

Digitalizing Lean Process Management

Posted by Raymond Sheen | Feb 13, 2024 |
Analysis, DT Framework - Readiness, Technology
| 0

SHARE:      



Digitalizing Lean Process Management

The digital transformation cheerleaders promise your business will be faster, better, cheaper and more customer focused. You will transform your company and your industry! That sounds great. But if that is the case, why do somewhere between 70% and 95% of digital transformation initiatives fail (BCG, KPMG, Forbes, Bain& Company)? That is because merely putting in some

SEARCH

Topics

All

Keywords

All

Search

SUBMIT

RESET

NEWSLETTER SIGNUP

The Journal of Digital Transformation is only available to Institute Members.

But Membership is FREE.

[CLICK HERE TO JOIN!](#)

INTERESTED IN HAVING YOUR ARTICLE

sensors, chatbots, and a digital dashboard does not move the needle. To realize the promises of digital transformation, you must change what you do.

This is where that old, dusty process improvement methodology known as LEAN can yield dividends. Lean is focused on speed of execution and the elimination of waste. It combines an external and internal focus on improvement. The external focus comes from starting with a clear understanding of what the customer considers to be of value in the product or service being provided. The internal focus comes from a rigorous review of the business processes that create and deliver that value in order to minimize wasted time and effort.

Lean management principles were developed by Toyota's manufacturing operation in the 1990's. The Lean concept swept across the globe and the principles migrated from manufacturing to virtually every other function in business. For operations that had become internally focused and bloated with bureaucracy, adopting Lean transformed them and resulted in impressive results. That same approach can be used again, but this time the process needs to be evaluated through a digital lens.

Digitalized Lean Customer

PUBLISHED
HERE?



**Guest
Authors**

[CLICK HERE](#)

**Sponsored
Posts /
Advertising**

[CLICK HERE](#)

RECENT
POSTS



**The
Power
of
Quest
ions**

Feb 25,
2025 |
Analysis,
Culture,
Leadersh
ip

Value

Lean started with a clear identification of the customer and customer needs. The customer defined the elements of value that were being delivered. This is where a Digitalized Lean needs to start. In today's environment, there is a major digital component in the value of the product or service. Customers want real-time information about the product, service, or transaction available in an app on their phone. They want interactive control, connectivity, and data aggregation onto a dashboard. Every product is now expected to be "smart." In addition, they want their experience to be customized and personalized, building on their most recent experiences.

This is a transformation of the customer experience and therefore it is a transformation of the value that is being created in the business processes. In some cases, this will change the customer identity. Customers include not only the direct beneficiaries of the product or service; the set of customers also includes those who process and consume the data generated by the product or service. The Digitalized Lean methodology needs to identify the elements of digital communication, digital control, and digital relationship that have become major elements of the overall portrait of customer value for each of the customer segments.



How AI is Reshaping the Workplace - Part 2

Feb 18, 2025 | Analysis, Culture, Leadership



Digital Transformation

FOLLOW US

For many processes, the focus of value creation moves from the physical space to the virtual space. This is one of the sources of failure for digital transformation initiatives. The digital needs of the customer are not recognized and given the priority they deserve. This leaves the customer with a poor digital experience and inhibits the market success of digitalized products. In many organizations, the paradigm of customer needs is still focused on physical products or service and the digital experience is not given adequate consideration.

Value Stream Map

The Lean methodology developed by Toyota relied on the development and management of a Value Stream Map to improve the process. This map was the set of steps in the process that led to the delivery of the product or service to the process customer. Each step was included, even those that did not directly add value. If it was an action in the process, it was a step on the map. Each step was accompanied by a databox that tracked metrics associated with the process. The steps were evaluated around attributes like cycle time, quality yield, inventory batch size, and resources assigned to the step. A key metric was to determine what portion of a step, if any, was directly contributing to the creation of an elements of customer value. With the value-added effort identified, everything

else in the process was a candidate for elimination or simplification.

The Digitalize Lean Value Stream Map needs to include the steps associated with data creation, data transfer, data analysis, and data delivery in addition to the steps associated with the physical product or service. The creation of elements of value in the digital experience needs to receive appropriate attention. That also means the data box associated with each step should now include an element for data creation or analysis.

The analysis of the Digitalized Lean Value Stream Map looks for waste and inefficiency in both the physical process output and the digital process output. Digital waste can occur when data is corrupted or disconnected from the physical product or service it represents. In addition, the use of the digital data with machine learning or AI can speed up each step of the physical process by eliminating the delays associated with waiting for an operator decision. Further the use of automation and cobots can improve the quality and lower the cycle time in steps that are repetitious, dangerous, or physically demanding. Including digital elements in the value stream map will lead to additional improvements in flow and quality performance.

The failure to use the value stream mapping approach to track the creation and performance of digital elements of value is another contributor to the failure of digital transformation projects. When the digital elements are an after-thought in process design and process management the creation of digital value suffers. When a digital tool, such as automation or AI, is used in a process that has not been optimized for value delivery, the new technology adds cost but virtually no benefit because other portions of the process are the areas of constraint. Using a Digitalized Lean Value Stream Map will put a spotlight on the areas where improvement is needed and help to identify the type of improvement.

Continuous Improvement

One of the unexpected benefits of Lean manufacturing was that it provided a great tool for documenting the process. When changes were made to the process the value stream map was consulted and updated. This was then used in training operators and managing the process. As Lean migrated into other portions of the business it provided an element of process configuration management and control that was often missing. This led to sustained performance and was a platform for continuous improvement.

In today's digitally transforming world, the need for configuration control and management of business processes is intensifying. Data incompatibility and data security are ongoing challenges. The systems that were in place when a new process was launched will be out of date within a year and new platforms and interfaces will be required. The Digitalized Lean Value Stream Map can serve as the management tool for monitoring the need for configuration upgrades and enhancement. Digital systems and processes are undergoing constant change. When control is lost, a process that initially was a success can be left in the dust or even bring a business to its knees. Using a Digitalized Lean approach to business process management and improvement will not guarantee your digital transformation is a success, but it can significantly improve the odds.

Tag/s: Business Transformation, Digital Enterprise, Manufacturing

[← PREVIOUS](#)

[NEXT >](#)

[Platform Governance in Organizations](#)

[Leadership Lessons of Ted Lasso](#)