

## Reviewer's report

for the doctoral thesis of Ing. Jan Špatenka  
submitted at the Faculty of Business and Management BUT

**Title:** Modification of the Methodology for the Implementation of Information Systems Involving Elements of Digitalization and Remote Collaboration

**Supervisor:** doc. Ing. Miloš Koch, CSc.

### The topicality of the subject of the doctoral thesis

The dissertation addresses a highly relevant and timely topic: the adaptation of information system (IS) implementation methodologies to incorporate digitalization and remote collaboration. The COVID-19 pandemic has accelerated the adoption of digital tools and remote work practices, making this research particularly pertinent. The thesis recognizes that while digitalization is often treated as an outcome of IS projects, its role as an enabler and integral part of the implementation process itself is underexplored. This shift in perspective is both original and necessary, given the ongoing transformation of business environments. The thesis provides a thorough literature review, including a bibliometric analysis and systematic content review of recent publications. It identifies a clear research gap: most existing studies focus on digitalization as a project output, not as a tool for improving the implementation process. The review also highlights that, despite the proliferation of digital and remote collaboration tools, their integration into IS implementation methodologies is insufficiently addressed in both academic and practical frameworks. The author's analysis of project management standards (PMI, IPMA, PRINCE2) further demonstrates that only PMI has made significant strides in updating its guidance to reflect post-pandemic realities, while others lag behind.

### The stated goal of the thesis, the process of its implementation and the methods used

The main goal is to modify existing IS implementation methodologies to meaningfully integrate digitalization and remote collaboration, optimizing project outcomes in terms of time, cost, scope, and quality (the project triple constraint). The research aims to provide actionable guidance for when and how to use these elements across different project phases.

#### Procedure and Methods:

The thesis employs a robust mixed-methods approach:

- **Secondary Research:** Comprehensive literature review, bibliometric analysis, and analysis of statistical data (Eurostat, Czech Statistical Office, ZEFIS).
- **Primary Research:** Qualitative research using focus groups (exploratory and validation phases) with experienced practitioners from both the implementer and customer sides.
- **Design Science Research (DSR) Paradigm:** The methodology is developed iteratively, with focus group feedback shaping and validating the artifact (the modified methodology).

- **Coding Techniques:** Concept, magnitude, and In Vivo coding are used to analyze qualitative data.
- **Empirical Validation:** The methodology is tested for applicability across company sizes and contexts.

This systematic and iterative approach ensures that the proposed methodology is both theoretically grounded and practically validated.

### **The process of addressing the issue and results of the doctoral thesis including indication of the specific contribution of the doctoral student**

#### **Results:**

- **Modified Methodology:** The thesis presents a detailed, phase-based methodology (inspired by Microsoft Sure Step) that specifies the meaningful use of digitalization and remote collaboration tools in each project phase.
- **Key Findings:**
  - **Remote Collaboration:** Most valuable in later project phases (design, development, operation), but personal contact remains crucial in the diagnostic and analysis phases for relationship-building and understanding complex processes.
  - **Digital Tools:** Communication, document management, and project planning tools are essential across all phases. High-fidelity prototyping and risk management tools are valued by customers but underutilized by implementers.
  - **Deployment Phase:** Requires a nuanced approach—data migration can be remote, but go-live support and user training often benefit from on-site presence.
  - **Company Size:** The methodology is applicable regardless of company size; organizational culture and process complexity are more influential factors.

#### **Discussion:**

The thesis critically discusses the practical implications of its findings, highlighting the importance of flexibility and context-awareness in methodology design. It also acknowledges the limitations of current project management standards and the need for continuous methodological evolution. The discussion is well-supported by empirical data and aligns with recent literature, confirming the thesis's relevance and contribution.

- **Formal qualities of the doctoral thesis and its language level**

#### **Structure and Clarity:**

The dissertation is well-structured, with clear sections for introduction, literature review, methodology, results, discussion, and conclusion. The use of tables, figures (e.g., radial maps, process diagrams), and appendices (e.g., interview guides, coding transcripts) enhances readability and transparency.

#### **Academic Rigor:**

- **Comprehensive referencing** and a detailed bibliography demonstrate engagement with current research.
- **Methodological transparency** is maintained throughout, with explicit descriptions of research design, data collection, and analysis procedures.
- **Language and Style:** The thesis is written in clear, academic English, with careful attention to terminology and conceptual definitions.

#### **Limitations:**

The author is candid about the study's limitations, including the focus on ERP implementations,

the Central European context, and the potential for rapid technological change to outpace the findings. Suggestions for future research are constructive and realistic.

### **The importance for practical implementation and development of the field**

#### **Scientific Contribution:**

- **Fills a Research Gap:** The thesis advances the field by treating digitalization and remote collaboration as integral to the IS implementation process, not just as outcomes.
- **Methodological Innovation:** The application of the DSR paradigm and iterative focus group validation is a methodological strength.
- **Actionable Framework:** The modified methodology provides a practical, adaptable tool for practitioners, supported by empirical evidence.

#### **Practical Impact:**

- **Guidance for Practitioners:** The thesis offers concrete recommendations for project managers, consultants, and organizations on how to leverage digital and remote collaboration tools effectively.
- **Relevance Across Contexts:** The methodology's applicability to organizations of different sizes and sectors increases its practical value.
- **Pedagogical Value:** The work can inform curriculum development in project management and information systems courses.

The research is timely and forward-looking, anticipating ongoing changes in work practices and technology adoption. It encourages organizations to be proactive in adapting their methodologies to future challenges, such as the integration of AI and other emerging technologies.

#### **Questions**

1. How would your modified methodology adapt to the rapid emergence of new technologies such as artificial intelligence, blockchain, or IoT in information system implementations?
2. Your research highlights the importance of organizational culture and digital maturity over company size in the successful adoption of digitalization and remote collaboration. What practical steps would you recommend to organizations with a strong in-person culture or low digital maturity to facilitate this transition?

#### **Conclusion**

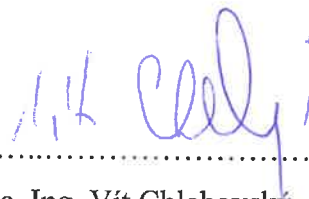
This dissertation is a **substantial and original contribution** to the field of information systems implementation. It is distinguished by its topical relevance, methodological rigor, and practical applicability. The work is well-structured, critically engaged with the literature, and transparent about its limitations. Its findings are both theoretically significant and directly useful for practitioners navigating the evolving landscape of digital transformation and remote collaboration.

There are few issues that could be improved and can be a good focus for the further research:

- Broader empirical validation – not only Czech and Slovak context, but internationally
- Integration of Emerging Technologies - Include scenarios or recommendations for how the methodology could adapt to rapid technological change, ensuring its relevance in the coming years.

I state that the submitted dissertation of Ing. Jan Špatenka, on the topic Modification of the Methodology for the Implementation of Information Systems Involving Elements of Digitalization and Remote Collaboration **meets** the requirements of the dissertation thesis in accordance with § 47 of the Act on Higher Education No. 111/98 Coll. Therefore, I **recommend** the submitted dissertation for defense and after successful defense I **recommend** Ing. Jan Špatenka, to obtain the doctoral degree (Ph.D.) in the study program Company Management and Economics. The student **demonstrated** creative abilities in the given field of research.

In ...Brno....., date ...10.10.2025.....

A handwritten signature in blue ink, appearing to read 'Vít Chlebovský', is written above a horizontal dotted line.

Doc. Ing. Vít Chlebovský, Ph.D.