

The Debate: Leading VS. Lagging Indicators

AN INTERVIEW WITH SAFETY PROFESSIONAL CORY WORDEN

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Key performance indicators (KPI) are crucial to understanding the strengths and weaknesses of any department in an organization and safety is no exception. However, safety professionals often struggle with determining which KPIs to use. Typically, there are two categories of KPIs safety professionals rely on: lagging and leading indicators.

Cory Worden, Manager of System Safety and Occupational Health and Safety at Memorial Hermann Health System is one of the safety professionals urging companies to reduce the emphasis on lagging indicators and start focusing on leading indicators as well.

eCompliance met with Cory to get a further understanding of why he thinks leading indicators are so important and should be top of mind for safety professionals.

& A

The Occupational Safety and Health Administration (OSHA) requires American organizations to track & report on specific lagging indicators. As these are legally required metrics, most at-risk organizations track and measure success using lagging indicators.

However, there's a growing debate about whether these are the best metrics to rely on for understanding risk levels within organizations operating in hazardous industries. Many safety professionals believe that the proactive leading indicators are important metrics & emphasize the need for organizations to adopt and use leading indicators as well – not just lagging indicators.

Q: *In your EHS Today article: “**Breaking Up with Lagging Indicators,**” you discuss the need for safety professionals to take a step away from lagging indicators and stop making them the ‘be all, end all’ of safety management.*

Could you summarize for those who may not have read the article, why you think we need to ‘break up with lagging indicators’?

A: Ultimately, lagging indicators simply tell us what has already gone wrong or how much we've failed in accident prevention. If we do nothing else but wait for each month's lagging indicators to be reported, we're essentially doing nothing to prevent incidents and only measuring the fallout.

Additionally, any additional time spent ‘analyzing,’ let alone arguing about lagging indicators is more time spent debating incidents when we could be preventing new ones.

Q: *Do you think we should abandon lagging indicators all together or just decrease their significance within the context of safety management?*

A: Lagging indicators play an important role in a safety management program but should not be overemphasized.

For example, they give a site picture of whether or not our hazard controls are working and provide the pretense for investigations and root cause analyses.

However, only after we've done the due diligence of analyzing hazards, providing hazard controls, communicating them and overseeing them through leading indicators.

Q: *Do you have any examples of how this heavy emphasis on lagging indicators has negatively impacted an organization?*

A: Organizations that fail to either provide hazard controls, communicate them and/or oversee them through leading indicators, ultimately, have no validity in their lagging indicators.

For example, if an organization has three injuries in a month and spends their time analyzing them or even arguing about them (recordability, etc.), but without having done anything to affect incident prevention, those lagging indicators mean nothing.

With this, the organization would simply be wasting time talking about these lagging indicators when they could be implementing hazard controls, communicating them and overseeing their use to actually affect incident prevention.

Q: *In your opinion, how do you think we got here? In other words, why do you think so many safety leaders put such large emphasis on lagging indicators?*

A: Many organizations live and breathe by key performance indicators – results. With this, they attempt to pigeonhole safety into a results-driven process regardless of how those results are obtained.

However, safety results without validity aren't results at all. There has to be a traceable incident prevention process as to how and why those results were obtained – we can't settle for invalid results for the sake of metrics or KPIs.

Q: *If lagging indicators are not the answer, then what is? What metrics should safety leaders be tracking and using to make decisions?*

A: Every lagging indicator should be traced back to the safety management process.

For example, each component should be measured. Has a hazard analysis been conducted? Are Job Safety Analyses being conducted? How many? Have hazard controls been implemented?

Which ones? Have the hazard controls been communicated? How? How often? Have employees been trained? Are the hazard controls being used? Are safe work practices being used? Are safe conditions in place?

These are all leading indicators that provide validity as to whether or not lagging indicators are valid. If these leading indicators are all positive and the lagging indicators are positive (lower injury rates), these would be valid metrics.

Q: *Do you have examples of companies who have been successful with using these metrics?*

A: This is an ongoing continual improvement effort from everyone I speak with. I have several departments within my organization who have excelled in this.

Q: *Typically, lagging indicators are used to measure safety performance and the success or failure of our safety programs.*

If you want us to break up with lagging indicators, then what do you think we should be using to measure success?

A: A combination of leading and lagging indicators is favorable. For example, leading indicators provide a real-time assessment of whether or not safety is being addressed via hazard identification, assessment and control.

When these leading indicators are compared with lagging indicators, a valid and comprehensive assessment of the safety program can be developed.

Otherwise, lagging indicators provide a results-driven measurement that can be negatively influenced in many ways (nothing being done to prevent incidents, lack of reporting, undue influence of incentive programs, and more).

Q: For many organizations, their main safety goal is to have 0 workplace incidents.

Do you think there's a better ultimate success goal for organizations?

And taking it one step further, is there even one, ultimate goal that all companies should work towards achieving or do you think that the markings of success should be specific to the company?

A: Ultimately, if organizations seek to optimize leading indicators and develop measurements that show they're doing everything they can do to prevent incidents, lagging indicator goals such as 'zero injuries' become self-fulfilling prophecies.

If the organization can optimize their leading indicators and meet that goal, it is valid. If the organization meets the 'zero injury' goal but without the validity of leading indicators, the achievement doesn't matter anyway.

Furthermore, if the organization's leading indicators aren't what they should be, this gives them something to work on as far as continual improvement, an effort that will lead to fewer injuries.

Otherwise, aiming for 'zero injuries' without the validity of leading indicators is like trying to pass a test by learning only the questions on the test without actually learning the concepts.

Q: If you could give some advice to companies who are in the mindset that their way is fine as it is, what would you say to them to break out of their old ways?

A: Ultimately, by only measuring lagging indicators, this is akin to having a good outcome on the profit and loss statement but not knowing how it happened and not being able to replicate it.

Obviously, the organization would want to know how they made or lost money and how to either continue to make money or stop losing it.

The same thing applies in safety; by only measuring lagging indicators, the organization will have no idea how or why they either sustained or didn't sustain injuries.

If they want any chance of improving their safety program, more effort is needed than simply measuring how many injuries did or didn't occur.