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TOWARDS DATA GOVERNANCE 2.0:

FROM DATA GOVERNANCE TO DATA PRODUCT GOVERNANCE

01

Introduction

We all know that data is important and without data management it is not possible to talk about digital transformation. Data is the key to ensuring proper business management and the launch of new initiatives, which is why it must be accessible, of quality and efficiently shared.

Managing data has become a vital function. So vital, in fact, that less mature organisations that don't adequately exploit data's potential are at a clear disadvantage with their competitors.

We also have to be aware that **the value of intangible assets continues to grow year on year**, and data is an asset that holds tremendous value for organisations. The way that we use data and the synergies, opportunities, risks, and challenges we face are being considered by investors and in due diligence processes as part of our income statement by investors and in due diligence processes as another part of our profit and loss statement.

What is clear is that we have entered a new era in the use of data and we must take it into account as another tool to improve our positioning. **Talking about technology means talking about data and how to improve competitiveness.**

However, data, which is the starting point and the fundamental basis for developing all types of applications, doesn't always get enough attention. Some of the main **consequences of being unable to properly manage data in a company** are:

- Decisions based on intuition, not data-driven.
- Business initiatives fail because of a lack of available data and poor data quality.
- Lost opportunities because of a lack of information.
- Focus on activities that don't add value instead of turning data into knowledge and action.
- Inefficient and/or non-digitizable business processes.
- Increased risk of non-compliance with current regulations and standards.
- Analytics initiatives are launched without delivering real value and remain in the proof-of-concept stage, with no real impact.

In addition, many Data Governance programmes aimed at facilitating the generation of knowledge fail or do not achieve the expected results. One of the causes is linked to organisational design, which does not get sufficient internal traction.

The **best organisational practices** are based on structures with three components:

- A central office (**Data Management Office**) led by a **Chief Data Officer**, whose main purpose is to generate a general data strategy that includes general Data Governance standards.
- Governance roles distributed by **data domains** that work on a day-to-day basis, follow the global principles, but have autonomy in the management of data in their domain.
- Governance mechanisms (**Data Council**), whose mission is to connect the data strategy with the corporate strategy, approve resources and maintain an agenda of the most relevant projects.

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Why is an updated version of Data Governance needed?

Data Governance, as it was originally defined, was largely focused on **regulations and standards** and addressed issues such as the definition of data, internal data ownership, quality controls and the establishment of internal rules for common use, often oriented towards informational use cases. It is essential that this approach evolves **towards Data Governance 2.0**, characterised by a **more evident contribution of value to the business**.

A **new approach** must necessarily take into account the profound evolution of both technology and ways of working, and the growing importance of **governing the entire data life cycle**, which includes both data and data products.

We therefore need to evolve towards a Data Governance 2.0 that addresses the following realities:

- Organisations that want to accelerate their data-driven transformation must complement a **traditional, "defensive" approach** to governance with a more value-driven, solution-oriented perspective, facilitating access to data and finding a **flexible balance** between "governing" and "facilitating the orderly use of data".

- **Technology has evolved**, and the "classic" disciplines of governance, such as security, access and quality, need to be revisited in many companies.

- It's becoming easier and easier to **generate use cases**, including **advanced analytics & AI**, but in many cases, the Data Governance approach is merely "informational", far from the "operational" data needed in the projects.

- As organisations have moved from conducting proofs-of-concept to **being concerned with the actual operationalisation of use cases and understanding the skills and profiles required**, they have become aware of three things:
  - Solutions or products must be brought closer to business,
  - We need to work differently, around these solutions
  - Centralised data management approaches are often not the right solution.

- As the enormous economic and social potential of data has become apparent, the ability to **exchange data between producers an consumers who do not necessarily belong to the same organisation** has become important. Thus, there is a shift **from an internal democratisation of data to an internal and external view**.

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A new approach: Data Governance 2.0

Based on our experience, we believe in a new approach to Data Governance that takes into account:

A new vision of data: Sharing and reuse I

The impact of new Cloud-based data architectures II

Agile mindset: How we organise ourselves to work on data projects III

Governance of the data life cycle: Federated approaches and Data Product Governance IV

I A NEW VISION OF DATA: SHARING AND REUSE

Data sources and the quality of the data produced and manipulated outside our organisations is often a factor that tends to be forgotten and overlooked. We focus on the internal view, which is mostly controlled by our data producers and Data Governance officers. However, **taking into account the data as part of an ecosystem is becoming increasingly important**. This view is characterised by:

- The growing importance of **data coming from outside** the organisation. External data can be classified into two broad domains: on the one hand, additional datasets from paid sources or from Open Data sources that augment or enrich what an organisation holds internally, on the other hand, collaborative datasets that are mostly found in shared work areas with other organisations.

- The importance of taking into account **the exchange and interoperability of data** from different domains internally, sectorally and with other private and public organisations.

SUCCESS STORIES

Bluetab worked with a group in the insurance industry on a project to implement a program to govern data across all of its organisations in a single installation. The same governance processes were implemented in all of the group's companies, enabling them to reuse information that crosses all of them. What did they achieve? A single vision of governance for the entire group and a specific vision for each one of the companies.

II THE IMPACT OF NEW CLOUD-BASED DATA ARCHITECTURES

Data architectures must necessarily evolve to meet the needs in terms of **flexibility, response time and innovation**. For organisations to gain a competitive advantage from the use of data, they need to overhaul their **technology stacks**, taking advantage of cloud as a foundational building block

Evolution requires investment, capabilities and strategic thinking, prioritising the changes that have the greatest impact on business objectives. **Cloud adoption** is a radical change that goes far beyond the technology, with many aspects that need to be considered taken into account to reap the maximum benefits, such as:

- Promote a new vision of solutions and technologies that revolves around the concept of **data product**.
- Define a new **operational work model**.
- Deploy a **methodology and innovation processes** based on **data products**.
- Define and develop **metrics to monitor** the deployment of the data architecture, including both qualitative metrics that evaluate the quality and efficiency of the service (e.g. **time to market**), and quantitative metrics that evaluate the derived **costs** (e.g. optimisation of FTE's execution costs dedicated to data integration tasks).
- Implement **new economic management** of operating and processing costs.

SUCCESS STORIES

Bluetab worked with a company in the Media sector that was committed to a 100% cloud data architecture based on Microsoft Azure. As part of its initiative, it included a governance layer that could be integrated with Microsoft's cloud services. This gave users a single view of the data, despite the multitude of services used on the platform, and also made governance tasks easier for them.

In addition to adopting **cloud** technology, which is undoubtedly the most disruptive driver behind a radically new data architecture approach, the following are also key changes to be considered:

- The evolution from batch to **real-time** data processing.
- The shift towards **"modular"** data platform approaches.
- Access to data via **APIs**.
- The transition from monolithic, centralised platform design approaches to domain-based **data architecture designs**.

III AGILE MINDSET: HOW WE ORGANISE OURSELVES TO WORK ON DATA PROJECTS

It is not possible to accelerate a data-driven transformation without working methodologies that connect technology and business and avoid some of the usual problems:

- Lack of working models that delimit responsibilities between systems and operational business units.
- Operationalisation of high-cost projects without clarity about their technical and economic viability or without monitoring of their return of investment.
- Low re-use of solutions.

An agile approach with newly defined roles implies a Data Governance that takes into account:

- The need to work in teams that create **minimum viable solutions** in an agile way and connected to the business needs.
- The importance of the **Product Owner** role as the expert and ultimate responsible for the data product both in the design phase and in the evaluation of results and exploitation.

SUCCESS STORIES

Bluetab carried out a project with a company in the Utilities sector that consisted of implementing a Governance tool through deployment in specific projects, starting with a specific comprehensive use case. To implement the solution, a team was formed based on profiles with different roles, from the CDO area as well as from the IT and business areas. The work plan included the metadata extraction of the corresponding systems, the formulation of data quality controls and the definition of relevant business concepts in the business glossary. After this was successfully executed, lessons learned were applied and the governance methodology was extended to use cases from different organisational areas.

IV GOVERNANCE OF THE DATA LIFE CYCLE: FEDERATED APPROACHES AND DATA PRODUCT GOVERNANCE

In many organisations the Data Governance approach is born with a focus exclusively on data as isolated entities. Either because they require a primarily regulatory approach and/or because organisationally they have not developed internal mechanisms to evolve from Data Governance to a **comprehensive Data Lifecycle Governance**.

From our experience, a modern approach requires:

- The governance of data and also of **data products**.
- A new vision of governance that combines general principles for the most important aspects and **decentralised and federated management of governance by data domains**.
- Treating **data like another product**.
- The creation of data-sharing mechanisms (**Data Sharing Agreements**) that establish the principles of responsibility, quality and security between producer/-consumer.

SUCCESS STORIES

Bluetab is working with a leading company in the banking sector to develop a platform for the comprehensive management of the data cycle. Data producers and consumers were defined and then provided with tools to reach data-use agreements between them. To achieve this, workflows were put in place to automate the processes for the generation of metadata and data access management.

*The previous four points make up a **modern Data Governance approach**, in which Data Governance is, more than ever, an end rather than a means to add value to the organisation. Through **data products** that are built and managed using **new ways of working**, often in the **cloud**, it is possible to obtain an overall view of a company's '**data fabric**' and governance throughout the entire data life cycle.*

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Towards Data Governance 2.0: Conclusions

The purpose of this document has been to set out the axes on which a **traditional approach to Data Governance should evolve**. The main drivers of this evolution are:

Consider that we need **a broad view of the data** we will need to manage and generate strategic opportunities. An internal data view will not be enough. Beyond the datasets we need for our use cases, we must incorporate a mindset of attention to sectoral data interoperability initiatives, open data and public-private initiatives to **create data-sharing data-spaces**.

Envision a **hybrid and multi-cloud future** that will impact on more hierarchical approaches to Data Governance. **Cloud technologies** mean not only a change in technology and extension of services, but also new ways of working around products: They bring business closer to managing the entire data lifecycle. In an environment that is becoming increasingly complex in terms of data sources, services and types of consumption, Data Governance must provide a flexible and agile response.

Keep in mind that it is no longer sufficient for our organisations to focus on governing "raw" data with traditional Data Governance roles. Governance needs to broaden its scope by managing **data as a product** and the products generated from it. This approach significantly improves the impact that initiatives have in terms of business value.

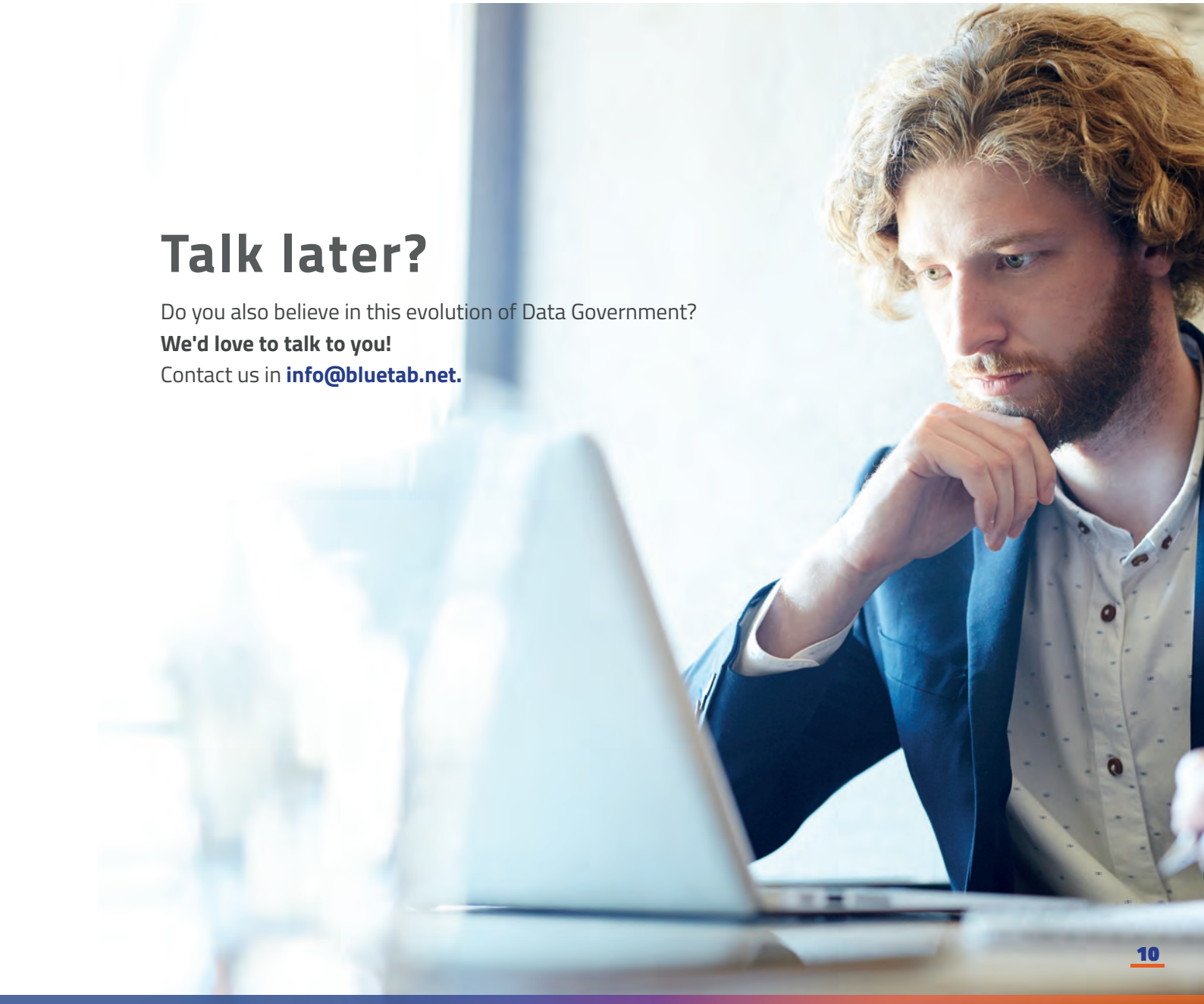
We can accelerate the transition to data product management by rethinking the way we work and the allocation of responsibility for data products.

Implement **an agile mindset** will facilitate the transition and especially the creation of the figure of the product owner. The only way to guarantee that data products are defined according to clear needs, built and maintained on a recurring basis is to have adequate ownership. Accelerating a data-driven transformation means ensuring that we move beyond the proof-of-concept phase **to go operational at scale**.

Make a clear commitment to move to a **governance model of the entire data lifecycle**. In most cases this implies **distributed and federated governance models**. These models require a distribution of data domains governed in a decentralised manner, a **product-centric approach** to both data domains and data solutions, and **governance principles implemented on a common data platform or infrastructure** used throughout the organisation.

And in conclusion to develop a **roadmap** for the **transition to Data Governance 2.0** that involves in summary addressing the following points with a holistic view of data:

- Assessment of current and required **capabilities**.
- Design of the **internal organisation of roles, teams and domains**.
- Identification of the gap between current and target **architecture**.
- Build the **Data Governance and data products operational model**.



Talk later?

Do you also believe in this evolution of Data Government?
We'd love to talk to you!
Contact us in **info@bluetab.net.**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