

EMS Conference 2026: “Bright Ideas, Lasting Impact”

DBA Extended Abstract:

**“Operational value creation through digitalization and AI
in Spanish Private Equity-backed SMEs”**

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1. Problems Addressed, Aims, and Research Question(s)

The Private Equity (PE) industry is currently at a critical inflection point where traditional value-creation strategies, such as financial leverage and multiple expansion, no longer consistently deliver attractive returns due to normalized interest rates and increased competition. This has necessitated a shift toward operational engineering and strategic entrepreneurship, where systematic improvements in a portfolio company’s EBITDA margin—often termed “operational alpha”—become the primary determinant of investment success.

Central to these operational measures is the transformative impact of digitalization and Artificial Intelligence (AI), which are increasingly recognized as standalone pillars of the modern Value Creation Plan. However, despite their potential, these technologies remain inconsistently adopted, particularly within the Spanish Small and Medium Enterprise (SME) market, where lean organizational structures and varying levels of managerial sophistication present unique challenges.

The primary aim of this research is to critically evaluate the success factors governing the adoption of digitalization and AI as strategic catalysts for Unlevered Free Cash Flow (UFCF) growth and business scalability within PE-backed SMEs in Spain. This study seeks to bridge

the gap between theoretical constructs and a pragmatic business application by addressing three interconnected research questions:

- Determinants of Success: Which factors are most influential in the successful adoption of digitalization and AI projects?
- Moderating Levers: Which internal and external levers act as the primary facilitators or inhibitors for the adoption of these technology-driven value factors?
- Value Drivers: What are the critical digitalization and AI-related factors contributing to operational value creation?

2. Justification for Importance

This research is pertinent to several key stakeholders, starting with PE Fund Managers and Operating Partners, for whom it provides a framework to navigate adoption barriers and identify optimization levers that translate into measurable UFCF gains and enhanced exit valuations. Additionally, it serves SME Executives by offering actionable insights on how to transition firms from mere consolidation platforms into engines of organic productivity through technology-enabled operational improvement. Finally, the study contributes to the Academic Community by extending established technology adoption frameworks to account for the unique moderating effects of Private Equity ownership and the specificities of the Spanish SME market.

3. Theoretical Basis

This study synthesizes established organizational and individual technology adoption frameworks to create a comprehensive understanding of its application for the PE-SME-Spain context.

At the organizational level, this research draws upon three foundational frameworks: Diffusion of Innovation (DOI), which analyses how innovations spread based on perceived traits such as relative advantage and compatibility; the Technology-Organization-Environment (TOE) framework, which evaluates the holistic context—technological availability, organizational structure, and environmental pressure—that influences firm-level adoption; and Electronic Data Interchange (EDI) for SMEs, which considers drivers specific to resource-constrained firms, such as organizational readiness and external market demands. At the individual level, the research incorporates the Unified Theory of Acceptance and Use of Technology (UTAUT/UTAUT2) to examine constructs like performance expectancy and social influence.

4. Research Design, Methodology and Data Collection

The study adopts a deductive scientific approach and a mixed-methods design.

The qualitative phase will apply semi-structured interviews to senior practitioner stakeholders to capture relevant information and refine the design of a practitioner-focused questionnaire.

The quantitative phase will apply data collection via a questionnaire derived from validated scales in existing literature. The analysis will utilize Qualitative Comparative Analysis (QCA) to evaluate the complex configurations of levers driving technology adoption and value creation, specifically identifying the combinations of sufficient determinants. This will be complemented by Necessary Condition Analysis (NCA) to isolate the 'sine qua non' or essential requirements for these outcomes.

The methodology leverages the researcher's professional network to secure high-integrity primary data from approximately 50 senior practitioner stakeholders, comprising a diverse sample of PE Fund Professionals, such as Operating and Investment Partners; Company Board members and executives at PE participated companies and Senior Advisors, specifically Investment Bankers and Strategic Consultants.

5. Relevance and Practical Importance

By investigating the intersection of PE governance and technological integration, this research seeks to move beyond universal conceptual frameworks, complementing these with geographic idiosyncrasies and specific ownership structures, ultimately aiming to amplify enduring ideas that help leaders turn technological adoption into a force for sustainable corporate value growth. To ensure these academic findings are translated into high-impact results, the dissemination plan includes a White Paper of Best Practices, presentations at relevant conferences and forums and actionable executive presentations designed to provide practical recommendations for PE stakeholders in Spain and globally.

6. References

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