

7 Principles of a Data Platform Strategy

Principles for getting, and staying, ahead of data demands

Data quantities are growing exponentially. More people are demanding more information. Complexity of questions being asked of data is increasing.

When you think about data management strategy, you no doubt think about these things as challenges that your strategy must address. And these are just the fundamental challenges—we haven't mentioned the fact that your strategy must be prepared to incorporate nascent technologies (ML, AI, etc.) or that your strategy has to be, you know, ADOPTED by naturally change-averse people.

All of these things can keep even the savviest data strategists up at night.



The good news is that we've implemented data strategies and platforms at hundreds of healthcare organizations across the nation. Our experience has led to the development of our healthcare data platform that was crafted on these 7 foundational principles.

Let's walk through each of the principles, what they mean, and what successfully addressing that principle requires.

1 - High Performance

Your platform must be able to complete processing tasks in a timely manner—regardless of the complexity of the task or the data types involved.

Processing billions of rows of data should take only a matter of minutes. Our customers have successfully processed 11+ billion rows of data on our platform in under 12 minutes, which previously took them over 3 hours.



2 - Reliable



Your platform must operate with minimal downtime, and the performance highlighted above must be consistently repeatable.

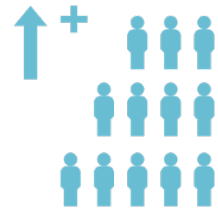
We don't mandate the number of '9s' required but suffice to say a guarantee of >99.5% plus resiliency features should be standard. If that can't be put into writing by your internal IT team or cloud provider then you should continue to examine options for your platform and environments.



3 - Scalable

Your platform must be able to automatically scale, up and down, to meet the changing data processing needs you will encounter going forward.

For many organizations, this is a large challenge because it means you must either a) setup a distributed computing environment on premises or b) purchase very powerful (read: expensive) hardware. Both come with challenges in reliability and serviceability, which we'll address in our final principle.



4 - Secure



Your platform must be HIPAA compliant and HI-TECH certified.

While these certifications are minimum requirements for healthcare organizations, you should also examine your policies and practices around environment and platform access to ensure only the right people have access and that they are using proper authentication methods and security protocols.

5 - Collaborative

Your platform must enable teams to coordinate effectively, re-use work product, and cooperate efficiently.

This is another area of challenge for many organizations because you'll often run into a situation like the following:



Emma, the ETL developer, pulls data from source systems and unifies it for use by other team members. Then Andy, the analytics administrator, grabs that unified data and creates metrics and dimensions for Barry, the viz whiz, to deploy in dashboards. At the same time Dana, the data scientist, takes unified data and creates metrics and dimensions and predictive models on her own platform that Barry also uses. Finally, Sam, the shadow IT king, is circumventing all of this (because his requests are still at the bottom of the queue), creating his own metrics and dimensions, dashboards, and more. Grace, the governance guru, is at a loss for how to keep checks and balances around this minimally organized chaos, and Candace, the CEO, is flustered by her organization's inability to simply agree on basic KPIs.

A big part of preventing the chaos above is having a data platform that accommodates the needs of all of these individuals so there is no need to use multiple platforms to achieve your data strategy and goals. Yes, efficient governance processes are a piece of this, too, and you can read more about them [HERE](#) (add link).



6 - Cost-Effective

Your platform must also be cost-effective based on what it enables your organization to achieve.

To help calculate and determine the cost-efficacy of your platform, it helps to expand your thinking beyond just hardware and license costs. This ensures you get a complete picture and you select a platform that will benefit all of your data consumers.

Some common things to consider are: hardware costs, software costs, staffing requirements, staff back-ups, training/certification, downtime/resiliency guarantees, SLAs, upgrade effort/timeline, and replacement costs. This is not a complete list but should help start you in the right direction.

7 - Cloud-Based

Finally, your platform must be cloud-based.

The days of managing expensive on-premises infrastructure are numbered, and if you're not actively moving to the cloud at this time, you are behind on your data management capabilities.

The benefits of cloud computing are tremendous and the risks are often smaller than an on-premises deployment. Think about it this way, who is likely to have the best server administrators with the best knowledge and the ability to be 100% dedicated to administering environments to the best of their ability? I'd say that *at least* 999/1000 times it'd be a player like Microsoft, Amazon, or Google, each of whom are spending billions every year on their cloud capabilities.





How to put the principles into practice

The majority of people reading this probably agree on the principles outlined in this document, and I'm sure that most of the people you work with today have the best intention of aligning to these or similar principles.

Build It

The seemingly most attractive option at most organizations is to use existing resources to build the new data platform strategy and tools that meet these 7 principles.

However, I will say that if you do not have a platform that is consistently hitting on each of these principles today then building one internally will be almost impossible.

Why's that? There are three big issues with going it alone, and a host of smaller ones that I won't get into here. The three big issues are:

Time: It takes time to understand the entirety of your data platform and how people understand your data strategy. Simply cataloging the tools your organization has may take months and understanding how each of your stakeholders use those tools will likely take years. This is because this isn't your only job! You, and the people you'd interact with, have other seemingly more important things to do.

Trial & Error: The first iteration of something as profound as a data platform that meets the criteria of the 7 principles above will not be deployed in perfection on the first try. More realistically it'll take 5–10 attempts. Now think of your stakeholders: we just spent how many months identifying tools, identifying use cases, identifying data flows, designing our new 'strategy and platform', getting buy-in, migrating over, and it still doesn't work? You've now lost your stakeholders and they'll go back to what they know works—the minimally organized chaos from before. Additionally, losing stakeholders here likely means you've lost them for any other initiative you might want to execute at any point in the near future.

Skill Gaps: As you think about where you're headed next with your data platform and strategy you'll start to find areas where you or your team have skill gaps. To address the smaller gaps, training may suffice (keep in mind this requires time away from exiting projects, away from assessing tools, and away from planning your future strategy and platform). But for larger gaps where fundamental skills would have to change, you'll need to have training and then a long tail for the person to become fluent in the new skill through practical application.



Buy It.

Far and away the fastest time to value to go from your current state to a data platform strategy and toolset that hits on the 7 principles is to buy a platform that:

1. Meets the criteria of the 7 principles and
2. Is successfully implemented and in use at dozens of healthcare organizations today.

Buying has 4 major benefits, in addition to eliminating the three big issues associated to building, not to mention a myriad of other benefits that I'll list briefly at the end of this post.

Empowers Your Team: Instead of having your team spend valuable time and energy navigating the challenging and political waters of formulating a data strategy and platform from scratch WHILE simultaneously continuing existing work WHILE simultaneously getting training for a new platform, they'll get a proven blueprint for successfully implementing a strategy and platform that adheres to the 7 principles and can be stood up in a matter of weeks. Your team can now spend that incredibly valuable time and energy doing things they were brought on to do, like:

- Accelerating your ability to deploy solutions to consumers
- Analyzing information for actionable insights
- Developing re-usable, scalable, and governable metrics and dimensions
- Working side-by-side with operational staff on novel challenges, and
- Reducing the overall time to value and time to ROI for your transition

Proven Successful: A strategy and platform that has been proven successful at dozens of healthcare organizations today (everywhere from large IDNs, academic medical centers, rural and community organizations, safety net facilities, and everything in between).

Expertise Built In: Your team will stand on the shoulders of dozens of healthcare organizations who have helped refine and expand the capabilities of the platform. Additionally, your team will be augmented with expert staff who understand the strategy, platform, and tools and how they apply to your situation at your organization. These experts can supply additional bandwidth to your team when needed, answer questions quickly that would otherwise take hours of research and provide coaching and mentoring to team members. You get the best of both worlds by getting continued progress toward your goals while transforming your data capabilities.

Plug-and-Play Accelerators: In addition to a proven strategy and platform, dozens of successful implementations, experts to assist your team, and the ability to learn and make progress simultaneously, a strong data platform will have healthcare accelerators that simply 'plug-in'. While not necessary for everyone, they often dramatically accelerate your team's ability to deliver governed, self-service data to your consumers, and this data can be re-used wherever else you might need it, preventing the need to recreate it ever again.

If you've made it this far, you're probably very interested at finding out what your options are for acquiring such capabilities—platform, expertise, and content.

The Prominence Data Preparation Engine



Prominence's Data Preparation Engine for healthcare is designed based on the 7 principles in this post, has been implemented dozens of times at all sorts of healthcare organizations, comes with a veteran team that's veteran as a team, and has a library of over 40 pre-built healthcare accelerators that span all critical domain areas.

To learn more about how our platform can maximize your teams' capabilities, your existing investments in visualization tools, and the work you've already done, contact us and we'll provide a no-strings deep dive into how we can make your transition to a modern data strategy and platform straightforward and fast.

<https://prominenceadvisors.com/contact-us/>