

Build the perfect data team

You have been learning about the role of data analytics professionals within organizations and the work they perform. You've also examined some general classifications for data professional roles. Additionally, you explored what a typical data analytics profession might experience during the initial days in a new position. Large organizations often have more data needs, requiring the creation of teams to take on projects. In this reading, you will learn more about how organizations build data analytics teams and look at some best practices when constructing them.

Designing data analytics teams

The idea of companies creating teams of data professionals developed over time and largely out of necessity. Originally, the responsibilities of data collection, management, and analysis fell onto the CIO (chief information officer) of the company. CIOs in the past would typically hand the responsibilities over to the IT (Informational technology) team.

Gradually, organizations began separating data functions as the wealth of information stored grew. Additionally, new technologies emerged and data-related tasks became more specialized.

Data professional profiles within large organizations

Earlier in this course, you were introduced to some data professional profiles.

- Data Scientist
- Data Analyst
- Data Engineer
- Analytic Team Manager
- Business Intelligence Engineer

These profiles are very generalized categories that can help you focus your eventual job search. In reality, many employers are looking for more than data professionals. They are looking for project stakeholders, dependable team members, and great co-workers.

Building the team

The data needs of larger companies requires the creation of a team of skilled professionals. The members of these teams each have a specialized area of expertise. Some will come from business backgrounds, some with project or staff management experience, while others will have more technical skills. While there is no checklist available for companies to follow when putting together their team of data professionals, the needs of their organization can help guide them.

Creating a team of data analytics professionals is very similar to how sports franchises put together championship-level rosters. Coaches and general managers are always looking to upgrade and enhance the capabilities of their teams. While having a superstar athlete can help deliver a consistent performance at a certain position, their abrupt departure can compromise the team's overall performance. A better approach is to develop a well-balanced and collaborative team.

Employers want to hire someone who has more than data analytic skills. They are selecting the best fit for their organization. Candidates who bring additional experience and skills beyond data analytics are most often seen as most favorable. Strong interpersonal and communication skills, experience working in business, or within a team dynamic can enhance data analytics. There is a very good chance that you already possess some of these skills.

Five principles for data team building

After you join a data team, there are still challenges to building a data-driven organization. Below you will find five principles that can guide any organization to becoming more effective when facing the challenges of data analysis, regardless of the structure of your data teams within the company.

1. Adaptability

Data platforms, networks and storage options need to allow flexibility. Each data professional will have their preferences as to the tools and their approaches to analysis. Remote and on-site employees need to have access and the ability to work with all data and use the tools of communication they feel are the most productive.

Organizations need to facilitate a data platform that allows open access to resources for all users. Instead of specifying specific software solutions, organizations can expand their pool of candidates by allowing individuals to integrate the tools and applications they are most comfortable and experienced with. Flexibility invites a wide range of experience and enhances data teams, adding experience and additional perspectives.

Just as organizations need to be adaptable, those seeking opportunities in data fields should be committed to learning new skills and technologies. Data workplaces are undergoing constant change, as you learned earlier. As a data analytics professional, you will continue to learn and grow as newer technologies or regulations emerge. Accept the challenge presented by new circumstances and let yourself feel energized when presented with opportunities for professional growth.

Pro tip: Keep your desire for learning. Expand your knowledge through online data science communities and educational opportunities.

2. Activation

Access to data analysis results require someone with the background and experience of a data analyst. Even small-scale data operations require skills that go beyond the scope of other professionals within an organization.

To become more data literate, organizations should cultivate new habits and integrate them into their daily work routines. Dashboards and other accessible interfaces can help promote the use of data analysis, enabling wider usage of data analysis, promoting communication and fostering cross-departmental collaboration.

Vital to the success of an organization's efforts to transform its internal habits and culture are the interpersonal skills of its employees. When a company is seeking to expand data literacy, its data professionals play an important role. There will be opportunities to help promote understanding among peers and colleagues. The time spent answering questions and promoting understanding will help others appreciate you and your contributions to the organization.

Pro tip: Maintain positive professional relationships through effective communication. Your ability to share insights is just as important to an organization as your analyzing skills.

3. Standardization

An organization needs to set criteria for the standardization of data practices and procedures. Standardization helps to promote best practices, and communication and transferability of information between teams. When users can share optimized code and other assets it saves development time and streamlines projects. An organization that builds a culture of collaboration embeds best practices into work behaviors.

Identifying candidates with capabilities beyond data analysis is essential to developing and standardizing best practices. To develop best practices, organizations need employees that contribute innovative solutions to problems.

Pro tip: Become a problem solver. Obstacles within a project can turn into opportunities for innovation, which can transform an organization.

4. Accountability

Data analysis is a complex and dynamic process that requires a high level of accountability. To promote responsibility, organizations need a 'paper trail' that allows examination of their entire process.

Accountability adds transparency, explainability, and security to data teams and projects. It also helps to eliminate layers within an organization, while aligning business goals and customer values. Transparency in workflow allows organizations to answer specific questions about the data analysis

process. Data analytics professionals can use project metadata to examine and communicate specific elements within their prediction models, giving data teams the collaborative ability to make adjustments with more precision.

One way to promote accountability is to extend your ability to communicate throughout your workflow. Within data analytical projects, the transfer of ideas extends beyond individual correspondence. It also includes information in project notes, records kept within projects, and proper tagging within metadata. Individual processes and ideas are the incubators of standards of practice and communicating these ideas effectively can improve an organization's accountability.

Pro tip: Data analytics professionals are more than repositories of information. It benefits everyone involved in a project if you are able to communicate your knowledge and observations. Identify what would be most valuable to others and provide the information.

5. Business impact

Often, the inability to estimate the impact on the business can block data analysis projects. Organizations are not considering all available data analytical solutions during the planning stage. Organizations should look at approaching data projects with the widest field of view in the planning stage. This requires a thoughtful approach including considerations beyond data analysis. For example, the difficulty of integration, commitment of resources, and changes to the project timeline. Businesses need to consider more data solutions options and identify which benefit the project the most.

Broadening the scope of an organization takes time and consistency of results. To achieve this, a data team must become a trusted resource for insight and a positive influence on an organization's decision-making process. An effective communication strategy, strong interpersonal skills, and a track record of problem-solving will earn the trust of the organization.

Pro tip: Focus on communicating clearly with stakeholders. Maintain a commitment to consistency between what you have promised and what you will deliver.