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Title: How to improve firm performance? – The role of production capabilities and routines

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Abstract:

Purpose: The research proposes a multilayered capability framework (MCF) with a complex view on performance implications. Within the MCF, two layers are integrated: functional-level production capabilities and shop floor-level production routines (PRs). The research examines how these two layers are interlinked, and additionally, explores how these layers contribute to firm performance.
Methodology: The hypotheses were tested by using structural equation modeling (SEM) on a sample of manufacturing firms.
Findings: At the functional level, production dynamic capabilities (PDCs) drive the renewal of production ordinary capabilities (POCs); and at the shop floor level, deployment of Industry 4.0 (I4.0) is influenced by lean production. Regarding the direct links between capability layers, PDCs and POCs have different roles in shaping shop floor PRs: PDCs are linked to I4.0, and lean methods are impacted by POCs. Only PDC and POC have a significant impact on firm performance (the latter is negative), while PRs do not.
Practical implications: When higher business performance is sought, firms should be more susceptible to resource renewal (PDCs) than to their general (POCs) or specific (PRs) exploitation efforts. Although the exploitation of current resource stocks positively impacts operational performance, its implications on business performance could be controversial.

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