

ABSORPTIVE CAPACITY AND INFORMATION SYSTEMS RESEARCH: REVIEW, SYNTHESIS, AND DIRECTIONS FOR FUTURE RESEARCH

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Appendix A

Papers Collected in Literature Review

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Appendix B

Detailed Description of Thematic Analysis Findings

In this appendix, we describe in greater detail the role of absorptive capacity in IS research. For the sake of clarity, we only include salient IT constructs in these models.

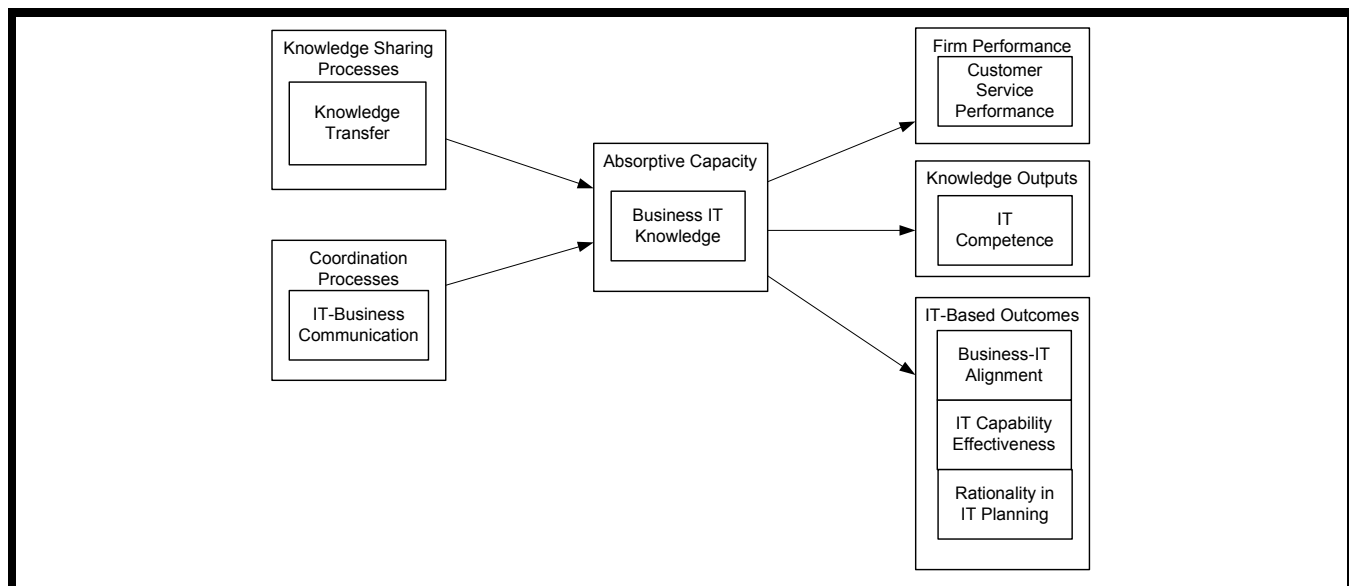


Figure B1. Business-IT Knowledge

Business-IT knowledge is a subset of a firm's absorptive capacity. Knowledge transfer and business-IT communication enhance business-IT knowledge. Consequences of business-IT knowledge include customer service performance, IT competence, business-IT alignment, IT capability effectiveness, and rationality in IT planning.

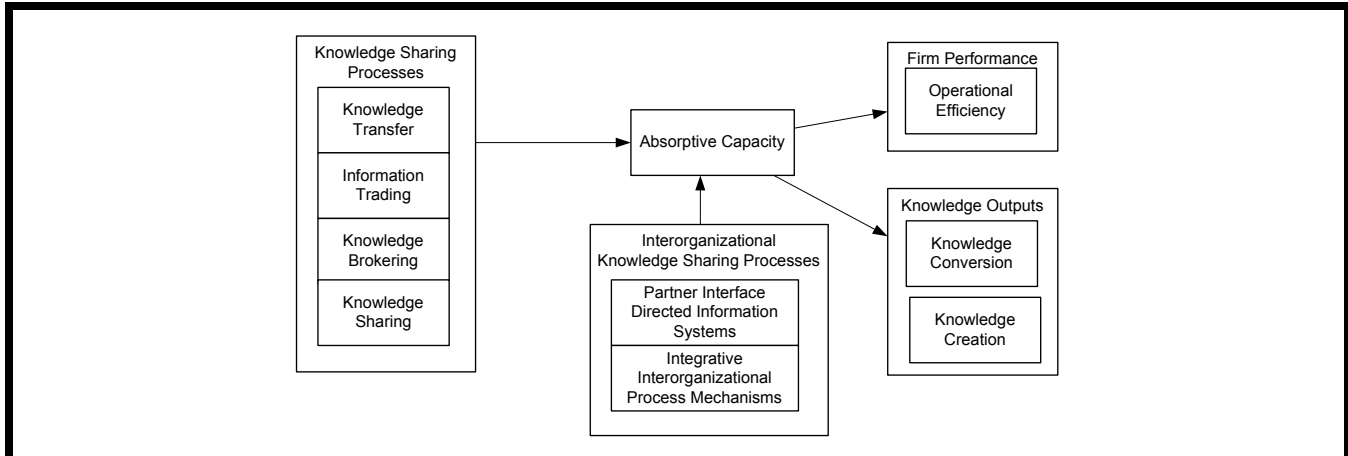


Figure B2. Knowledge Transfer

For our *knowledge transfer* theme, several knowledge sharing processes influence absorptive capacity. In particular, knowledge transfer, information trading, knowledge brokering, and knowledge sharing impact absorptive capacity. At the interorganizational level, partner interface directed information systems and integrative interorganizational process mechanisms enhance absorptive capacity. Higher levels of absorptive capacity result in operational efficiency, knowledge conversion, and knowledge creation.

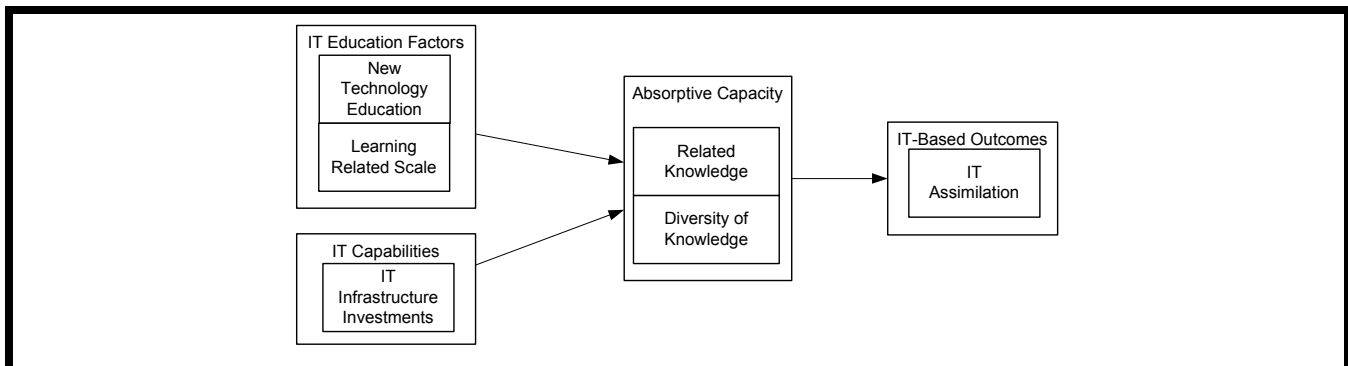


Figure B3. IT Assimilation

Our findings from *IT assimilation* research show that learning related scale, investments in new technology education, and IT infrastructure investments increase absorptive capacity. Related knowledge and diversity of knowledge (i.e., absorptive capacity as knowledge base) facilitate the assimilation of complex IT innovations.

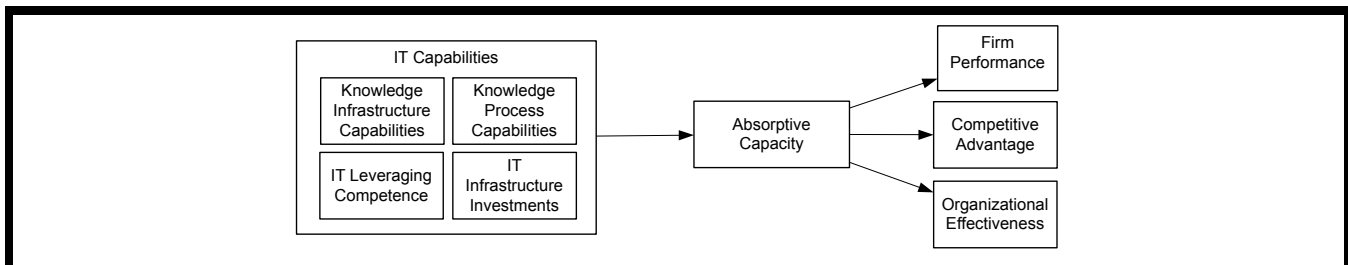


Figure B4. IT Business Value

Finally, our *IT business value* theme reveals several antecedents to absorptive capacity, such as knowledge infrastructure capabilities, knowledge process capabilities, IT leveraging competence, and IT infrastructure investments. Consequences of absorptive capacity include competitive advantage, organizational effectiveness, and firm performance.