

MANAGING RISK IS MORE THAN JUST REGISTERING IT

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Risk is just an expensive substitute for information.

Adrian Slywotzky

There is a story in your data, but your tools just don't know how to tell it. That story could be the difference between averting risk or ignoring it, but that story must be visually and contextually brought to life. This is storytelling with data and it will change the way you see how risks are interrelated and you can revolutionise problem-solving.

Data visualisation is not a common skill. Those hired into analytical roles typically have quantitative backgrounds that are used to find data, pull it together, analyse it, and build models. They do not usually have skills in design that helps them communicate the analysis to an audience of decision-makers, which is the only part of the analytical process stakeholders will see. More than ever those without technical backgrounds are being asked to interpret data, actually increasing risk not averting it.

The first step in presenting data for accurate interpretation is understanding people. People learn through story and data must tell the story of what risks exist in a way that has a beginning, middle and conclusion so that decisions jump from the page, not confuse and waste time.

Data communication to reduce risk sits at the intersection of science and art and it's time for a revolution in risk management. Too often organisational risk is registered but not resolved. When risks are registered, their interrelationships are not always identified and solutions that could solve multiple problems, are not devised.

As sometimes happens, waiting until the end of the financial year leads to the discovery of unknown risks or worse, known ones that blew out to be much bigger than predicted and budgets collapse.

The leader's Responsibility

Leaders are responsible for creating visibility of risks in projects. Risk registers assist in this process; however, issues are not always listed according to priority and the data used to make key decision is often outdated or poorly presented.

Regular data feeds that provide vital information must be presented visually in a way that all team members can understand and make crucial decisions about the future of projects.

The first step in good data presentation is accurate data gathering. People are complex and do not always present critical information without it being requested. However, that process can fail when the right questions are not asked, and the base data is not presenting the whole picture.

This is why I am an advocate of the LEAN 5 Why's principle to assist in getting to the heart of the problem and having a more accurate assessment of risk.

Managers may think of lean as only process improvement, seeing it prominently as tools and techniques but not a culture of employee engagement. Therefore, they embark on a methods only approach to lean. In this way, they neglect social aspects for sustained change and continuous improvement.

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As a result, managers taking the easiest path, delegate the implementation to process engineers and consultants, not realising the need for their personal involvement. Because of this, there is a high likelihood of poor decision making, through delegating responsibility without discernment. This, in many cases, results in inappropriate delegations to process engineers and consultants who themselves may or may not take a suitable approach to lean.

Risks Are Always Interrelated

According to Barki et al. (1993), there are causal relationships between risks in any type of project, which makes individual risk management ineffective. Chapman & Ward (2003) suggest that risk analysis without assessing risk interactions results in a superficial and incomplete understanding of risk.

The most effective responses in the treatment of some risks may be to reduce the probability of occurrence of risks that precede them (Aloini et al., 2012; Echeveste et al., 2017). Hence, there is a need for research to collect empirical evidence on the relationship between risks in an organisation. Visualisation of the relationships between risks has been used in software development projects not only to understand such relationships but also to demonstrate the effects of the risks and the factors that originate them (Wallace et al., 2004; Aloini et al., 2007).

The 5 why's Solution

The 5 WHY's approach, a Lean Management tool, is critical in reframing and re-engaging teams to focus on project risks and prioritising their solutions.

In terms of pedigree, '5 whys' traces its roots back to the Toyota Production System (TPS). It also plays a key role in Lean (a generic version of TPS) as well as Six Sigma, another popular quality improvement (QI) methodology.

Father of the Toyota production system, Taiichi Ohno describes '5 whys' as central to the TPS methodology: "The basis of Toyota's scientific approach is to ask why five times whenever we find a problem ... By repeating 'why' five times, the nature of the problem, as well as its solution, becomes clear. The solution, or the how-to, is designated as '1H.' Thus, 'Five whys equal one how' (5W's=1How)". (Ohno. T 1988)

This quote also makes the case for the technique's simplicity. Asking 'why' five times allows users to arrive at a single root cause that might not have been obvious at the outset. It may also inspire a single solution to address that root cause.

The pedagogical argument for '5 whys' is that it creates an 'aha moment' by revealing the hidden influence of a distant cause, which illustrates the importance of digging deeper into a causal pathway. This quick and easy learning experience can be a powerful lesson in systems safety.

End at The Beginning

Good stories always have closure and data interpretation is no different. When we only see a partial story, we draw conclusions and make decisions that increase the risk of failure. Worse, when we have all the data, but leaders are not shown it in a meaningful way we overlook critical detail.

Good data visualisation will end where it began, by presenting the story of how you got where you are, highlighting what decisions can be made, and outlining what will be the results of each action. Once the risk is registered it becomes part of the organisational knowledge that informs the next project.

Mischief Managed.

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