

DATA CULTURE ASSESSMENT FOR YOUR ORGANIZATION



**A strategy and framework for
developing enterprise-wide
Analytics Maturity**

Introduction

Having a Data Culture is your passport to survive and thrive in the new digital world. An organization is considered to have mature data and analytics culture – i.e. high analytics maturity – when data is being appropriately leveraged to optimize day-to-day decisions toward enhanced performance and growth. Just like Rome, Data Culture is not built in a day. Also, you are not done with it once you have it; developing a Data Culture is an ever-evolving journey. However, there is a fair amount of work needed upfront to get the ball rolling in the right direction.

So, how do you get started? Before we talk about the first steps, let's look at the key components of Analytics Maturity.

4 D's of Analytics Maturity

A company with mature data culture has these four attributes:

1. **Data-driven leadership:** The leaders of the organization understand the power of data as well as analytics and have a strong motivation to lead by numbers.
2. **Data maturity:** There is a single source of truth for data, i.e. people can access data with ease and that data is accurate.
3. **Data literacy across the organization:** Both the analytics and the non-analytics side of the organization have an appropriate level of Data Literacy.
4. **Data-driven decision-making process:** There exists a mechanism to make decisions in the organization, which is aligned with the key drivers of the business so that everyone understands how their work moves the key metrics, thereby adding value to the company.

Data-driven leadership

Of all the factors integral to a data-driven company, data-driven leadership holds the top spot as it is key to transforming an organization's culture. The leaders have to first champion the nuances of Data Culture themselves so that the process can be made effective and successful. After this, they have to lead by example and ask the right questions to unmask the right information. They need to hold people accountable for decisions while checking whether a structured approach has been followed or not.

For instance, when one of our clients hired a new Vice President (VP) of Marketing, he restructured the marketing initiative planning process by introducing zero-based budgeting. He implemented the following guideline: every project will be funded based on the expected Return on Investment (ROI). This meant that no project could be funded unless it showed a clear line of sight to revenue. Due to this, marketing managers had to think through their targeting and segmentation strategy to understand and estimate the expected ROI. Only after proper evaluation, the managers would present their strategy to have a budget allotted for their



respective projects. Not only that, the new VP held people accountable for the ROI they were signing up to, and the review process pitted the expected revenue against the reality so that those concerned could learn from their experience and mistakes.

Data Maturity

Data-driven insights sit on a solid foundation of good data. Organizations that invest in infrastructure with appropriate data collection and storage process lay the groundwork needed to start leveraging data as an asset. Bad data quality can severely impair an organization's ability to learn about their customers and their products through data. Hence, data quality is the foundation of Data Maturity.

The other key factors that reflect data maturity includes usability, ease of access, scalable agile infrastructure, and instrumentation process (a process to quickly enable capturing of the new data field and sources as the need for previously unavailable data becomes apparent).

One of our gaming clients was completely paralyzed by data immaturity. The organization was launching gaming experiences online at a very fast pace as well as releasing new features every two weeks. However, a well thought through data architecture and instrumentation plan didn't exist to capture the key metrics.

For example, a key success metric was product activation, but since it wasn't planned and instrumented, the success metric would get pulled from various production sources. These sources would not often agree –while one source would report 20% activation, another would report 27%. The product managers could believe neither of them. So, they ended up making a decision by gut. As we began our work on data literacy for this organization, one of the first things we worked on was data re-architecture.

Data Literacy

Data Literacy is the ability to read, digest, and interpret data toward meaningful discussions and conclusions. Companies with higher data literacy are able to leverage data to understand their customers' needs and product usage. This insight helps them develop better products and create a delightful customer experience, thereby driving greater revenue and rapid business growth.

However, data literacy is not a one-size-fits-all phenomenon. Different roles and responsibility need different levels of data literacy to be successful in their job. Here are the six common personas we have identified as part of our data literacy work:

Data-driven Executive: Data-driven Executives understand the power of analytics, which is the discovery and interpretation of meaningful patterns in data and their application for effective decision making. Data plays an integral role in their decision-making process. They hold their team accountable for their work and can understand when analytics has been executed in the right manner or not.

Data Scientist: Data Scientists are well versed with advanced analytics methodologies. They can solve almost 100% of business problems using analytics. They are adept in the use of advanced tools like R, Python, and SAS among others to manipulate data and build models. These Data Scientists are capable of aligning stakeholders toward an actionable solution and excel at the data-driven process of decision making.

Citizen Analyst: Citizen Analysts are data-driven employees who can solve 80% of their business problems using a structured approach to analytics and in the process align the stakeholders as well. They can get to an actionable solution and move the key metrics for the company. Some Citizen Analysts can also be taught advanced analytics.

Data Literate: Data Literates understand the analytics landscape and can be an active participant in discussions involving data. They are willing to hone up their analytics skills. A good recipe-based analytics program with hands-on practice on the most employed analytics techniques can take them and the company a long way toward being data-driven.

Data Enthusiast: Data Enthusiasts believe in the power of data. They are eager to learn more about how to use data and interpret it in their work. A good data literacy program could usher them and the company to new heights toward being data-driven.

Data Skeptic: Data Skeptics don't believe in the value and power of analytics. They see analytics and data as 'burden' to their work. They can derail any data literacy project unless carefully nurtured into becoming Data Enthusiasts. A good data awareness program is imperative in turning these skeptics into enthusiasts.

We have a detailed 5-steps method for developing data literacy and sample course content. Email us at dataliteracy@aryng.com to get your copy.

Assessing current and desired data literacy by various personas is an integral part of assessing the data culture of an organization. It helps us identify the gaps that need to be filled.

Decision-Making Process

After having leadership and people set up properly, data needs to be inserted into the decision-making process. For eg, the manner in which a company allocates marketing budget is a good representation of whether data has a place in the decision-making process or not. Is it zero-sum based? I.e. money is allocated based on the expected Return on Investment (ROI), or is it status quo per last year and some incremental. (if so, it implies that data is irrelevant in making decisions).

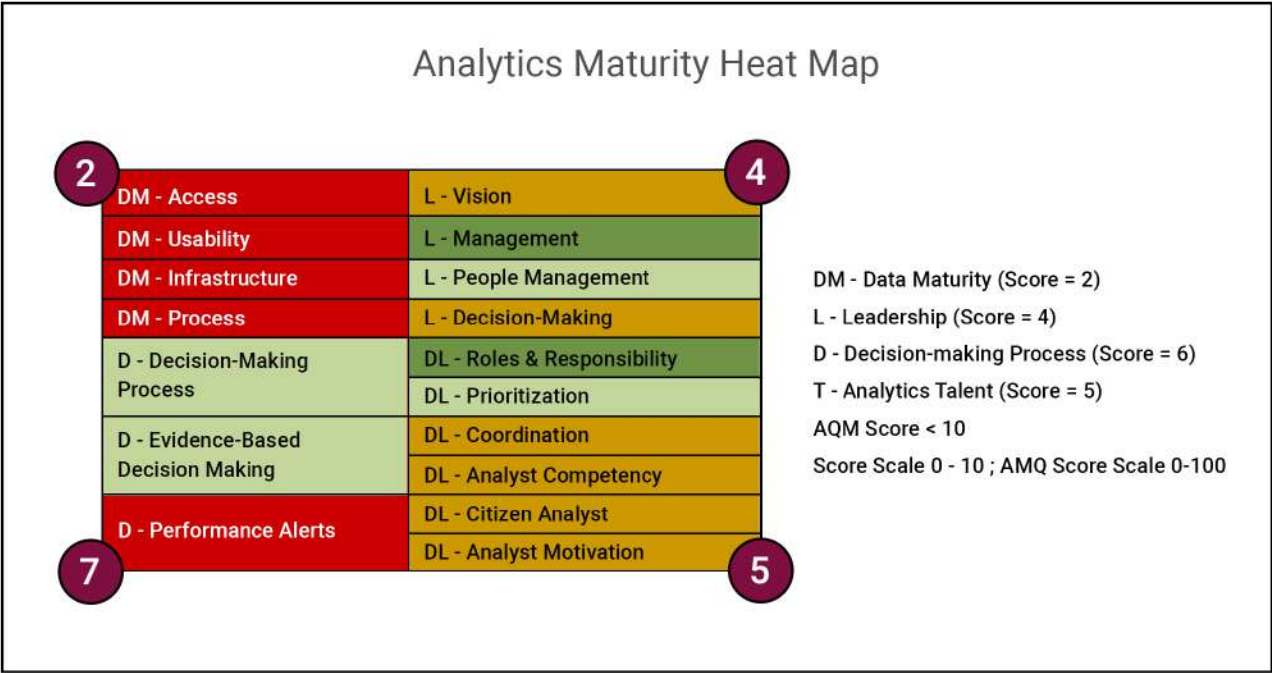
A data-driven organization has a structured planning and review process like a Quarterly Business Review with a clear and transparent decision-making process. Data is part of that process. In addition, at the manager level too, there exists a clear and transparent process by which projects get prioritized and data-driven insights are very much part of those decisions.

First steps toward building a data culture

Now that we understand the four pillars of data culture, let's talk about how to get started toward your journey. The first step, as you may have guessed is assessing where your organization at present is, in its data culture. How mature is data access, usability, and infrastructure? Do you have a single source of truth? How data literate is your organization? How data-driven is your leadership and do you have a data-driven decision-making process?

At Aryng, we have a comprehensive analytics maturity assessment method based on detailed stakeholder interviews, the voice of executives, enterprise-wide surveys, data infrastructure audits, and deep dive-in planning process. The output of the analytics maturity assessment is typically a heat-map with scores across every sub-dimension of analytics maturity.

Here is a simplified, sample output of the analytics maturity assessment.



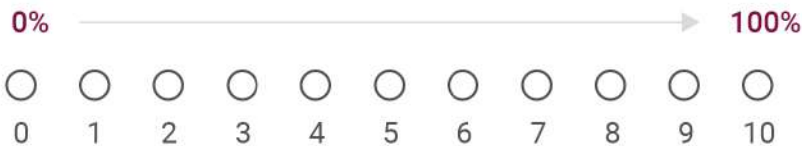
For this organization, it is clear that we should improve their data literacy. However, until we mend data maturity (it's in the red zone), this organization cannot become data-driven. The organization also needs to revamp its leadership skills to support building a data culture within the organization.

So, what's your organization's Analytics Maturity? Start by floating this DIY survey below to as many decision-makers in your organization as possible, and take the averages for each of the buckets to get an overall idea of the data culture.

Analytics Maturity Assessment DIY Survey (Perception based)

Data-driven Leadership

1. What percentage of leaders in your organization make decisions based on data most of the time?

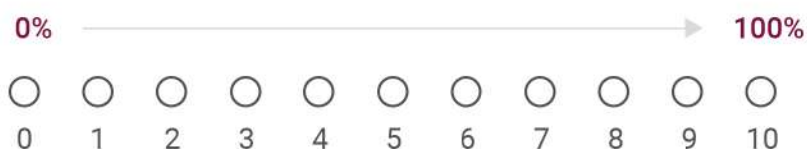


2. Of all the projects that are currently in your pipeline, what percentage of them are expected to move at least one of the key metrics for your organization (i.e. you have an analytics agenda in place)

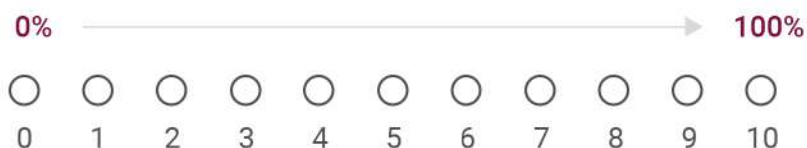


Data Maturity

3. How likely is it for a randomly pulled data set (from a data warehouse) to be accurate?



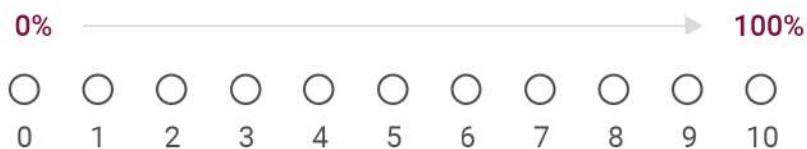
4. On average, what percentage of an analytics project timeline gets spent on reconciling data from different sources?



5. How likely is it for an identified data field, which is currently not captured, stored, or rendered, to be eventually made available for analysis in the future?



6. What percentage of people in your organization have an appropriate level of access to relevant data and dashboard?



Data Literacy

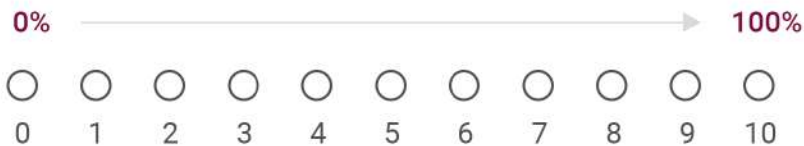
7. In your organization, how many non-analysts can execute simple analysis in Excel or any similar tool?



8. In your day-to-day workflow, what percentage of decisions that you make are based on metrics and charts?

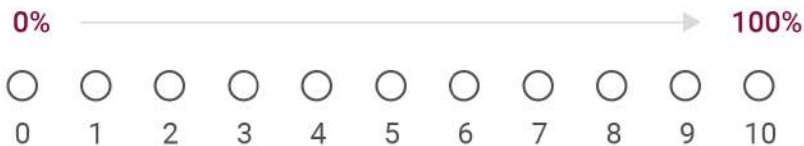


9. In your day-to-day workflow, what percentage of decisions that you make are based on metrics and charts?

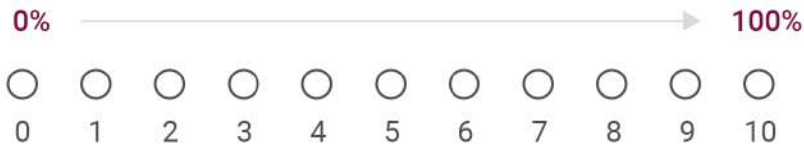


Decision-Making Process

10. What percentage of decisions made in your organization comes about from a well-defined process?



11. In what percentage of cases is budget allocation done based on the impact of the project on the key metrics?



Summary

Before embarking on a data culture journey to make your organization more data literate, it is very important for the organization to take stock of their current analytics maturity, identify the weakest links, and start fixing it in the optimal order. For most of the current well-scaled organizations that have strong Business Intelligence teams, data maturity issues are a thing of the past. The biggest hurdle most of these organizations face today in cultivating a data-driven culture is creating data-driven leaders who can be the flag bearers of developing data culture within the organization.

Comprehensive Data and Analytics Maturity Assessment

If you would like to get started on your journey to build a culture of data and also would like Aryng to conduct a comprehensive Analytics Maturity Assessment for your organization, please contact us at info@aryng.com

Comprehensive Analytics Maturity assessment is typically a 4-week process involving

1. 1 week of stakeholder interview with executives + interviews with business, analytics and IT/BI department heads.
2. About 2 weeks time-period for the company-wide survey.
3. 1 week of collating the findings into a data culture heat map with a prioritized list of recommendation for increasing analytics maturity.

Aryng is a Data Science consulting and training company. Aryng's SWAT Data science team helps solve complex business problems, develop the company's Data DNA through Data Literacy programs and deliver rapid ROI using machine learning, deep learning, and AI. Our client list includes companies like Google, Box, Here, Applied Materials, Abbott Labs, and GE among others.