ISSN: 2230-9926

Available online at http://www.journalijdr.com

IJDR

International Journal of Development Research
Vol. 16, Issue, 10, pp.71130-71134, October, 2026
https://doi.org/10.37118/ijdr.31266.10.2026



RESEARCH ARTICLE OPEN ACCESS

THE IMPACT OF PROJECT MANAGER LEADERSHIP PROFILE ON PROJECT PROFITABILITY GAIN IN COMPLEX ERP IMPLEMENTATIONS

***Dr. Jair da Anunciação de Azevedo Júnior, BSc. Renata Cristina Xavier de Araújo**

PUCRS — Pontifícia Universidade Católica do Rio Grande do Sul

ARTICLE INFO

Article History:

Received 24th July, 2026
Received in revised form
21st August, 2026
Accepted 23rd September, 2026
Published online 31st October, 2026

Key Words:

Project Management, Leadership Profile, DiSC, Situational Leadership, Project Profitability, ERP Projects, Organizational Learning.

****Corresponding author:***
Dr. Jair da Anunciação de Azevedo Júnior

ABSTRACT

This study investigates whether project profitability gains differ by the project manager's management profile in complex ERP (Enterprise Resource Planning) implementations. Based on doctoral research conducted at IPEN – Instituto de Pesquisas Energéticas e Nucleares, associated with the University of São Paulo (USP), this article focuses on hypothesis H1.1: There is a difference in project profitability gain according to the management profile of the project manager. A large multinational ERP company headquartered in Germany served as the research field. The sample comprised 3,449 project observations from 98 project managers distributed across 317 strategic projects (2014–2018). Leadership profiles were assessed using the Dimensional Leadership Questionnaire (DLQ) based on the DiSC model (Dominance, Influence, Steadiness, Conformity). One-way ANOVA, followed by Tukey's HSD post hoc test, confirmed statistically significant differences among all profile pairs ($p < 0.001$). The Influence (I) profile consistently achieved the highest average profitability gain, followed by Dominance (D), then Steadiness (S). These findings contribute to the understanding of how leadership style affects financial performance in complex projects and offer practical implications for project manager selection and development in knowledge-intensive organizations.

Copyright©2026, Jair da Anunciação de Azevedo Júnior and Renata Cristina Xavier de Araújo. *This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.*

Citation: Dr. Jair da Anunciação de Azevedo Júnior, BSc. Renata Cristina Xavier de Araújo, 2026. "The impact of project manager leadership profile on project profitability gain in complex erp implementations.". *International Journal of Development Research*, 16, (10), 71130-71134.

INTRODUCTION

Projects are defined as sets of concatenated tasks that must together achieve an objective within a given period (PMI, 2013; PMI, 2021; Kerzner, 2001). Regardless of the nature of the deliverables — processes, products, or services — the objective is always to effect change within the organization. In this scenario, the project manager plays a central role in ensuring that organizational objectives are met within the constraints of scope, time, and cost. Complex projects, such as ERP (Enterprise Resource Planning) implementations, represent a particular challenge for project managers. These projects involve high organizational and technological complexity, multiple stakeholders, large financial volumes, and tight deadlines (Williams, 1999; Kumar & Gupta, 2012). Research by PMI (2008) on ERP projects found that scope management (79%), cost management (69%), and risk management (56%) were the dimensions most frequently addressed in project management methodology. Despite this recognized complexity, there is still a significant gap in methods for evaluating the efficiency and effectiveness of management styles and their impact on the profitability of complex projects (Azevedo Júnior, 2020). Botter et al. (2009) argue that incorporating the decision-maker's profile into the management model enables the selection of the most suitable decisions based on the manager's management style, which is more appropriate than adopting a static implementation methodology.

Hartmann et al. (2010) argued that leadership is determinant in the use of performance measurement and that a specific combination of leadership styles and performance measures implies key factors for project success. Abernethy et al. (2010) demonstrated that leadership style contributes to explaining choices related to the project management system, influencing planning, control, and performance measurement stages. The leadership dimension has been studied extensively in organizational behavior (Hersey & Blanchard, 1986; Blanchard et al., 1993), but its connection to project financial performance — specifically to profitability gain in complex ERP implementations — remains underexplored empirically. This gap motivates the present study, which directly tests hypothesis H1.1: There is a difference in project profitability gains according to the project manager's management profile.

THEORETICAL FRAMEWORK

The Project Manager and Core Competencies: For Archibald (2003, p. 99), the effectiveness of a project strongly depends on its manager — specifically on the manager's skills to work in a not always structured relationship with other managers, to integrate the efforts of many people, and to resolve their conflicts. Le Bussonnais (2003, p. 100) suggests that the role of the project manager comprises five areas of competency: (1) mastery of project management

methods and tools; (2) dealing with people and teams; (3) technical proficiency; (4) business knowledge and basic administration; and (5) integration. Omidvar et al. (2011) note that the competencies of a project manager are managerial and technical in nature, encompassing the ability to develop schedules, control costs, conduct requirements analysis, demonstrate organization, and exercise agility in decision-making, risk calculation vision, team inspiration, detailed planning, and flexibility for strategic realignment. More recent studies corroborate and extend this view: Irfan et al. (2021) demonstrated that project manager competencies are significant predictors of public sector project success, and Moradi et al. (2020) identified collaborative competencies — including communication, relationship management, and adaptive leadership — as particularly critical in complex, multi-stakeholder project environments. Waxer (2012) argues that there is no ideal profile for a project manager; however, the manager's profile must be identified in relation to the company and project environment, adapting the principal required competencies accordingly.

Decision-Making Models: Organizational decisions are made by individuals — such as project managers — for organizational purposes (Barnard, 1938). Simon (2009) and Mintzberg et al. (1976) proposed similar models of decision-making composed of three main phases (identification, development, and selection) and seven decision routines that do not necessarily occur sequentially and may be repeated. Klein's (1999) Recognition-Primed Decision (RPD) model describes how decision-makers size up the situation to identify a course of action and evaluate it through mental simulation rather than formal analysis. Experienced decision-makers tend to find the first workable option rather than searching for the optimal one. The decision-maker's behavioral profile directly influences the type of projection they will make, and as a result the nature of the decision itself may differ, with different consequences and management efforts for the project. This connection between leadership profile and decision-making underpins Hypothesis H1.1.

Situational Leadership and the DiSC Model: The Situational Leadership Theory (SLT) of Hersey and Blanchard (1986) describes four leadership behavior sets resulting from combinations of high and low levels of supporting behaviors and directing behaviors. The Situational Leadership II (SLII) theory (Blanchard et al., 1985; 1993) is an evolution that proposes leadership styles in a prescriptive manner: any style may have merit depending on the diagnosis of the situation. Unlike other classificatory theories (Blake & Mouton, 1981) that defend one management style as better or worse, in SLII there is no single best style. The DiSC model (Dominance, Influence, Steadiness, and Conformity) provides a common language that people can use to better understand themselves and adapt their behavior to others' (Blanchard et al., 2013; Ahmad et al., 2021). Figure 1 illustratestheDiSCquadrant model.

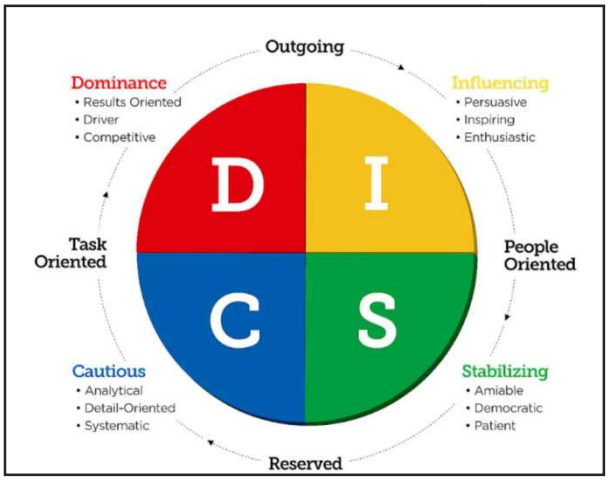


Figure 1: DiSC Leadership Profile Model (Source: Blanchard et al., 2013)

Once the leadership profile of a given individual has been diagnosed, it is possible to predict their behavioral style of decision-making for each situation:

A decision-maker with a D (Dominance) style is motivated by victory, competition, and success. They prioritize accepting challenges, taking action, and achieving immediate results. They are direct, demanding, vigorous, strong-willed, motivated, determined, fast-moving, and self-confident, but may be limited by a lack of concern for others and impatience (Blanchard et al., 2013). A decision-maker with an I (Influence) style is motivated by social recognition, group activities, and relationships. They are convincing, magnetic, enthusiastic, warm, confident, and optimistic, prioritizing collaboration and expressing enthusiasm. They may be limited by being impulsive and lacking follow-through (Blanchard et al., 2013).
A decision-maker with an S (Steadiness) style is motivated by cooperation, opportunities to help, and sincere appreciation. They prioritize giving support, collaborating, and maintaining stability. They are calm, patient, predictable, and consistent, but may be limited by indecisiveness and a tendency to avoid change (Blanchard et al., 2013).

METHODOLOGY

Research Nature and Design: This research is quantitative in nature, with the objective of formulating and testing a theory about the phenomenon under study (Creswell, 2008). The study is characterized as exploratory in scope — no previous study was found that addressed the specific hypotheses examined — and correlational, insofar as it evaluates the existence of relationships among the variables studied (Sampieri et al., 2006). The research followed a hypothetical-deductive approach. All statistical tests were conducted in R (R Core Team, 2013) using RStudio (Verzani, 2011).

Research Hypothesis

H1.1: There is a difference in project profitability gain according to the management profile of the project manager: This hypothesis is grounded in Abernethy et al. (2010), who showed leadership style influences planning and performance measurement; Hartmann et al. (2010), who argued leadership style affects work outcomes through performance measures; and Narbaev & De Marco (2017), who showed risk assessment decisions linked to leadership profile directly affect project cost outcomes. Profitability gain (G_R) is defined as the deviation between final (actual) profitability and the initially budgeted profitability (baseline), expressed in percentage points (pp):

$$G_R = Rent_f - Rent_0$$

Positive G_R values indicate the project exceeded its initial profitability target; negative values indicate underperformance.

Population Delimitation and Sample: The study considered completed projects as the unit of analysis. Templeton et al. (2002) argue that larger, knowledge-based companies demonstrate better structure for organizational learning. Antunes and Pinheiro (2019) further established that knowledge management, organizational learning, and memory are interdependent processes that reinforce each other in knowledge-intensive organizations, and Kordab et al. (2020) empirically confirmed that organizational learning mediated by knowledge management practices is a significant driver of sustainable organizational performance. The application of the model was carried out in a large IT multinational corporation headquartered in Germany — responsible for the world's largest ERP software — cited as a source of best practices in complex business process management. The sample was defined as non-probabilistic (Creswell, 2007). The projects constituting the unit of analysis were completed between 2014 and 2018, with a minimum budget of one million euros, automatically classifying them as strategic and high-risk in the studied company.

Sample Description — Leadership Profiles: A total of 106 project managers participated in the DiSC leadership profile mapping using the Dimensional Leadership Questionnaire (DLQ), developed by Bass and Avolio (1985) and revised in subsequent editions (Howell & Avolio, 1993; Antonakis et al., 2003). Of these, 98 project managers used the organizational learning knowledge base and are included in the final dataset. The global character of the study is evidenced by the distribution of project managers across 15 countries. Figure 2 shows the quantity of project managers per country.

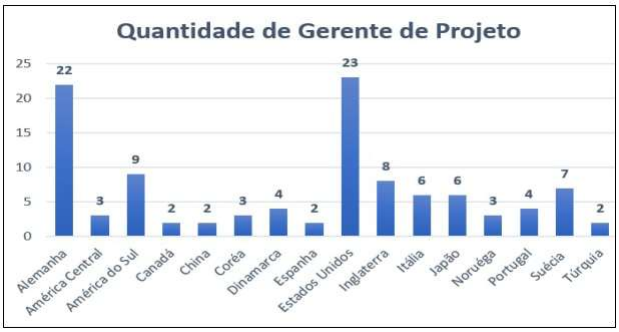


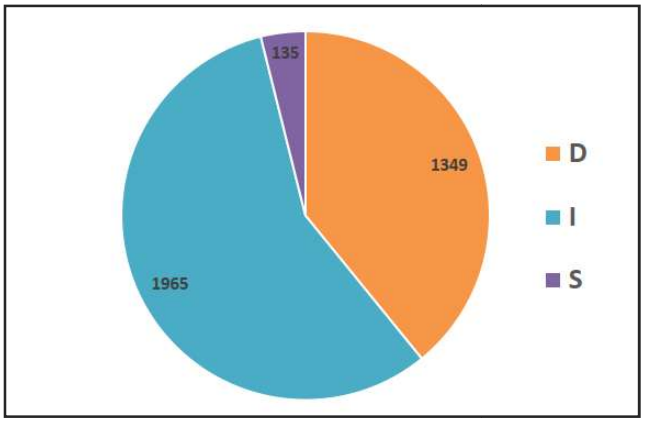
Figure 2. Number of Project Managers per Country

The knowledge base database contains 3,449 observations distributed across 317 strategic ERP implementation projects. Table 1 presents the distribution by implementation phase.

Table 1. Distribution of Observations by ERP Implementation Phase (ASAP)

Phase	Description	Observations
1	Project Preparation	109
2	Business Blueprint	1,006
3	Realization	1,631
4	Final Preparation	299
5	Go-Live & Support	404
	TOTAL	3,449

The distribution of management profiles was as follows: Dominance (D) = 1,349 observations (39.1%), Influence (I) = 1,965 observations (57.0%), and Steadiness (S) = 135 observations (3.9%). The predominance of the Influence (I) profile is common in service-oriented consulting companies, where interpersonal skills and team motivation are particularly valued. Graph 1 illustratesthisdistribution.



Graph 1. Distribution of Management Profiles in the Sample

Data Analysis Procedure: A one-way ANOVA was conducted with the DiSC profile (D, I, or S) as the independent variable and the project profitability gain, G_R, as the dependent variable. Homogeneity of variance was tested using the Levene test (Welkowitz et al., 2012), which is the most robust for this assumption (Larson, 2008; Sawyer, 2009); the Brown-Forsythe test (Brown & Forsythe, 1974) was applied as a graphical corroboration. Given the confirmed presence of outliers (176 observations, 5.1%), tests were performed both with and without outliers. Where statistically significant ANOVA results were found, Tukey's HSD post hoc test was applied to identify specific pairs that differed significantly (Kao & Green, 2008).

RESULTS AND DISCUSSION

Preliminary Analysis: The profitability gain values ranged from –32.97 to +21.13 pp, with a mean of –1.68 pp and a standard deviation of 9.26 pp. After removal of 176 outliers (5.1%), values ranged from –20.94 to +13.89 pp, with a mean of –0.90 pp and a standard deviation of 7.27 pp. Figure 3 presents the boxplot distribution of profitability gain by DiSC profile.

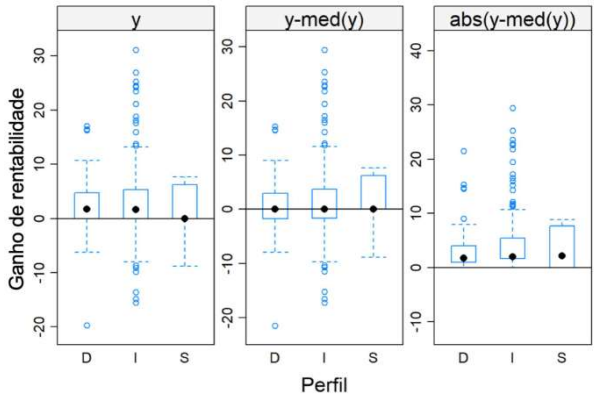


Figure 3. Boxplot of Profitability Gain by Management Profile (D, I, S)

ANOVA and Variance Homogeneity: The Levene test yielded p = 0.0624, which, at the 5% significance level, supports acceptance of the null hypothesis that the variances among the D, I, and S groups are statistically equal. With all prerequisites satisfied, the one-way ANOVA was carried out.

Table 2. One-Way ANOVA Results for H1.1

Source	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Profile	2	3,413	1,706.5	47.97	< 2e-16 ***
Residuals	11,749	417,922	35.6		

*Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05*

The p-value is well below the 0.05 significance level ($p < 2e\text{-}16$), confirming statistically significant differences in profitability gains among the management profiles. The F-value of 47.97 indicates that the between-group variance is substantially greater than the within-group variance.

Tukey's Multiple Comparison Test: Tukey's HSD test was applied to identify which specific profile pairs differed significantly. Tables 3 and 4 present the results with and without outliers, respectively.

Table 3. Tukey HSD Results — With Outliers (95% family-wise confidence)

Comparison	Difference (pp)	95% Lower	95% Upper	Adj. p-value
I – D	+0.957	+0.690	+1.225	0.000 ***
S – D	–1.420	–2.366	–0.475	0.001 **
S – I	–2.378	–3.314	–1.441	0.000 ***

Table 4. Tukey HSD Results — Without Outliers (confirmatory analysis)

Comparison	Difference (pp)	95% Lower	95% Upper	Adj. p-value
I – D	+0.191	+0.026	+0.357	0.018 *
S – D	–1.213	–1.779	–0.646	0.000 ***
S – I	–1.404	–1.966	–0.842	0.000 ***

All pairwise comparisons showed statistically significant differences in both analyses. The consistent ordering across both tests is: I (Influence) > D (Dominance) > S (Steadiness). Specifically: (1) the Influence (I) profile achieved, on average, 0.96 pp more profitability gain than the Dominance (D) profile; (2) the Dominance (D) profile achieved 1.42 pp more than Steadiness (S); and (3) the Influence (I) profile achieved 2.38 pp more than Steadiness (S). These differences were confirmed in the sensitivity analysis without outliers, demonstrating robustness. The results confirm H1.1 with high statistical significance. The finding that the Influence (I) profile achieves higher profitability gains in this ERP consulting context aligns with theoretical predictions from the DiSC model. The Influence decision-maker prioritizes action, collaboration, and expressing enthusiasm; is motivated by social recognition and group activities; and demonstrates coaching values and advisory functions (Blanchard et al., 2013). In complex ERP projects — where the most critical deliverables involve client sign-off, organizational change management, and cross-functional coordination — these characteristics align well with the demands of the work. Conversely, the Dominance (D) profile, while effective in result-oriented environments, may fall short when sustained relationship management is required. The Steadiness (S) profile's tendency toward avoiding change may conflict with the inherent dynamism of complex ERP implementations. These results corroborate Abernethy et al. (2010) — leadership style influences planning and performance measurement stages — and Hartmann et al. (2010) — certain leadership-performance measurement combinations are key project success factors. More recently, Uwguanyi and Ndekile (2023) confirmed that project leadership styles directly affect organizational performance, and Ahmad et al. (2023) demonstrated that a project manager's transformational leadership is positively associated with project success outcomes. Ali et al. (2024) further found that project management practices mediated by transformational leadership significantly improve project performance, reinforcing the present study's finding that the manager's behavioral profile is a non-trivial determinant of project outcomes. In the specific context of ERP implementations, Zahur (2022) showed that knowledge-oriented leadership is positively associated with team creativity and ERP project success, while Idilbi and Abu-Shanab (2022) identified project manager leadership as a critical success factor in ERP deployments. Kittikunchotiwut (2020) established an empirical link between leadership style and organizational financial performance through mediating roles of learning orientation and innovativeness, directly supporting the H1.1 result.

CONCLUSION

This study confirmed, with high statistical significance, that the leadership profile of the project manager has a direct and measurable impact on project profitability gain in complex ERP implementations (H1.1 confirmed). The Influence (I) profile consistently achieved the highest average profitability gain, followed by Dominance (D), with Steadiness (S) showing the lowest performance across all pairwise comparisons. This ordering was confirmed in both analyses with and without outliers, demonstrating robustness of the finding. The practical implications are significant. For organizations engaged in complex ERP implementations, the leadership profile should be considered as a relevant criterion in project manager selection and role assignment, particularly for high-value, high-risk strategic projects. Organizations investing in the development of Influence (I) leadership behaviors — collaborative decision-making, interpersonal communication, enthusiasm for team motivation, and adaptive stakeholder management — may achieve superior project profitability outcomes. These findings align with and extend the theoretical propositions of Hersey and Blanchard (1986), Blanchard et al. (1993), Hartmann et al. (2010), and Abernethy et al. (2010), providing empirical evidence from a large-scale, longitudinal dataset of 3,449 observations across 15 countries. Limitations and Future Research: This study is limited by its single-company context, which restricts generalizability. The relatively small representation of the Steadiness (S) profile (n = 135, 3.9%) may reduce statistical power for comparisons involving this group. Future research should seek to balance profile representation, explore the moderating role of cultural variables across the 15 countries in the sample, and investigate the influence of leadership profile on profitability gain across different industry sectors and project types.

AUTHORS' BIOGRAPHY

Dr. Jair da Anunciação de Azevedo Júnior holds a Doctorate in Nuclear Sciences – Applications from the Instituto de Pesquisas Energéticas e Nucleares (IPEN), associated with the University of São Paulo (USP), defended in 2020. He is a certified Project Management Professional (PMP) with over 20 years of experience managing complex ERP implementation projects in multinational environments. His research interests include organizational learning, project governance, leadership and management styles, and project profitability in complex technology projects. He is the author of the doctoral thesis 'Aprendizado Organizacional Aplicado na Gestão de Projetos Complexos, Considerando a Governança, Ganho de Rentabilidade e Estilo de Gestão' (IPEN/USP, 2020) and co-author of articles published in the International Journal of Development Research.

BSc. Renata Cristina Xavier de Araújo holds a bachelor's degree in psychology from the Pontifical Catholic University of Rio Grande do Sul (PUCRS), completed in 2001. She has extensive professional experience in Human Resources management and people development, with expertise in recruitment and selection, employee training, performance evaluation, leadership development, and organizational processes. She has experience coordinating Human Resources, administrative, and financial operations, as well as managing teams. Her professional interests include people management, organizational development, employee training, and leadership.

REFERENCES

Ahmad, A., Yuliadi, I., &Pribadi, F. (2021). DiSC personality model and leadership style in hospital. Jurnal Aisyah: Jurnal Ilmu Kesehatan, 6(S1). https://doi.org/10.30604/jika.v6is1.990

Ahmad, M. K., Abdulhamid, A. B., Abdul Wahab, S., & Nazir, M. U. (2023). Can the project manager's transformational leadership lead to project success? International Journal of Information Technology Project Management. https://doi.org/10 .4018/ ijitpm.323206

Ali, A., Hafeez, A., & Asghar, W. (2024). Impact of project management practices on project performance: Mediating role of transformational leadership. International Journal of Business and Management Sciences. https://doi.org/10.63468/ijbms.5.1.06

Antunes, H., & Pinheiro, P. G. (2019). Linking knowledge management, organizational learning and memory. Journal of Innovation & Knowledge, 5(2), 130–136. https://doi.org/10.1016/j.jik.2019.04.002

Idilbi, M., & Abu-Shanab, E. A. (2022). Critical success factors for ERP implementation. International Journal of Technology and Human Interaction, 18(1). https://doi.org/10.4018/ijthi.297613

Irfan, M., Khan, S. Z., Hassan, N., Hassan, M., Habib, M., Khan, S., & Khan, H. H. (2021). Role of project planning and project manager competencies on public sector project success. Sustainability, 13(3), 1421. https://doi.org/10.3390/su13031421

Kittikunchotiwut, P. (2020). Transformational leadership and financial performance: The mediating roles of learning orientation and firm innovativeness. Journal of Asian Finance, Economics and Business, 7(10), 769–780. https://doi.org/10. 13106 /jafeb.2020.vol7.no10.769

Kordab, M., Raudeliuniene, J., & Meidute-Kavaliauskiene, I. (2020). Mediating role of knowledge management in the relationship between organizational learning and sustainable organizational performance. Sustainability, 12(23), 10061. https://doi.org/10.3390/su122310061

Moradi, S., Kähkönen, K., & Aaltonen, K. (2020). Project managers' competencies in collaborative construction projects. Buildings, 10(3), 50. https://doi.org/10.3390/buildings10030050

PMI – Project Management Institute. (2021). A guide to the project management body of knowledge (PMBOK® Guide) (7th ed.). PMI.

Uwguanyi, W., & Ndekile, C. P. (2023). Effect of project leadership styles on organizational performance. Journal of Management and Social Science Research, 4(2). https://doi.org/ 10.47524/ jmssr.v4i2.50

Zahur, H. (2022). The role of knowledge-oriented leadership and team creativity in ERP project success. Pakistan Social Sciences Review, 6(II). https://doi.org/10.35484/pssr.2022(6-ii)60

Abernethy, M. A., Bouwens, J., & Van Lent, L. (2010). Leadership and control system design. Management Accounting Research, 21(1), 2–16.

Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. The Leadership Quarterly, 14(3), 261–295.

Archibald, R. D. (2003). Managing high-technology programs and projects (3rd ed.). John Wiley & Sons.

Azevedo Júnior, J. A. (2020). Aprendizado organizacional aplicado na gestão de projetos complexos, considerando a governança, ganho de rentabilidade e estilo de gestão [Doctoralthesis, IPEN/USP]. IPEN Digital Library.

Barnard, C. I. (1938). The functions of the executive. Harvard University Press.

Blanchard, K. H., Zigarmi, P., & Zigarmi, D. (1985). Leadership and the one minute manager. William Morrow.

Blanchard, K. H., Zigarmi, D., & Nelson, R. B. (1993). Situational leadership after 25 years: A retrospective. Journal of Leadership Studies, 1(1), 21–36.

Blanchard, K., Zigarmi, P., & Zigarmi, D. (2013). Leadership and the one minute manager (Updated ed.). Harper Collins.

Blake, R. R., & Mouton, J. S. (1981). Management by grid principles or situationalism: Which? Group & Organization Studies, 6(4), 439–455.

Botter, A. C., Barroso, A. C. O., & Monteiro, C. A. (2009). Management style and complexity of ERP projects. Journal of Information Management, 15(2).

Brown, M. B., & Forsythe, A. B. (1974). Robust tests for the equality of variances. Journal of the American StatisticalAssociation, 69(346), 364–367.

Creswell, J. W. (2007). Projeto de pesquisa: Métodos qualitativo, quantitativo e misto (2nd ed.). Artmed.

Creswell, J. W. (2008). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Sage.

Hartmann, F. G. H., Naranjo-Gil, D., & Perego, P. (2010). The effect of leadership styles and use of performance measures on managerial work-related attitudes. European Accounting Review, 19(2), 275–310.

Hersey, P., & Blanchard, K. H. (1986). Management of organizational behavior: Utilizing human resources (4th ed.). Prentice-Hall.

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation. Journal of Applied Psychology, 78(6), 891–902.

Kao, L. S., & Green, C. E. (2008). Analysis of variance: Is there a difference in means and what does it mean? Journal of Surgical Research, 144(1), 158–170. https://doi.org/10.1016 /j.jss.2007.02.053

Kerzner, H. (2001). Project management: A systems approach to planning, scheduling and controlling. John Wiley & Sons.

Klein, G. (1999). Sources of power: How people make decisions. MIT Press.

Kumar, A., & Gupta, P. C. (2012). Identification and analysis of failure attributes for an ERP system. International Congress on Interdisciplinary Business and Social Science. ISSN 1877-0428.

Larson, M. G. (2008). Analysis of variance. Circulation, 117(1), 115–121. https://doi.org/10.1161/CIRCULATIONAHA.107.654335

Le Bussonnais, J. L. (2003). Le management de projet. AFNOR.

Mintzberg, H., Raisinghani, D., & Théorêt, A. (1976). The structure of 'unstructured' decision processes. Administrative Science Quarterly, 21(2), 246–275.

Narbaev, T., & De Marco, A. (2017). An earned schedule-based regression model to predict project time completion. Journal of Management in Engineering. https://doi.org/10.1061/(ASCE) ME.1943-5479.0000512

Omidvar, G., Kissi, E., Sharaf Momtaz, N., & Harbans, L. A. (2011). Project manager competencies and skills. Project Management Journal, 42(3).

PMI – Project Management Institute. (2008). Estudo de benchmarking em gerenciamento de projetos Brasil 2008. PMI Chapters Brasileiros.

PMI – Project Management Institute. (2013). A guide to the project management body of knowledge (PMBOK® Guide) (5th ed.). PMI.

R Core Team. (2013). R: A language and environment for statistical computing. R Foundation for Statistical Computing. https://www. R-project.org/

Sampieri, R. H., Collado, C. F., & Lucio, P. B. (2006). Metodologia de pesquisa (3rd ed.). McGraw-Hill.

Sawyer, S. F. (2009). Analysis of variance: The fundamental concepts. Journal of Manual & Manipulative Therapy, 17(2). Retrieved from http://jmmtonline.com/ documents /v17n2/sawyer.pdf

Simon, H. A. (2009). The sciences of the artificial (3rd ed.). MIT Press.

Templeton, G. F., Lewis, B. R., & Snyder, C. A. (2002). Development of a measure for the organizational learning construct. Journal of Management Information Systems, 19(2), 175–218.

Verzani, J. (2011). Getting started with RStudio. O'Reilly Media.

Waxer, C. (2012). Project management for dummies (3rd ed.). For Dummies.

Welkowitz, J., Cohen, B. H., & Lea, R. B. (2012). Introductory statistics for the behavioral sciences. Wiley.

Williams, T. M. (1999). The need for new paradigms for complex projects. International Journal of Project Management, 17(5), 269–273.

****