Building and Leading Your Organisation's Data Capability

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The most impactful data teams can think strategically while delivering technically.

Building a data capability that delivers sustained business value is a journey, often an arduous one. Depending on where your organisation is on that journey, there may be different answers to the questions: Whom should you hire? How should you organise resources to maximise their impact? How do you ensure their alignment with business stakeholders and the tech function? While there is no one-size-fits-all answer to these questions, there are some important elements to keep in mind as you develop your data teams and capabilities and become a more data-driven organisation.

We discussed some of these in our recent webinar with Sanjeevan Bala, Group Chief Data & AI Officer at ITV, one of the largest TV channels in the UK, and Gilad Lotan, Head of Data Science at Buzzfeed. We invite you to **watch the recording**.

Assessing where you are on the journey

Buzzfeed and ITV are both in the business of attracting eyeballs: The more readers/viewers they gain, the more advertising they can sell on the back of that. Buzzfeed is essentially a tech company, while ITV is in the midst of a digital transformation. And yet, developing a data capability is very different than developing a digital one. One can run a tech-savvy business on digital platforms and still be at the start of a data journey.

How can you pinpoint where you are in the journey? One important factor is whether your data capability is grounded mostly in a defensive or an offensive approach. A defensive approach is all about looking back at what happened yesterday. Data talent generally focuses on generating KPI reports for the business. Typically, defensive teams include generalists who react to opportunities as they come up; they are often seen as a support function. A defensive approach can add a lot of value when baseline reporting is not yet in place, but these teams tend to quickly become overwhelmed with requests that add little business value.

On the other hand, an organisation with a more offensive data strategy focuses less on reacting to requests for reports, and more on how data and AI can contribute to EBIT (earnings before interest and taxes) growth and innovation. An offensive strategy means the data team gets ahead of strategic questions and proactively proposes how and where it can add value, rather than waiting for business teams to tell it what its roadmap should be.

Typically, offensive teams demonstrate a greater degree of specialisation – both in terms of their technical functions and the parts of the business they serve – than defensive teams. A more advanced data capability may carve out distinct responsibilities and career tracks for analysts, data visualisation experts, data product owners, data scientists, economists, data engineers and machine learning engineers. This greater degree of specialisation tends to correlate, in turn, with retaining data talent for longer periods of time, as they have a greater sense of mentorship and career progression than those on a generalist track. Furthermore, the business-facing roles, such as analysts and data scientists, in an offensive strategy typically focus on adding value to specific parts of the business. For instance, some of the data talent might be embedded with the advertising team, others with the original content team, and yet others with the content acquisition team.

Functional and technical specialisation not only allows the data team to transition from a mainly reactive role to strategic partners, it also enables members to create greater automation and self-serve capabilities further down the line. Analysts and data scientists can create quick-win prototypes to demonstrate value and get buy-in from stakeholders. But in order to scale data-driven decision making, you also need a strong data engineering team, as well as investments in infrastructure and data quality and governance. These initiatives are more difficult to tie to ROI than data science and analytics, but they are fundamental to democratising data across the organisation (while managing the potential new costs this can raise).

Finding an operating model that suits your organisation's needs

Regardless of where an organisation is on its data journey, there is no standardised model for maximising the impact of its data capabilities. The strongest data teams evolve over time based on factors such as culture, strategy, business model and maturity on the data journey. They often alternate between a centralised function where a data leader manages all the data talent, and one that segments talent into functional teams such as sales, marketing or engineering. Centralisation is often effective when data initiatives are disparate and disorganised, which can happen both at the beginning of the journey but also as an organisation scales. A team-centric structure can be useful for creating tighter integration with stakeholders and partners.

Regardless of the degree of centralisation in the data team, organisations with impactful data capabilities all have one thing in common: Their structure is designed to align closely with the business on the one hand, and with engineering on the other. To institutionalise this dual alignment, it's important to start with establishing the optimal reporting line for the data leader.

Ideally, heads of data and analytics should report to someone with strategic oversight at the executive level who has an aptitude for quantitative thinking and shows curiosity about new technologies. This combination of strategic and quantitative skills – rather than a particular title such as CFO, CEO or CSO – is key to setting up a data function that thinks strategically *and* delivers technically. At Buzzfeed, for example, the data leader reports to the CTO. This is ideal in Buzzfeed's context because product and engineering – the data team's most important stakeholders and collaborators – both sit

under tech as well, which, at a digital native company, is itself a highly strategic function.

Data leaders must then organise their teams to ensure close collaboration with both business and tech. The data teams at Buzzfeed and ITV currently include analysts and data scientists that report to the data leader but are functionally embedded in business teams. Data and platform engineers report to engineering leads, yet retain a dotted reporting line to the data leader because data architecture and pipelines are so crucial to the success of all other analytical work.

The data leader not only has some say over the data engineers' roadmap, but also participates in their processes and advocates for them at the executive leadership level, recognising this team's success is the bedrock upon which further successes in analytics and AI will be built.

Whom to hire

But while specialisation and the operating model are important, it's also crucial to hire team members that crave a sense of the bigger picture and have an almost anthropological interest in people and processes. Data talent can easily go down rabbit holes, chasing projects and opportunities that are intellectually interesting but provide little business value, or plowing ahead to answer a business question that wasn't clearly articulated in the first place.

Business users commonly ask data professionals questions that don't really address the problem they're trying to solve. As such, one of the most valuable skills in a data analyst or data scientist is the ability to dig deeper and understand exactly what the user is trying to get at, rephrasing the question if necessary, before devising a technical approach.

Managers should take a values-led approach to hiring, choosing people who are pragmatic and strive for operational excellence. This means hiring data scientists who think about productionising their algorithms from the outset and for whom success means that users adopt their solutions. This is in contrast to those who are primarily interested in testing out all the latest techniques even when they have minimal impact on business or are not adopted.

This also means hiring data engineers who care deeply about time to business value – those who are laser-focused on building faster, more efficient systems and pipelines. Indeed, some of the most valuable data engineering work happens when data engineers are invited to be part of the business value conversation, rather than being relegated to a back-office function.

Another crucial predictor for success in data roles is the ability to navigate ambiguity effectively. Data products, such as recommender systems or automated data pipelines, usually involve a higher degree of ambiguity than other tech outputs. It's often near-impossible to set out structured roadmaps for something like a recommender system for Buzzfeed's shopping content, because building them includes a plethora of "unknown unknowns" that are impossible to anticipate at the outset and require multiple iterations. The best data talent is comfortable not only working with a changing roadmap, but also explaining to product, business and engineering teams why this work is different, more iterative and more uncertain, than other kinds of product development.g

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