



Using Lean Risk Management to Reduce Costs

How a Total Cost of Risk Approach
Eliminates Waste and Maximizes the Value
Received From Insurance Programs

Introduction

Many companies have increased their profitability by applying lean management principles to their risk-management operations. By doing so, they have improved quality and process efficiency, eliminated waste, and created a continuous-improvement model that can drive down costs and yield more value each year. This paper discusses how a company can apply lean management to their risk-management operations.

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“Lean is not a short-term cost-reduction process based on tools and techniques, but rather a long-term transformation of how an organization thinks, solves problems and creates value as defined by customers.”

Defining Lean Management

Lean management was first defined and detailed in 1990¹ and has since been widely adopted in manufacturing, the financial sector, healthcare, government and other non-profits, and elsewhere. The basic goal of lean is to maximize customer value while minimizing waste. By removing waste, companies free up assets so that they can be deployed more effectively to achieve strategic goals, such as increasing revenues and/or profitability.

“Lean thinking has been defined as a way to do more and more with less and less—less human effort, less equipment, less time, and less space—while coming closer and closer to providing customers with exactly what they want.”²

Lean is not a short-term cost-reduction process based on tools and techniques, but rather a long-term transformation of how an organization thinks, solves problems and creates value as defined by customers. A lean organization challenges its employees and encourages them to continuously improve. Ultimately, key processes and tasks are standardized to prevent time delays, making work easier for employees and accelerating the delivery of value to customers.

Every organization has waste. Lean theory identifies eight types of waste: defects (time spent doing something incorrectly, inspecting for errors or fixing errors); overproduction (doing more than what is needed by the customer or doing it sooner than needed); transportation (unnecessary movement of the product in a system);

waiting (waiting for the next event to occur or next work activity); inventory (excess inventory cost through financial costs, storage and movement costs, spoilage and obsolescence); motion (unnecessary movement by employees in the system); over processing (doing work that is not valued by the customer, or caused by definitions of quality that are not aligned with customer needs); and human potential (waste and loss due to not engaging employees, listening to their ideas or supporting their careers).³

Eliminating waste allows an organization to reduce costs, provide more service, improve quality and improve employee satisfaction.⁴

Sometimes waste is obvious, such as a duplication of records or a stockpile of outdated components. Often though, waste is hidden and must be uncovered through analysis and benchmarking. Data does not lie, and so being able to define the gap between acceptable (i.e., efficient) and excessive (i.e., wasteful) in a process using calculations and comparisons is a powerful tool in the effort to eliminate waste. Over the years, lean practitioners have developed total-cost models to document all costs associated with an activity so that they can make pure comparisons to determine the best possible option. These models consider not just obvious costs, but costs that are not tied to a definitive line item, invoice or expenditure. Yet, they are costs.

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¹ Womack, James P., Daniel T. Jones and Daniel Roos, *The Machine That Changed The World*, (New York: 1990) Macmillian Publishing Co.

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² Womack, James P. and Daniel T. Jones, *Lean Thinking* (New York: 2003), Free Press, Page15.

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³ Id. at 43.

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⁴ Graban, Mark, *Lean Hospitals* (New York: Productivity Press, 2009), 36.





How Lean Risk-Management Principles Help Companies Reduce Cost

Every year, companies are faced with their annual insurance renewal. Often their insurance brokers advise that the company is looking at another significant increase in insurance premiums and it's the best deal available.

How can companies know how well this premium offer measures against what their industry peers are paying? The best way to do that is to undertake a Total Cost of Risk ("TCOR") analysis. TCOR evaluates the problems to be addressed by defining current and target conditions as part of the value-stream⁵ improvement process. A TCOR analysis creates agreement about the nature of the problems (quality, cost, and delivery) and potential ways to address them.

The lean definition of a problem is a gap between where things are now (current performance) and where they are supposed to be (an established standard). Lean thinking requires that a company recognize that there is a gap (a problem), then identify and work on that problem to start closing the gap and make genuine and sustainable improvement toward reaching the established standard. TCOR can be used to develop a standardized risk-management approach that benefits the company not only in the current year, but also in future years—just as standardization does in other functions. Calculating TCOR is a systematic process that enables companies to:

- Understand the costs that drive the company's risk management.
- Understand the risks that the company faces throughout the organization.
- Understand the company's strategic plan and goals.
- Evaluate and apply the appropriate techniques to protect the company's assets.
- Measure and manage the process effectively.⁶

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"Total Cost of Risk is a standard way for companies to measure their risk management costs and benchmark them against industry peers."

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⁵ "Value Stream: All of the actions, both value-creating and nonvalue-creating, required to bring a product [or service] from order to delivery. These include actions to process information from the customer and actions to transform the product [or service] on its way to the customer." *Lean Lexicon, Third Edition*, (Cambridge, MA: Lean Enterprise Institute, 2006) 2009), 36.

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⁶ *Measuring the Total Cost of Risk*, University Risk Management & Insurance Association, URMIA White Paper, November 2008.



“From the TCOR results, a company can identify which improvements are desired and construct a strategy that addresses them, thus reducing the company’s TCOR below the industry benchmark.”



While calculating TCOR will help to identify and subsequently manage risk exposures, it also can provide a benchmark comparison of insurance costs, and so should be calculated in a manner that enables meaningful comparisons within the same industry and against companies of relatively the same size. Undertaking a TCOR analysis helps a company develop the problem statement which, when the TCOR analysis is complete, will describe the current situation (the gap) in measurable terms and its impact on the company.

Determining a company’s TCOR involves the following calculation:

$$\begin{aligned} & \text{premiums} \\ & + \\ & \text{direct and indirect losses} \\ & + \\ & \text{outside service fees} \\ & + \\ & \text{administrative costs} \\ & = \text{TCOR} \end{aligned}$$

First, add up all of the company’s insurance premiums and premium taxes and fees (surplus lines fees, state taxes, etc). Premiums for workers’ compensation are included, but life insurance premiums, and health insurance benefit premiums are not. Most companies purchase automobile, property, general liability, excess general liability (or umbrella) and workers’ compensation policies. Others may also purchase insurance policies covering ocean transit, employment practices, crime, inland marine, directors and officers, errors and

omissions, aviation, fiduciary, and environmental, to name a few, depending on the business’ size, complexity, and activities. Total all of these premiums and analyze a period of at least three to five years so that a company can see a trend.

Second, total all the direct and indirect losses. That would include those costs that a company paid for claims or costs it expects to pay (loss reserves) but are not covered by insurance. These losses represent “self-insured losses.” Direct loss costs include deductibles and self-insured retentions. It is important to include any legal fees that were not covered by insurance associated with the claims and then calculate a total for several years. Indirect loss costs include those costs associated with lost productivity, loss of use, damage to brand.

Third, add up the fees that you pay to your outside services. This would include your brokers, legal services, risk management consultants, third party administrators, actuarial services, and risk control services. If your brokers are paid by commissions only, then do not include the commission fee.

Fourth, determine the administrative costs of the insurance program. This would include the clerical, claim and other administrative personnel costs (including salaries, and the cost of benefits and expenses) associated with finding, managing and implementing the risk-management function in the company.

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Now total the numbers to calculate the company's Total Cost of Risk ("TCOR").

For TCOR to be useful, a company should compare itself against its competitors. To do this, companies should express TCOR as a percent of revenue, or as a dollar cost per \$1,000 of revenue. Then, compare the TCOR with the numbers which are updated each year by RIMS, the Risk and Insurance Management Society. The RIMS data is broken down by industry. The result is a TCOR comparison that is irrefutably data-driven and transparent. The TCOR results will identify the gaps within a company that are out of line with industry standards. From the TCOR results, a company can identify which improvements are desired and construct a strategy that addresses them, thus reducing the company's TCOR below the industry benchmark. Typically, when a company's TCOR is above the industry benchmark, significant savings can be found by analyzing, among other things, the following items:

- (i) whether the structure of a company's insurance program is appropriate (i.e., should the company be buying its limits via layers, quota-share, fronted policies, captive schemes, non-admitted, direct, finite, retro, domestic insurers, London insurers, Bermuda insurers, etc.);
- (ii) whether the company's limits and self-insured retentions are appropriate given its unique situation;
- (iii) whether the company is paying more than it should for broker services and whether the broker's compensation is structured in such a way that the broker's objectives are in line with the company's best interests;
- (iv) whether there are any guidelines for analyzing the work performed by third-party administrators (TPAs), the TPAs compensation structure, and whether there are any return to work programs;
- (v) whether the company's safety program and safety culture, both of which impact workers compensation, auto and general liability claims and costs are appropriate;
- (vi) whether the exposure data and renewal information being shared with underwriters is being audited thoroughly; and,
- (vii) whether the company's story is being effectively communicated to the various underwriters. Although companies may be tempted simply to reduce their internal risk management workforce as a way to reduce their TCOR, such approach — while sometimes necessary — is usually shortsighted because the real and long-term cost savings are found in the above-discussed items.

After identifying the areas where costs can be reduced, the final step is implementing cost-saving strategies. As a general rule, such implementation is more successful when a multidisciplinary team implements the cost-saving strategies because it creates buy-in from the company as a whole, and it conveys the message that strategic risk management should be a focus for everyone in the company. The team should include a "lean champion" who is a part of the company's senior leadership team, as well as a "lean team leader" who has the

overall responsibility for the performance of the project and the performance of the value stream designated for improvement.

Conclusion

A company's TCOR should be reviewed each year to make sure that the company is improving its risk-management processes, and as a result, its profitability. Applying lean principles to a company's risk management program helps improve the company's bottom line.



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