A Guide to Implementing a Digital Transformation Strategy Using Tableau Blueprint

Who should read this paper

This white paper is intended for government employees seeking to improve how their organisation uses data to help their agency achieve its mission. This includes anyone who is governing, managing, securing, sharing, and storing data, and are interested in learning the Tableau perspective on how to deploy analytics at scale, and achieve the goals of the governments digital transformation strategy:

- Chief data officers

- Chief information officers

- Business analysts and leaders

- Data analysts, data engineers, and data scientists

- Executive sponsors and project champions of analytics

- Stakeholders with an interest in the use of government data to improve services and outcomes

Contents

Digital Transformation Strategy: a roadmap for data-driven government

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> Like any lofty goal, we're looking both strategically and tactically. We have to start with the basics, and invest and build a rock-solid foundation. —SUZETTE KENT, FEDERAL CIO

The data held by the Australian Government is a strategic national resource that holds considerable value for growing the economy, improving service delivery and ensuring that programs and policies are informed by evidence.

On 8 May 2017 the Australian Government tabled the Productivity Commission's Data Availability and Use Inquiry (PC Inquiry). The Inquiry made 41 recommendations aimed at overcoming barriers and issues with Australia's current data system to move from one based on risk avoidance, to one based on value, choice, transparency and confidence. The recommendations balance the need between improved data access and use arrangements with proactive management of risks.

The objective of the Data Sharing and Release Bill (DS&R) is to provide a flexible and modern framework to streamline the process for sharing public sector data and improve data safeguards across the public sector. The starting point for the data sharing and release framework is a focus on creating incentives for self-management of risks and voluntary improvement of data management practices within public sector agencies.

Tableau Blueprint: a framework to help bring data-driven government to life

Tableau has created a framework to help organisations implement data analytics at scale, and this 'blueprint' can be especially helpful for government agencies who are looking for information about how to leverage the Tableau platform to meet the objectives of the digital transformation strategy.

Recently, we conducted research on what success (and failure) looks like for hundreds of customers deploying Tableau at scale. This rich feedback has resulted in a compilation of best practices, expert knowledge, and lessons learned. We have thoughtfully organised this content into the Tableau Blueprint.

Leading with the digital transformation strategy, and informed by Tableau Blueprint, government agencies will be well prepared to leverage data as a strategic asset, achieve mission goals, and provide better service to their constituents.

Framework for success: introducing Tableau Blueprint

Data as an organisational mandate

To succeed with any analytics initiative, it's essential to have a data-centric mindset, and a culture that is open to change. And change is never easy—according to a 2018 McKinsey Analytics study, 92% of the 1,000 companies surveyed are failing at achieving the elusive goal of analytics at scale.

But at the heart of every organisation with a strong data culture, you will find three core capabilities: agility, proficiency, and community. Tableau Blueprint can help government agencies understand how to build and master these three core capabilities.

Agility: Modern analytics projects use agile and iterative development methods and practices that involve strong cross-functional collaboration between business and IT. Together, they work closely through a set of near-term business requirements focused on delivering immediate benefits and value. Mastering agility as an organisational capability leads to creating a highly accountable, cohesive and focused data team. Think execution with SWAT team precision.

Proficiency: Today, proficiency with data is desired if not expected across the organisation from the top-down and not just exclusively with IT. Proficiency with data begins with building data analysis skills. Proficiency with data is achieving data literacy and mastering data analysis.

Community: Developing a community of practice around analytics lays the foundation for creating a culture of analytics and evidence-based decision making. Community happens through frequent and regular meetings of data analysts, data consumers, data engineers, and data scientists coming together for collective learning and support and sharing lessons learned.

How can Tableau Blueprint help?

Tableau Blueprint is a step-by-step guide to becoming a data-driven organisation, whether your organisation is new to modern, self-service analytics or you've already deployed and need to broaden, deepen, and scale the use of data. Although every organisation's journey to developing a culture of self-service analytics will differ, Tableau Blueprint outlines the processes and best practices from hundreds of customers. Tableau Blueprint offers:

1. A method to select the right governance model for your analytics strategy to control how data and content are used across the enterprise.

2. Ways to create secure and interactive sources of data and content.

3. A process to improve the use of data for decision-making and accountability through the measurement and monitoring of key operational and performance metrics.

4. Ways to securely enable third parties to access government data for commercial and public use.

Tableau Blueprint begins with engaging both IT and business stakeholders to answer the question "what does success look like?" It's a simple, yet powerful question that the organisation and IT can collaborate on. Specifically, establishing what does analytics success look like? What specific results and outcomes can the organisation achieve?

Applying Tableau Blueprint to analytics strategy helps organisations map the "how" (people, process, and technology), and the "what" (outcomes and key results) that ultimately informs the "why". Tableau Blueprint helps customers execute their analytic strategy by aligning activities along workstreams that map to four critical analytic core capabilities: agility, proficiency, community, and governance.

Getting Started

The Tableau Blueprint begins with the discovery process, a systematic approach to gathering information and perspectives from sponsors and stakeholders about roles and responsibilities, architecture and infrastructure, and the use of analytics and data across the organisation. The discovery process includes the Tableau Blueprint Planner which contains the questions to be answered that will inform activities at every stage and workstream in the Tableau Blueprint.

The discovery process also helps identify Executive Advocacy and Project Team members. Forming the cross-functional executive advocacy and project team are critical for alignment, buy-in, and ultimately the strategy's success. Together, they shape the organisation's vision for modern analytics, working towards shared goals, mission, and objectives of making governed, secure data access a reality.

The Tableau Blueprint Planner collects information about the following:

• **Analytics Strategy**

• **Roles and Responsibilities**

• **Enterprise Architecture**

• **Use Cases and Data Sources**

• **User Community**

Let's take a closer look at four ways Tableau Blueprint can help your organisation build the essential skillsets—and the environment—to successfully operationalise the digital transformation strategy.

Chapter 1

Agility

One of the biggest challenges faced by government agencies is having too little information, too late. Program efficacy fails when leadership lacks the information it needs to make informed decisions. A central reason for this deficiency are disparate data sources. Without a unified view into the data, reporting is often redundant, and it's difficult to follow-up questions.

In a traditional business intelligence environment, data warehousing, and report factory projects follow a waterfall standard development lifecycle (SDLC) approach. This approach sequences project phases or stages in a linear manner for execution over the duration of the project.

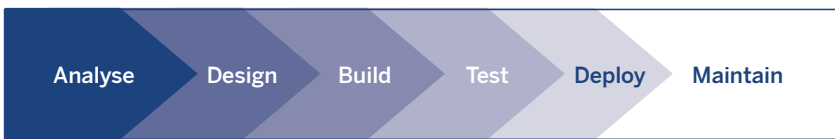**Traditional Waterfall Standard Development Lifecycle (SDLC) Approach**

Figure 2 Traditional waterfall development cycle is linear

Project efforts are led by IT with requirements input, stage-gate validation, and output sign-off by the business. The emphasis of the waterfall SDLC approach is satisfying the business requirement. With the increasing speed and volume of change in today's business environment, the traditional waterfall SDLC approach cannot keep pace and a different and more modern approach is necessary.

Figure 3 The Tableau Blueprint harnesses an agile and user-centered approach that supports a modern analytics workflow.

What does success look like for your analytics strategy?

Learn how these Tableau customers are achieving success with analytics:

AIHW transforming public data into interactive visualisations

Reporting at IP Australia

Chapter 2

Proficiency

As you begin your data analytics initiative, it's important to ensure that you are emphasising data literacy and basic data proficiency before focusing on data science capabilities.

To be clear, data scientists are essential to mature data analytics teams—necessary for any initiatives involving artificial intelligence, machine learning, or natural language processing. Data scientists are in high demand, making them difficult roles to recruit for. And because of their specialised expertise, their time should not be spent on routine reporting or repetitive question/answer projects.

So, begin by building your foundation. Data literacy and basic data proficiency are at the core of data culture. Fundamental data skills empower users to become capable and self-sufficient in working with data, and informs the basis of data science, so emphasis on these skills begins to build needed data science competencies.

Raise your analytical IQ

Proficiency is tied to establishing a robust educational plan that aims to raise the "analytical IQ" of your team. Tableau Blueprint suggests a holistic approach; your organisation should provide opportunities for your teams to gain understanding of processes and technologies that are specific to your organisation, as well as Tableau-specific skills. Where to start? Organisational role-mapping can be a helpful tool for identifying how data is distributed and consumed by individual team members, and to determine their existing skills.

Tableau provides:

Free, comprehensive video training for all user levels

Tableau certification

Discover more Tableau education

Basic data proficiency begins with data analysis skills and it requires data literacy. As data skills develop and evolve within an organisation, data engineering efforts focused on the collection, storage, and transformation of data can support and strengthen the workforce's growing proficiency. This focus on skill-building provides an opportunity for analytical talent to flourish, and creates a pipeline of data science within your agency.

Supported by self-service analytics, data scientists are freed to focus on data models that drive high value result.

Chapter 3
Community

"Always be learning" is an appropriate mantra for the age of data analytics because without an ongoing relationship to the people and resources who can support and nurture your data initiative, it will fail to gain the traction needed for success.

But it's not just efficient to provide training and access to a platform. You need to create a culture, a community that everyone has a stake in. This is why a digital transformation strategy includes establishing a "Learning Culture" as one of its core principles. Specifically, this entails:

· Investing in learning

· Developing data leaders

· Practicing accountability

Beyond championing a learning culture, Tableau Blueprint champions community to make individual and organisational learning sticky. Tableau Blueprint builds a community of practice, and Tableau users thrive because of the internal support from peers within their company and the external support they get from others within the Tableau community.

The power of community: students use public data to help veterans

Challenge: To help veterans find out if they qualify for healthcare benefits by analysing open government data. Legislation had been introduced to extend healthcare benefits to service members who were exposed to the toxic chemical, Agent Orange, while aboard aircraft carriers and other ships. To be eligible for additional benefits or healthcare, veterans and their family members had to manually search through handwritten deck logs to find proof of eligibility.

Solution: A Tableau for Students hackathon team from University of Virginia decides to tackle the problem, using open data sources from the US Department of Veterans Affairs.

Impact: The visualisation enabled users to find answers in minutes—instead of what took single analysts several weeks to complete. The project shows the important role that open data can play in solving real-world problems. Needless to say, the team won first place for their efforts.

Read the story
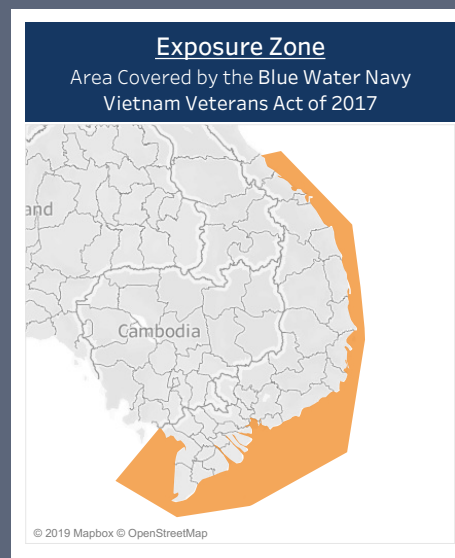
The winning viz

When public data sets can be leveraged to create interactive visualizations, they become community assets that serve to promote open data and transparency, a key directive of a digital transformation. In fact, Action 16 requires agencies to identify "an initial set of priority agency datasets that are key to mission success and/or a priority for stakeholders outside of the agency. These datasets can be the initial focus for testing and implementing improvements to agency comprehensive data inventories and catalogues, as well as for improving secure processes for data access and sharing, for concretely engaging stakeholders to help them understand and use government data, and for obtaining effective feedback on the agency's planning processes to improve open data access."

Tableau works hard to cultivate its user community, promote data literacy, and provide opportunities to enhance users' data skills. The efforts have resulted in a community like no other in the analytics and business intelligence industry. Today, Tableau User Groups meet regularly in over 180 cities across the globe. Once a year, more than 15,000 Tableau users come together at the annual Tableau Conference to learn, network, and share their Tableau experience. Within the Tableau community, those who rise above others in their expertise and proficiency with Tableau, contribute frequently to the Tableau Community Forums, and mentor and nurture others selflessly on their Tableau journey are the Tableau Zen Masters. The Tableau community includes users of Tableau Public, a powerful—and free—resource that allows anyone to publish interactive data visualizations to the web.

Simply stated, when your organisation has access to a vibrant and healthy learning community, your analytics initiative will flourish.

Chapter 4

Governance

Seeing governance and self-service used in the same sentence is a paradox. Yet solving this paradox solves the challenge that many organisations face: how do you provide secure access to data and trust proper use of data? The answer is to manage data separate of the analytic content that is derived from it and share the responsibility to govern both across the business and IT.

If governance is too tight and inflexible, your employees won't have access to the data and content they need to answer questions. Status quo will persist and data-driven policymaking will fail. And even worse, employees will seek workarounds that put data security at risk. But governance policy that is too loose also has clear drawbacks.

Governance is viewed often as IT controlling access to content or the combination of analytics and data. Self-service is viewed often as the organisation having open access to content. Governance and self-service are most often considered at odds with each other—but this doesn't have to be the case. Organisations can have both by balancing the controls shared by the organisation and IT.
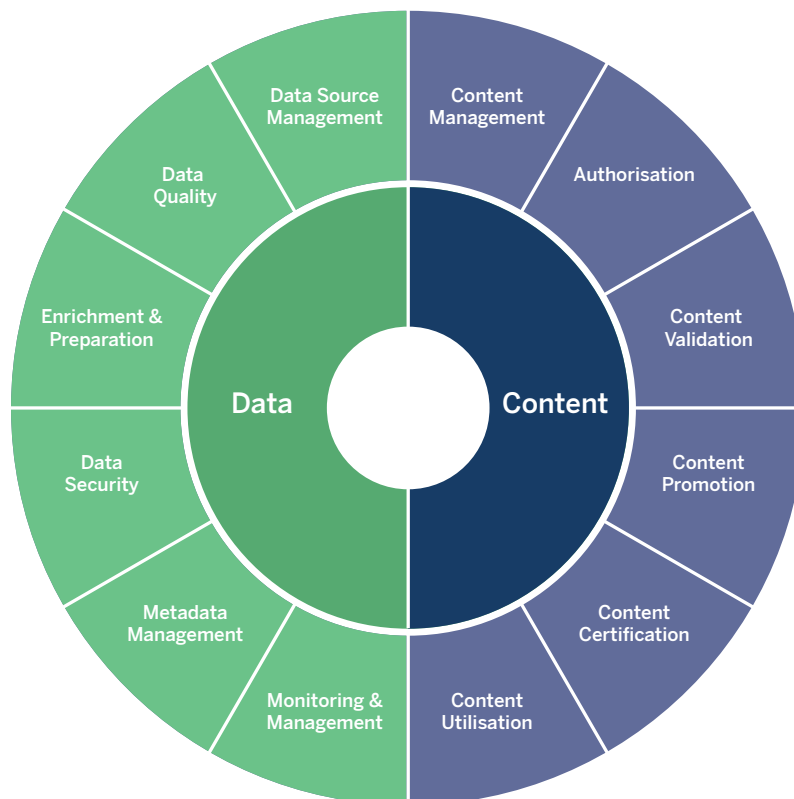

Figure 3 With Tableau Blueprint, data and analytic content are governed. Data governance ensures the accuracy of the data driving users' decisions. Content governance helps business users to quickly and confidently find, share, and use relevant analytic content and data sources. From soft guidelines to firm boundaries for the usage of analytic content, organisations need to design their own governance models that comply with their internal policies and procedures, and overall business needs.

Conclusion

At Tableau, we understand that data is a strategic asset for government—it's imperative that agencies and governmental organisations are ready to fully realise the potential their data.

When presented clearly and visually, data has enormous potential for improving mission critical outcomes and performance. We invite you to learn more about how the Tableau platform can drive new levels of transparency, productivity, and innovation in your organisation.

About Tableau

Tableau helps extract meaning from information. It's an analytics platform that supports the cycle of analytics, offers visual feedback, and helps you answer questions, regardless of their evolving complexity. If you want to innovate with data, you want an application that encourages you to keep exploring—to ask new questions and change your perspective. If you're ready to make your data make an impact, download a free trial of Tableau Desktop today.

Resources

Online

Meet Tableau Blueprint

Federal Civilian Analytics solutions page

Federal Data Strategy

White papers

4 Ways Government Agencies Can Deliver Better Results

How Government Agencies Can Achieve More with Modern Analytics

How to Build a Culture of Self-Service Analytics in Government

Community

Tableau Community Forums