



Going Digital?
Make Data Strategy
a Priority.

Introduction

Renowned management guru, author and professor Michael Porter has a number of spot-on quotes about strategy, including this one: *“A company without a strategy is willing to try anything.”* If you are a CIO or data officer and this sounds painfully familiar to you, you are not alone. As digitalization has started to dominate the thinking of CEOs and board members, the pressure to realize value from the company’s data creates an often frantic push for analytics and business intelligence and sets expectations that many CIOs may find unrealistic to deliver.

Picture an IT executive tasked with improving how the organization acquires, stores and manages data, in a fairly short period of time. With a mandate like this, but without a clear strategic plan or end goal, it is likely the organization will have several false starts, face internal disagreements and overinvest in the wrong types of technologies, soon to regret its hasty buying decisions. Even if the results are not completely disastrous, they usually end up being cumbersome, unwieldy, expensive and, worst of all, unsuitable to support the organization’s growth plans. The investment in technology and data solutions would have been made with the best information and budget available at the time. But was it informed by a solid long-term data strategy? Unlikely.

Many organizations become excited about digital initiatives and attempt to push them through without a thorough understanding of the technology and data infrastructure that’s in place. Savvy leaders understand that a CIO’s team of technologists can bring a vision to reality, but only if the right infrastructure is in place to support the required changes in business processes.

– Shaheen Dil, Managing Director, Protiviti

Why the Push for Digitalization?

There are perhaps as many reasons for going digital as there are companies and industries. Even so, most organizations are looking to build a strategic plan around one or several of these goals:

- Gaining a competitive advantage
- Expanding consumer outreach to build stronger relationships and loyalty with customers
- Responding to governance issues or new regulatory compliance directives

- Strengthening cybersecurity and preventing breaches
- Strengthening a current position or repositioning the company with a new business model

The diagram below illustrates how the organizational, market and technology drivers intersect with operations, customer experience and the company's go-to-market approach. Impacts within each section will vary depending upon the organization's objectives, but we regularly see consistent elements like these in most organizations developing comprehensive digitalization strategies.

• • • A Strategic Plan for Growth With Data at the Core





How Can a Data Strategy Support the Overall Goal of Digitalization?

Digitalization without data is meaningless. It makes sense, therefore, that a push for digitalization should be underpinned by a well-thought-out data strategy aligned with the ultimate goal of the organization's digitalization efforts.

Use of data represents a competitive advantage for organizations — just ask Google. Data, properly harnessed, often makes a new, competitive business model possible. An organization operating under a clearly-defined strategy will naturally become a data broker, using its data as a key asset. Some organizations even consider their data as a saleable asset and have developed extensive go-to-market strategies to capitalize on this important piece of their business.

None of this can happen without a vision and a plan to achieve it. A data strategy enables the company to recognize and treat its data as a structured,

comprehensive, cross-domain value-generating asset, second in importance only to the organization's human capital. Decisions regarding the organization's type and amount of data, how it is collected, where it is stored, how it is accessed and used, who is responsible for it and where future data investments will be made are all important for informing the organization's digitalization strategy and its underlying technology component.

Knowing where the organization stands in terms of readiness for change is key. People, processes and, ultimately, technology will drive the organization toward efficiency, resulting in the cost savings that spur revenue growth. But an organization that is not ready for change will drag itself reluctantly through this evolution, resulting in a costly mess. Transformation will become a dreaded buzzword.

— Steve Freeman, Managing Director, Protiviti

Anatomy of a Data Strategy

While each organization's data strategy will have its own unique characteristics based on goals, the basic components of data strategy development, below, are easily adapted. The strategic scope should include:

- A review of the current analytic capabilities within the organization
- A review/mapping of data flow within the organization
- A review of the organizational, functional and technical capabilities of the existing data management program
- Defining future-state capabilities and documenting key data requirements
- Determining a best-in-class recommendation of data management and business intelligence tools and database solutions
- Developing a comprehensive road map for the organization by defining key gap-closing initiatives in agreement with key stakeholders

Once the strategic scope has been defined, the organization would then move to planning and, ultimately, implementing its data strategy. For this journey, organizations should:

- Leverage a flexible, phased approach to update the organization's existing data management program
- Schedule a phased implementation of the strategic road map to meet the organizational requirements for the future-state data management program
- Work with experienced resources within the organization or bring in the necessary expertise to revise the existing data management program as well as highlight and manage key challenges and risks associated with the effort
- Facilitate an agreement among key stakeholders to implement the gap-closing initiatives identified in the scoping phase

"We often see organizations struggle to manage effectively the volumes of data that are, essentially, the lifeblood of the company. Often, they neglect to address the 'nuts and bolts' of data management upfront and, as a result, miss golden opportunities to make the data produce optimum results. A simple data strategy, developed with the end goals in mind, can alleviate a considerable amount of heartburn in the long run."

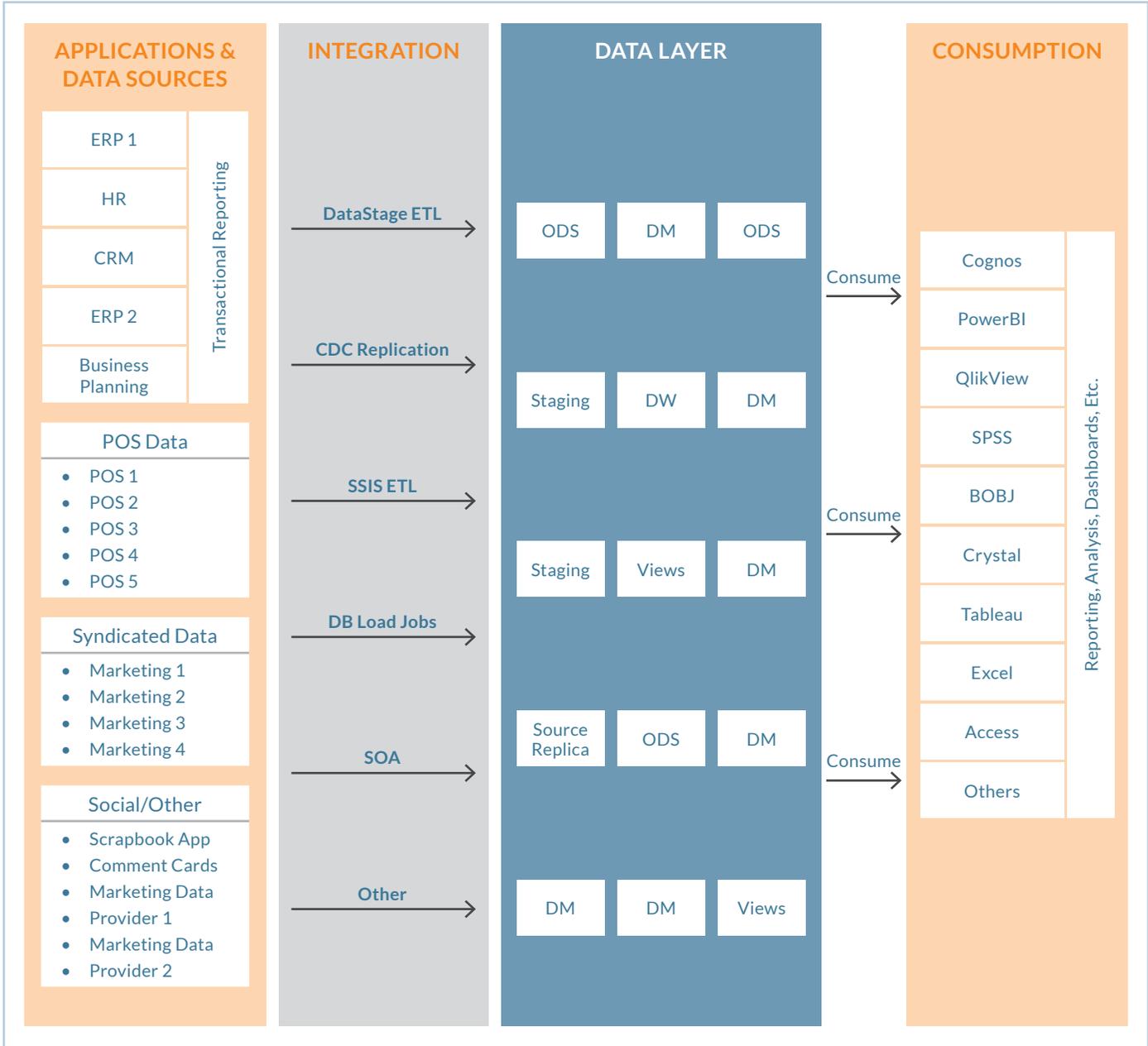
— Don Loden, Managing Director

A Data Strategy Case Study

Protiviti worked with a large U.S.-based utility company who wanted to implement a comprehensive data strategy to ensure they were making the most of their technology investments across their network.

We began by completing a four-stage, four-week review that would enable us to define and document an enterprise data strategy and road map. In the process, we discovered the client had a fairly complex IT architecture in place.

- • • Existing IT Architecture



Additionally, we determined there were several significant challenges preventing the client from moving forward as effectively as possible:

- **Lack of consistent access to information.** This resulted in issues with data integrity.
- **No agility in delivering new projects.** It was difficult to add new data to the environment, and the lack of a consistent approach compounded data governance and accuracy.
- **Lack of archiving strategy.** This resulted in too much data being retained, impacting performance. This was a serious risk to the client.
- **No big data capabilities.** Lack of cost-effective storage was hampering the client from developing future competitive improvements.
- **Lack of governance and process.** A diverse and growing number of reporting and analysis technologies made new initiatives costly, time consuming and cost prohibitive.

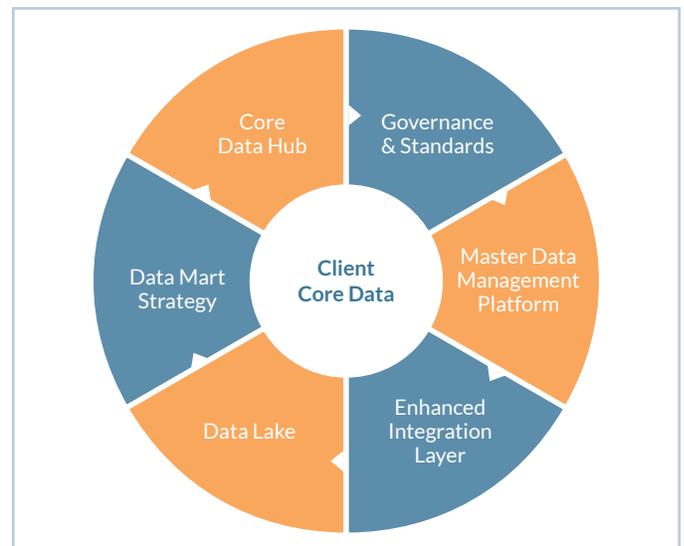
With this information in hand, we developed a future program design and then conducted a gap analysis. This step helped define the list of initiatives that would minimize and eventually eliminate functional and technical gaps between the client’s current-state and desired-state data management program. We also worked with key stakeholders to prioritize initiatives, document key gap themes and develop an implementation timeline.

Our future state recommendation was built with the understanding that “core data” — data revolving around the company’s systems (i.e., Finance and Operations) — is at the heart of all other data decisions. The organization had struggled to understand what data is most important to the business’s strategic initiatives. Identifying and establishing a core data hub (a central repository to collect, connect and analyze data) enabled the organization to provide additional data analysis and more strategic decision-making.

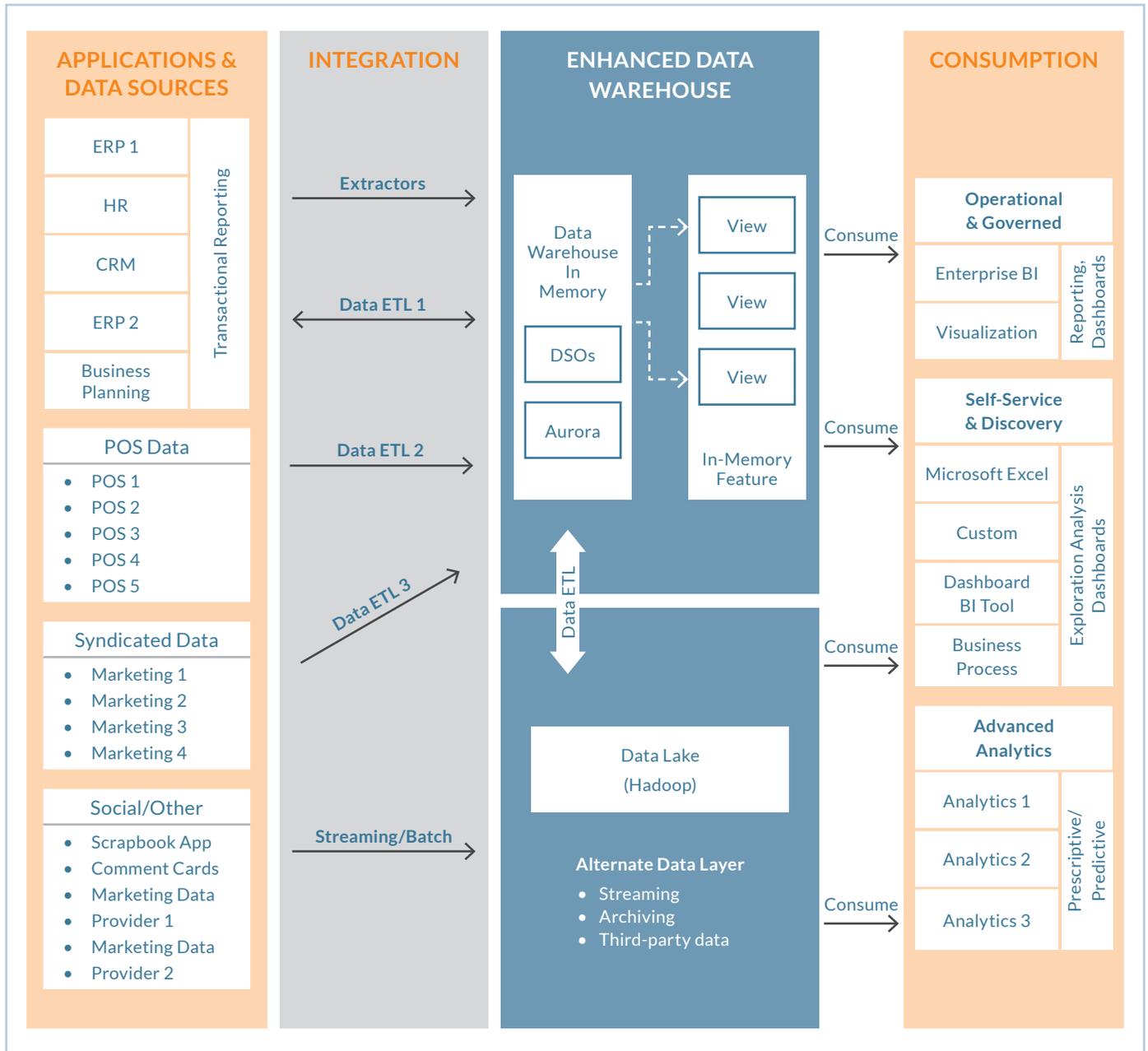
Our recommendations included:

- Establishing a core data hub to collect, connect and analyze data.
- Formalizing a thorough data governance process and determining lines of responsibility. This allowed the client to create clear lines of ownership.
- Establishing a master data management platform, which supports governed data for the core data hub and enables the “golden record” for master data.
- Enhancing the integration layer. In this case, the client enabled streaming technologies for data lake replication and publish/subscribe (pub/sub) technologies for future-state enterprise application integration (EAI) needs.
- Introducing a data lake, which addresses archiving and big data needs through cost-effective storage and access.
- Enabling a data mart strategy. This involved sourcing core data needs from the core data hub and sending non-core data to the data lake, to be extracted to the data mart.

• • • Future State Recommendations



The resulting data architecture is streamlined considerably:



A solid data foundation is key to any digital transformation effort. As mentioned earlier, digitalization is meaningless without data — more importantly, relevant, trusted and secure data. This organization took the first step in their digitalization journey and developed a trusted data strategy that meets their needs for growth to digital.

Conclusion

Most companies will run into trouble with their digitalization effort if the data strategy behind it is missing. When facing the pressure for change and innovation, organizations must pause, take a breath and ask themselves:

- What is the role of data in our business and how does it relate to our digitalization effort?
- Are we investing the time and resources necessary to develop a data strategy, as much as we invest in our overall growth strategy?
- Are we taking a “bottom up” approach, recognizing that the company’s investments in data analytics and supporting technology will make or break the end goal we have in mind?

- Are we ensuring C-suite support for these essential “bottom up” data initiatives?
- Are we working to ensure our people and processes are as future-ready as our technology?

We encourage organizations to eschew the costs and headaches caused by one-off initiatives undertaken under a pressure to “do something.” Instead, we recommend that they plan for where they want the business to be five, 10 or more years from now, and create the data and technology infrastructure that would support this future state.

ABOUT PROTIVITI

Protiviti is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and our independently owned Member Firms provide consulting solutions in finance, technology, operations, data, analytics, governance, risk and internal audit to our clients through our network of more than 75 offices in over 20 countries.

We have served more than 60 percent of Fortune 1000® and 35 percent of Fortune Global 500® companies. We also work with smaller, growing companies, including those looking to go public, as well as with government agencies. Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.

CONTACTS

Shaheen Dil

Managing Director
+1.212.603.8378
shaheen.dil@protiviti.com

Steve Freeman

Managing Director
+1.678.569.1156
steve.freeman@protiviti.com

Scott Golden

Managing Director
+1.678.569.1145
scott.golden@protiviti.com

Don Loden

Managing Director
+1.678.348.5497
don.loden@protiviti.com

Matt McGivern

Managing Director
+1.404.926.4346
matt.mcgivern@protiviti.com

Jeremy Stierwalt

Director
+1.312.931.8713
jeremy.stierwalt@protiviti.com

ABOUT PROTIVITI'S DATA MANAGEMENT AND ADVANCED ANALYTICS PRACTICE

Our Data Management and Advanced Analytics Practice helps companies harness data to make intelligent business decisions that drive performance and growth while managing risks. We use leading practices to design customized solutions in the areas of data strategy, advanced modeling and analytics while building meaningful relationships and delivering excellence to our clients.



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