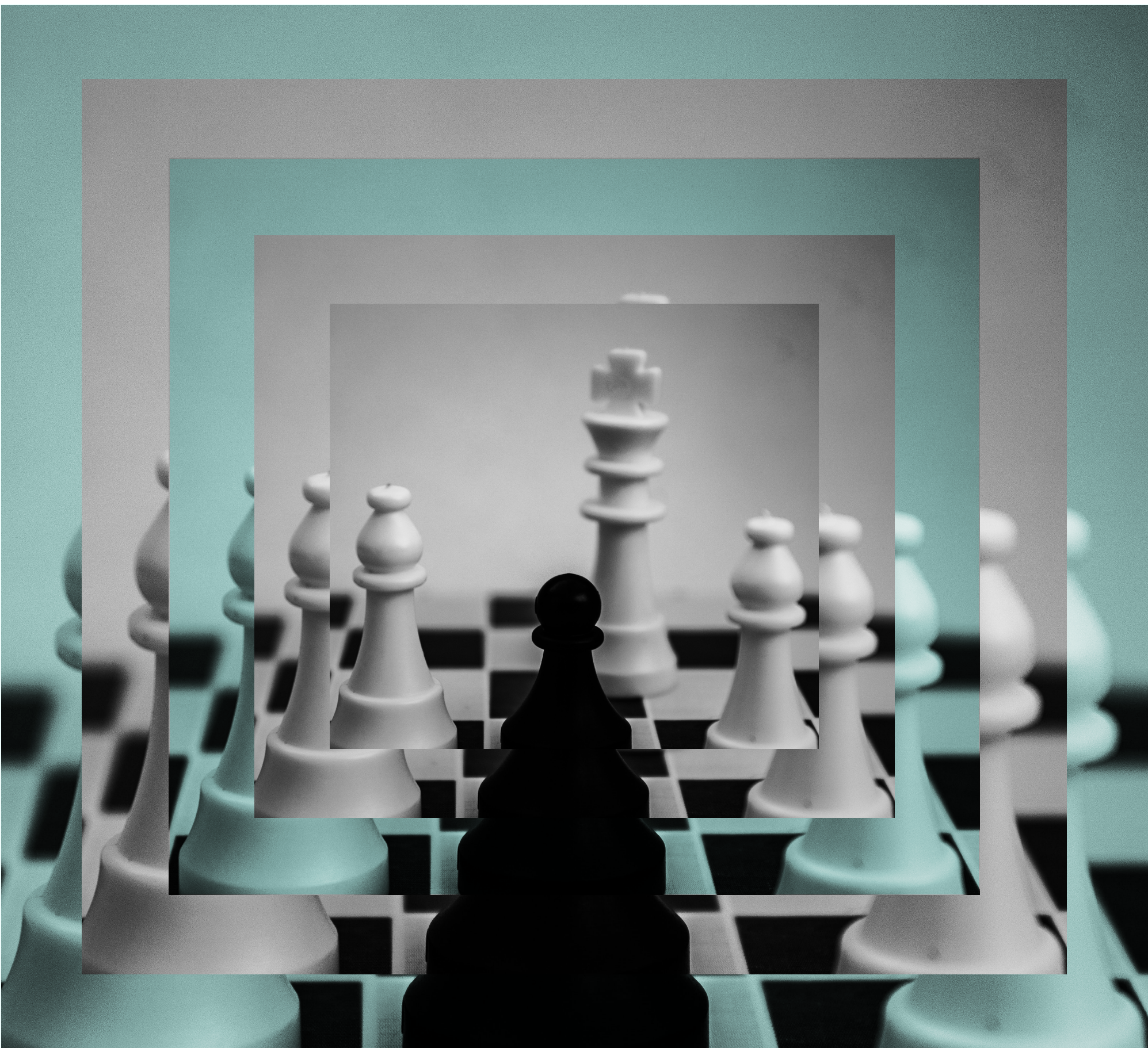


How Data Scientists Can Get a Seat at the Strategy Table



Remember when Microsoft bought up Nokia, the Finnish phone company? The computing giant realized it had dragged its heels for way too long when it came to developing a decent mobile platform — and by 2013, Apple and Android had carved up the market between them. Nokia, on the other hand, had been in the game for ages. Perhaps Microsoft could piggyback over all those years of R&D and just buy the expertise?

The trouble is, Microsoft had no idea what to do once they'd acquired Nokia. They saw it as a done deal and didn't think through the strategy that followed. Without the right developer and carrier partnerships, their new Lumia phone was a flop. Two years later, Microsoft CEO Satya Nadella had to sack 15,000 Nokia employees and write off the venture as a \$7.6 billion loss.

Data scientists — and the people who hire them — should pay close attention to this cautionary tale. Buying up talent isn't enough. You need to figure out how to use it properly.

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Unfortunately, in many cases, business leaders and data scientists simply aren't speaking the same language. Data professionals are talking about machine learning, augmented analytics, and regression models, when CEOs need to hear about growth and revenue streams and monetizing existing resources within the company.

Sure, they might be shooting for the same targets, but it doesn't sound that way from a management perspective. And so, the people best equipped to leverage value from the company's data resources are left out of the crucial strategy decisions that could make that happen.

Over the next 19 pages, we'll tell you how to tackle this problem.

We'll show you how to bridge gaps between departments and how to demonstrate the value of data science for all levels, as well as how to earn your place at the table.

... How to direct, not just enact, management's vision.

Seize the momentum

It can be tempting to keep your head down and wait until you've learned the ropes before trying to make an impact, but there will never be a better moment to persuade your colleagues of the value of your role than right after you've been hired.

After all, they've brought you into the organization because they are aware that they need someone with precisely your skillset. It stands to reason that they're keen to see what you bring to the table.

That said, even if you've been with the company for a while, there are ways to make your role seem fresh and new. Simply “branding” your team effectively is an excellent way to get you on the radar for your colleagues and higher-ups.

Try giving yourself an official-sounding name (and acronym) like Digital Center of Excellence (DCoE), Advanced Analytics and Data Science (AADS) or Corporate Insights and Business Intelligence (CIBI). Add this to your email signature, work communications, presentations, and so on. Start marketing what you do internally so that people know who you are and what you do — and see it as logical that you'd be involved in key decisions.

Position yourself as an (approachable) expert

Now that you have a brand, show your colleagues why they need it. It's crucial that you position yourself as an authority, but not a formidable one. Talk to colleagues from different departments about what kinds of data challenges and gaps they're dealing with, explaining what's currently possible from your point of view and what else you would need to meet their needs. Schedule casual check-ins and make yourself available to answer questions and provide advice whenever possible.

Some questions you should have answers to off-hand include:

- The general data types each team might require and produce
- How implementing a specific data practice will impact a team's workflow
- How to improve a team's data collection and usage practices
- What questions each team should ask to produce the right data
- How a specific data type can impact ROI or improve operations

This is vital because it helps you get past one of the biggest barriers: the fact that those from non-technical backgrounds don't always understand how this stuff works and are probably embarrassed to ask for fear of sounding

ignorant. Making these people feel comfortable coming to you isn't just great networking, it also means they'll start asking better questions and involve you earlier in the process. In turn, they'll see better results and make smarter decisions — and you'll become increasingly indispensable.

Offer training and development

Another way to demonstrate your expertise while generating interest in what you do is to get people trying out some of these tasks themselves.

Contact other parts of the business and offer to deliver training sessions, workshops, or masterclasses to develop a data-related skill, get to grips with a particular program, or answer a specific query they may have. This could range from topics such as split testing and measuring marketing campaign performance through data visualization and storytelling. You could also take this opportunity to demonstrate how small changes to data entry, tagging, or similar can improve the quality or accuracy of results and analysis.

For instance, at Explorium we have monthly educational opportunities for all of our non-technical staff. This includes a monthly “Data Science 101” session where one of our data scientists covers both the platform and

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broader topics in the field to give the team a better understanding of what the company does.

As suggested above, this helps to highlight your expertise and embed a data-driven culture across the organizations. It also gives your colleagues an opportunity to ask you questions that help them figure out the ways you can support them — and for you to get a clear idea of their priorities and needs.

Get the c-suite excited

You can't make progress if you don't have the boss on board. Unsurprisingly, the organizations that perform the best when it comes to harnessing and leveraging data are those in which executives spend a significant proportion of their time discussing analytics activities and data-based projects. They also tend to be the companies with a long-term corporate strategy in place rather than using data analysis on an ad hoc basis.

However, if you want your CEO, CTO, or other board members to appreciate this, you'll need to present the business case in clear, measurable terms. Explain precisely how adopting a data science-led approach will cut costs, generate revenue, or make the business more competitive overall. You need to demonstrate to the powers that be that your priorities are thoroughly aligned.

Engage all parts of the business

Once you have buy-in from your management team, it will be easier to shift the culture of individual departments and teams, as well as prioritize a cultural shift from siloed data sources to a joined-up enterprise that shares and collaborates through data and analysis.

What information could your sales department share with marketing, finance, or logistics that would enrich decision-making and provide greater visibility over performance, for example? What information might it be helpful to bring in from outside the organization altogether — and where might you find this?

Crucially, you will quickly become the tie that binds all these strands together. The more you speak to each department about what they have, what they know and what they lack, the more you can highlight connections between them, or suggest new processes and systems that help them combine, integrate and interrogate these data streams. Such insight could just be your ticket to the strategy table.

Bring in the best technology (and data)

Don't settle for making the best of what you have. If you're going to be taken seriously as a visionary in your company, you must be prepared to advocate for the tools, platforms, and approaches that you believe will benefit the business the most.

At its core, that means pitching a strategy that merges the best of machine learning and human expertise. It means figuring out ways to incorporate predictive analytics, not just reporting on historical data. It means looking at ways to inform future decisions, not just assess performance in the past.

Depending on the data you're able to capture and store in-house, this can present a challenge. Internal data doesn't always give a complete enough picture to create nuanced, useful prediction models. Meanwhile, acquiring that data externally is typically a lengthy, resource-heavy, expensive process — and one that isn't guaranteed to give you the results you want. That's a lot of risk to ask of your boss — especially when you're still trying to prove yourself.

Before making a decision, it's worth weighing the advantages and disadvantages of each:

	Premium Data Provider
Advantages	<ul style="list-style-type: none">• Cleaned• Updated• Unique and proprietary (sometimes)
Disadvantages	<ul style="list-style-type: none">• Could be expensive depending on the type of data and volume• Usually won't give you access to the complete dataset (only based on your query)• Some providers may require being a controller of your query (i.e. you have to provide query data to improve the service), which could be problematic• Trust and integrate with an external API for runtime. Downtime of the provider's API could cause your prediction service damage• Vendor lock-in
Integration type	<ul style="list-style-type: none">• API• Batch
Types of data it is best for	<ul style="list-style-type: none">• Companies• People

Open Data

Usually:

- Free
- One click to download and use
- License: Less limitation on what you can do with the data
- Can hold data for eternity
- No damage in case of breach
- Complete dataset (and not samples) — good for aggregations

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- Not updated
- Not proprietary or unique
- Sometimes messy/uncleaned
- No API to integrate with real-time systems

- Batch

- Aggregated statistics
- Geospatial data

Dealing with external data on your own can be an unappealing alternative both for you and your manager. This may lock you into a decision you don't necessarily want to make. Instead, look out for platforms and partners that can automate as much of this for you as possible. That can connect and harmonize data swiftly and securely from external sources. That can take on a lot of the heavy lifting so that you can focus on creating new models to solve pressing business problems.

Remember your audience

Never forget who you're talking to. It's not your fellow data scientists you need to win over; it's your non-technical, business-orientated colleagues. Work on your ability to explain, summarize, and translate complex data and discoveries into something clear, concise, and meaningful to the person who needs to understand it. Highlight actionable outcomes and findings. Provide plenty of context, explaining why each insight is so important or relevant. This skill will make you supremely valuable.

In fact, this applies to all interactions with other departments and colleagues, especially when arguing for greater or earlier involvement in planning digital initiatives.

Focus on easy-to-explain, real-world, practical examples. Offer live demos. Detail case studies and past successes. Emphasize headline results and big wins. Prepare presentations for heads of departments that walk them through what they can expect from your work and how it benefits theirs. Demonstrate the true value of analytics and build up trust in your team.

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Final thoughts: don't get complacent

Your colleagues' data needs and challenges are evolving all the time. It's incredibly important that you remain in constant contact to make sure that your team continues to deliver value. You also need to follow up with your leadership team to make sure the insights you provide are making an impact. Seek and act on feedback continually.

Ultimately, to earn your seat at the table long term, you need to strive to stay as visible and as useful as possible. Get out there and talk to people. Ask them what they need. Figure out how best to make that possible. Prove your worth and expertise, again and again.





Explorium's augmented data and feature discovery platform turns data science on it's head like never before. We do all the heavy lifting (not just parts of it), allowing data scientists to focus on strategic products, drive major impact, and scale across the entire business funnel.

Productivity hyperdrive

Your time is precious. Instead of getting stuck with tedious, time-consuming tasks, focus on strategic projects that drive value and let Explorium do the heavy lifting. Explorium reduces the noise and lets data scientists focus on their north star: building the best models with the best data and the best features.

Instant impact

When you need to show business value fast, taking months and tons of resources to improve your models with better data is not an option. With Explorium, those months are transformed into minutes. Plus, we know automating ROI with better data is not something you can set and forget. To ensure your impact is continuous, Explorium continues to monitor your features and improve.

Limitless scale

Wherever you use machine learning in your business you can use Explorium. From lead scoring and marketing optimization to risk modeling and sales predictions, Explorium allows you to embed machine learning in every business process and scale by operationalizing and democratizing internal and external data sources into a single platform.