improve performance in this area.

Table 6.

Variable descriptive results IT project management.

Management of information technology projects					
		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Regular	11	6,3	6,3	6,3
	Efficient	164	93,7	93,7	100,0
	Total	175	100,0	100,0	

In the IT project management dimensions, the management is perceived as "efficient" by 94.3% of the employees, while 5.7% rate it as "regular". This suggests that IT project management is effective, providing clear guidance and aligned with strategic objectives. However, the small proportion that perceives management as "fair" could indicate the need to improve aspects such as communication or decision making to optimize management effectiveness.

In the final product quality dimension, 94.3% of employees rate the quality of the final

products of IT projects as "efficient", and only 5.7% rate it as "fair". This reflects the fact that most projects deliver high quality end products that meet the expected standards. However, the 5.7% who rate quality as "fair" could point to specific areas where post-implementation testing and evaluation processes could be improved to ensure even more effective deliverables.

In the time dimension, 92.6% of employees perceive time management in IT projects as "efficient", while 7.4% consider it "regular". This result suggests that most projects are executed within the established deadlines, reflecting adequate planning and the organization's ability to meet schedules. However, the 7.4% who consider time management as "fair" could point to areas for improvement in the estimation of deadlines and coordination between teams to avoid delays and ensure timely completion of projects.

Finally, regarding the inferential results, Spearman's correlation between OC and DT and IT project management shows a correlation coefficient of 0.790, with a significance value of 0.000, indicating that there is a significant positive correlation between these variables at the 99% confidence level ($p < 0.01$). This result suggests that as OC and DT processes are perceived as more efficient, more efficient management of IT projects is also observed at SUNAT. The strong and positive correlation indicates that both factors are significantly related and that an improvement in OC and DT is likely to positively impact IT project management.

In the development of this research, the correlation between OC, DT and IT project management at SUNAT was explored, highlighting the importance of these factors in improving organizational efficiency. The results obtained were contrasted with various theories and previous studies, which allowed us to situate this work within the framework of the existing literature and to provide new knowledge on the interaction of these factors in the context of a Peruvian public institution.

Regarding OC, the positive perception of by 92.6% of the collaborators coincides with that established by Carro et al. (2017), who state that a solid OC is fundamental to ensure business continuity. This result reflects the perception of an efficient organizational environment, which is closely linked to SUNAT's operational stability and effectiveness. Similarly, studies by Salas Arbeláez et al. (2017) support that a "Clan" and "Adhocratic" type OC can generate positive effects on organizational performance, which could explain the positive perception of collaborators regarding SUNAT's culture, promoting cooperation and dynamism.

Likewise, Gutiérrez (2016) and Pérez Ruibal (2023) suggest that a strong link between OC and commitment to the institution's mission improves employee motivation and performance. In

this context, high levels of satisfaction with OC at SUNAT could be facilitating greater motivation and, therefore, superior performance, which is reflected in the perception of an efficient culture by workers.

On the other hand, 91.4% of the collaborators consider DT efficient at SUNAT, which coincides with the studies of Schallmon and Williams (2018), who point out that DT is a continuous and gradual process that generates added value by integrating new technologies. In this case, the effective implementation of new technologies in SUNAT has been perceived positively, suggesting that the institution is advancing in its digitization process. In addition, Halpern and Valderrama (2018) highlight that DT does not only imply adapting to changes but leading them. This trend is also observed in SUNAT, which seems not only to adopt emerging technologies, but also to proactively adapt to the challenges they imply.

The management of IT projects at SUNAT was also evaluated positively, with 93.7% of employees considering it efficient. This is consistent with the findings of Carmona Arbañil (2023), who states that the adoption of DT improves productivity and service quality. The perception of efficient management of technological projects at SUNAT is aligned with the positive impact it has on service quality and internal productivity. However, Schreckling & Steiger (2017) suggest that organizations should be flexible in project management, which could explain the responses that perceive IT management as "regular", suggesting areas for improvement in the adoption of agile methodologies or staff training in new technological tools.

On the other hand, the results of this research are consistent with the findings of previous studies on the relationship between OC and operational efficiency. Huisa Núñez (2021) and Mosqueira Rodríguez (2021) suggest that strong OC is closely linked to service quality, which is reflected in the results obtained at SUNAT, where OC and IT project management are perceived as efficient. Regarding DT, the results obtained are consistent with the research of Aguila Vargas (2023), who highlight the importance of technological infrastructure and digital competencies in the improvement of public services, which is reflected in the perception of DT efficiency at SUNAT.

Regarding OC and IT project management, the results show a significant positive correlation between the variables with a correlation coefficient of 0.742, $p < 0.01$, which supports the theory of Carro et al. (2017), which states that a strong OC is essential for the success of projects within an organization. This finding is also supported by the work of Salas Arbeláez et al. (2017), who find that a positive OC contributes to organizational performance. In this case, an efficient OC seems to be linked to successful management of IT projects at SUNAT, improving both productivity and service quality.

Regarding DT and IT project management, there is a significant positive correlation with a correlation coefficient of 0.846, $p < 0.01$, which highlights the importance of digital processes in improving organizational efficiency. This result reinforces the view of Schallmon and Williams (2018), who emphasize that DT is a continuous process that generates added value, which translates into improved IT project management at SUNAT. Likewise, Halpern and Valderrama (2018) argue that DT is key to ensure organizational competitiveness and efficiency, which is reflected in the results obtained, where TD contributes significantly to the improvement of IT projects.

Finally, the correlation observed between OC, DT and IT project management with a correlation coefficient of 0.790, $p < 0.01$ highlights the interaction of both factors as key elements for the improvement of project management at SUNAT. This finding is consistent with the studies of Carro et al. (2017) and Schreckling & Steiger (2017), who indicate that both OC and DT are fundamental for innovation and continuous improvement in business processes. In this context, OC seems to facilitate the adoption of emerging technologies and the success of IT projects, which reinforces the importance of integrating both factors to improve organizational efficiency.

The results of this research suggest that, in order to improve the management of IT projects at SUNAT, it is essential to strengthen both OC and the implementation of DT strategies. It is essential to promote an organizational environment that values technological innovation and is flexible in the face of change, which will favor the adoption of new technologies and improve efficiency in project management. Likewise, it is recommended to reinforce the digital skills training strategy for staff, as suggested by Halpern and Valderrama (2018), which would not only optimize the integration of emerging technologies, but also contribute to greater transparency and efficiency in the provision of public services.

4. CONCLUSIONS

The research has shown that both OC and DT have a significant influence on the management of IT projects at SUNAT. The results show a strong positive correlation between these factors and the efficient management of IT projects. As strong OC and more efficient DT processes are perceived, a substantial improvement in the execution of IT projects is observed. These findings underscore the importance of strengthening both aspects to optimize the management of technology projects, which will contribute to organizational success and the improvement of the public services offered by SUNAT.

The research results indicate that an efficient OC has a positive and significant impact on the management of IT projects at SUNAT. Employees who perceive a strong OC, characterized by values, commitment and cohesion, are more likely to actively participate in technology projects and

contribute to their success. The close relationship between organizational culture and IT project management highlights the need to strengthen the organization's values and internal structure to ensure the success of technology projects.

DT has been identified as a key factor for improvement in the management of IT projects at SUNAT. The results show that as SUNAT implements more efficient digitalization processes, IT project management also experiences substantial improvements. The adoption of emerging technologies and the continuous improvement of digital systems contribute to greater transparency, efficiency and speed in the execution of projects. These findings underscore the importance of continuing to drive DT within SUNAT to optimize technology project management and increase organizational competitiveness.

Impact of Organizational Culture and Digital Transformation on IT Project Management:

The research has confirmed that both OC and DT significantly influence the management of IT projects at SUNAT. The positive correlation between these variables and efficiency in technology project management underscores that the perception of a strong OC and well-defined DT processes are determining factors for organizational success. The observed statistical relationship demonstrates that technology project management can be optimized by strengthening these organizational aspects.

Effects of a solid Organizational Culture:

It was identified that an efficient OC, characterized by shared values, commitment and internal cohesion, has a positive impact on the active participation of employees in IT projects. This reinforces the importance of aligning organizational values with technological goals to foster a collaborative and results-oriented environment. In addition, the study highlights that strengthening CO can positively impact innovation and the adoption of agile practices in project management.

Relevance of Digital Transformation in IT projects:

DT stands out as an essential element to improve the processes and results of technological projects. The evidence suggests that, as SUNAT advances in the implementation of emerging technologies and in the digitalization of its processes, efficiency, transparency and speed in the execution of projects increase. This finding highlights the need to continue investing in technological infrastructure and employee training to consolidate progress towards a more agile and effective management.

Strategic recommendations:

The research findings indicate that successful IT project management requires an integrated approach that combines OC strengthening with an adequate DT strategy. It is recommended to implement training programs focused on organizational values and digital competencies, as well as to promote a culture of innovation and continuous improvement at all levels of the organization. This will not only optimize the management of technological projects but will also increase employee satisfaction and the services offered to citizens.

Contribution to organizational success and public service improvement:

Ultimately, the results of the study underline that the strengthening of OC and the implementation of DT strategies not only benefit internal project management, but also contribute to the improvement of public services provided by SUNAT. These advances translate into greater transparency, efficiency and effectiveness in operations, strengthening citizens' trust in public sector technological services.

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CONFLICT OF INTEREST.

The Authors declare that there is no conflict of interest or whatever is appropriate.

AUTHORSHIP CONTRIBUTION.

In accordance with the internationally established taxonomy for assigning credits to authors of scientific articles (<https://credit.niso.org/>), the authors declare their contributions in the following matrix:

	Justo Pérez,	Ciro Roldríguez	Cayo León
Actively participate in			
Conceptualisation.	X		
Formal análisis.	X	X	X
Acquisition of funding.	X		
Research.	X		
Mehtodology.	X		X
Project management.	X	X	
Resources.	X		
Writing – original draft.	X	X	X
Writing – reviewing and editing.	X	X	X
Discussion of the results.	X	X	X
Review and approval of the final versión of the work.	X	X	X

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