

A dramatic photograph of a large ocean wave crashing, with white foam and deep blue water. The sky is overcast with grey and blue clouds. The text is overlaid in the center in a white, bold, sans-serif font.

**Getting IT right:
An exploration of the dynamic
capabilities
required for effective implementation
of artificial intelligence.**

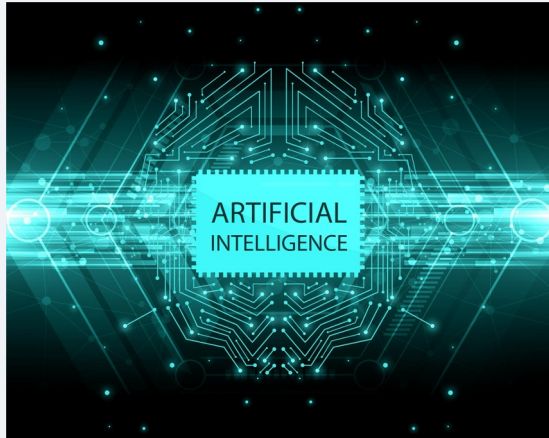
Companies are racing towards AI with uncertain outcomes

AI has the potential to radically change the way business operates and add as much as \$15.7 trillion potential contribution to the world economy by 2030 (Rao, 2017)

The race to adopt and implement AI is in full swing; approximately 80% of large companies have attempted some form of AI (Ghosh, 2019)

However, established research demonstrates that 70% of significant technology projects fail (Drummond, 2005)

This research is designed to develop knowledge in how organizations can improve the chances of successful implementation of AI



Research is racing to catch up with this trend



- Technology adoption theory is well established but only starting to be applied to AI
- Much of that theory is at the individual level and focused on the decision to adopt, rather than implement, a technology
- The extant organizational adoption and innovation theory is quite broad and does not offer a pathway for practice to improve outcomes

Research Questions



What do we know about the effective implementation of Information Systems (IS)/ IT at the organizational level?

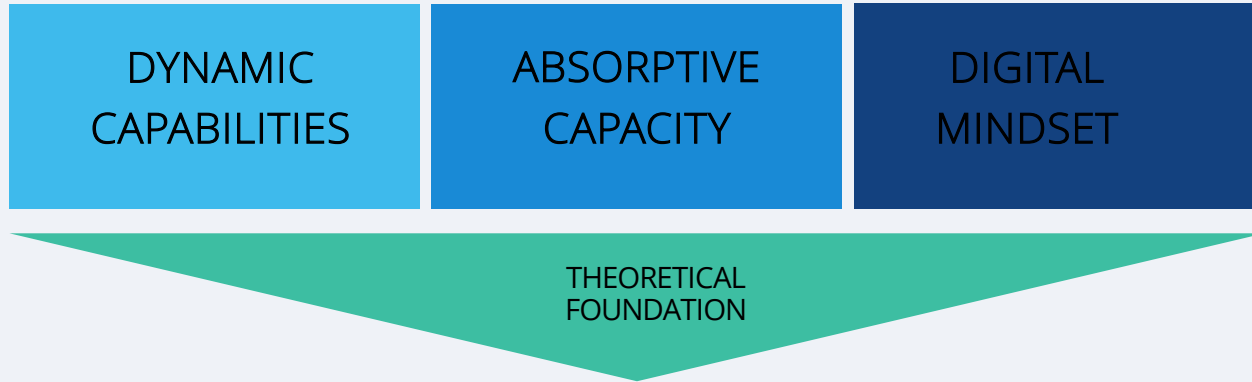


What dynamic capabilities fuel the successful implementation of AI?

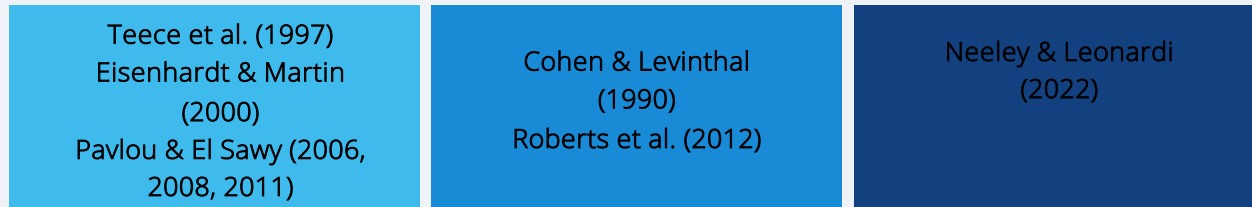


How do those dynamic capabilities affect AI implementation outcomes in mature companies?

Building blocks for the conceptual model



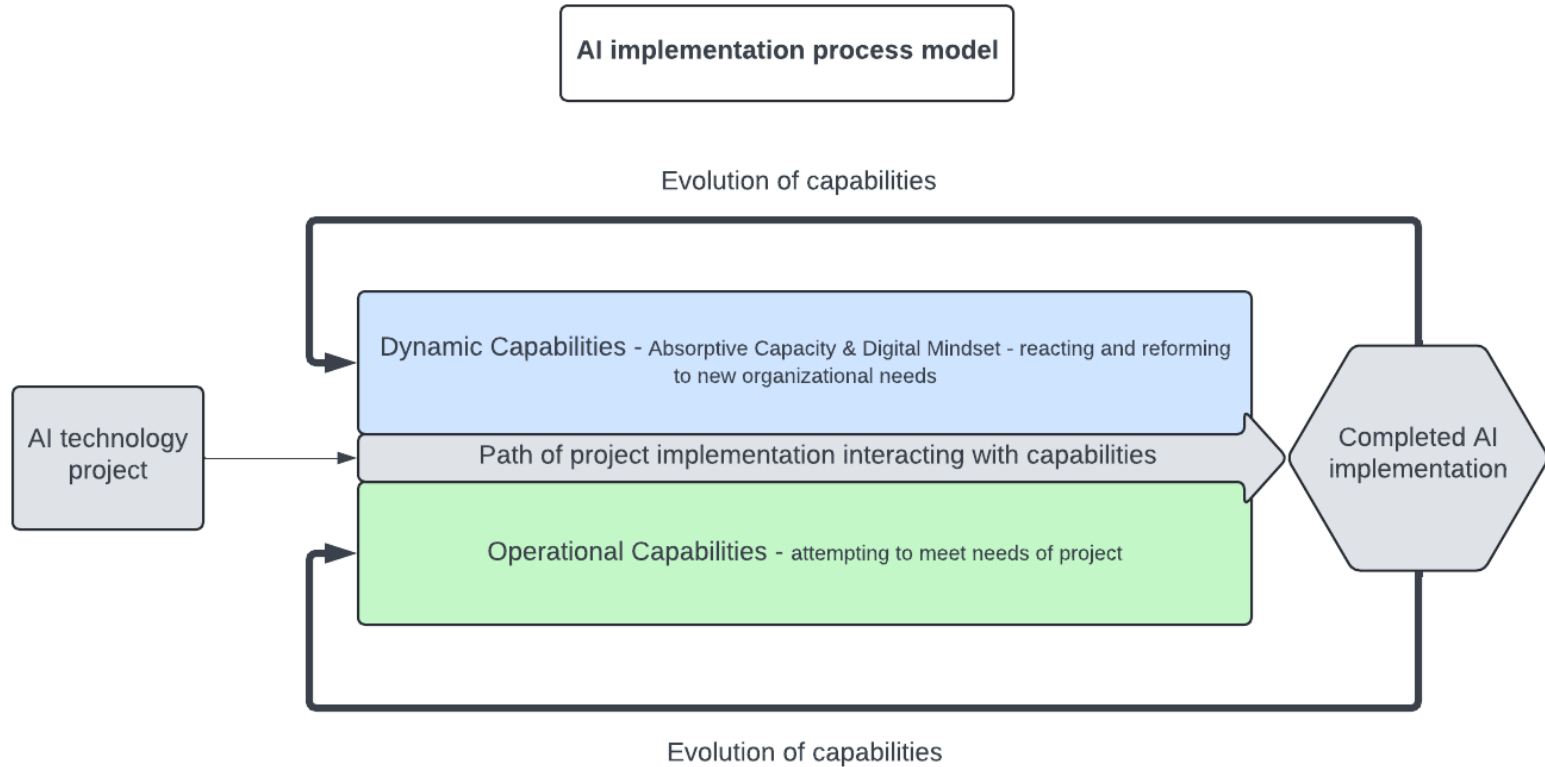
To examine the human psychological aspects of knowledge adaptation, mindset, culture, and how they dynamically react to technology implementations, a combination of established theories was sought.



How these theories help build the conceptual model



The conceptual model underpinning the research



Study population and sampling

Case site locations - United States

Financial services company
Telecommunications company
Insurance company

Case site locations - United Kingdom

Financial services company
Entertainment company
Insurance company

- Sample of expert informants to be drawn from mid to senior level executives with direct involvement and responsibility for implementation of AI technology.
- The sample will be representative of both technological and business leaders.
- 30-40 interviews will be conducted across 6 sites organizations depending on final approval of case site locations.
- Multiple data-rich industry sectors that pre-date dotcom era and, as such, have needed to transform digitally,
- Two geographic regions provide contrasting pairs of organizations in similar industries

**Sample plan to support iterative sampling as data
collection and research process unfolds**

Data collection methods and instruments

Interviews

Semi-structured interviews of key executives involved in implementing AI technologies at each case site.

Examining and defining capabilities that influence the implementation of AI technologies.

Primary method of data collection to drive observation of phenomena and identification of success factors. Interviews will be conducted until saturation.

Secondary data analysis

As case opportunities allow, examine the project documentation from the implementations of AI technologies.

Examples include project plans, meeting minutes, reports, technical requirements documentation, and use case documents.

Secondary data collection method to support conclusions developed from the interview stage.

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