

CreaDev: A Structured Framework for Embedding Creativity in Business Process Management*

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Abstract

Modern organizations face the dual challenge of maintaining efficiency while fostering innovation. Yet, traditional Business Process Management (BPM) frameworks often lack the flexibility to support creative problem-solving. This paper introduces CreaDev, a structured framework developed using the Design Science Research Methodology (DSRM) to embed creativity into BPM routines. By identifying process steps with high optimization potential, CreaDev guides users through a process of modeling, ideation, evaluation, and implementation. The framework was piloted in diverse organizational settings, including technology, consulting, and education. Qualitative findings suggest that CreaDev enhances problem-solving capacity, supports creative self-efficacy, and fosters collaborative innovation. Participants reported increased engagement, learning gains, and intentions to implement creative solutions. While results are based on a small sample and require further validation, the framework provides a promising, theoretically grounded approach to fostering creativity in structured, process-oriented environments.

Keywords

business process management, creativity, process optimization, organizational resilience, creative self-efficacy

1. Introduction

Creativity has become a critical competency for organizations navigating complex and rapidly evolving environments. In business contexts where adaptability and innovation are essential, such as consulting, software development, or higher education, creativity enables employees to generate novel solutions, address unforeseen challenges, and improve overall responsiveness. Despite this, Business Process Management (BPM) frameworks such as Lean Six Sigma, ISO 9001, and BPMN remain largely focused on standardization, optimization, and control [1, 2, 3]. These strengths become limitations when applied to processes that require exploration, iterative learning, or non-linear problem-solving.

Recent BPM research has acknowledged the importance of creativity [4, 5], yet it lacks actionable methodologies to support it in structured process design. While creativity-focused methods like Design Thinking and Creative Problem Solving (CPS) offer guidance on how to generate ideas [6, 7], they are often disconnected from formal process management and fail to integrate into BPM routines. This reveals a gap: BPM as a discipline struggles to systematically embed creativity into operational workflows. As a result, potentially transformative ideas remain unstructured or siloed, and process innovation is often ad hoc rather than sustained.

This paper addresses the question: *How can a structured framework enhance creativity within business process management (BPM) to support innovation, problem-solving, and efficiency in organizational*

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workflows? We introduce the CreaDev framework, developed using the Design Science Research Methodology (DSRM) [8], as a structured yet adaptable tool for embedding creativity into BPM practice. CreaDev identifies processes with optimization potential and provides guided interventions to support creative thinking without sacrificing clarity or control.

By presenting a process-oriented creativity framework grounded in both literature and practice, this study contributes to a growing body of work that seeks to modernize BPM for today's innovation-driven organizations. The goal is not only to offer a tool, but to change how researchers and practitioners conceptualize the role of creativity in BPM: Not as a disruptive force, but as a capability that can be structured, supported, and scaled.

2. Problem Statement

Creativity has become a critical organizational competency in dynamic, knowledge-intensive industries such as technology, consulting, and pharmaceuticals [9, 10]. Unlike routine workflows, creative processes involve high uncertainty, iterative learning, and rapid adaptation [11]. However, traditional Business Process Management (BPM) frameworks such as Lean, Six Sigma, and ISO 9001 primarily emphasize efficiency, consistency, and standardization, aiming to optimize performance and reduce variation through structured methodologies [12]. While effective for quality assurance and operational excellence, these approaches offer limited flexibility and adaptability, making them less suitable for creativity-benefitting work. Creativity-intensive processes require a fundamentally different BPM approach that allows for ambiguity, exploration, and emergent outcomes [13]. This creates a structural tension: While BPM provides operational discipline, it lacks mechanisms for integrating creative exploration. As a result, potentially innovative ideas remain unstructured or disconnected from formal process management, leading to missed opportunities for improvement and engagement [14, 13].

Research on structured creativity, including design thinking [6], creative problem solving [15], and designerly ways of knowing [16], highlights how innovation can be systematically guided within constraints by leveraging structured yet flexible methods. These approaches promote divergent thinking, human-centered design, and iterative refinement. Yet, they are rarely embedded into BPM practice, despite their alignment with goals like process adaptability and continuous improvement. This gap calls for new frameworks that can embed creativity into BPM without sacrificing structure. The CreaDev framework addresses this need by offering a structured yet flexible approach to support creative problem-solving within business processes.

3. Methodology and Framework Development

This study follows the Design Science Research Methodology (DSRM) [8], which supports the development and evaluation of innovative artifacts through iterative, problem-centered cycles. The methodology enabled the structured design, implementation, and early validation of the CreaDev framework for embedding creativity into business process management (BPM) environments.

3.1. Conceptual Foundations and Framework Design

The foundation for the CreaDev framework was established through a systematic literature review (SLR) to identify relevant constructs and research gaps at the intersection of creativity and Business Process Management (BPM). Following established SLR guidelines by Cooper (1988) and vom Brocke et al. (2009) [17, 18], we focused on peer-reviewed literature from 2000 to 2023 across major databases such as SpringerLink, IEEE Xplore, ACM Digital Library, AIS eLibrary, Web of Science, and Scopus. The search strategy combined BPM-related terms with creativity and problem-solving concepts, targeting literature on process optimization, creative autonomy, knowledge-intensive work, and structured innovation practices. Key insights emphasized the need for tools that balance operational discipline with creative exploration.

Table 1
Participant Overview

ID	Age	Role
P1	34	Project Manager in Construction
P2	36	Software Developer
P3	28	Solar Energy Consultant
P4	31	Deputy Museum Director
P5	57	School Principal
P6	29	Primary School Teacher
P7	59	CEO Physician
P8	30	Electrician for Building and Energy Systems
P9	29	Psycho-oncologist
P10	61	Biologist
P11	60	University Lecturer

The full set of SLR findings is accessible at: [link](#). These results informed the CreaDev framework’s conceptual pillars and are documented for transparency and reproducibility.

Findings from the literature were consolidated into six conceptual pillars that guided the framework design: Creative Autonomy, which encourages unconventional ideas within structured environments [19, 20], Collaborative Environments, which promote diverse thinking and social learning [14, 21], Management Support, which provides resources, legitimacy, and tolerance for experimentation [22, 13], Pockets of Creativity, which identify high-potential areas for targeted intervention [13, 23], Process Modeling and Visualization, which support clarity and ideation through structure [24] and Feedback Mechanisms, which foster adaptability and iterative improvement [19].

These principles were translated into a layered design combining visual tools, guided interventions, and collaborative reflection techniques to systematically foster creativity in operational contexts. Based on these components, a prototype of the CreaDev framework was developed. It included process visualization, ideation prompts (e.g., morphological boxes), and structured evaluation methods (e.g., pairwise comparison). Iterative refinements were made based on preliminary user testing and expert feedback to ensure usability and theoretical coherence. The final version of CreaDev was then piloted in diverse organizational workshops as described below.

3.2. Framework Evaluation

3.2.1. Evaluation Design

The CreaDev framework was tested through a series of 11 individual guided interventions with professionals recruited via the authors’ network from diverse organizational backgrounds, including technology, consulting, education, and environmental monitoring. Participants represented a wide range of roles—from project managers and software developers to marine scientists and public sector employees—providing a heterogeneous perspective on process creativity and optimization. An overview of participant demographics is provided in Table 1.

Example processes and challenges participants approached during the interventions include: a difficulty in adapting a new software to track completed work and material usage on construction sites, and a challenge in coordinating urgent funding approvals across multiple departments in a public sector organization. These examples illustrate the framework’s applicability to both technical and administrative process settings.

3.2.2. Procedure

Participants began the intervention by completing a preintervention survey, which included questions regarding demographics, as well as giving informed consent to participate in the study. Afterwards,

a moderator who was familiar with the CreaDev framework guided the participants through the intervention. To evaluate the immediate effects of the intervention, we employed a post-intervention survey, open-ended reflection questions, and semi-structured interviews. These instruments focused on participants' perceived creativity, clarity in problem-solving, engagement, and confidence in applying the generated ideas.

3.2.3. Analytical Approach

The collected data were thematically analyzed following the Braun and Clarke method for qualitative content analysis [25]. Codes were derived both deductively, based on theoretical constructs such as creative self-efficacy, perceived usefulness, and process awareness, and inductively, grounded in the participants' open responses. Recurring themes were then clustered into six overarching research dimensions, such as flexibility vs. structure and organizational impact. Table 3 provides an overview of the qualitative codes and illustrative quotes that exemplify key findings across dimensions.

4. The Structure of CreaDev

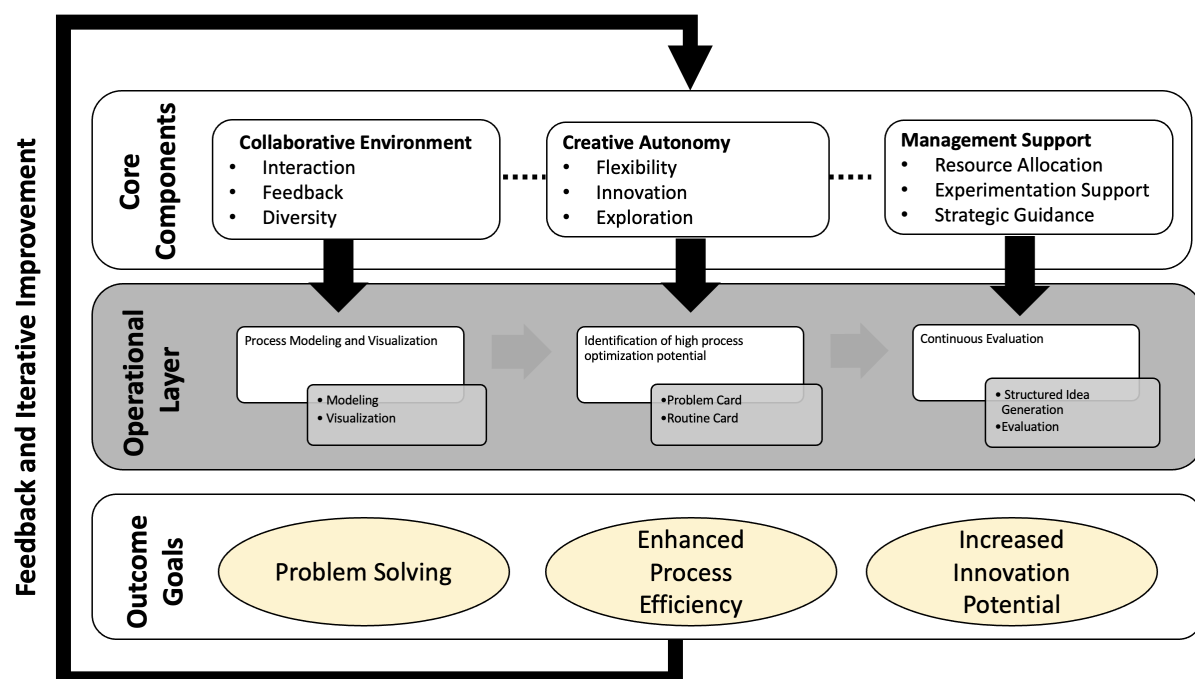


Figure 1: Theoretical structure of the CreaDev framework.

The CreaDev framework offers a structured approach to embed creativity into business process optimization as can be seen in Figure 1. Grounded in empirical and conceptual research, it incorporates enablers such as creative autonomy, collaborative environments, managerial support, and process visualization. Designed for flexibility, it can be applied digitally (e.g., with BPM tools like Modelangelo) or analog (e.g., paper-based workshops). Depending on process complexity and familiarity, typical sessions last two to three hours. Ideal applications include routines that obscure innovation potential or fragmented knowledge-intensive tasks. For implementation, we recommend diverse teams of 3–6 individuals (e.g., process owners, operational staff) to foster cross-functional creativity. In this study, however, one-on-one sessions were used to test the framework's components in depth.

The process begins with modeling current workflows to increase transparency, reflection, and shared understanding. Visual modeling externalizes tacit knowledge and supports ideation in complex settings [24, 11]. Users annotate models using two card types: *Problem Cards* identify bottlenecks or friction

Table 2
CreaDev Framework Components Overview

Layer	Component	Description
Core Components	Collaborative Environment	Encourages team-based idea sharing, dialog, and diversity of viewpoints [14, 21].
Core Components	Creative Autonomy	Enables exploration of alternative approaches using techniques like morphological boxes [23, 20].
Core Components	Management Support	Ensures resources, time, and a supportive culture for experimentation [11, 23].
Operational Layer	Process Modeling and Visualization	Externalizes knowledge and enables structured reflection [24, 11].
Operational Layer	Identification of Optimization Potential	Annotations can stimulate reflection during process modeling and help identify areas for improvement [11].
Operational Layer	Continuous Evaluation	Includes both idea generation and evaluation: Uses creativity techniques to explore a solution space across multiple dimensions [20, 23], and filters ideas by impact, feasibility, and strategic relevance [11].
Outcome Goals	Problem Solving	Supports creative, structured resolution of bottlenecks and inefficiencies.
Outcome Goals	Enhanced Process Efficiency	Leads to streamlined processes and increased performance.
Outcome Goals	Increased Innovation Potential	Builds a long-term creative capability within organizations.

points, while *Routine Cards* flag outdated procedures. These visual markers help uncover “pockets of creativity” [13, 23], i.e., routine segments with high innovation potential.

Idea generation is supported through structured creativity techniques. In particular, a morphological box was applied: Participants define a challenge, break it into dimensions, brainstorm multiple options per dimension, and combine them to generate creative solutions [20, 23]. This balances divergent thinking with operational feasibility and proved especially effective during workshops.

CreaDev explicitly draws from Design Thinking principles to structure its problem-solving logic. The modeling and annotation phase mirrors *empathize* and *define*, while the ideation phase corresponds to *ideate*. Visual markers such as “problem” and “routine” cards support reframing, while morphological analysis enables structured exploration. Although not a full Design Thinking implementation, CreaDev adapts its core logic for process-based creativity in both individual and team settings [6].

Evaluation of ideas is built into the process via a combined activity of selection and reflection. Alternatives are assessed based on feasibility, organizational fit, and potential impact [11]. This “continuous evaluation” enables progression from creativity to implementable change.

While individual activities resemble traditional BPM (e.g., modeling, improvement), the novelty lies in how CreaDev embeds creativity throughout. Visual annotations surface experiential knowledge; ideation is guided through structured tools; and organizational support mechanisms create space for experimentation. This makes CreaDev a hybrid: process-centric yet creativity-enabling (see Table 2).

5. Key Findings and Outcomes

The evaluation of the CreaDev framework, based on thematic analysis of qualitative data, revealed six key outcome areas:

- **Creativity and Problem-Solving:** Participants reported improved clarity in addressing complex challenges. The framework supported structured ideation, visual thinking, and shifting perspectives to enable innovative problem-solving.

- **Perceived Usefulness:** Users consistently emphasized the framework's value in bringing structure to unorganized workflows. It facilitated task prioritization, eliminated inefficiencies, and enhanced both individual and collaborative innovation.
- **Learning and Self-Awareness:** The intervention promoted both cognitive and emotional learning. Participants developed a deeper understanding of their thought processes, recognized internal blockers, and improved how they approached recurring challenges.
- **Self-Efficacy and Empowerment:** Many participants expressed increased confidence in applying their ideas. The framework helped them feel capable of driving meaningful change in their own work environments.
- **Planned Behavioral Change:** Participants planned to implement developed solutions and expressed a commitment to continuously reassess and optimize their workflows, signaling lasting process improvements.
- **Organizational Impact:** Beyond individual effects, the framework encouraged collaborative creativity and cultural openness to change. It fostered team alignment and increased acceptance of innovation initiatives.

5.1. Qualitative Reflections by Participant

To evaluate the applicability of the CreaDev framework, a series of facilitated workshops was conducted with 11 professionals across domains such as consulting, education, healthcare, science, and engineering. Their roles ranged from software development and teaching to public sector management and environmental research. Each session applied the CreaDev procedure, consisting of business process modeling, problem identification, structured ideation (e.g., morphological analysis), and solution planning.

Insights from the 11 participants were grouped into three overarching themes:

Clarity and Structure in Complex Workflows. Participants from construction, museum administration, and engineering (e.g., P1, P4, P8) highlighted how CreaDev enabled them to break down complex challenges and visualize process bottlenecks. They appreciated the structured modeling and card-based annotations as tools for gaining clarity and facilitating discussion.

Creative Empowerment and Autonomy. Participants from software development, education, and consulting (e.g., P2, P3, P6) emphasized the framework's role in surfacing tacit knowledge and enabling autonomous problem-solving. For instance, a developer valued the shift from abstract retrospectives to concrete ideation, while an educator expressed increased confidence in facilitating team-based change.

Organizational Reflection and Impact. Leaders and specialists (e.g., P5, P7, P9) described how the framework fostered a reflective culture. It helped them identify patterns of inefficiency, address interpersonal tensions, and approach problems as opportunities. A psycho-oncologist noted the method's relevance for leadership development, while others emphasized the importance of visibility and follow-through.

A minority of participants (e.g., P10, P11) reported limited benefit, citing either prior structuring habits or low relevance to their specific role. These cases underline the need for contextual alignment and facilitation.

5.2. Quantitative Findings

To complement the qualitative insights, we conducted a quantitative analysis of key psychological and evaluative scales before and after the intervention. Descriptive statistics show high agreement across participants on the relevance and applicability of the CreaDev framework.

The post-intervention results ($n = 11$) indicate strong mean values on central constructs (see figure 2) :

- **Creative Self-Efficacy** ($M = 4.58$, $SD = 0.42$): Participants reported high confidence in their ability to engage in creative problem-solving.
- **Framework Utility** ($M = 4.71$, $SD = 0.31$): The framework was perceived as highly useful for structuring complex problems and developing actionable solutions.

Table 3
Qualitative Codes and Example Quotes with Participant References

Research Dimension	Code	Example Quote (Participant)
Creativity and Problem-Solving in BPM	Problem Identification	It helped me reflect on the causes of a recurring problem. Several partial steps became clearer. (P4)
	Creative Thinking	I was able to gain new perspectives; my problem-solving approach has changed. (P5)
	Structured Ideation	Helps plan useful structures/processes, separate meaningful strands of action from less effective ones. (P4)
	Visualization and Synthesis	Helped me visualize thought processes and connections, verbalize and prioritize problem strands. (P4)
Flexibility vs. Structure	Balancing Control and Flexibility	Clear structures help; they build on one another. (P4)
	Adaptability	I now see problems more as opportunities to try out optimal methods. (P5)
Innovation and Process Efficiency	Iterative Problem Solving	I will evaluate and reconsider solutions and dimensions. (P9)
	Process Optimization	Can help improve workflows and create problem awareness. (P4)
	Task Prioritization	Useful for separating meaningful tasks from time-wasters. (P4)
Organizational and Cultural Impact	Outcome Focus	A professional approach to unforeseen situations. (P4)
	Employee Engagement	The joint process also increases acceptance of necessary changes. (P6)
	Team Collaboration	Excellent for defining problems and developing creative solutions as a team. (P6)
	Cultural Shift	Helps foster a professional approach to unforeseen situations. (P4)
Barriers and Challenges	Resistance to Change	Depends on the visibility of the solution plan and the person's capacity for reflection. (P5)
	Effort and Complexity	Requires willingness to identify time-consuming steps and work on structured improvements. (P6)
	Real-World Application	I believe the solutions developed are applicable and can change my situation. (P7)

- **Process Awareness** (M = 4.45, SD = 0.53): Participants gained clarity about their own processes and were able to identify optimization opportunities.
- **Intention to Implement** (M = 4.64, SD = 0.50): A strong willingness to apply the developed ideas in everyday practice was expressed.

Although the sample size was limited (n = 11), the results suggest a high degree of perceived effectiveness, engagement, and applicability. These findings substantiate the qualitative feedback and offer preliminary empirical support for the framework's impact on cognitive and motivational dimensions relevant to process innovation.

6. Significance and Relevance

The CreaDev framework addresses a critical blind spot in Business Process Management (BPM): the systematic integration of creativity into structured workflows. As organizations increasingly operate in dynamic, innovation-driven environments, there is growing recognition that traditional BPM tools, designed for predictability and control, are ill-equipped to support the flexibility and ideation required in knowledge-intensive and rapidly evolving domains. The significance of this study lies in its contribution to both academic discourse and practical management by offering a structured, actionable methodology to embed creativity into BPM routines.

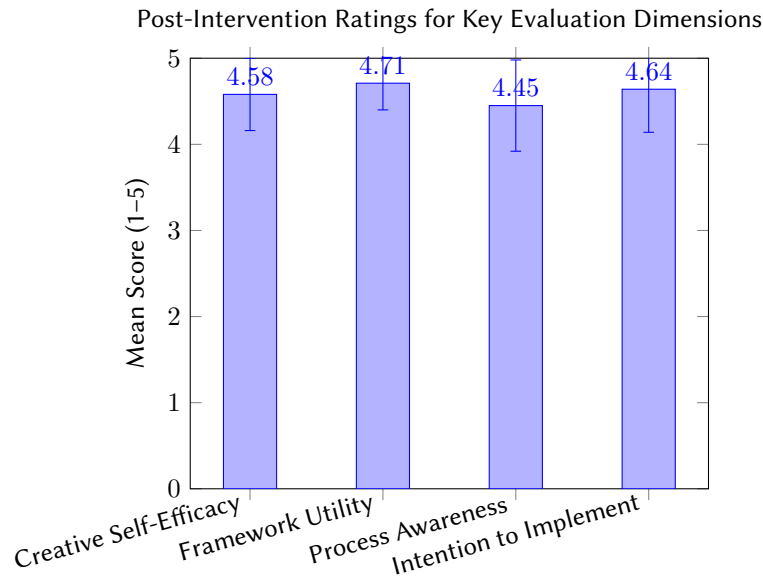


Figure 2: Post-Intervention Ratings for Key Evaluation Dimensions

From a theoretical perspective, the framework responds to recent calls in the BPM literature to expand the discipline’s scope beyond optimization and efficiency toward adaptability, human-centered design, and innovation support [4, 5]. It operationalizes insights from structured creativity research, such as Design Thinking [6] and Creative Problem Solving [15], and integrates them into BPM contexts without compromising clarity or process control. This bridges a persistent conceptual gap between process formalization and creative exploration.

In terms of societal and organizational relevance, the CreaDev framework enables employees across hierarchical levels and industry sectors to engage in reflective, solution-oriented process innovation. By empowering individuals to identify optimization potential within their daily tasks and collaboratively develop improvement ideas, the framework promotes integrative, bottom-up innovation and contributes to a more resilient organizational culture. This aligns with broader trends in the future of work, including decentralization, employee empowerment, and the integration of soft skills like creativity into core business functions. Furthermore, the case study’s application across a diverse set of roles demonstrates the framework’s versatility and scalability. It complements current management practices that emphasize agility, cross-functional collaboration, and human-centered transformation, making it a relevant tool for organizations seeking to balance stability with innovation in an increasingly uncertain world.

Scope and Limitations

This study evaluates the design and initial implementation of the CreaDev framework—a structured approach to foster creativity within Business Process Management (BPM). Piloted across diverse sectors including technology, education, public service, and healthcare, the framework illustrates early applicability in knowledge-intensive environments. The evaluation emphasizes short-term, perception-based outcomes, drawing on qualitative feedback and descriptive statistics. Although the small sample size ($n = 11$) limits generalizability, the study design follows principles of Design Science Research (DSR), which favor contextual depth and relevance over statistical breadth in early-stage artifact evaluation [8].

Several limitations warrant consideration. First, no before/after performance metrics or KPIs were collected, and behavioral indicators such as process redesign follow-ups or implementation tracking were not within scope. Second, insights were self-reported and may reflect social desirability bias. Third, while the heterogeneous sample supports broader applicability, domain-specific insights remain

limited. Future research should incorporate longitudinal studies, concrete process outcome tracking, and quantitative comparisons to validate impact and generalize results across sectors. Despite these constraints, the study achieves its goal: demonstrating the feasibility and perceived value of integrating creativity into structured BPM environments. Claims regarding improved innovation capacity and creative self-efficacy are considered exploratory and require triangulated evidence in future work.

Conclusion

The CreaDev framework offers a structured, domain-independent method to foster creativity and process improvement within business contexts. Rooted in business process modeling and supported by techniques such as morphological analysis, it empowers professionals to identify problems, ideate effectively, and plan actionable solutions. Qualitative reflections from eleven participants across sectors, ranging from education and healthcare to construction and IT, highlighted enhanced self-efficacy, clarity, and intention to implement the outcomes. Quantitative findings supported these impressions, showing high ratings for creative self-efficacy, usefulness, and applicability.

This study demonstrates that process-oriented creativity methods like CreaDev can contribute meaningfully to both individual learning and organizational change. By integrating structured reflection into daily routines, the framework fosters a professional and innovative approach to problem-solving. Future applications should explore integration into team workflows and assess long-term behavioral impact in larger sample settings.

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Declaration on Generative AI

This manuscript benefited from language assistance using OpenAI's ChatGPT to refine phrasing and improve clarity. The authors are solely responsible for the content.

References

- [1] M. George, *Lean Six Sigma for Service: How to Use Lean Speed and Six Sigma Quality to Improve Services and Transactions*, McGraw-Hill, New York, 2003.
- [2] AXELOS, PRINCE2® Project Management Certifications, 2024. URL: <https://www.axelos.com/certifications/propath/prince2-project-management>, accessed: 2025-05-17.
- [3] Object Management Group, *Business Process Model and Notation (BPMN), Version 2.0*, Technical Report, Object Management Group, 2011.
- [4] T. Grisold, J. vom Brocke, S. Gross, J. Mendling, M. Röglinger, K. Stelzl, Digital innovation and business process management: Opportunities and challenges as perceived by practitioners, *Communications of the Association for Information Systems* 49 (2021) Article 27. doi:10.17705/1CAIS.04927.
- [5] M. Szelaḡowski, J. Berniak-Wożny, Bpm challenges, limitations and future development directions – a systematic literature review, *Business Process Management Journal* 30 (2024) 505–557. doi:10.1108/BPMJ-06-2023-0419.

- [6] T. Brown, Design thinking, *Harvard Business Review* 86 (2008) 84–92. URL: <https://hbr.org/2008/06/design-thinking>, reprint R0806E.
- [7] S. G. Isaksen, K. B. Dorval, D. J. Treffinger, *Creative Approaches to Problem Solving: A Framework for Innovation and Change*, 3rd ed., SAGE Publications, Thousand Oaks, CA, 2011.
- [8] K. Peffers, T. Tuunanen, M. A. Rothenberger, S. Chatterjee, A design science research methodology for information systems research, *Journal of Management Information Systems* 24 (2007) 45–77. doi:10.2753/MIS0742-1222240302.
- [9] T. M. Amabile, A model of creativity and innovation in organizations, *Research in Organizational Behavior* 10 (1988) 123–167.
- [10] J. C. Kaufman, M. Karwowski, I. Lebeda, Measuring creative self-efficacy and creative personal identity, *The International Journal of Creativity & Problem Solving* 28 (2018) 45–57.
- [11] S. Seidel, Toward a theory of managing creativity-intensive processes: a creative industries study, *Information systems and e-business management* 9 (2011) 407–446.
- [12] J. C. G. d. Reis, P. Marques, J. C. Sá, R. J. Mateus, F. M. R. D. C. S. Pinto, Lean, six sigma and iso management systems standards: An integration framework, in: *Conferência Internacional sobre Engenharia e Gestão da Qualidade*, 2024, pp. 435–465.
- [13] S. Seidel, F. Müller-Wienbergen, M. Rosemann, Pockets of creativity in business processes, *Communications of the Association for Information Systems* 27 (2010) 415–436.
- [14] J. Becker, M. Karow, F. Müller-Wienbergen, S. Seidel, Toward process modeling in creative domains, in: *AMCIS 2009 Proceedings*, 2009, p. 596. URL: <https://aisel.aisnet.org/amcis2009/596>.
- [15] C. E. Shalley, L. L. Gilson, Creativity and the management of technology: Balancing creativity and standardization, *Production and Operations Management* 26 (2017) 605–616. doi:10.1111/poms.12639.
- [16] N. Cross, Designerly ways of knowing, in: N. Cross, D. Elliott, R. Roy (Eds.), *Design: Science: Method*, Westbury House, Guildford, UK, 1982, pp. 221–227.
- [17] H. M. Cooper, Organizing knowledge syntheses: A taxonomy of literature reviews, *Knowledge in Society* 1 (1988) 104–126. doi:10.1007/BF03177550.
- [18] J. vom Brocke, A. Simons, B. Niehaves, K. Reimer, R. Plattfaut, A. Cleven, Reconstructing the giant: On the importance of rigour in documenting the literature search process, in: *17th European Conference on Information Systems (ECIS 2009)*, Verona, Italy, 2009, pp. 2206–2217.
- [19] X. Wang, C. Schneider, J. S. Valacich, Enhancing creativity in group collaboration: How performance targets and feedback shape perceptions and idea generation performance, *Computers in Human Behavior* 42 (2015) 187–195.
- [20] M. Voigt, K. Bergener, J. Becker, Comprehensive support for creativity-intensive processes: An explanatory information system design theory, *Business & Information Systems Engineering* 5 (2013) 227–242.
- [21] M. Levy, D. Huli, Collaboration and knowledge sharing in open innovation: How to design business processes for openness, *Journal of Knowledge Management* 23 (2019) 2073–2094.
- [22] O. Marjanovic, R. Seethamraju, Business process management: Theory and practice, *Business Process Management Journal* 14 (2008) 693–703.
- [23] S. D. Muller, F. Ulrich, Creativity and information systems in a hypercompetitive environment: A literature review, *Communications of the Association for Information Systems* 32 (2013) 1–40. doi:10.17705/1CAIS.03207.
- [24] K. Figl, J. Recker, Exploring cognitive style and task-specific preferences for process representation formats, *Requirements Engineering* 21 (2016) 63–85.
- [25] V. Braun, V. Clarke, Using thematic analysis in psychology, *Qualitative research in psychology* 3 (2006) 77–101.