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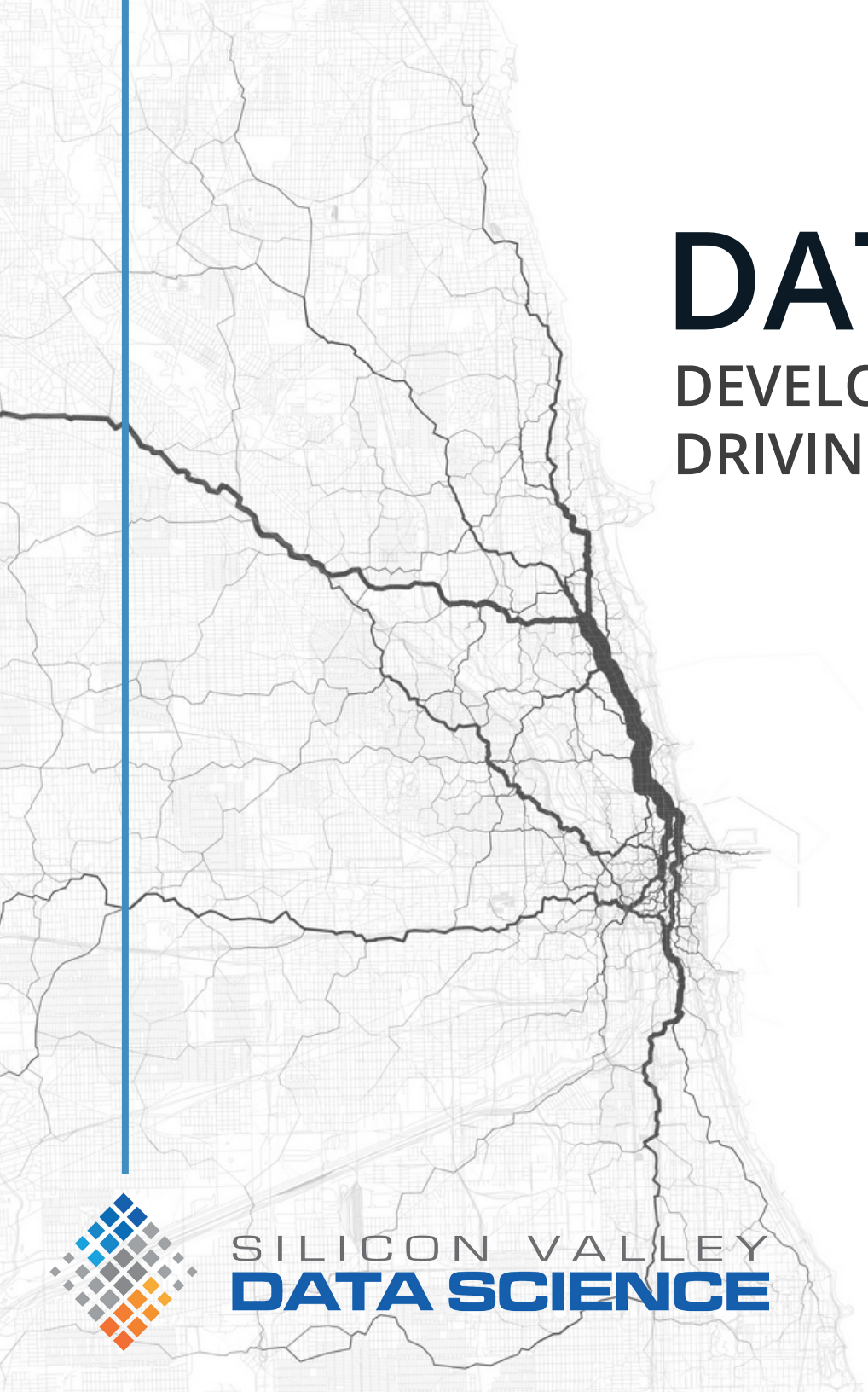

DATA STRATEGY

DEVELOPING YOUR ROADMAP FOR DRIVING BUSINESS VALUE WITH DATA

SILICON VALLEY
DATA SCIENCE

Executive summary:

Data has become critical to achieving competitive advantage in business. The evidence that data is driving disruptions in entire industries is overwhelming: companies such as Amazon, Uber, and AirBnB are radically disrupting their respective competitive landscapes through the use of data. Data is an important window into the way that decisions get made and processes get executed in each individual business. The number of organizations that can credibly say that data is not critical to their competitive advantage is dwindling daily.

With so much data to look at and tools to consider, however, it is easy to invest in the wrong platforms and capabilities. Creating a clearly articulated data strategy—a roadmap of technology-driven capability investments prioritized to deliver value—helps ensure from the get-go that you are focusing on the right things, so that your work with data has a business impact. A successful data strategy is created in collaboration with stakeholders from across the entire organization, so as to ensure buy-in and solid understanding.

The practice of maintaining a data strategy that is enmeshed in your business values is not only about being oriented to what your business needs today, but accounting for the fact that you will inevitably need to adapt as you go. A sound data strategy focuses on mapping technology capabilities to business objectives in a way that is actionable now but also flexible in the face of rapid change.

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These days, the the ability to leverage data is a basic requirement for business. In businesses successfully deriving competitive advantage from data, IT has graduated, becoming an enabler of the whole life of the business. In the past, IT was still seen primarily as a service function, and data was seen as something that flows around, getting work done. Now we understand that, when used strategically, data is a raw material from which we can create more value, such as new products, increased revenue per customer, efficient operations, and optimized resource utilization.

In a digitized world, data is the digital proxy for many aspects of business, from production systems, to supply chains and physical assets, to the competitive environment. It is the means we have for understanding our customers and their preferences: how they interact with an organization, how they interact with our sales force, how they interact with products, how they provide payment, how products reach them. These are critical to understanding how to compete. Without data, we are limited to what we can casually observe—and a lot of gut feel and hunches.

Data has gone from being "nice to have" to being table stakes for comprehending what is working and what is not working in a business in order to compete. Understanding how to use that data as a resource is the reason every company needs a data strategy.

> "Data is the digital proxy for many aspects of business.

The initial recognition that there is value in data is a great starting point, but what do you do next? It's tempting to charge off and begin deploying big data platforms and analytical capabilities, but without direct links to real problem solving, these investments can founder.

Another approach is to conduct a proof-of-concept project, prototyping the solution to a particular problem. Such a project may well be successful, but if you didn't choose a problem valued by the business, then nobody will care about your results. That's the worst death a project can have: when you do everything right and it doesn't matter to anyone. Such a situation is both demoralizing to the team and potentially disastrous to the organization, if the result is taken to mean there is not value in pursuing other data-driven projects.

Data strategy serves two functions. First, it forces you to articulate the value of data inside your organization, so that your business as a whole can understand the importance of your data to creating value. Then, it tells you how to move forward, providing a roadmap for how to build those things of value: it tells you what you need to do and how you can get started—or continue moving forward.

> **"Data strategy tells you what to do and how you can get started.**

Q:

WHAT MAKES A GOOD DATA STRATEGY?

First and foremost, the hallmark of a good data strategy is that it is business-driven, not technology-driven. It should directly support the goals of your business. It should be oriented to outcomes, to reliably deliver more of whatever your business needs. It should take into account the particular situation of your business, allowing you to see your investments and what you need to do to keep the lights on, as well as what kinds of disruptions may be attractive and when.

Remember that this isn't a data strategy for just your technology organization; this is a data strategy for your whole business. That means that you must have not only the engineers, the architects, and the IT people on board, but also all of the business stakeholders and those who own the business problems and use your data to make decisions.

A:

It is aligned with the business goals.

The second sign of a good data strategy is that it works within the realm of what is possible and practical. Any strategy that you have—whether you are talking about data strategy or business strategy—should be actionable. If it isn't clear to you how you are going to execute that strategy, then you don't have the right one.

It is not just a matter of saying, "this is the data that is important," or "these are the problems that we need to solve in our organization." You need to have a plan for how you are going to solve them. And specifically with data strategy, you need to have a plan for how data will help achieve the solution, in a way that makes an action plan very clear, easy to follow, and easy to communicate throughout your business.

A:

It is actionable.

Technology is moving incredibly fast, and competitive landscapes are highly dynamic. So the data strategy needs to be malleable. It should be a living document, revisited early and often as conditions change. It should help prioritize your investments for business value, but in the context of a changing business and technology landscape.

A good data strategy allows you to defer investments when you should, understand when you are making choices in the context of changing landscapes, and do so with eyes wide open.

A:

It is flexible.

Many people immediately jump from the word "strategy" to consider data governance and security policy. Securing your data, limiting access to it, controlling where it is stored and for how long, deciding when it gets destroyed: all of those things will always be important tactics, but they are nothing but the tactics.

Data strategy is also not about how IT can keep costs down, or how your technologists can achieve the best benchmarks, the most elegant platform, or even necessarily the most maintainable platform. These are important concerns as well, but they fall under the category of data architecture.

Data strategy should instead be about how you do things with your data that make you more competitive, that make your business more successful, that allow you to grow, and that allow you to enter new markets and take on new challenges. It should be about creating value for your business.

> **"Data strategy should be about creating value for your business.**

When we work with clients to develop a data strategy, we bring together the critical stakeholders from across the entire business to list and discuss trade-offs in technology investments, based on what each investment may enable the business to do. By using a highly participatory, inclusive process for surfacing and discussing such information, we ensure that the resulting strategy is well understood by the people who will be expected to implement it, own it, champion it, and benefit from it. It becomes a living, breathing plan of action that is embraced by the organization, because the critical stakeholders participated in its drafting. They therefore have a much better understanding of its judgments than is typical in a more interview-based approach of gathering the necessary information, which may end up becoming an expensive document on a shelf.

Initially, we do an analysis of the imperatives and objectives that matter to the company today, and put together an analysis of your business and your technology and the connections between them. Then we talk about what is possible, and things the business should do to move forward. The intent is to provide a 12–18 month roadmap; the further we get from the point in time when we did the analysis, the hazier things get because of changes in the technology landscape and competitive environment.

> **“By using a highly participatory process, we ensure that the resulting strategy is well understood.**

When creating or assessing a data strategy, we always consider the possibilities of new technology together with an understanding of what data assets exist inside a company and outside a company, and add an understanding of what the business needs to achieve—including any changes in business priorities—to determine how we can get there with significant portions of the value early. Strategies that will only deliver value after prolonged, expensive investments are both extremely risky and unlikely to produce optimal results. This explains the widespread dissatisfaction with data warehouse and business intelligence investments throughout the 90s and 00s.

If you find that you can't articulate how the cost of your data systems relates to the benefits of your business, or if you can't articulate how your technology philosophy enables your business aspirations, then your company would almost certainly benefit from data strategy.

The importance of data to business is not something we are going to wind back the clock on: it is actually a step-change in the same way that the arrival of the internet was. Today, we exist in an environment where the means of production, distribution, communication, prototyping, investigation, R&D, and more are increasingly digitized, and increasingly cheaper. The more is done on the network and the computer, the more we can digitally understand and, most importantly, digitally affect the world. Our experimentation can go from long cycles of sales and marketing and annual reports into much tighter feedback loops of data, data analytics, and adaptation.

It is its ability to understand the world that makes a business succeed. A business is a machine for understanding and reacting to the world around it, and taking advantage of it in the market—and the world is increasingly represented as data. Creating a sound data strategy is the key to building an increasingly sophisticated and actionable understanding of that world.

> **"The importance of data to business is actually a step-change.**

- ☐ **Identify your business objectives.**
  These should become the goals of your strategy; your data will be the means to executing your objectives.
- ☐ **Go from objectives to tactics.**
  Answer the question: How are you going to achieve your goals?
- ☐ **Include all parts of the org and all stakeholders in the conversation.**
  This means people from both the business and technical sides of your organization, at a minimum.
- ☐ **Look at how technology can support the use cases.**
  Answer the question: What data technology makes this possible?
- ☐ **Exploit patterns and reuse.**
  Look at common relationships and services, and figure out where efficiencies are possible.
- ☐ **Prioritize all the things you *could* do to figure out where to start.**
  Not all projects are created equal. What matters most to your business?
- ☐ **Define your roadmap with an end-point in mind.**
  Identify a pipeline of projects that take you toward your goal.
- ☐ **Lather, rinse, repeat.**
  Revisit and reuse this checklist to refresh your data strategy as conditions change over time.

No doubt you're excited by the potential of using data to achieve great business results. We're here to help make that real. As experts in planning, architecting, and implementing data systems, we'll work with you to equip your business to achieve your objectives and build a data-driven future.

For more information on how we approach data strategy, please visit:

http://svds.com/data-strategy

If you're ready to talk with us, please reach us at:

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> **"We'll work with you to equip your business to achieve your objectives.**