



BEHAVIORAL DATA

Maturity Matrix

A strategic framework to help you harness the power of behavioral data.





We live in an experience economy where personalized customer experiences are the key to standing out. But truly understanding the driving sentiment behind each customer interaction? That's where most businesses stumble.

Behavioral data helps brands see what they might otherwise miss, offering insights into customer sentiment, preferences, and pain points. Armed with these insights, organizations can fuel better customer experiences, build loyalty, and drive meaningful innovation.

However, the journey to leveraging behavioral data looks different for every organization. Many are still in the initial stages, struggling to consistently collect, analyze, and implement behavioral data. Others actively use data for strategic decision-making but encounter roadblocks like underutilized resources, integration gaps across systems, or difficulties maintaining an innovative edge.

What is the guide and how will it help me?

Harnessing the power of behavioral data is essential for outpacing the competition. In fact, Datacamp's State of Data & AI Literacy 2024 showed that leaders with mature data and AI literacy programs report faster decision-making, better innovation, and increased revenue.

But from recognizing the value of data and collecting basic insights to eventually mastering complex analytics at scale, every stage of data maturity presents its own set of obstacles.

This guide will help you pinpoint where you stand in the behavioral data maturity spectrum and provide specific, actionable steps to progress to more advanced stages. Because the sooner you harness the power of behavioral data, the sooner you can start outpacing the competition through unbeatable customer experiences.

Understanding variations in data maturity

The stages of data maturity outlined in this guide provide a framework for evaluating your effectiveness in collecting and utilizing behavioral data. However, it's important to recognize that these stages are not rigid boundaries. In reality, your organization might exhibit overlapping characteristics of multiple stages, and not all attributes of a single stage may apply perfectly to your situation.

It's also important to note that not every aspect of data maturity outlined in this guide needs to be a priority for every business. Achieving best-in-class in all areas may not align with your current needs or even be feasible given your company's resources and market position. So, focus on the elements of data maturity that most directly support your organization's specific objectives and strategy.

What is the Laggard stage?

The Laggard stage describes companies at the lowest level of data maturity. Organizations in this stage lack clear leadership for data initiatives. They make no concerted effort to collect or understand behavioral data, leading to missed business opportunities and unhappy customers.

DID YOU KNOW

In a survey of Chief Data Officers, cultural resistance to change was listed as one of the **top three roadblocks** to successful data and analytics initiatives.

(Gardner Chief Data Officer Survey)



Foundational problems

- **Lack of behavioral data:** The failure to collect and analyze customer behavior data prevents a deep understanding of what customers actually want and need.
- **No data champions:** Without clear champions for data, its strategic value gets overlooked. This hinders investment in the necessary resources and tools.
- **Cultural resistance:** Pushback against changing long-standing practices and adopting new technologies and data-driven approaches stifles innovation and progress.

Resulting pain points and risks

- **Uninformed decision-making:** Decisions are often based on best guesses and gut feelings, which can lead to costly strategic errors and operational missteps.
- **Misalignment with customer expectations:** The disconnect between data and decisions results in services and products that do not meet customer needs or expectations.
- **Unhappy customers:** Poor customer experiences directly contribute to a lack of customer loyalty and low Net Promoter Scores.
- **Competitive disadvantages:** As competitors harness the power of data to enhance operational efficiency and customer retention, Laggard organizations fall behind and miss out on critical opportunities.

Next Steps



Paving the path to Novice

To progress to the next stage of data maturity:

1. **Recognize the value of data:** Start learning how behavioral data can positively impact business decisions and customer relationships. Address cultural resistance by conducting workshops or training sessions to shed light on the benefits and potential impacts of behavioral data on business outcomes.
2. **Invest in the right tools and resources:** If you want to start collecting and leveraging data effectively, you need the right resources. Look for tools that will help you gather, store, and analyze data, and will integrate seamlessly with your existing tech stack.
3. **Identify data champions:** Start by appointing employees who are passionate about data as internal champions to drive initiatives. If resources allow, consider hiring dedicated data professionals to spearhead initiatives and establish centralized practices.



What is the novice stage?

The Novice stage represents organizations that have started recognizing the potential value of behavioral data but have yet to make significant progress in utilizing it. At this stage, individual contributors within isolated teams may collect data, but insights are siloed and underutilized.

65%

of leaders say standardizing how different teams interact with, create, and apply data is a relevant challenge.

(Fullstory Q42024 Market Intelligence Survey)



Foundational problems

- **Poor data literacy:** Limited understanding of data’s potential and how to manage it effectively leads to ad hoc and misaligned data collection efforts.
- **Decentralized data practices:** Without centralized governance or standards, data efforts are uncoordinated across teams and data quality is inconsistent.
- **Gut-driven culture:** Even if some data is available, a history of disjointed and unreliable information leads to a lack of trust in that data. As a result, decision-makers often default to making choices based on gut feelings.

Resulting pain points and risks

- **Redundant spending:** With each team or department adopting its own tools and systems, the organization racks up unnecessary expenses from redundant software and duplicated efforts.
- **Subpar customer experiences:** Disconnected data efforts mean that customer insights are incomplete, inaccurate, or overlooked. The resulting customer experiences fall short more often than not.
- **Slow responses:** Teams without a strong understanding of data are slower to analyze and act on insights, delaying responses to market changes and customer needs.

Next Steps



Paving the path to Reactive

To advance to the next stage of data maturity:

1. **Establish centralized data governance:** Implement processes and roles to standardize data collection, storage, and access across your organization.
2. **Provide proper training and tooling:** Equip your teams with the skills and tools they need to gather meaningful data, perform insightful analyses, and ground decisions in insights.
3. **Pilot use cases for behavioral data:** Collaborate with product, marketing, and customer experience teams to pilot data-driven initiatives focused on core metrics like product usage, customer acquisition, churn reduction, etc.



What is the Reactive stage?

The Reactive stage encompasses organizations that collect and analyze behavioral data more regularly than Novices but primarily use this data to react to immediate challenges rather than for strategic planning. Isolated teams often spearhead these efforts, which can lead to data hoarding rather than sharing.

32%

of senior executives believe their organization collects good quality data but lacks the skills to interpret and use it effectively.

(Treasure Data)



REACTIVE

Foundational problems

- **Integration roadblocks:** Behavioral data is leveraged but remains disconnected from other data. The need for a centralized data warehouse is becoming increasingly evident.
- **Data quality deficit:** There's significant variation in how data is collected, processed, and maintained across teams, leading to inconsistencies in formatting, output quality, and ultimately, spotty reliability of insights.
- **Skill gaps:** There is a disparity in data skills among employees. Some may be adept at data collection and basic analysis, but many cannot interpret deeper insights or understand the broader implications of the data they work with.

Resulting pain points and risks

- **Operational inefficiencies:** The lack of integrated data systems leads to duplicated efforts and miscommunications between departments, slowing down processes and increasing operational costs.
- **Brand risk:** Fragmented and incomplete customer insights result in hit-or-miss service. This inconsistency can damage your organization's reputation and erode customer trust over time.
- **Resource misallocation:** Disconnected and unreliable data make it difficult to accurately assess business needs, leading to inefficient use of financial and human resources.

Next Steps



Paving the path to Proactive

To progress to the next stage of data maturity:

1. **Implement predictive analytics:** Leverage predictive analytics to forecast market trends, predict customer behavior, and identify potential issues before they arise.
2. **Enhance data integration across teams:** Map out a data integration strategy to break down current silos. Promote cross-departmental collaboration and sharing of insights.
3. **Plan for data warehouse implementation:** Begin planning and discussing the implementation of a data warehouse to centralize and optimize data storage and accessibility. This will support more sophisticated data analysis and pave the way for seamless integration across departments.



What is the Proactive stage?

The Proactive stage marks a significant advancement in an organization's data maturity journey. At this level, cross-functional teams benefit from democratized access to sentiment-rich data, and they use that data to inform and enhance strategic decision-making.

17%

of leaders say increased rates of burnout and turnover are top risks from not developing adequate data skills.

(Datacamp 2024 State of Data & AI Literacy Report)



PROACTIVE

Foundational problems

- **Governance growing pains:** Even with more mature data practices, implementing robust governance frameworks to properly manage data access, accuracy, security, and compliance may be an uphill battle.
- **Inconsistent data quality:** The difficulty of consistently upholding high standards of data quality at scale can undermine the reliability and accuracy of analytics.
- **Privacy and compliance hurdles:** As data integration deepens and the scope of data collection expands, adhering to privacy laws and ethical standards becomes more nuanced and complex.

Resulting pain points and risks

- **Underutilized resources:** Inadequate data governance can lead to redundant or unused resources, or data not being fully utilized due to concerns over quality or compliance.
- **Incomplete integration:** Efforts to maintain high data quality standards may hinder the full integration of data systems across the organization, ultimately limiting your ability to implement a unified data strategy.
- **Lack of innovation:** Stringent governance and ethical considerations may slow down the adoption of new technologies or innovative approaches, potentially causing your organization to fall behind in market competitiveness.
- **Risk of turnover:** As the demand for data-savvy professionals grows, retaining top talent becomes increasingly difficult; employee turnover may impact the continuity and effectiveness of data initiatives.

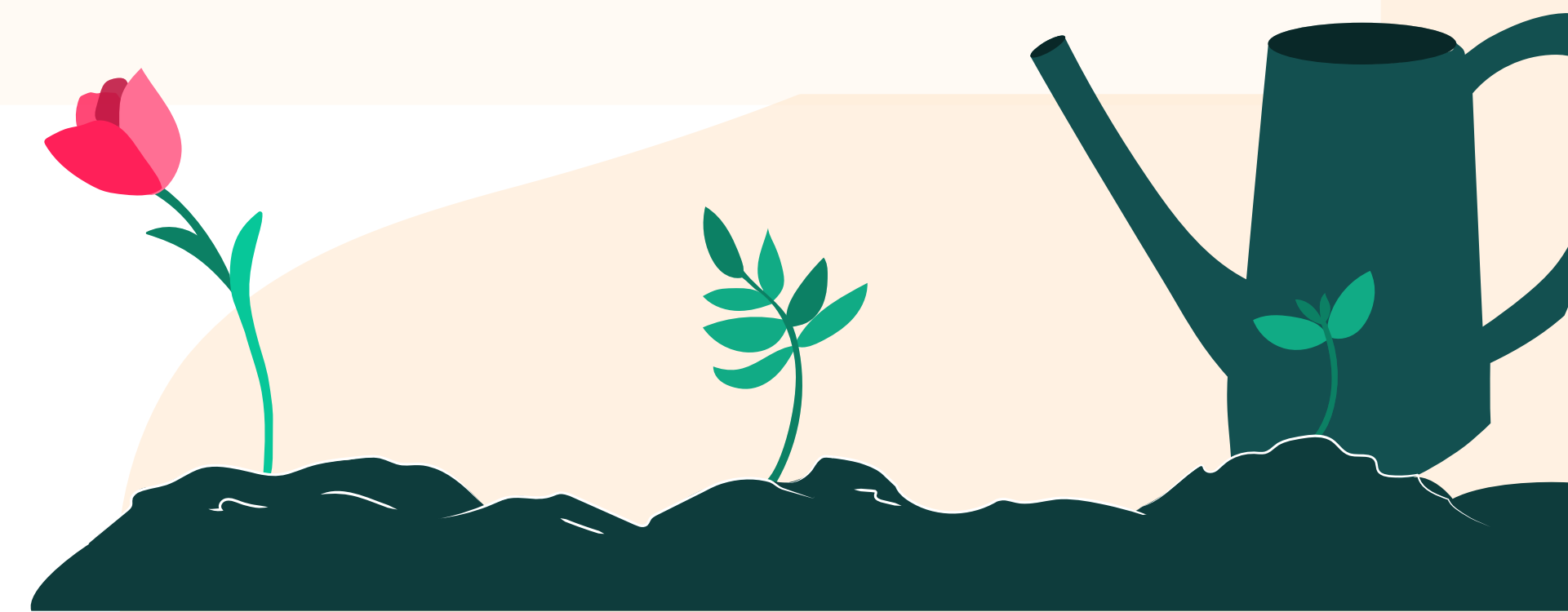
Next Steps



Paving the path to Leader

To progress to the next stage of data maturity:

- 1. Expand and optimize data warehouses:** To address incomplete integration and underutilized resources, fully integrate comprehensive data storage solutions that support complex analytics and real-time processing. This will ensure that data is used efficiently and effectively across the organization.
- 2. Increase investment in AI and machine learning:** Invest in and leverage descriptive analytics, predictive analytics, AI, and machine learning to produce comprehensive insights, improve predictions, and refine decision-making processes.
- 3. Automate data processes where possible:** Automate processes to streamline data collection, processing, and analysis. By doing so, you will increase efficiency, ensure data consistency, and retain skilled personnel by reducing mundane tasks and allowing them to focus on more strategic initiatives.



What is the Leader stage?

The Leader stage represents the pinnacle of data maturity. At this stage, behavioral data is a core strategic asset deeply embedded into decision-making processes across all business operations. C-level executives are the driving force behind these data-driven strategies, leveraging comprehensive analytics capabilities to fuel innovation, uncover efficiencies, and maintain powerful competitive advantages.

THE MOST PREVALENT DATA PROBLEM

across all roles is handling the volume and complexity of the data.

(Fullstory Q42024 Market Intelligence Survey)



Foundational problems

- **Privacy and legal compliance:** As data usage becomes more sophisticated and widespread, staying compliant with an increasingly complex array of privacy and data protection laws becomes more challenging.
- **Complex data at scale:** Managing and making sense of vast quantities of data from diverse sources presents significant challenges in terms of data architecture and analysis.
- **Innovation pressure:** Pushing the boundaries of what can be done with data analytics and technology to maintain a competitive edge requires constant innovation and adaptation.

Resulting pain points and risks

- **Data overload:** Handling an enormous volume of data can overwhelm existing data management systems, leading to inefficiencies and delays in extracting actionable insights.
- **Soaring costs:** Securely storing, processing, and maintaining large datasets requires robust infrastructure, scaling up software licenses, and expanding data teams, which can drive costs substantially higher.
- **Time to meaningful ROI:** The investment in advanced data technologies and systems can result in longer periods before seeing a return on investment, especially as expectations and standards for outcomes rise.



Continuing to lead the charge

To maintain your Leader status and continue to advance your data-driven initiatives:

1. **Invest in emerging technologies:** Stay ahead of the curve by continuously exploring and adopting new technologies and methodologies that can lead to new ways of leveraging data and support specific outcomes and initiatives.
2. **Promote a culture of continuous learning and innovation:** Encourage ongoing education and innovation within your workforce to adapt to new data tools and practices swiftly.



It's time to take action

The stages of behavioral maturity outlined in this guide are not meant to neatly confine you to a single rigid category—as we've already mentioned, there is often overlap between stages. Use the insights in this guide to understand your approximate stage of maturity, then tailor your priorities to the specific hurdles and growth areas most relevant to your goals.

No matter where you currently stand, collecting behavioral data and using that data to inform decision-making will help you outpace competitors and provide exceptional customer experiences.

Finally, to provide a visual overview of the information covered in this guide, we've included our official Behavioral Data Maturity Matrix (as seen on the next page). This chart allows you to see the distinguishing characteristics of each maturity stage succinctly mapped out in one place. Refer back to this matrix regularly to track your progress and adjust your strategies as your organization progresses in its ongoing journey to data maturity and excellence.



LAGGARD



NOVICE



REACTIVE



PROACTIVE



LEADER

	LAGGARD	NOVICE	REACTIVE	PROACTIVE	LEADER
Sponsorship	Undefined sponsorship results in limited investment in data	Individual contributors within isolated teams collect and analyze data on an ad hoc basis	Isolated team(s) oversee collection — with some hoarding vs sharing	Dedicated data team(s) ensures democratized access to sentiment-rich data	C-level leadership and a dedicated data team(s) cultivate a robust data culture and drive strategic alignment
State of behavioral data	No effort is made to understand or collect behavioral insights	The potential value of behavioral insights are recognized but collection is siloed and spotty at best	Behavioral data is leveraged but remains disconnected from other data; a CDP or data warehouse may exist or the need for one is evident	Behavioral data makes its way out of single threaded teams and into organization-wide warehouses	Trusted behavioral data is combined with other data sources in lakes and warehouses to drive strategic outcomes
Organizational outcomes	No systematic approach to gathering or analyzing data for solving business problems	The business is starting to seek out sources of behavioral data but that data is not analyzed or integrated	Behavioral data is leveraged to respond to issues rather than prevent them	Behavioral data signals are trusted to inform strategies and decision-making; trends are anticipated and adjustments are made accordingly	Advanced analytics and AI are leveraged to extract insights from trusted, real-time data streams
Key obstacles	<ul style="list-style-type: none"> • Technical shortfalls • Resistance to cultural change • No data champions 	<ul style="list-style-type: none"> • Siloed collection and access • Skill and resource gaps • Quality and consistency issues 	<ul style="list-style-type: none"> • Integration challenges • Quality and consistency issues • Building data literacy 	<ul style="list-style-type: none"> • Data governance • Maintaining data quality • Establishing privacy standards • Documented ethical practices 	<ul style="list-style-type: none"> • Privacy and legal compliance • Complex data at scale • Sustaining innovative edge
Business climate	<ul style="list-style-type: none"> • Missed opportunities • Competitive disadvantages • Unhappy customers • Low Net Promoter Scores 	<ul style="list-style-type: none"> • Wasted resources • Redundant software costs • Slow responses • Poor customer experiences 	<ul style="list-style-type: none"> • Operational challenges • Brand damage • Poorly personalized experiences • Resource misallocation 	<ul style="list-style-type: none"> • Underutilized resources • Incomplete integration • Lack of innovation • Risk of turnover 	<ul style="list-style-type: none"> • Privacy and security concerns • Data overload • High storage and software costs • Time to meaningful ROI
What's needed	Understand the value of behavioral data and invest in the technology and resources needed to harness it	Provide training and tooling for teams to better collect, analyze, and use data	Utilize predictive analytics to anticipate and address issues before they arise	Further integrate data-driven insights into all strategic areas of the business and automate data processes when possible	Focus on innovation and the ability to quickly adapt to new data technologies and methodologies tied to specific outcomes

Session replay readiness

Fullstory analytics readiness

Data direct readiness