

# Why Organizations Need a Geospatial Strategy

An executive perspective



# "Why do we need a geospatial strategy?"

asks a skeptical CIO.

It's a fair question, but no matter how often I'm asked, I find I'm caught slightly off guard. Because if what they mean is, why does this geospatial stuff matter, and why is it worthy of a strategy, then the importance of *geo* at the executive level is still unclear.

That may be why the question is asked with a tone of skepticism, implying a geospatial strategy really isn't important—not on the level of a marketing strategy or a talent strategy or a climate strategy. These strategies address issues of critical importance, so (obviously) a strategy is needed!

As someone who helps organizations devise geospatial strategies, I've often responded to this question without addressing the deeper issue: What makes a geospatial strategy actually strategic? What problem does it solve? What advantage does it create?

In articles and in person, I've talked about the mechanics of crafting a geospatial strategy. I've talked about best practices for implementing a geospatial strategy. Essentially, I've focused on the how of strategy and not the why.

Let me fix that right now.

Here are five reasons why organizations need a geospatial strategy:

- To unlock new sources of value
- · To strengthen a digital strategy
- · To enrich the customer experience
- · To establish a shared data foundation
- · Because the IT strategy missed geo

### Unlock New Sources of Value

Organizations exist to create value for: customers through quality products and services; for shareholders through robust financial returns; for employees through satisfying work; for society through active corporate citizenship

It's all about value.

Location intelligence, the product of a geospatial strategy, empowers organizations to look at value creation in a different light. They can discover new routes to value by considering where.

When equipped with location intelligence, organizations can flip conventional business problems on their heads. How? By reframing them as problems of location.

This can be game changing.

For instance, take the financial services company USAA. As an insurer, USAA protects the assets of military members and their families. In 2018, the Woolsey Fire in California damaged thousands of homes and properties owned by USAA members. Processing that many claims could have taken months and required extensive manual effort to verify the validity of claims. At least it would have, if USAA had followed conventional thinking.

Instead, USAA looked to geospatial analysis for help. Using drones, USAA captured high-resolution imagery of the areas impacted by the fire. Then it used artificial intelligence (AI)—specifically, deep learning—to scour the imagery and spatially

creates an enduring ability to unlock new sources of value.

# Strengthen a Digital Strategy

As digital technology and business models transform industries, organizations are scrambling to respond with their own digital strategies. Their results vary considerably.

According to a survey of executives published by McKinsey & Company in April 2019, 8 in 10 organizations have established a digital strategy, but just 14 percent have realized major performance improvements. Even fewer have been able to sustain these improvements.

Organizations that report success point to several key factors. Chief among those factors is focus on implementing solutions that make information more accessible. This is where a geospatial strategy makes its mark.

A large percentage of data is geospatial. Some researchers and geoscientists

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verify damaged versus undamaged properties. Using this approach, the process took hours instead of weeks. By thinking geospatially, USAA unlocked new value for stakeholders. This value translated into faster claims for customers, greater efficiency for claims adjusters, and more stability for communities.

On its own merits, this is a strong example. But the big payoff comes from driving this kind of geospatial innovation continually and taking it from a one-off project to a core capability of a business. That's why a geospatial strategy is so important. It

have indicated that 60 percent to 80 percent of data is georeferenced in some way. Despite this, many digitalization efforts fall short when it comes to the geospatial dimension. Even though the raw data may be accessible, the tools and know-how needed to reveal insights locked away in the geodimension are not. To bolster a digital strategy, organizations need a geospatial strategy that ensures the avalanche of geospatial information generated can be leveraged.

BP, the British multinational oil and gas company, recognized this in its digital

transformation program. A major goal of BP's strategy was to improve data access across the organization. To do this, the company adopted an official open-by-default mandate, which made approximately 95 percent of geospatial data available to users.

However, BP also recognized that geospatial data on its own is only so useful. Consequently, it ensured that its users had the right tools to exploit this data and were encouraged to become "citizen developers." As a result, BP saw an explosion in the number of maps, geospatial apps, and dashboards across the organization.

Clearly, digital transformation is challenging. Having a complementary geospatial strategy to implement the right mix of specialized tools and capabilities can help to accelerate a digital vision.

### Enrich the Customer Experience

Transforming the customer experience is among the top priorities for modern CEOs. In fact, "Customer Experience Is the New Brand," an article in the July 15, 2018, issue of *Forbes* magazine, notes that an amazing 89 percent of organizations indicate they compete primarily based on customer experience. It's not just what you sell anymore but also how customers engage with your products and services that sets you apart.

Improving the customer experience enhances the customer journey. Understanding this journey involves mapping out all the ways a customer engages with your business and identifying the interactions that drive customer satisfaction. Organizations monitor these interactions and adapt their products and services to improve the customer experience.

The opportunity for innovation lies in discovering new ways of connecting with customers at crucial points along the customer journey. Enter geospatial technology and the concept of hyperlocalization, which personalizes customer experiences based on location.

For utility providers, a customer's experience during a power outage is a significant driver of overall satisfaction. Creating a personalized experience—from the time

of an outage to when power is restored—is a strategic focus for all providers. In fact, during a severe weather event, that experience often begins even before the outage occurs.

Many utility providers use geospatial technology to deliver localized outage communications before, during, and after an outage. Before an outage, publicly available outage maps and notification systems alert customers of potential severe weather events affecting their homes or businesses. These alerts aren't broadcast blindly. They are sent where the weather impacts will likely be experienced.

During an outage, customers can see the status of their property and neighboring areas on mobile devices as well as the estimated time until power will be restored. They are provided guidance on navigating the outage. Once power is restored, customers are notified and provided with channels for feedback.

A geospatial strategy that enables precise localization enriches and deepens the customer experience. It's like adding rocket fuel to the customer journey.

# Establish a Shared Data Foundation

Geospatial data is ubiquitous. Often, we don't even realize we are using it. From logistics to customer analytics to health and safety management, geospatial data is an essential part of the knowledge base of most organizations.

The problem is, many organizations haven't adjusted how they collect, manage, or share geospatial data. Data is still primarily acquired and maintained through projects or by a specific department. Duplicate data purchases are common. Disconnected datasets and poor integration are rampant because geospatial data isn't considered to be a strategic asset.

Without a common geospatial data foundation, organizations struggle to support a business environment that increasingly requires collaboration across the enterprise. The vision of Norway's national geospatial strategy, described as "Everything happens somewhere," addresses this issue. As part of its Digital Agenda, the country

is advancing a national knowledge base of geospatial information that collates data from many government sectors and industry partners. For Norway, a common geospatial data infrastructure is vital for addressing societal challenges such as climate change, international trade, emergency planning, and urbanization.

In the digital world, data is king. A shared foundation of geospatial data is fundamental to the new reality of this digital world.

## The IT Strategy Missed Geo

While many organizations don't have a geospatial strategy, they likely have an IT strategy. So why another strategy? Isn't the IT strategy good enough?

My experience is that it's not good enough. Not because it's not a solid piece of work, but because usually an IT strategy glosses over the geospatial function because geospatial technology is not the focus. It's not uncommon to see the geospatial discipline relegated to a single line item in an annual budget. The IT strategy promotes a vertical, technology-centric view as opposed to a horizontal, capability-centric view.

To do great things with geo on an organizational scale, geo needs to be treated as an organizational capability. Building a capability requires a strategy. That's why, in a broad sense, you need a geospatial strategy. You need to define how your organization wins with location intelligence. Geo shouldn't be a footnote to an IT strategy but a primary focus of your business.

### About the Author

Matthew Lewin is the director of management consulting for Esri Canada. His efforts are focused on helping management teams optimize and transform their business through GIS and location-based strategies. As a seasoned consultant, Lewin has provided organizations in the public and private sectors with practical strategies that enable GIS as an enterprise business capability. The intersection of business and technology is where Lewin's interests lie, and he thrives on helping organizations bridge the gap to achieve their most challenging GIS ambitions.

