

Am I a Lean Innovation Champion or Laggard? – A Short Discussion of the Lean Innovation Audit

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Nobody needs much convincing to realize the importance of successful innovations. They ensure the sustainability of a company by setting them apart from the competition. Even at higher prices, innovative products can achieve market success and guarantee a company's growth. However, with more than half of all innovation projects failing, many enterprises are less and less successful at achieving uniqueness through innovation. Each failure causes exorbitant costs!

Lean Innovation: An Innovation Offensive despite Limited Resources

Examples of successful companies show that innovation projects that abide by certain principles and rules have a much higher probability of succeeding. According to studies, Lean Innovation champions are able to create concurrent and sustainable innovations despite resource constraints. For these results, it is necessary to focus on the value created by innovations and to identify and eliminate typical types of waste that occur in innovation management and R&D.

“To recognize waste is the first step to have successful and efficient innovation projects.”

Michael Lenders, Ph.D.

Companies that can avoid the following waste are on their way to becoming Lean Innovation champions:

- Lacking customer orientation and vague project goals
- Idle resources in research and development

- Unnecessarily long time-to-market because of interrupted value streams
- Costly products because of uncontrolled creation of product complexity and unused scale effects
- Further inquiries and iterations because of insufficient standards
- Avoidable defects and revisions during the prototype phase

Where and How Does Lean Innovation Start?

Lean Management sets the scope to focus activities on value creation, while reducing unnecessary waste. The utilization of Lean tools, which has already become the norm in the manufacturing field, is drastically underutilized in the R&D and innovation management field. Only few companies have started the systematic identification of waste in R&D and innovation management.

Schuh & Company offers the Lean Innovation audit as a diagnostic tool. It gives companies an effective way of assessing their state of affairs before or during the implementation of Lean efforts within the R&D departments. Unnecessary efforts can be eliminated, saving upfront costs, and resources can be directed to areas where they become most effective.

A workshop brings together the company's employees and focuses on clarifying the Lean Innovation principles. In consequent steps, the processes are analyzed and the types of waste for R&D and innovation management at the company identified. For each of the twelve Lean Innovation principles, the currently achieved degree of maturity is transparently assessed. An effective and sustainable action plan is developed in coordination with the employees to implement Lean Innovation based on the company's achieved understanding and situation.

The Different Steps of the Lean Innovation Audit

The Lean Innovation audit is unique in that it can be completed within a short time period. Audit results are available after a few workshops and about ten interviews. The detailed proceedings (Fig 1.) are aligned according to the company structure, goals and guidelines. While the Lean Innovation audit's duration and efforts are quite manageable, its results can help companies achieve major breakthroughs in managing its limited R&D resources.

The first step for a successful project, no matter in which area, is always to be on the same page. Therefore, each audit starts with a management alignment. This serves as an introduction to the Lean Innovation topic and is a forum to discuss project goals from the viewpoint of management. Not only is the stage set by providing the background knowledge via presentations, simulations and games, we also introduce the significant tools of the Lean Innovation method. Together with the management team we determine the focal points of the audit and select the methods for the in-depth analysis, e.g. R&D value stream analysis. Based on the developed Lean Innovation understanding and the outcomes of the analysis, the plan for the following implementation of Lean Innovation within the company is defined in this phase.

Part 1: Understanding Lean Innovation. Value orientation in R&D and innovation management.

Lean Innovation: What is that? This question is answered in the first part of the audit. The theoretical foundations of Lean Innovation are described and the types of waste in R&D and innovation management are pointed out. A significant part of this phase is the

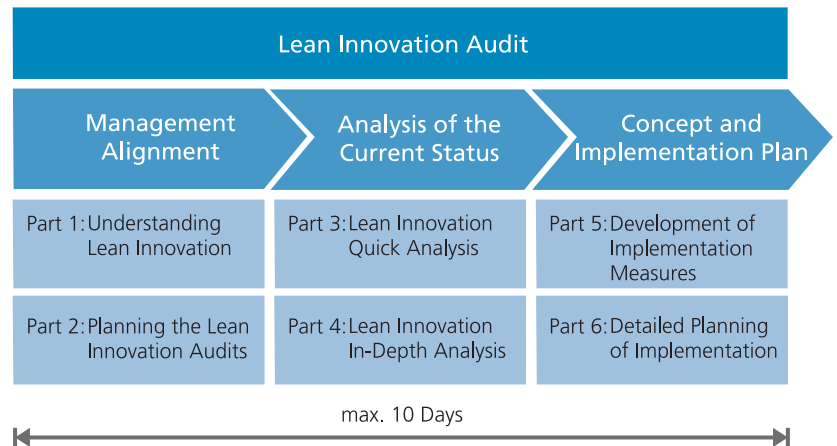


Figure 1: Overview of the Audit Steps

instruction in the twelve Lean Innovation principles (for more information, please read the article "More Innovation, Less Waste – The Secret of Efficient Development Processes" Part 2, p. 4-9).

Actions are defined and the method kit, including the analysis of the Lean Innovation audit is introduced. Additionally, practical exercises by means of simulation games clarify the impact of actions (e.g. value stream optimization).

Part 2: Planning the Lean Innovation Audit. Defining a concept (vision) for Lean Innovation in the company and creating a detailed plan of the audit.

Discussions and adjustments of precise goals for Lean Innovation in the company are necessary in order to achieve a vision.

The detailed plan of the Lean Innovation audit comprises a comprehensive and collective selection of the processes that are going to be examined during the value stream analysis as well as the coordination of workshop and interview partners within the company. An additional part of this audit phase is the preparation of the internal communication about Lean Innovation efforts.

A summary of the management alignment concludes this part of the Lean Innovation audit.

Part 3: Lean Innovation Quick Analysis. The quick analysis is based on the Lean Innovation degree of maturity model.

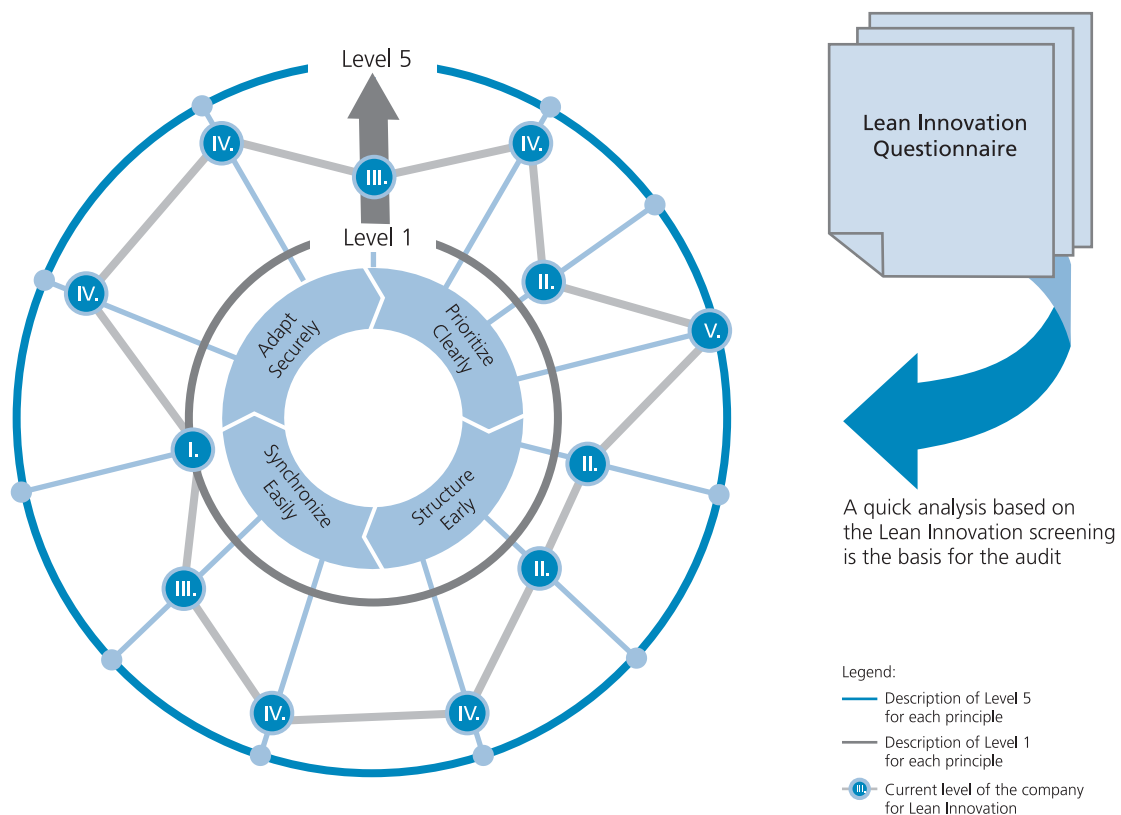


Figure 2: The Radar Chart Pictures the Achieved Level of Lean Innovation within the Company for Each Principle

The quick analysis is a screening, which comprises questionnaires, a moderated workshop and interviews with several employee groups of the company to assess the status quo of Lean Innovation.

The next step is an anonymous evaluation and clear overview of the current state of the company in adherence to each of the twelve Lean Innovation principles.

“The Lean Innovation Audit gives a quick overview about measures that can sustain your companies business success.”

Stephan U. Schittny, Ph.D.

A radar chart (Fig. 2) depicts the achieved level of Lean Innovation within the company for each of the principles.

Part 4: Lean Innovation In-Depth Analysis. A typical in-depth analysis for selected innovation and R&D processes.

During workshops, we perform value stream analyses for the processes that were selected during the management alignment. An essential component is to convey the special characteristics of value stream optimization for creative R&D and innovation processes. Together with company management and employees, a target value stream is developed for each process.

As an option, activity and organizational structure analyses can also be performed for selected R&D groups. Muda-workshops on-site, meaning at the desks of R&D employees, or the 5S method are additional approaches to identify improvement opportunities.

In the last phase, the management team approves implementation measures to ensure the successful implementation in the future.

Part 5: Development of Implementation Measures.

Deduction and prioritization of improvement based on the analysis of the as-is state, the defined goals and development of implementation concepts.

For any project to be successful it is important that the developed improvements are feasible. Lean Innovation projects are no different. Therefore, the action items are prioritized depending on importance in a first step. The joint development of approaches helps to foster the acceptance of the measures by the employees. Project outlines serve as aids to document the results. They also assess the obtainable improvement opportunities.

The management team has the final say in approving all measures, because it will be responsible for the outcome of the measures.

Part 6: Detailed Implementation Planning. A detailed plan of the opportunities based on a pilot study and short, mid, and long-term improvement projects.

Further ideas for pilot projects are planned and developed. In addition, improvement projects are prioritized and assigned to a person responsible for their implementation. The development of a monitoring system helps to track the progress and achievement of goals.

It should not be forgotten that Lean Innovation also has to be communicated to the employees of the company. The development of a communication concept is an important part and ensures the success of the overall project.

Conclusion

The probability to achieve innovation success despite limited resources is increased by concentrating on the value creation of innovations and the minimization of typical, avoidable waste in R&D and innovation management. Translating the Lean philosophy from manufacturing to R&D requires, as described in the first article, a conversion of the principles to satisfy the creativity of R&D processes.

With the help of the Lean Innovation audit, a quick and easy evaluation of the current improvement activities of R&D departments and innovation management becomes possible. The company is measured against the degree of maturity model. Depending on the recorded degree of conformance with the model, actions and measures are derived to assist the implementation of Lean Innovation.

Therefore, the Lean Innovation audit is an invaluable tool in assessing the company's efforts in the beginning or during the introduction of Lean Innovation. It also ensures a sustainable and successful implementation.

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