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Lodgaard is currently working as a research scientist at SINTEF Raufoss Manufacturing and is a PhD candidate at NTNU Department of Engineering and Materials. Earlier she has been working in the industry for 13 years – mainly as operations manager, laboratory manager, and quality assurance engineer.



The speed at which firms develop and roll out new products has become an increasingly critical issue regarding competitiveness. The long-term business sustainability therefore depends on the ability to acquire knowledge throughout the organization to develop better products and processes.

Even though continuous improvements have been well-known techniques for decades, it is still reported that little has been written about the application of continuous improvement to product development. Companies often achieve significant improvements in the short run, but continuous improvement ultimately falls apart or does not materialize.

The PDCA cycle describes a systematic and continuous improvement approach, which has been used since 1950 by the Japanese to improve the quality in the entire organization. This tool is widely outspread in the industry today, and the PDCA approach is also highly recommended by the quality assurance standard ISO/TS 16949 used by the Norwegian first-tier suppliers in the automotive industry. Coordinating continuous improvement plans with a PDCA cycle involves four steps: Plan, Do, Check and Act, carried out in the cycle illustrated in the figure below. Most of the organizations are not consistently effective in addressing

“Application of the PDCA cycle to enhance continuous improvement process in product development”

Facts

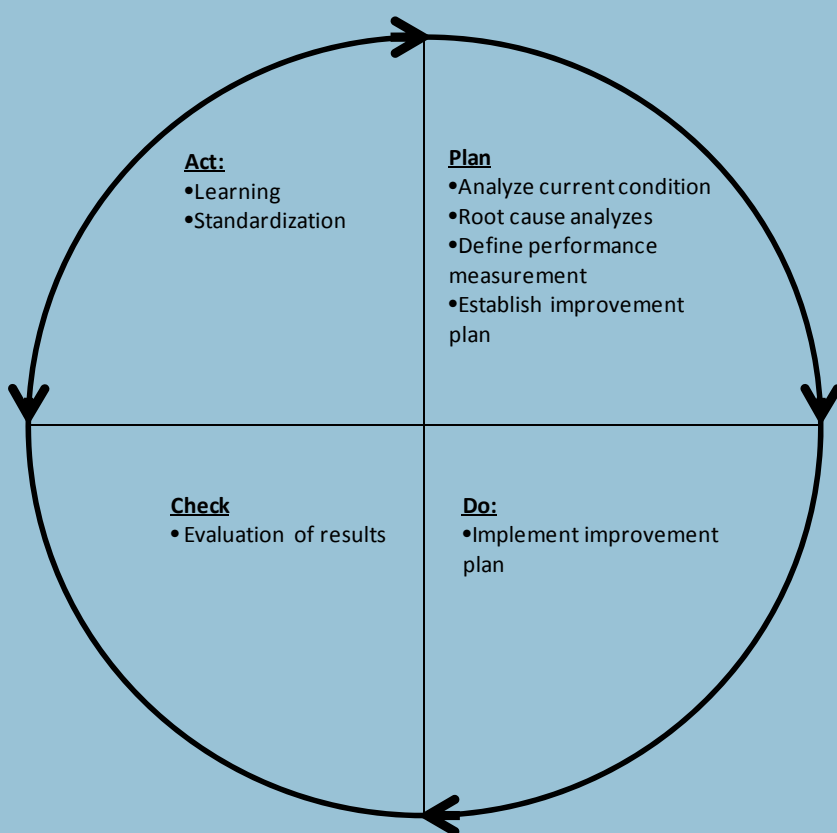
- PhD started August 2008
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 - Bjørn Andersen
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- Thesis title: Application of PDCA Cycle in Product Development

the day-to-day problems they face, but instead they have developed sophisticated “fire-fighting” skills. In the West many companies are adept to just “do” and neglect the P-C-A phases.

The PhD project will identify which success factors must be in place in the PD organization to succeed in using the PDCA cycle to increase efficiency as necessary for a company’s long-term survival in a demanding market.

Main objective of the PhD project:

– to identify the main success factors that influences the success of using the PDCA cycle in product development.



PDCA Cycle