

# Using Conceptual Change to Improve Lean Implementation Quality

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## **Abstract**

Change initiatives have a 70 percent failure rate, but effective change is necessary if a company is to remain competitive. Current organizational change research around lean process improvement links unsatisfactory implementation results to organizational behaviors, but does not assess how individual cognitive characteristics affect successful lean implementation. Although a range of cognitive characteristics from anti-lean (zero/single loop) to continuous improvement (double loop) mindset have been identified, these remain poorly translated or untranslated into training schemas (or cognitive models) to help managers or trainers support the transition from anti-lean behavior (zero/single loop mindset) to a culture of continuous improvement (double loop mindset).

The research objectives, in this dissertation, are to first investigate an accommodation-based model to outline how a manager might evaluate individual perceptions and interpretation of a process or system (their cognitive state or conception), before leading the employee transition from zero/single loop to double loop behavior. Secondly, to propose a conceptual change strategy to facilitate the transition from zero/single loop mindset to double loop mindset and thirdly to implement the proposed conceptual change strategy in *formal* and *informal* training settings.

To achieve these research objectives, two case studies were conducted in this dissertation to illustrate the accommodation-based model. The first case study was in a formal training setting at a university. The second case study was at a governmental service organization located in northwestern United States.

In the formal training setting, the conceptual change strategy displayed a positive outcome by changing single-loop actors to a nascent double loop and double loop mindset when compared to the group in which conceptual change strategy was not applied. Nevertheless, in the informal training setting, the conceptual change strategy allowed a successful transition to double loop mindset, followed by a change from quick fixing behavior (single loop behavior) to initiating/enhancing behavior (double loop behavior) in accordance with the cognitive change. The findings identified in this dissertation provide suggestions for managers and academicians to improve the success of organizational change projects.

**Tuesday, August 28, 2018**

**11 AM, Rogers 226**

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