

DATA DRIVEN BY DESIGN

Humanity's Role in a Data-driven Future

In APQC's annual survey of process and performance management professionals, we [found](#) that when it comes to data and analytics, organizations cite establishing a data-driven culture as their top challenge. To help address that challenge APQC will periodically pose a question to thought leaders in the world of data and analytics to get to the bottom of what it really takes to build a data-driven organization.

This time we spoke with:

- ♦ Miriam Friedel, Director of Commercial Analytics, Elder Research
- ♦ Andrea Stroud, Lead Statistician, APQC

The following is their perspective on this question: What is the role of the human mind (i.e., intuition, experience, acumen) in a business environment that's becoming increasingly automated and data driven?

MIRIAM FRIEDEL

There is often the notion in the data science industry that you can just push an easy button and magically get the answer you need: upload your data to a one-size-fits-all tool, click a few buttons, and get instantaneous insights. Alternatively, if your organization can just build an automated data pipeline or leverage the latest and best cloud architecture, answers will appear with no further effort.

While tools and technologies undoubtedly accelerate data-driven decision making, it is rarely this easy: real-life data is incredibly messy, and leveraging this data to drive business decisions almost always requires careful thinking and human input. What does each field mean? Why was it collected? How will the results of the model be used? What actions need to be taken? Deriving true meaning and value from data requires the business understanding, context, interpretation, and even the emotional intelligence that machine learning cannot provide. Automation is a good thing, but there is no substitute for thinking.

ANDREA STROUD

While business environments are becoming increasingly automated and data driven, the role of the human mind (i.e., intuition, experience, and acumen) is still very crucial to business intelligence. Both data and the human mind are complimentary to one another. Having data outcomes, without the foresight to know what to do with it won't take an organization very far. The human mind helps shape and drive a great deal of the data being collected for research studies, as well as helping make sense of the data and provide steps to take insights to an

actionable level. The role of the human mind is meant to be more strategic than it has been in the past. In the past the human mind was used for tactical tasks like analyzing data by creating different models and algorithms and doing mathematical computations by hand. This is no longer the case. There are tools that really help save time by automating analysis that must be repeated or looking at various iterations of models that have the best fit. Automation has allowed for time and resources to be redistributed elsewhere.

Leaders must be intuitive, able to use various experience, and business acumen to drive what research/business questions they want answered. They then must look at the supporting data both internal and external to their organization that will help them achieve answers. The human mind provides a strategic competitive edge. Automation and tools for analysis are really enablers for organizations to do great work. Organizations have gotten a lot smarter about elevating employees at all levels of the organization to be more strategic and utilize automation analytics tools to drive/enable strategic initiatives within the organization.

For more content about building a data-driven organization, please see APQC's [expertise page](#).

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