Leader Adaptability in Technology Organizations:
How A Sense and Respond Approach Enables Leaders to Navigate Dynamic Environments

Debranetta Gethers and Dr. Lars Mathiassen, Georgia State University

Research Motivation

Rapid technological changes, such as digital technology and artificial intelligence, are changing how individuals work. Technological advancements "have deemed it necessary" for adaptive leadership (Ndebu, 2023). The purpose of this study is to explore leadership characteristics that enable real-time response in volatile and dynamic business environments. Against that backdrop, this study seeks to

1. Understand how technology leaders utilize adaptive leader behaviors to navigate dynamic environments effectively and enable the success of their organizations.
2. Examine how a Sense and Respond (SaR) approach contributes to the resilience and agility of leaders, enabling them to respond adeptly to volatile environments and lead their organizations through periods of uncertainty, rapid change, and disruption.
3. Explore how behaviors shaped by adaptive leadership principles interact with implementing the SaR approach among leaders aiming to boost their adaptability and facilitate strategic responses to rapid change.

Problem Setting

The environment in which IT leaders navigate is dynamic.

The financial services industry is volatile, faces internal and external challenges, and is technically intense.

Research Question

How Does Implementing a Sense-and-Respond Approach Enable Leaders to Adapt in Dynamic Environments?

Adaptive Leadership Theory

Developed by Ronald Heifetz and Martin Linsky at Harvard University

Effective leadership involves addressing technical issues with known solutions and navigating adaptive challenges that require innovative thinking and adaptive change (Heifetz and Laurie, 1997).

In dynamic environments, adaptive problems should not be treated the same as technical problems (Heifetz and Laurie, 1997).

Sense and Respond Approach

Framing

Introduced by Stephan H. Haeckel, a management theorist at IBM, in 1993.

Origin: Adaptive loop draws from US Air Force OODA Loop - a framework examining how fighter pilots of inferior aircraft won combat engagements.

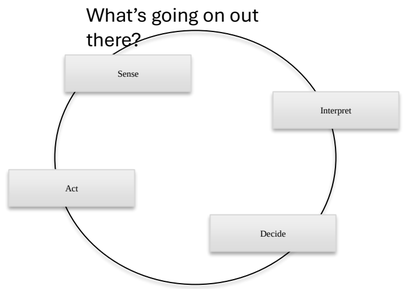
Applications: Firm level theory typically used in the context of software firms' technology systems, enterprise design, and architecture.

Opportunity: Explore the sense and respond approach with the individual as the unit of analysis.

Four Principles of Adaptive Enterprise Design (Haeckel, 1995):

1. Processes that learn
2. Value based governance
3. Dynamic accountabilities
4. Modular processes.

Sense and Respond Approach: Business Learning Loop



Methods

Engaged Scholarship – Developed by Andrew Van de Ven (2007)

Research Design – Purposive selection with the individual unit of analysis (Polkinghorne, 2005). A total of 8 participants will be recruited for this study.

Data Collection – Recorded interviews of middle managers in dynamic industries. Multi-case study approach.

Data Analysis – Coding leveraging a priori coding scheme and second level coding to identify patterns. NVIVO.

Expected Results

- A deeper understanding of how adaptiveness drives change in dynamic environments.
- Further insights into how continuous learning enables leader adaptability.
- A model applying the Sense and Respond approach at the induvial unit of analysis.

Literature

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