The data driven economy is enabling new business models, creates new markets and changes what customers expect from us. Digital and technology are getting more prominence in the board room. Risk committees are trying hard to keep abreast of cyber security. How should the board approach oversight of data management? This white paper will touch on all the key concepts a board member should know about oversight and governance of data. But we won’t stop there. Performing well as a board in the digital age and managing the data of your organization also requires new skills and capabilities – in the board room and beyond.

The ownership of data is about finding, empowering and supporting the right knowledge workers to address the accountability and the legal rights of data. The preference would be to allocate these roles to those who own the operational Business & Data processes. The recommended roles that would support the governance of data are:

**Data Owner**

A Data Owner provides executive sponsorship and influence strategic direction, approve, change and support data governance activities, as well as being accountable for the implementation of the data policies and standards, and for setting and achieving targets and metrics (e.g. Data Quality, Usage, and Security).

**Data Steward**

A Data Steward ensures that data supports all business needs and regulatory requirements. They support a specific part of the business and work with stakeholders that are impacted by data to develop data definitions, standards and data controls. Aware of the data quality, data acquisition and data entry initiatives within their area, a data steward understands how their team in the business operates and is able to resolve simple issues and take action on the data they use without the need to escalate.

**Data Custodian**

A Data Custodian works closely with the stewards and is the go-to person for their allocated system and its use of data. They are consulted on any changes to data that may affect their system and potential system changes. They have a high-level understanding of how the system works and manages access to the right people that can make changes.

**Accountability**

Defining and implementing data governance needs to address your organization at large. In our experience, many companies still work in silos – and also keep their data in silos. In many cases different repositories are used, various technologies are deployed to access the data and the quality of data might vary mightily from one business unit to another.

**Siloed Organisation - Siloed Data**

Breaking down silos starts from the top with agreeing on a shared vision of how to use data. It won’t happen in one big leap, but incrementally over time.
Rewards and Reporting

The data governance framework should provide a reward system that encourages collaboration among the major data owners and data governance that allows for participation. A reporting mechanism on how data analytics contribute to the company’s success generates transparency on the use of data and the cross-fertilization effect across business units. It should be used to incentivize the management team to further break down silos.

![Illustrative: Data Management Roles]

Utilize in-house Capabilities

One very strongly defended silo is often the technology team. Once the business units align on how they want to leverage data better, the technology team will be approached on multiple levels. Often excellent skills for data analytics are to be found in-house but remain underutilized because ideas are communicated in a fashion that single-mindedly serves just one business unit and does not provide a convincing value proposition for funding.

Technology in the Board Room

Getting your technology team involved is key to moving your data initiative forward. We heard directors admitting that they disengage if technology is tabled in the board meeting. We believe this is triggered by the language used in board papers and technology presentation. The language of papers in the board pack should not contain technology lingo. We know boards who have explicitly banned all 3-letter acronyms. The language should be “above the weeds, but below the clouds”. Don’t dive into the detail, but enable all directors to grasp the impact for the company and the ecosystem it operates in.

Above the Weeds - Below the Clouds

We have worked with directors who feel more comfortable to talk to an external consultant than to their own technology people. A consultant is not part of the siloed – and often clashing - organization and in some instances seems also to be more fluid in adjusting their language to the board room. We will discuss later when engaging external advisors might be a good solution. For breaking down silos and assigning accountability for your data, banning 3-letter acronyms will come much cheaper.

Business - Technology Cooperation

Ultimately breaking down silos will also result in improved collaboration between technology and business. Breaking down silos starts in the board room. That sounds obvious enough. But we have talked to directors who consider themselves to sit on the board for a narrow field of expertise, say sales or finance. To embrace data driven strategies, the breaking down of silos needs to start in the board room. All directors should feel comfortable inquiring about data across the business units, technologies used, the risks a data strategy encompasses and the related investments.
Data Governance Framework

Data governance has its own structure for ensuring that updates to and the management of data is carefully managed across the organisation. A data governance framework sits around the roles described earlier to ensure there is support and that escalation and decisions can be achieved.

Integration into Corporate Governance

Many organisations we work with already have a wider corporate governance structure in place which provides support and context. If you are implementing a digital transformation programme, there is very likely an element of the data governance included in that already. As the programme delivers, this framework then starts to move into business as usual, to ensure data is owned, managed and supported through its life cycle.

Escalation

If there is a decision that cannot be actioned by the working group as it has a wider business impact, this can then be escalated to the Data Governance Council to ensure a decision can be made, or escalated further dependent on the complexity to top management.

Ambiguity

Executives and ultimately the board are facing a lot of ambiguity when governing data. What do we mean by that? As with many things digital, data governance is mostly not (yet) regulated. Many choices are yours. Many decisions will have to be re-visited after a few months or a year, as the world of data and analytics is changing rapidly. Many parameters you set are good today and bad tomorrow.

Also, the assessment of what is good, right, ethical or correct and what is not is shifting and subject to interpretation. Many other topics decided in the board room are much more stable and regulated, especially everything financial – which is what most directors are very comfortable handling. For overseeing the use of data, the board is asked to set policy with much less external guidance and using much more of their own judgement.

Dedicate Time to Data Governance

Boards need to allocate considerable time to data governance deliberations. This level of uncertainty is where trusted external expertise with access to benchmarks and reference projects might be very helpful.

Risk Management

Data is considered the most unaccounted for risk. The involvement of the Risk Management Committee is best practice, as is the integration of data governance into the Enterprise Risk Management framework. The integration into Enterprise Risk Management needs to address cyber risks and data protection as well as other risks related to utilizing your data.
Integration into Enterprise Risk Management

Before the Risk Management Committee recommends the data governance framework to the board, make sure the board paper is using suitable language. Externally imposed governance practices are tempting but should be supplemented with effective governance nurtured from within. Data governance might be an example for when this is paramount.

Data Quality

Starting to drive advanced data initiatives in your business such as implementing algorithms, brings other issues such as the quality of data and bias. Data quality is very much an activity of the data governance team, to ensure they are making good quality data available to all that require it.

Machine Learning

As we move into the normalising of machine learning into organisations, we will need to ensure we can answer these questions:

- Who is responsible for its results?
- How do we help data governance teams ensuring data quality?
- If the model is tweaked, how do we ensure the output will be repeatable?

The short answer is, that the above falls very much into the realms of data governance. The Data Governance Framework provides the rules and roles which ensure that processes are followed and risks and issues escalated.

Models and Algorithms

One of the problems that does arise from the machine learning process is “bias”. All models and algorithms more or less will have bias in them. This means that data governance principles need to be developed to help those designing and managing algorithms.

Bias Review and Smoothing

Application of machine learning requires the expertise to ensure bias review and smoothing, incorporating business rules for version control and traceability. This will help to understand how the algorithm came to its final outcome. It would also be required to understand the provenance of where that data came from (for privacy and regulatory purposes). You need to be able to follow that lineage across systems, technologies, databases, dashboards and where it might go externally.

Digital Trust

Your clients and partners entrust you with their data. To earn and maintain this digital trust the board’s oversight over how data is used in your organization is crucial. Ensuring that you base your products and services on a good quality of data is key to managing trust. Continuously monitoring data quality and looking out for bias in your data is a foundation to maintain trust in your services. Keeping your data integer and safe should be paramount for a board. Combining data ethics with cyber resilience generates digital trust.
About the Authors

Susanne founded Acoyvis in 2008. She is dedicated to make change a rewarding experience. A key ingredient is trust between business and technology teams. In leading from the top, Susanne works with directors to achieve better Technology Governance. Susanne has experience serving as a non-executive director and chair of the Audit Committee for a regulated financial services firm. Her prior career included top management roles (CxO, VP) and consulting assignments for several Fortune Global 500 companies.

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About Acoyvis

Acoyvis is a boutique consulting firm. We speak Business and understand Technology. Our board services include training for directors (overseeing cyber risk, technology governance), workshops between the board and the technology team, key note speeches and coaching for directors. We serve clients in Europe and Africa.

About datazuum

datazuum is a data and analytics consultancy specialising in aligning commercial business drivers with effective data strategies. A 50 strong team of senior data professionals with cross industry expertise. With a passion for data, focusing on our clients’ business outcomes covering: cost savings, customer experience and increasing revenues.