

How can managers use data to drive reliable decision-making?

■ **MY INSIGHT**

HR in the Era of Big Data



by **Sebastien Brion**

“CHOCOLATE ACCELERATES WEIGHT LOSS,” read the headlines, citing a study that “proved” it. The study was real, as the researcher behind it explained: “We ran an actual clinical trial... And the statistically significant benefits of chocolate that we reported are based on the actual data.” But there is where the science ends. The researcher went on to explain that he did the whole thing to prove a point: to show how absurd conclusions can be drawn from “laughably flimsy” studies like his, and how willingly people believe them.

As companies embrace digitalization, big data is becoming a more central part of decision-making processes in organizations. This is especially happening in the HR context, with data increasingly being used to drive strategic HR decisions. This is excellent news. But the recent case of the Google engineer who made a supposedly evidence-based argument for why women were not as suited for tech jobs as men, and used that to build a case against diversity and inclusion policies, highlights that we need to be extremely careful with our analyses and conclusions, because the stakes for getting it wrong are considerably higher than eating too much chocolate.

If HR managers hope to make genuine organizational change using data, they need to learn how to avoid the following pitfalls that have plagued social science research.

INCENTIVES. If analytics groups are structured so that people are rewarded for finding patterns, we set ourselves up for biased findings. Judgments should be based on the rigor of the analyses, not on whether the analyses yield significant findings. This runs counter to how most organizations work: we reward people for results. But social science research is moving away from this. For instance, more journals are moving toward a system of “registered reports” in which scientific studies are accepted for publication before the results of the data are fully known. This shifts the focus to the study process itself, not awarding publication only to those studies that turn up the most sensational findings. Likewise, we should be rewarding and recognizing our professionals for the sound processes they follow, not incentivizing a search for false positives.

LATITUDE. Research is moving toward increased transparency, in which all methods, materials and analyses are openly disclosed. If you build a culture of openness, analysts will hold each other accountable to higher standards. You could set up a version of the peer review process between departments, or try crowdsourcing by having two or more teams work independently on the same problem. This may be costly, but less costly than creating a new organizational initiative based on faulty findings that eventually fails.

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COMPLEXITY. Learn to acknowledge that most analyses – when done correctly – do not tell clean, straightforward stories and that the failure rate of analyses will be quite high. Resist the urge to oversimplify. Although nuanced interpretations of data are less persuasive than the simple answers that stakeholders often look for, be cautious and set reasonable expectations about what data can do.

In short, ask yourself: What reward structure have I created for my internal analysts or external providers? Am I holding my analysts and providers to sufficiently high standards? Do I have realistic expectations of what can be achieved?

There’s no question that data-driven decisions can improve outcomes and competitive advantage. But we need to approach data and analytics as a means to an end, rather than relying on data alone to make costly and potentially irreversible policy decisions. The best use of data is to empower managers to act. Data give managers insights into their unique challenges. Managers can then use those insights to develop a human, bespoke solution to their team’s or organization’s needs. The data will be as complex and diverse as the people and issues involved, so treat data as conversation starters – to identify key issues that require thoughtful human solutions.

Remember, if the stories being told by data sound too good to be true – like chocolate helping you lose weight – it’s probably because they are. ■

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