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From data and people - the indispensable human factor in data transformation

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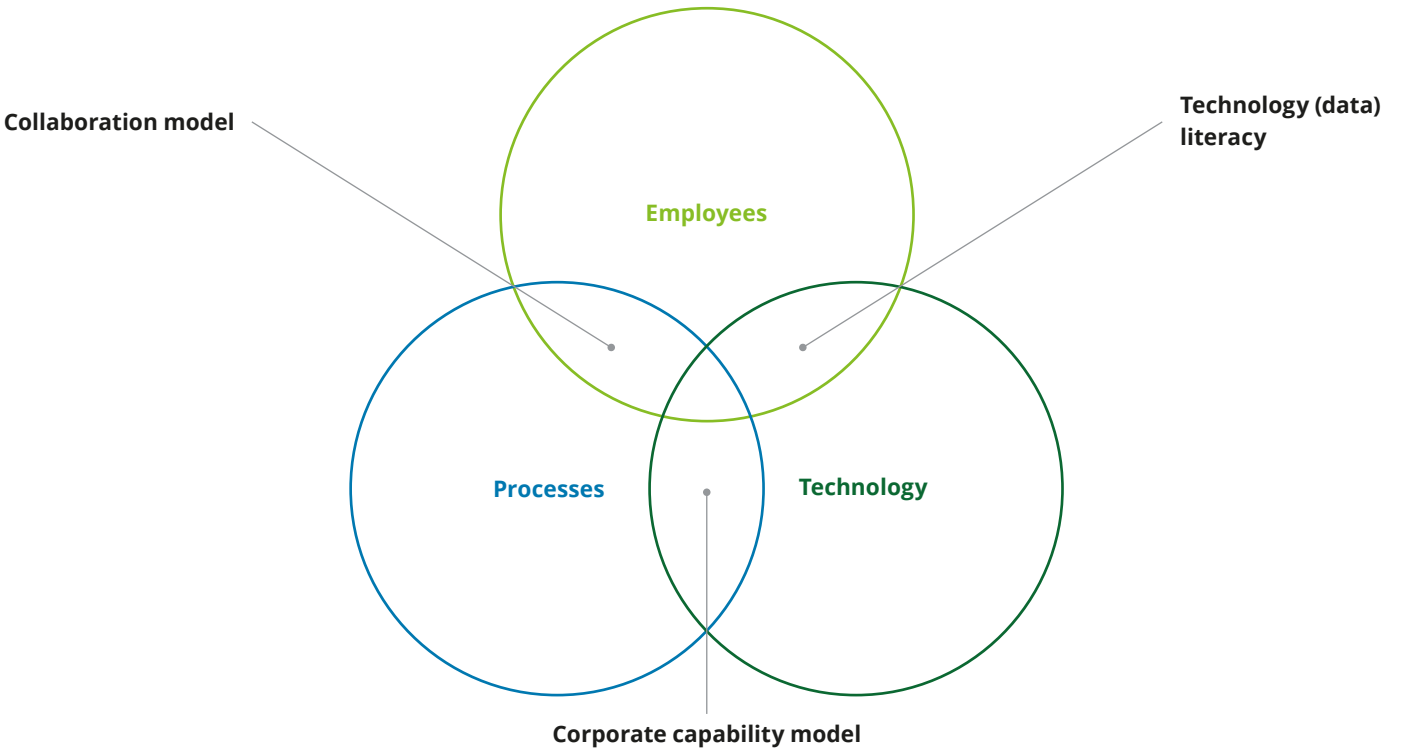
Introduction

Modern enterprises leverage data and AI to keep up with the high dynamic of an ever-changing business world. On the way to achieve that goal almost all of our clients face the same challenge: To transform their strategy, operating model and way of doing business such that data is used to drive the corporate capabilities used in processes that generate value.

One of the recent concepts of achieving this is the data mesh, that shifts responsibilities towards the business to produce data products that are standardized in their creation as well as in their access. The data mesh paradigm, however, is not a purely technological invention, but rather a socio-technological endeavor that brings together technology, employees, and corporate processes. The classical Venn diagram of these three is given below. We have added the usually omitted descriptions of the links between the adjacent pairs: Employees possessing an intuition for the capabilities and limitations of technology ("technology literacy"), the enterprise being able to use technology in processes ("capability model") and the employees working together along the process landscape ("collaboration model").



Achieving literacy, data capabilities and collaboration are at the core of a successful transformation. Here, Deloitte presents a series of papers that explain key aspects how to achieve these three along the transformation towards becoming a data driven enterprise. The series is structured into strategic, tactical and operational aspects of data driven work.

Beginning with the strategy framework we are working along, we introduce our orchestrator for the data transformation journey. As the major tactical pillars of the transformation we focus on the required governance as well as the data-centric process landscape in two further articles.

These concepts are underpinned by operational tools such as data catalogs, data quality and IT platforms which we are also covering in an article. Since these developments need to be sustained by specialized change management, a separate article is dedicated to this topic.

The journey to a data-centric enterprise is a complex transformation that continues to bring new challenges and insights. We will continue to expand and add to our series of articles.

From data and people - the indispensable human factor in data transformation

It is widely accepted that data is a key asset, if not the core business, for many of today's companies. If, however, we fail to identify who is using the data and for what, we will not be able to harness it for business growth. The only way to generate the value you expect from your data and analytics projects is to reflect on the ways it impacts processes, ways of working, technology, potential future business models and therefore ultimately people.

To achieve a successful data and analytics transformation, it is imperative to view people as one of the most critical success factors:

Vision & Change Strategy

Communication & Enablement

Behavior & Culture

Companies walk through different maturity levels along their data analytics journey which come with their respective challenges

- Organizations keep up momentum by **providing the bigger picture** and enterprise-wide **data principles**
- Senior management inspires with a **clear vision** and a communication strategy to **raise awareness among various stakeholders**
- **Analytics roles**, both present and future, are **well defined** and mostly on cover the entire spectrum

- Organizations run smoothly in day-today business when there are **analytics translator** in place
- There are enough pockets of expertise in the business that allow **a self-service mentality**
- Business users **can handle data and analytics tasks on their own**, as data principles are translated into business-relevant functionalities

- There are little to **no data silos**, which will speed up the democratization of data
- Performing data and analytics tasks has **become "natural"** and a **core behavior** within the enterprise
- Data is powerful and using it builds **trust and courage** among staff, empowering the business to grow

A people-centric approach to transformation helps companies progress through different maturity levels on their data analytics journey and achieve a company-wide data mindset: establishing a clear *vision and change strategy*, investing in *communication and enablement*, fostering the right *behaviors* to create a sustainable *data culture*.

In the following sections, we will shed light on the key activities in each building block.

Vision & Change Strategy – Leading the way

Getting the entire organization off on the right track requires a combined top-down and bottom-up approach to motivate staff and generate buy-in across the entire data analytics journey. That is why creating a shared vision and transmitting it to everyone in the organization must be your top priority.

Senior management needs to agree on a 'north star' in a guided workshop (for details see *Info box 1*) and develop a narrative for the transformation into a data-driven business. Success comes to those that consider which existing elements to preserve, what the internal as well as external challenges are and how to make the case for a data-driven transformation.

North star workshop
Invite cross-functional leaders to participate in an ideation workshop that will identify your personal **data and analytics aspirations** (e.g., 10-year outlook), **data crown jewels**, key **value unlocks** (e.g., increased productivity, better customer centricity), and performance **metrics** (quantitative and qualitative!) as well as collecting **stakeholder voices** (both internal and external). **The result is the position you aspire to in your broader ecosystem.**

To ensure the results of the north star workshop are available throughout the organization, they should be documented in an easily communicable form. Ideally, you will work with visuals and summarize the key insights in a set of universally understandable and guiding 'data principles' (for details see *Info box 2*).

Data principles
Data has value. Intrinsic value of data for the business and the ecosystem in which it operates

Data as an enterprise asset. Corporate resource and buy-in from leaders will set a strategic focus

Data quality. Quality and integrity of data is a priority for the business

Data democratization. The creation, easy access and consumption of data is possible and encouraged to improve data-driven decision-making

Data accountability. Suitable governance frameworks are in place to foster data compliant behavior

In a next step, leaders need to encourage a team-led localization process. The impact of a novel data and analytics vision will vary widely at the department, team or employee level. Translating between the different levels will make people throughout the organization more receptive and make the data product itself more relevant. A keen awareness of the narrative and the various personal and powerful impacts will reduce uncertainty as well as anxiety among staff.

To ensure an effective federated data and analytics community, you need to define clear roles and responsibilities for data expertise within the organization at an early stage: *Who is a data steward? What do they do? How can they help me? How can I help them?*

Once you have a clear vision of where the road is leading, it is crucial to also understand the organization's starting point in terms of skills and capabilities. Recognizing the different levels of existing data expertise is the key to unlocking further data literacy, particularly in areas of the organization that are not as data-heavy. Storytelling and visualizations can be very effective in communicating the use case and helping everyone understand the future benefits of the data transformation. Providing data playbooks for easy reference is vital, especially for scaled transformations. One of the best examples here is master data governance and the decentralized management of the same.

Communication & Enablement – People as the heart of the matter

An essential part of enabling data and analytics in the business context is considering the needs and expertise of all employees and including them when you define your cross-functional use cases. *What problems is the data-driven transformation trying to solve? Ask your employees what their main challenges are!*

Since data and analytics skills are not yet part of the broader educational curriculum, not everyone in your organization will be able to solve the identified business problems on their own using analytics expertise and tools – nor should they. It is vital to enlist dedicated and highly skilled staff to play the role of 'analytics translators', who can translate back and forth between the business problems or needs and the data models and products designed to address them (e.g., KPIs, dashboards, reports). Finding suitable staff to act as 'analytics translators' must be a priority, as it demands a combination of analytical, technical and business skills as well as the right mindset.

Once you have an initial data product, it can serve as your first proof of concept to indicate whether you are on the right track with your data and analytics efforts. Ideally, these products will reinforce the imperative and motivate the business side of the organization to move from a push to a pull principle, fueling the shift towards a more data-driven mindset.

To navigate the transformation as it unfolds, we recommend providing a framework as well as governance principles for setting up, evaluating and tracking identified use cases, for example with charters or steering committees. Keeping the entire organization up to date on progress with success stories from the so-called 'use case factory' is another key element to make your organization more data driven every day.

At this stage in the journey, it is time to broaden the reach of your data and analytics project and directly address multiple stakeholders. Designing strategic messages for each stakeholder cluster and/or persona will deliver clear, concise communication that is tailored to the respective business needs without getting too technical. This will form the basis for the communication campaigns still to be developed and executed, including the previously defined data principles.

In addition to clear communications, giving staff the right skillsets is key. As we outlined in the Deloitte 2023 Global Human Capital Trends report (link), up/reskilling is more important than ever, even more so when it comes to data and analytics projects. The focus should be on increasing data literacy across the entire organization using engaging, self-paced learning materials and making it fun and meaningful to engage with data analytics.

In preparation for the third building block, organizations need to define target behaviors with the objective of future data-driven decision-making. The main barriers to change in a data-driven transformation often come down to deep-seated habits and a lack of understanding or mistrust in the data and analytics solutions. Employers need to clarify the opportunities for career advancement and professional development that are available to current and future talent: *What are our expectations for talent in various data-related activities? How can we make the staff more confident in their data skills?*

Another issue is getting everyone on the same page in terms of pushing the business in the direction of a data-focused agenda: *How do we embed data and analytics into day-to-day operations? To what extent will it support our corporate decision-making? How is the executive leadership involved?*

Behavior & Culture – Data to the people

As the data and analytics revolution picks up speed, it will be your people as well as their mindset and behavior that determine whether your transformation succeeds in the long run.

Fostering data-friendly behavior is fundamental, and it takes time and consistency to create a data culture and work towards a shared vision – which is why it is so important to have the right strategy from day one. One key step towards achieving a true data culture is making data visible and accessible to everyone in the enterprise. This includes a practice of your data and analytics leaders diligently spreading the practical data principles throughout the business in the right format and through the right channels. If organizations want to work towards a mindset shift across the business, they need to empower all employees, regardless of their role, to apply the new skills they have acquired, to test their ideas for data use cases and to single-handedly develop novel data products that meet the most pressing needs of the enterprise. In other words, democratizing the data landscape will change how organizations involve, engage and work with data in their business processes and decision-making. *But how does a data-driven business behave? And how can we find the right human-centric approach to fuel that transformation?* These and further questions will be covered in future articles – stay tuned!

Example behaviors of data-driven organizations:

1. Data-Driven Organizations Place Equal Importance on **Trust and Accountability**
2. Data-Driven Organizations Encourage **Data Exploration** and **Curiosity**
3. Data-Driven Organizations **Break Down Silos** and **Emphasize Collaboration**

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Julian is a Senior Consultant in Deloitte's Human Capital practice. He is advising in the business area of Sales and Marketing with his expertise in strategy, design and implementation of change, communication, and training. Focusing on technology transformations along the customer life cycle and ecosystem (Sales & Marketing, Service, Commerce, Analytics), he is convinced that data and analytics capabilities are a necessity for a resilient organization and its employees.

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Jan is a consultant in the area of Organization Transformation with a focus on Digital Enablement in disruptive technologies. He is experienced in Change, Communication and Learning strategies and execution in organizations of different scale and along every stage of a project life cycle as well as agile settings. In Jan's opinion, people and organizations who can create value with data will shape the future of business.

Glossary

Data Mesh
The data mesh is a domain-driven socio-technological approach for creating decentralized data architectures. It is based on decentral governance structures as a foundation for generating sustainable business value using standardized and re-usable data products. It relies on a flexible collaboration model accross the entire enterprise.

Data Product
A data product is a set of data that is made available for the usage of employees or systems via a standardized API on a marketplace. Its purpose is to realize use cases and therefore to enable the implementation of data-driven services.

Data as a product
Synonymous to Data Product.

Use Case
A use case creates business value by fulfilling an explicit objective. Use cases are based on existing Data Products.

Data Catalog
A data catalog is the central inventory for all data assets within the company. It is made understandable via a glossary of frequently used terms and by highlighting the technical and business data lineage as well as transformation logic.

Data Governance
Data Governance is the discipline that connects data processes, and corresponding roles and responsibilities by formulating binding enterprise-wide policies.

Ontology
Ontologies are formalized descriptions that capture relations between business entities and their ab-stract realization as data.

Data Domain
A data domain takes ownership of data relevant to a common area of interest and implements roles that are responsible for expanding and maintaining the usability of this data.

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