

Data Science Lessons Learned

Steelcase is driving digital transformation forward with the help of new insights developed by data science.



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In today's data economy, the argument is increasingly being made that data is more valuable than oil. In fact, to survive in the digital age, organizations have to figure out how to leverage data into a competitive advantage. The journey to get there isn't always clear.

Steelcase was born more than a century ago and unlike Silicon Valley start-ups, we are not a digital native. We've recognized the transformative change harnessing data can have on our organization. It is helping us gain efficiencies in our processes, better understand our customers and actually transform business models. It's why we've invested heavily in developing powerful data science capabilities across the organization. And, we've learned a lot throughout our journey.

LESSON #1: TECH MAY BE THE EASY PART

Data science requires a delicate balance between people, process and technology. We often find the people and process challenges are harder to overcome than challenges in technology. When collaborating with other parts of the organization, it is quite common for data scientists to find that situations our stakeholders consider challenging are actually straight forward and what they think will be simple is quite difficult.

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For example, assume the organization chooses to build an app that can recognize and name our products by uploading a photo. Some people may think developing an app like this requires advanced and complex artificial intelligence (AI) models – maybe only tech giants have these capabilities. Yet, the reality is these AI models are rapidly growing in popularity and availability. The true challenge in this scenario brings us to lesson #2.

LESSON #2: GETTING THE RIGHT DATA CAN BE DIFFICULT

Often, we find the real challenge is getting the right data in the right way. It is one thing to have data, but we have to make sure we have the right data in the right structure. To develop a capability like the one in our example, a data science team would need thousands of photos of each product. In addition, each photo would have to be tagged and classified so the machine could find the name of the desired product. The work required to produce such a dataset is often slow and labor intensive. Someone may have to manually tag thousands of images. Building this type of dataset is quite an investment and can often be underestimated. Yet, the more we invest in high quality data, the more effective our models will be.

LESSON #3: DIGITAL TRANSFORMATION REQUIRES DATA TRANSFORMATION

Organizations born in the digital age generated their data with all sorts of applications in mind. But non-digitally native organizations face the added challenge of transforming their data which can be time consuming and resource intensive.

Aside from a data transformation, non-digitally native organizations often need to work on redefining their legacy processes, rethinking their value proposition and building up the digital dexterity of their workforce. Building an effective and powerful data science practice across a non-digitally native organization requires a much deeper transformation. For Steelcase, this transformation is ongoing.

LESSON #4: A TRUE TRANSFORMATION HAS NO END

The evolution of data science practices here have been marked by contributions of key visionary leaders who focused their efforts on setting up the groundwork to position the organization for success. Because of those early efforts, we're now able to see more frequent breakthroughs in our data science projects. We've been able to grow and strengthen our relationship to other parts of the organization. And, most importantly, it has given data science a seat at the table when it comes to business strategy.

Our transformation didn't happen overnight and it's far from over. It's the result of a commitment to balancing technology, people and process with clear goals in mind. We've learned technology isn't always the tough part, getting the right data isn't easy and transforming our data requires patience and persistence. We also know the excitement around data science continues to build. Our results are palpable, powerful and propelling our organization into the future.



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