



Business Intelligence Maturity Roadmap

> HAVE THE RIGHT DATA IN THE RIGHT PLACE AT THE RIGHT TIME

understand how your people, processes and technology can elevate and evolve your business



Introduction

Data is more accessible than ever before. With information so accessible, the timing and accuracy of data is paramount and integral to business decision-making. Once data is consolidated and validated it can be used to predict the future and tell a story rather than merely measure performance. The advancement in technology's ability to store and handle more data than ever before, enables us to find insights that would otherwise remain undiscovered.

Every organization inherently has data; however, not all use data to make critical business decisions methodically and systematically. A shocking number of organizations still rely on gut feelings and past experiences to guide decision-making. Business Intelligence (BI) is the combination of data strategy, ownership, reporting, and analytics to become a data-driven business and make data-driven decisions. A data-driven business uses data to not only make decisions but to also improve processes to acquire and retain customers leading to increased revenue.

We developed an easy way to quickly diagnose your organization's current level of data-driven business effort and to understand how your people, processes, and technology can elevate and evolve your business into a data-driven growth machine.

Take our 10 Question Assessment

What is the BI Maturity Roadmap?

Our BI Maturity Roadmap will help you better understand your organization's relationship and reliance on data. The five phases of the maturity roadmap are designed to paint a picture of where an organization might be and what steps are necessary to advance to the next phase. We've represented these five phases in the modal progression from walking to flying:



Within each phase are eight essential elements:

1. Data-Driven Business Effort

Trusting and leveraging data to validate and challenge assumptions and to help you remove the risk of decision making.

2. Data Ownership

Understanding who is accountable for data quality and data accuracy.

3. Insights from Data

Turning insights from the data into a cohesive, actionable story to solve business problems.

4. Reliance on Data

Trusting and believing that good information will lead to better outcomes that otherwise would not have been achieved.

5. Data Governance

The process around ensuring data quality and data reliability.

6. Data Strategy

Deliberately viewing data as an asset for the organization. Leveraging data in a way that it becomes a competitive advantage in the marketplace.

7. KPI's (Key Performance Indicators)

Performance metrics tied to critical goals and objectives.

8. Reporting System Accessibility

How data is delivered to the organization. This process allows for easy access to information and KPIs needed to keep the organization thriving.



Dana the Data Person, our protagonist

To help illustrate what organizations experience in each phase of the roadmap, we'll be using the persona of Dana the Data Person. A business leader interested in driving organizational growth through data and data insights. You'll see how Dana's role evolves as we move through each phase, going from an individual contributor to a leader executing and leading data strategy efforts across the business.



You have to crawl before you can walk. The same can be said about harnessing the power of business intelligence. In this Phase, generally, only a few people in the organization are using data, and the data exists in spreadsheets.

Data-driven Business Effort: Phase 1

An organization in Phase 1 is doing well and is making money. Everything's great! You haven't had much of a need to assess what's happening and data isn't a part of the culture. This phase is a natural place to find yourself in until there's that shift. The organization isn't concerned with data. Maybe it's not even on the backburner. Perhaps the thought of using data to drive decisions is not yet on the radar. But then, opportunity knocks, and growth is explosive and then there's this shift, this new need, to be data-curious.

Data Ownership Phase 1

If we asked this organization about their data ownership, their response would likely be, "What data?" There's no need to manage data that isn't being captured. Sure data exists within the organization, but that's as far as it goes.

Insights from Data Phase 1

Phase 1 is another situation where we'd ask an organization "What kind of insights are you gathering from your data?" Their response might again be, "What data? What insights?"

Reliance on Data Phase 1

This organization says they don't rely on data at all, but they do in small ways. We find that there are organizations in Phase 1 who are "data ignorant" through no fault of their own and some who are willfully ignorant who fall more closely in line with Phase 2.

Data Governance Phase 1

An organization in Phase 1 could ask, "What data? What is data governance?" Why would they need to govern data they aren't capturing.

Data Strategy Phase 1

Again, this organization may ask, "What data?" Why would they need a strategy for data they aren't collecting? In Phase 1, you may have individuals trying their best and succeeding; however, they don't realize what they have and what they need.

KPIs Phase 1

How could an organization not collecting data possibly have KPIs?

Reporting System Accessibility Phase 1

Why would a company need to access reports on data they don't have? Or maybe this organization only has a manual process to create reports — they request reports from Dana and then they get their report. They don't question the effort it takes to create the report.



We can begin to see Phase 2 on the horizon. Soon you'll be running. The next evolution is sharing data within individual teams and developing standardized metrics. Additionally, you can begin automated data collection and reporting. You're running! Data is starting to be shared within multiple teams and departments. Various data tools are starting to be used for collecting and analyzing data. This is where Dana comes in: They collect and aggregate data, but it's not their primary job function; they've just found themselves as everyone's "Data Person." To start cycling, you'd want to work with Dana to develop a data strategy for collecting and gathering data in a central database and hire more people to have a team of "Danas."

Data-Driven Business Effort Phase 2

Remember Dana the Data Person? Phase 2 is their time to shine. An organization in Phase 2 has a Dana or maybe a couple of Danas in each department who will, from time to time, compile data and take it to their meetings. Leadership will say, "Oh, this is so nice to have, thank you for doing this. This is everything we wanted." The reality is that Dana is spending hours compiling data every week in addition to their full-time job and maybe they're just barely keeping up. Burnout is inevitable. Nothing is automated and Dana is seen as a vital member of the organization for their ability to compile and analyze data.

Data Ownership Phase 2

Dana's back! In Phase 2 this organization has an unofficial data person. Dana manages and owns a limited amount of data in their domain within the organization.

Insights from Data Phase 2

Dana comes in to save the day once again. If anyone in the organization needs insights from data they know to go to Dana the Data Person. Unfortunately, they usually don't have a process in place and Dana deals with a lot of emergency and ad hoc reporting requests.

Reliance on Data Phase 2

In Phase 2, this organization occasionally relies on data, using data only for gut checks and to validate assumptions. The data isn't used in any regular or meaningful way. If the data doesn't confirm their assumptions, they look the other way and plow forward with their plans.

Data Governance Phase 2

Dana the Data Person is back. Dana is governing data whether they know it or not. If there's data, there has to be some governance and, in this organization, it falls on Dana.

Data Strategy Phase 2



In Phase 2, Dana is pushing hard for an organizational data strategy, but they either don't have the support they need, or, perhaps, they have some support, but not enough from leadership to be effective. Dana knows there are beneficial insights in the data but is unsure, both, of how to access them and which data sources are important. Typically, organizations in this phase are only capturing data as opposed to Phase 3 where they're generating insights from data.

KPIs Phase 2

Dana is unsurprisingly all about KPIs but is joined only by the executive team. KPIs are not widespread throughout the organization.

Reporting System Accessibility Phase 2

In Phase 2 Dana is busy in spreadsheets — creating and managing charts and graphs. The manual process in Phase 1 is still in play, but more people are starting to request data and only Dana recognizes the bottleneck. The organization still isn't bought in.



Hop on the bike! In Phase 3, the data supply is meeting the organizational demand. Some teams and departments are analyzing and gathering their data and are starting to use data from other departments. To start driving the organization would need executive sponsorship to create a Business Intelligence (BI) team and a centralized data repository for reporting and analytics.

Data-Driven Business Effort Phase 3

This organization's Dana, or maybe a team of Danas, is starting to put together a data warehouse. They've managed to get data into the cloud, but they're not following best practices for data warehousing. There was a need for data in the organization and Dana stepped up to meet that need, but they never received any formal training, nor do they have sufficient budget to work with. Dana has people requesting data who are then able to generate insights; however, there's no formalized process or way for them to get that data except through Dana.

Data Ownership Phase 3

Dana isn't the only "data person" in this organization, but they're fragmented. In Phase 3, different departments and teams will have varying levels of ownership of their data. Nothing is centralized amongst one team of "data people."

Insights from Data Phase 3

An organization in Phase 3 will have multiple Danas spread across a few teams, but again, they're fragmented and not centralized. This still isn't Dana's official role, somehow circumstances have led to them being a "data person" who holds the data keys for the organization.

Reliance on Data Phase 3

In Phase 3, this organization learned that looking the other way when it comes to data just doesn't work. They use data to look at historical trends, when it's available and convenient. They still don't have a formal process in place and data analysis is fragmented. The perils of fragmented data analysis is the lack of a single source of truth. Maybe the finance and marketing teams are working off the same number, but if you ask production or sales, the number is different. The data can't be trusted

Data Governance Phase 3

Dana's no longer flying solo and has a few other people functioning as unofficial system administrators. Unfortunately, the data is fragmented and there are data

discrepancies. Reporting is completely manual and nothing is automated. There is still no formalized data governance process in place. Inefficient workarounds abound within this organization.

Data Strategy Phase 3

In Phase 3 Dana, and other people like Dana, have a strong business case built with formal support from all the right people and they have an informal data strategy but there's no centralized team in place to drive the effort. Dana and others are still siloed as individual owners.

KPIs Phase 3

KPIs are starting to catch on! Teams are coming up with their KPIs thinking about collaboration with other teams.

Reporting System Accessibility Phase 3

The manual process continues in Phase 3, but this time Dana has help from across multiple teams. Or perhaps another person, while waiting on a report from Dana, asks, "Isn't there a better way? Can't we automate this? It's taking up a lot of Dana's time." Dana would agree: there is a better way! Automation is possible! Sure, the process they have in place works for now, but for how long?



PHASE 4

We're cruising down the highway in Phase 4 now! Your organization has a centralized BI team everyone depends on for all their reporting needs. Business decisions at every level are made based on the data provided by your BI team. Take to the sky by providing data-driven decision-making through predictive modeling and artificial intelligence. You'll have the **right data** in the **right place** at the **right time**: at the point of all decision-making.

Data-Driven Business Effort Phase 4

An organization in Phase 4 would have a team of Danas set aside for organizing data and pulling data from all of the needed source systems and for providing standardized reports to the organization.

Data Ownership Phase 4

An organization in Phase 4 has a centralized Business Intelligence (BI) team owning the data and data management process.

Insights from Data Phase 4

We know an organization is solidly in Phase 4 when they have a formalized BI team to provide insights for the entire organization.

Reliance on Data Phase 4

In Phase 4 this organization can trust their centralized, automated, and validated data. Unfortunately, they still have data skeptics in the organization. In contrast, they also have a few data evangelists who leverage the data far more than others and make data-driven decisions.

Data Governance Phase 4

Dana is on an official data or BI team which creates processes to prioritize data clean-up. This team isn't a part of the team that would know the data well, but they can manage data well.

Data Strategy Phase 4

In Phase 4, Dana has a team and a formalized data strategy in place. The executive leadership asks for insights and statistics and the BI team can deliver. Dana is the data subject matter expert.

KPIs Phase 4

An organization in Phase 4 has standardized KPIs set by leadership and everyone is on board with their method of tracking performance.

Reporting System Accessibility Phase 4



In Phase 4, this organization has more executive buy-in because multiple BI tools are being used throughout the organization. Automation is in place now, but the data isn't centralized. Any information someone could want is available, but they have to dig and know where to look.



And finally, prepare for take-off because we're at Phase 5. Your BI team provides direction and solutions to complex business problems and is involved with strategic decisions for the business. This team provides predictive and prescriptive analytics at the point of decision-making in source systems to solve business problems and drive the direction for the business.

Data-Driven Business Effort Phase 5

In Phase 5, this organization lives and breathes data — morning, noon, and night. Leaders and decision-makers are reluctant to make any decision without first looking at the data. Data drives decision-making for this organization. The goal is for the data to become predictive and prescribe solutions for the organization.

Data Ownership Phase 5

Everyone in the organization is a data owner in Phase 5. From the top-down, it's a joint effort from executives and the BI team to set the data management strategy and have the entire organization involved.

Insights from Data Phase 5

In Phase 5, an organization's insights are baked into its solutions and processes. For example, if HR is working through a turnover issue, their insights are within their HR tools. They don't have to hunt for their data — it's there right when they need it.

Reliance on Data Phase 5

An organization in Phase 5 is comprised of data evangelists. Data is part of the culture. Everyone trusts and uses the data. This phase can be a tricky one though because some organizations will place themselves here when really, they're still in Phase 4. Becoming a data-driven and data reliant organization is a huge cultural shift. Phase 5 is all about having the automated processes in place with prescriptive solutions and closed-loop analytics that completely drive decision-making at every level within the organization. If an organization is in Phase 5, they know they can be better and do more with their data and therefore prioritize growing their data practice.



Data Governance Phase 5

Here you'll achieve consensus from the entire organization, at every level, along with organization-wide support to ensure the data team can manage clean data. There are great, efficient processes in place. Rather than the data team having complete ownership of the data, data ownership lives within the organizational culture. Good data-driven decisions and prescriptive solutions can only come from good data. Overall, data governance is a well-balanced, joint effort between Dana's data team and the rest of the organization.

Data Strategy Phase 5

An organization in Phase 5 is bought into its data strategy at every level. The key difference between Phase 4 and Phase 5 is that the strategy and the execution are in place. Everyone in the organization recognizes the need for the data and has access to it. Dana has a seat at the decision-making table.

KPIs Phase 5

In Phase 5, the data decides the KPIs. Insights from the data drive growth and align the organization

Reporting System Accessibility Phase 5

An organization in Phase 5 is beyond self-service dashboards and reports. They're looking into closed-loop analytics so their data can be in the **right place** at the **right time** to support all decision-making.

Solving Barriers to Data Performance

Your organization's journey to data optimization won't be without a few hiccups, especially for those starting out in the early phases. Here are some of the more common issues, along with a few proven ideas to get the ball rolling.

How to get executive buy-in for BI?

The quickest way to an executive's heart for buy-in on something as critical as data is to pull data from multiple data sources to provide a unique insight that wouldn't ordinarily be accessible. This illustrates the need for data consolidation and how having the right data at the right time can be a game-changer for the organization.

Defining Closed-loop analytics?

Closed-loop analytics is where KPIs, predictions, prescriptions, and metrics are surfaced in the source system or delivered in a way that it can be accessed quickly and easily at the point of decision making. You don't have to chase down a report or go find Dana the Data Person to get one piece of information, because all the data is in one place. Eventually, closed-loop analytics lead us into predictive and prescriptive modeling

Achieving Master Data Management?

Scalable data models and architecture is critical at every phase in the roadmap because it allows for faster development of reports. Data governance allows for data validation and consistency providing a single source of truth for the organization. If there's no single source of truth, then why should anyone trust the data? If no one trusts the data, then no one will use it. It seems basic, but less than 10% of organizations utilize Master Data Management. The data you use is only as good as the data that's entered into the systems of record. Everyone in every level of the organization must take ownership of their data and get involved with Dana and the BI team to establish that trusted single source of truth.

What's the Difference Between Data Modeling and Data Architecture?

Data scientists may disagree with us on this, but for our purposes, "modeling" and "architecture" are the same thing. How do you store and build data so that it can be consumed for reporting, analytics, and predictive modeling? By breaking down database tables into highly normalized forms a non-technical person could still look at a database table for easy visibility and reporting. In addition to faster application and web speeds you can develop and deliver insights to your organization faster. A word of caution though: don't over engineer here. Instead, make sure you're pushing advanced logic into the database.

Enabling Self-service BI?

If data is well modeled and architected, self-service reporting is an easy win for leveling up your data practice. Shared data sets allow for users to create their own reports and dashboards rather than waiting for Dana or the BI team to create them. With Self-service BI users can access data however they want — even if their preferred tool is spreadsheets.

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About Us

In its 20+ year history as a leader in digital transformation for highly regulated industries, Veracity Solutions has pioneered the implementation of technologies that are key to the growth of the digital business. We believe data is an essential element to driving this growth. Industry leaders are using data as a competitive advantage by generating and leveraging actionable insights from normally siloed teams and sources.

Veracity Solutions is a BigML Partner, providing businesses with one of the most powerful AI and ML platforms to aid in the creation of industry-leading algorithms. Additionally, our Data Performance and Analytics Studio offers the key services needed to deliver a world-class BI experience, transforming teams, and helping businesses meet and exceed objectives.

Let's talk about your BI and data plans. Click below to reserve time with a Veracity Solutions BI Solutions Expert.

