5 Stages in Becoming a Sentient Enterprise

Assess your organization's progress as it evolves into a business that conducts analysis and makes autonomous decisions at massive scale in real time.

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It's a very interesting time for data. Technology is evolving faster, data volumes are exploding and business is being conducted quicker than ever before. So it's no surprise that real-time and self-service capabilities are big trends throughout every industry. >>

Customers expect real-time interaction on everything from their bank accounts to flight information and they prefer self-service capabilities such as using a website or an app over traditional actions like going to a bank or dialing a call center.

Companies want to be faster and more agile, yet many struggle to keep up because real-time and self-service functions are not the strengths of today's IT departments. In an effort to increase agility, businesses have created silos that subsequently end up slowing down data movement and transformation processes. These data marts might produce insights for a while, but the approach doesn't work at scale. Sooner or later data will be outdated or missing, throwing the validity of the entire data set into question. **Plus, up to 75% of an organization's time will be spent dealing with the data instead of gaining new understanding**. A lot of time is also spent sifting through data because companies don't know where to start looking for the information they need and end up asking for all types and combinations of data.

The initial infrastructure cost is not what companies should focus on—it's everything that happens after that. Not only does copying and correcting the data put a lot of strain on IT and take time away from decision making, this anti-agile approach could actually cost organizations tens of millions of dollars.

COMPANY-WIDE EVOLUTION

The continued proliferation of big data and the evolution of analytics will usher in the next major change: a state called the "sentient enterprise." The sentient enterprise listens to data, conducts analysis and makes autonomous decisions at massive scale in real time. It can also sense microtrends and respond as a single organism without being impeded by information silos.

A sentient enterprise is also constantly evolving, using emergent intelligence that becomes progressively more sophisticated. Reaching this state won't happen overnight—it's a process that takes time to achieve. This five-stage maturity model can help you assess your organization's progress:

» STAGE 1: Data Agility

If you can't be agile with your data, don't even try to be agile with big data. The agile data warehouse moves central data warehouse structures to a balanced, decentralized framework. The move helps an organization become agile with all types of data. To take advantage of this ability, companies need self-service data labs and automatic, built-in governance. Organizations also need to analyze what people are doing in the data lab to learn from their behaviors.

» STAGE 2: Behavioral Analytics

This requires a huge shift in the company mindset about how it deals with customer and sensor data. Organizations have a transaction-centric view, which focuses on how many products were sold, but it's not until the business moves to behavioral analytics that it starts asking very different questions to gain new insights. Behavioral analytics looks at all the data points between transactions over time to formulate behaviors. Thinking about individual behaviors instead of transactions allows companies to understand how to best help a customer, right now, in his or her unique situation. **>>**

» STAGE 3: Collaborative Ideation

Enterprises need an internal collaboration platform where users can learn everything they need to know about analytics with self-service tools. This puts the data front and center for users so they can interact with it. The entire organization can then participate in the creation of structure, tagging and metadata, which can bring together people who are working on similar problems. Crowdsourcing concepts are built into this stage of the ideation platform to allow collaboration on an enterprise scale through sharing, liking and searching, making it a one-stop shop for existing data. Bringing data together in one place transforms the information into insights and lets users engage with data in new ways.

» STAGE 4: Analytics Application Platform

Once businesses have a variety of analytical outputs and insights, they need to act on them. The best insights aren't worth anything unless they can be acted upon or implemented. Turning the analytical ecosystem into a self-service application that listens to incoming data and allows different teams to iterate workflows and concepts is key. It's important for enterprises to move from time consuming, non-agile data movement and transformation coding, and massive, centralized applications to enabling smaller, self-service apps that make insights reproducible. This allows others in the company to consume or even drive email campaigns, make website modifications, change product pricing and more. Ultimately, this app-driven agility lets more people within an organization create analytical outputs and insights.

» STAGE 5: Autonomous Decisioning

The final stage involves applying new ways of dealing with data and new types of algorithms at scale. Once this stage is reached, analysts will have more data than ever to work with. However, they still won't know where to find the needle in the haystack. That's where autonomous decisioning comes in. Today, upwards of 90% of decision makers' time is spent sifting through dashboards and mountains of data, leaving very little time to actually make decisions. Applying new algorithms at scale that look at things like trends, customer segments and KPIs helps businesses pinpoint and focus on the important information. Only when companies leverage predictive technologies and algorithms to look at anomalies are they able to focus most of their time on decision making instead of searching through data.

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BECOME A SINGLE ORGANISM

Improving data agility, adopting a behavior-centric mindset, bringing people together to increase collaboration, building repeatable processes and using algorithms at scale will make an organization more productive, scalable and agile. When a business integrates all of these capabilities to think about, listen to and learn from data, it becomes a true sentient enterprise. Being highly agile requires knowledge, transformation and time. It will take a number of years for businesses to complete each step along the journey, but as each step is perfected, they move one step closer to becoming a single, sentient organization. **T**

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