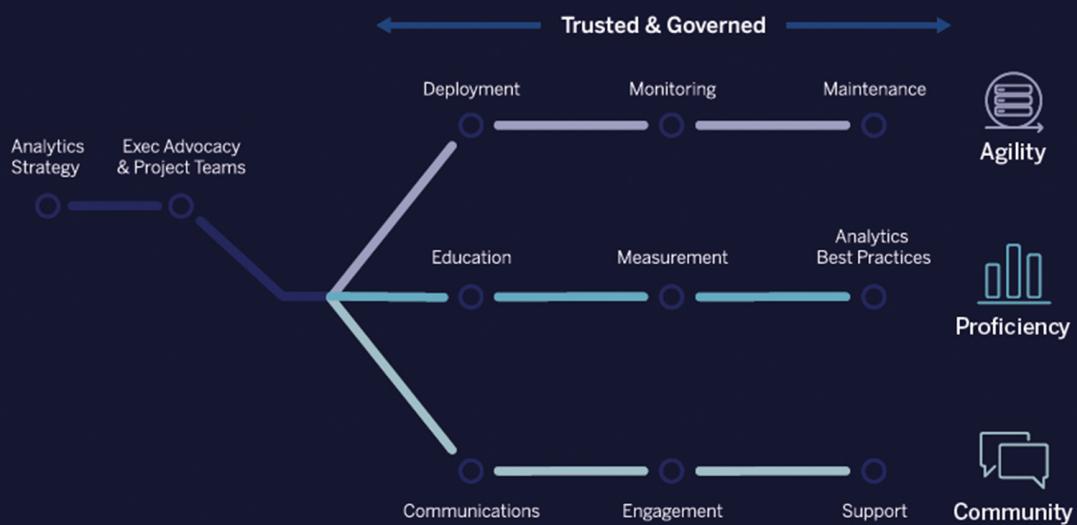


A PRACTITIONER'S GUIDE TO

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BLUEPRINT



A PRACTITIONER'S GUIDE TO TABLEAU BLUEPRINT

A Practitioner's Guide to Tableau Blueprint

Published by

USEREADY

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About USEReady

USEREADY's mission is to help users succeed with data.

We achieve this mission with fanatical customer centricity, humility, and integrity. At USEReady, we love to solve customer problems, contribute to community, and continue to improve. We aim to build a strong learning culture and have fun doing it together.

We have harnessed modern Business Intelligence solutions with cutting edge Artificial Intelligence (AI) platforms to unlock the power of data. Our result-oriented solutions ensure that our customers are successful in adopting self-service technologies.

We have partnered with the best in class BI, Data and Cloud products such as Tableau, Snowflake, Alteryx, Informatica, Exasol, AWS and Azure. We have delivered proven success across Financial Services, Insurance, Retail and Media verticals.

Check us out at www.useready.com or e-mail contact@useready.com.

About Tableau, Inc.

Tableau Software, headquartered in Seattle, Washington, is a leader in data visualization and data analytics solutions. It was founded in 2003 to create software products focused on Business Intelligence with a revolutionary approach.

The company was recognized as the leader of the Gartner Quadrant for five consecutive years from 2012 to 2017 due to its remarkable Ability to Execute and Completeness of Vision.

Hundreds of thousands of data analysts around the world rely on Tableau Software products for their daily data preparation, data visualization, and data exploration needs. Tableau is also recognized as one of the top products in delivering powerful end-user interactivity supported by self-service capabilities.

In simple terms, Tableau Software helps people see and understand data. For more details, please visit www.tableau.com

Foreword



Michael Holcomb, Senior Strategic Customer Success Manager at Tableau, helps Tableau's largest customers in the financial services industry achieve self-service analytics at scale. Michael has been working in the financial services industry for 20 years and has used Tableau since 2008. He has implemented Tableau's enterprise platform for internal and external-facing deployments, helping teams and customers see and understand their data.

A few words from Michael:

At Tableau, our mission is to “help people see and understand their data” – seven words that drive everything we do. Our products are transforming the way people use data to solve problems. We make analyzing data fast and easy, beautiful and useful. It’s software for anyone and everyone.

Transforming how your company makes decisions every day is no easy task but incorporating data and analytics into decision-making cycles is how you will see the most transformative impact on your organization.

Achieving that level of transformation requires a deliberate and holistic approach to developing your analytics practice. Tableau Blueprint is a step-by-step guide to becoming a data-driven organization.

Education is a critical element of Tableau Blueprint. To integrate modern analytics into the fabric of your company, it's essential to build a scalable and ongoing learning plan

for all your users. A skill belt program provides a pathway for a user to develop skills and establish a common language across an organization for abilities at measured levels of knowledge and competency.

Such a program should be designed to sequentially build skills and knowledge across product functionality, storytelling, design, visualization, best practices, and community resources. That will enable you to quickly scale both horizontally and vertically to ensure that you are maximizing your investment in Tableau by creating deep pools of highly skilled users throughout your organization. You should strive to connect users within your company and generate enthusiasm among a group of people founded on the common cause of putting data at the center of every conversation.

USEReady is a leader in educating users in analytics best practices, empowering users with the Monitor, Analyze, and Detail (MAD) methodology for dashboard design, and the Long Pole in the Tent (LPiT) philosophy for optimization.

It doesn't matter if your organization is new to modern, self-service analytics or if you've already deployed and need to broaden, deepen, and scale the use of data. USEReady can help develop guidelines, standards, and processes for the discovery, interpretation, and presentation of data.

Foreword



Since joining Tableau in 2010 and through the early days of Tableau Desktop to today's Tableau Platform, I have collaborated with USEReady extensively to help our customers "see and understand data." In my current role as a Senior Strategic Customer Success Manager, I focus on helping customers develop and grow a

data-driven culture. USEReady has leveraged its vast expertise in its latest book, *A Practitioner's Guide to Tableau Blueprint*. Just like USEReady's previous guides, this book is sure to become a premier resource to help customers create that data-driven culture.

Today, 92% of companies are failing to achieve analytics at scale (McKinsey Analytics Survey). Tableau Blueprint is a guide to help achieve this elusive goal by building the necessary capabilities. There are three core capabilities at the heart of Tableau Blueprint: Agility, Proficiency, and Community, all built on trusted and governed data. In this guide, USEReady helps you build those capabilities through concrete plans, recommendations, and guidelines, helping you become part of the 8% achieving analytics at scale.

As a seasoned Tableau professional whose primary goal is empowering companies to become self-service, data-driven organizations, I'm very excited to add this guide to my toolkit.

Jeremy Walsh
Senior Strategic Customer Success Manager
Tableau Software

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CHAPTER 1

BLUEPRINT OVERVIEW

1. Tableau Blueprint Overview

To achieve and maintain success, the modern enterprise relies on data and analytics to make more strategic and faster decisions. The magnitude of data that organizations capture, store, and organize grows exponentially year over year. Organizations large and small that recognize the importance of effective data analytics have a tactical advantage over those that are slow to adopt.

In addition to ensuring that your Tableau server is deployed on a scalable platform and training provided to users, a mind-shift around how the organization recognizes data needs to occur. Adopting a data-driven culture requires defining and continually developing governance around data validation and security.

The change processes defined will enable a larger community of users to have timely access to the right information with as few obstacles as possible. From executive leadership to Creators and Viewers, participation and a commitment to modify behavior is needed to sustain long-term change. Effective communication across all levels of the organization will help to align objectives and ensure that issues are raised before significant impact.

To execute a complete Analytics Strategy, refer to Tableau's comprehensive Blueprint Help Guide, which can be found at help.tableau.com/current/offline/en-us/tableau_blueprint.pdf

Additional information can be found at
www.tableau.com/learn/data-culture

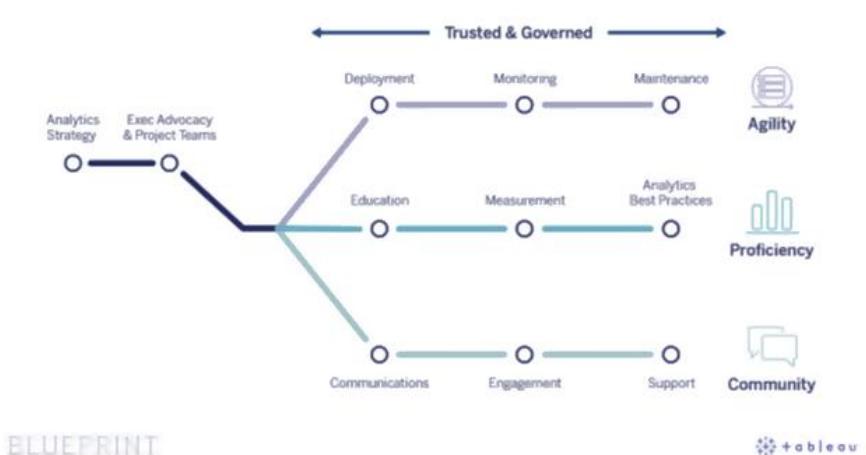


Figure 1. Tableau's Blueprint (Tableau Blueprint Help, 2019)

Data Is Your Most Valuable Asset

Forbes Technology Counsel published an article (Why Digital Transformations Fail: Closing the \$900 Billion Hole in Enterprise Strategy, 2018) outlining the gaps that exist in most organizations and prevent a successful digital transformation. The article identified teamwork, a system of record for work, the modern assembly line, work collaboration, and consolidated sources of truth as critical for success.

This practitioner's guide highlights the critical success factors detailed within the Tableau Blueprint and how they can be executed within a community center.

In a study by International Data Corporation (IDC) (The Digital Universe of Opportunities: Rich Data and the Increasing Value of the Internet of Things, April 2014), IDC found that 42% of managers said they have less than 24 hours to make an important business decision, and, in many cases, they don't have access to data to help inform those decisions. Additionally, at least 64% of managers have seen the time allowed for decision-making shrink in the past 12 months. Data-driven enterprises are faster with their decisions,

allowing them to better respond to dynamic business environments and competitive markets.

Creating a Data Culture

A data-driven organization that fully embraces the concept of readily available and accurate analytic insights achieves this by supporting three primary organizational capabilities within Tableau: agility, proficiency, and community. To execute successfully an organization needs to establish a holistic analytics strategy, including a well-defined and evangelized governance and change management process.

Establishing and maintaining both data and analytics governance is key to advancing a data culture within your organization. Whether the goal is to fully advance self-service capabilities within Tableau or simple to better align existing groups that develop analytics, the organization will benefit from governance.

Irrespective of the size of your organization, you can likely recall times when different groups attempting to report on the same KPI or metrics, produced varying results and likely after spending significant effort to produce those results. As we will cover in greater detail, communication and governance complement one another, as it is not good enough to have a good process if only a segment of your community is leveraging. Optimally and where appropriate, governed data sources and vetted analytics will be shared and enhanced. This will not only lead to consistency in reporting but will also cut down on wasted work effort.

Efforts also need to be made to measure the success of efforts, as well as impacts. For larger and geographically disperse organizations, leveraging existing or new technologies, such as a community center are an efficient way to coordinate these activities, particularly those activities that align to measuring changes to cultural behavior. Additionally, as part of an organization's analytics strategy, a plan should be developed

for regularly assessing impact areas related to the agility of the Tableau server environment, performance metrics of individual workbooks and tangible impacts to the business.

Governance – Data and Content

Tableau identifies two key areas of governance – data and content – to be evaluated and evolved in order to provide a modern self-serve analytics experience to business users. Data governance ensures the accuracy of data available in order for users to make decisions. For additional details on data governance, refer to the Tableau Blueprint Help Guide (Tableau, 2019).

A community center helps organizations execute on best practices related to governance, easily transforming theory into practice.



Figure 2. Governance (Tableau Blueprint Help, 2019)

2. Bringing It Alive – USEReady Community Center as a Perfect Companion to Tableau Blueprint Strategy

Tableau's Blueprint is a detailed framework designed to assist IT and business groups to develop a high-performing data culture, enabling trusted and governed self-serve analysts and expedited business insights. Within this practitioner's guide designed to supplement the information found in the Tableau Blueprint Help Guide (Tableau, 2019), we'll be sharing step-by-step guidance related to both IT and business

functions but with a focus on how our Community Center can help advance proficiency and enable community in your organization.

From years of experience helping customers implement Tableau, we notice that quite often IT and business teams are not able to achieve their analytics objectives. A consistent reason for this challenge is a lack of centralized proficiency and a community platform.

Conversely, organizations with traditional Learning Management Systems (LMS) have a central location to refer to, but content is often stale and not structured with a guided path. To assist both public and private groups with a prescriptive and dynamic enablement experience, USERReady offers the Analytics Community Center.

Successful Business Intelligence (BI) Leaders identify keys to success as creating a community to engage with users and building data literacy with all teams. Designed to support Tableau creators, explorers, and viewers, the Community Center assists BI Leaders develop and evolve a culture of analytics and get more value from their existing data.

The Community Center, developed and hosted by USERReady, comes pre-populated with an abundance of valuable content curated from various sources in the Tableau community, enabling organizations to quickly ramp up their analytics journey. Customizations, while not required, may be desired in order to align to current tools and offerings within your organization. Help is available for those customizations, and common options will be discussed throughout this guide.

After reviewing the information in this guide and getting assistance from USERReady to complete an assessment, your organization could have access to the Community Center such as the one below, transforming how you enable your users.

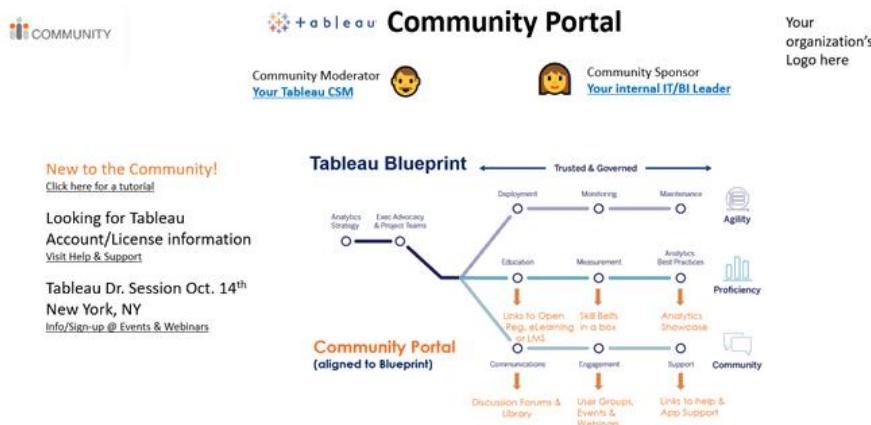


Figure 3. USEReady Community Center

3. User Roles

3.1. Tableau Blueprint Advocacy and Project Teams

To ensure lasting success, transformational initiatives require executive sponsorship, as well as a comprehensive project team to execute the strategy for a trusted and governed Tableau analytics practice. Within the project teams, Tableau defines several Blueprint roles: Analytics Director or IT Service, Enterprise Architect, Security and Compliance Administrator, Database Administrator, Systems Administrator, Network Administrator, Client Administrator, Project Manager, Data Stewards, Content Authors, Content Consumers, and Community Leader. For complete descriptions and associated responsibilities of these roles, refer to Tableau's Blueprint Help Guide (Tableau, 2019).

Now let's explore in more detail three of Tableau's defined roles: Content Author, Consumer, and Community Leader.

- a. Content Author: Creates and publishes dashboards and possibly the underlying data sources. The role is fulfilled using a Tableau Creator license.

- b. Content Consumer: Uses Tableau to make data-driven decisions; could be a Creator, an Explorer, or a Viewer.
- c. Community Leader: Responsible for user enablement and building a community. There could be several individuals in an organization who fill this role, and they frequently have a second role such as Customer Success Manager (CSM), Sales Executive (SE), or Sales Consultant (SC).

3.2. Community Center Roles

Whether in real life or virtual communities, consistent participation and a value-added experience are clearly defined roles and have associated responsibilities. Those in leadership roles should not only be technically competent but also committed to fostering an inclusive environment, recognizing the benefits of virtual learning, sharing, and teamwork. Below are the key roles for the Community Center.

- a. Blueprint Coach or Moderator: This individual oversees the Community Center and partners closely with the Community Leader, fostering the data-driven culture through the portal. A Moderator is someone who is proficient with best practices related to high-performing analytics communities.

For many enterprises, the Tableau CSM fills this role best since it corresponds with many of the activities he or she is already performing. Organizations with a mature Center of Excellence may want to nominate someone internal as a Moderator. Public user groups could also nominate a Moderator from within. For organizations without access to a Tableau CSM and without the internal expertise to nominate a Moderator, a viable alternative is a Blueprint Coach who is skilled in all aspects of Tableau Blueprint and can mature the analytics culture in your organizations, as well as fill the Moderator's role. That individual

would be a billable consultant, tasked with the objective of eventually handing over the Moderator role to someone internal.

- b. Participants: Comprised of Content Creators and Content Consumers, these individuals may be working in isolation or in small groups and will now have access to a broader community of expertise. They will benefit from having a primary location to visit in order to improve their skills, measure their achievements, reference best-in-class sample high-performance analytic dashboards or reports, and network with others.

4. Tools

Similar to Tableau's mission to "help people see and understand their data" and with a core belief that communities and continual learning inspire positive change in both individuals and organizations, USEReady has created the Community Center and Skill Belt. They are both cloud solutions built and hosted by USEReady. Below are additional details:

- a. Community Center: A central location for an enterprise or group to access analytics content and share information consistent with the Tableau Blueprint. The Community Moderator will have access to configure many aspects of the community experience and will be the go-to person for posting information and tracking achievement. Similar to the overall analytics strategy for your organization, the Moderator is key to ensuring that best practices are implemented, relevant stakeholders are informed, and usage is continually measured.
- b. Skill Belt: This is a collection of best practices and learning content packaged with knowledge assessments, rewarding participants with merits and

identification of leaders within the organization, all accessed in the Community Center.

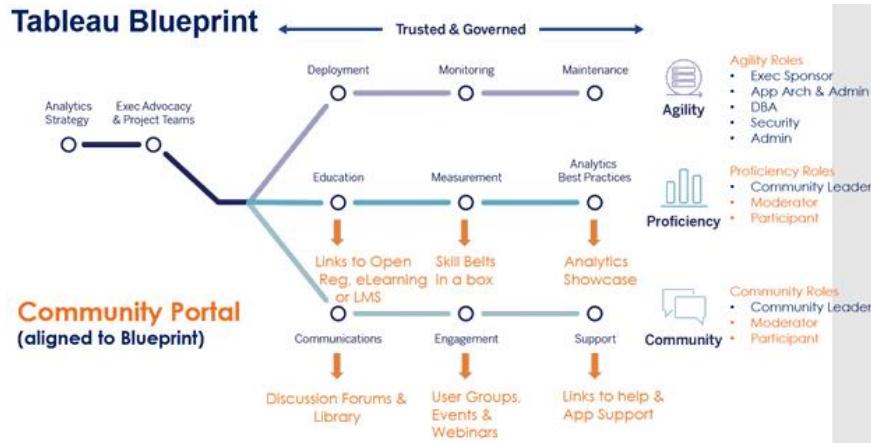


Figure 4. Tableau's Blueprint in the USERReady Community Center

CHAPTER 2

CREATING AN AGILE ENVIRONMENT

The foundation for any good analytics platform is one that meets the current needs of the enterprise community and can easily scale as new users and projects are added.

Allocating the best possible resources not only provides optimal performance for Tableau users but allows for upgrades and additions of new functionality without a negative impact. We'll outline the various aspects to consider when creating or optimizing a Tableau deployment, but for comprehensive details, refer to the Tableau Blueprint Help Guide (Tableau, 2019).

In this chapter we will go into greater detail on an aspect of Monitor, relating to a top-down analysis framework to help dashboard designers create intuitive, meaningful dashboards that convey relevant information in a crisp manner.

The Blueprint Help Guide (Tableau, 2019) should be the direct reference for best practices related to deploying a Tableau server, as well as related requirements and recommendations for sizing and upgrading. This information is updated frequently as new versions of Tableau are released and features enhanced.

Refer to the Guide for topics related to:

- Deployment – Includes Designing an Architecture, Creating a Platform, and Installing and Configuring your Server.
- Monitoring – Includes Deployment Monitoring and performance best practices.
- Maintenance – Includes Synchronization of daily updates, Back-Ups, Testing, Planning, and Upgrades.

help.tableau.com/current/offline/en-us/tableau_blueprint.pdf

It is recommended that your organization's IT team review the Tableau Blueprint Planner's Tableau Enterprise Architecture Survey, if it has not already been completed by departments and teams in your organization.

help.tableau.com/current/blueprint/en-us/bp_enterprise_architecture.htm for the Tableau Data and Analytics Survey.

help.tableau.com/current/blueprint/en-us/bp_data_analytics_survey.htm for departments and teams in your organization.

MAD: Monitor – Analyze – Detail and LPiT: Long Pole in the Tent

Two areas that we will be reviewing as part of Creating an Agile Environment are the frameworks for developing performant dashboards and measuring the performance of dashboards and the related impacts to Tableau Server performance. To maintain an optimally performing Tableau Server, it is critical for Tableau Server and Site Administrators to be knowledgeable the best practices, as well as share those with the individuals publishing content. Two best practices detailed here are MAD and LPiT.

1. MAD – Monitor, Analyze and Detail

MAD is a top-down analysis framework to help dashboard designers create intuitive, meaningful dashboards that convey relevant information in a crisp manner.

Traditionally, companies built static reports by importing data and then creating their own sub-reports. This meant long, laborious hours for report creators and lots of effort spent to achieve small progress. BI tools previously were report-centric, meaning, the user would have to have to open multiple reports and gather desired information.

This process was cumbersome and did not really help consumers of such reports gain strategic insights and answer business questions. Additionally, the technology teams spent

an inordinate amount of time collecting and cleaning data. Hence, this approach has turned out to be expensive and inefficient for companies.

Development of new-age tools is rapidly replacing the traditional static-reporting framework because it is providing more value to its users. Tools such as Tableau have expedited the report creation lifecycle and helped business analysts create more ad hoc reports with focus on analyzing data instead of cleaning them.

From departmental changes and progress, to company-wide strategic initiatives, senior level executives in companies are beginning to recognize the value of BI tools and are keen to leverage their potential in different ways. However, they are not the creators of BI dashboards themselves, but are consumers of the dashboards created by the business analysts. Hence, it becomes ever more imperative that KPI's included in dashboards convey accurate information instantly.

The ease of use with modern BI tools has led to a commonly observed problem wherein report creators often jump straight into content building without giving much thought to how it will be used or how difficult it is for the end users to consume the information.

Dashboards without clear vision can lose their purpose and value despite providing all appropriate information. Take an airline cockpit as an analogy. It can be quite confusing for any new person walking into a cockpit to understand what is going on. Individuals will get lost in the information overload. In the same way, a dashboard will be just a mashup of charts and KPI's without a clear structure to it. Hence, a logical framework that avoids these pitfalls and delivers the maximum value from the dashboard is paramount to effectively leverage the power of BI tools.

MAD based dashboards look to alleviate some of the previously mentioned problems and generally bode well for

organizations with business groups that have agreed upon the information they want presented. Well thought-out dashboards generally have KPI's identified at a very high level followed by analysis level and a detail level. Successfully applying the MAD framework is about figuring out the analysis layer. The information presented in this layer changes depending on the information the user seeks, and the section therein determines where deep dive analysis is performed.

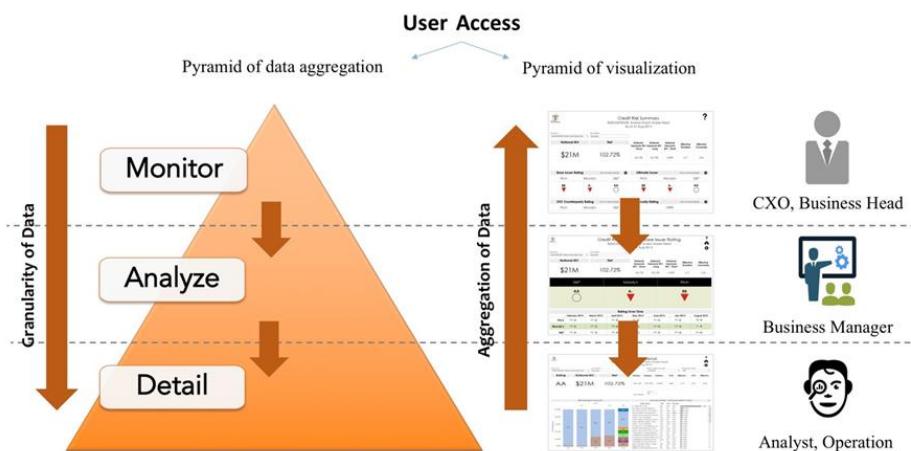


Figure 5. USERReady's MAD Framework visualization

MAD framework helps build an optimal dashboard for users of all kinds from a casual user to an inquisitive analyst looking to answer questions with the help of data. It alleviates the pains of working with data/information-dense dashboards and provides the user with a framework that has a flow and logic to it. A key concept in this framework is to convey all levels of information with minimal clicks.

1.1. M in MAD: Monitor

This section generally represents high level KPI's which answer high level questions from the data. Information is generally conveyed with the help of graphical charts or scorecards which summarize the KPIs, provide their trends and answers initial questions the user might have of the data. Executives and managers generally tend to focus at this layer

and drill down to the subsequent layers depending on the information they seek.

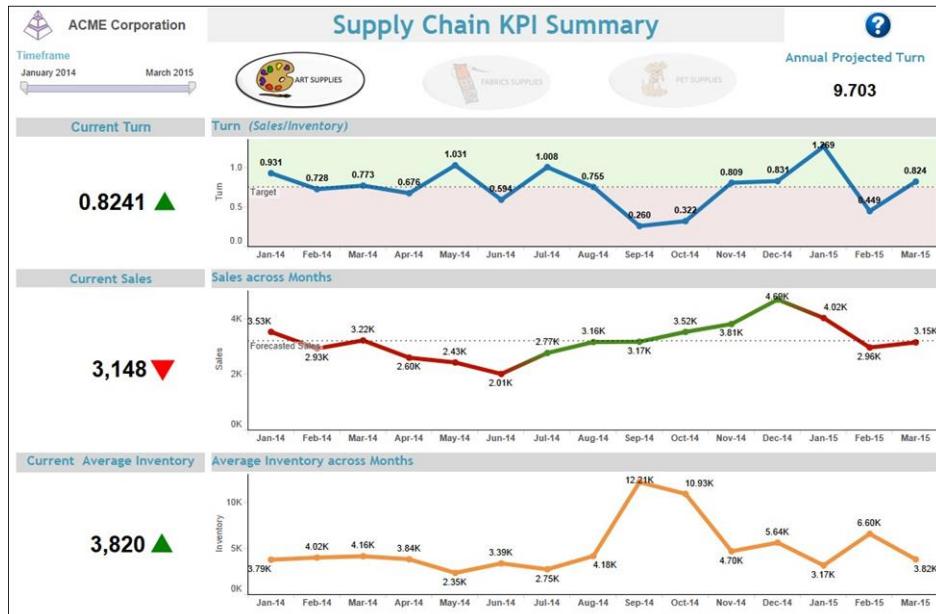


Figure 6. USEReady sample dashboard 1

1.2. A in MAD: Analyze

If a particular KPI is of more interest to the users, they can drill into that KPI and gather more information about it in the Analyze layer. They can analyze the KPI in further detail with the help of filters or time frame analysis to gather deeper insights into it. Analysts tend to spend the majority of their time at this level and drill down for details or move up to monitor level depending on their needs.

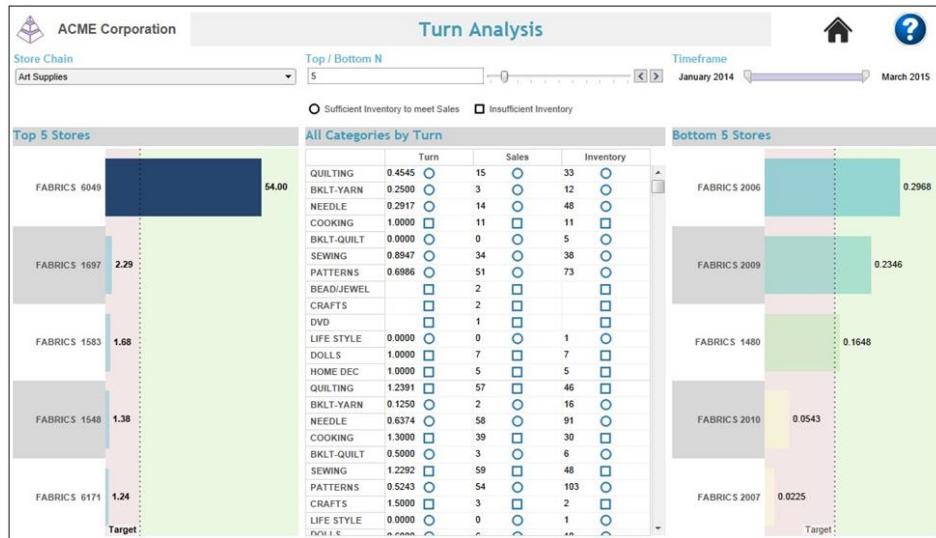


Figure 7. USEReady sample dashboard 2

1.3. D in MAD: Detail

Detail Transaction level detail is available at this level. It is the section where deep dive analysis can be performed. Granular data on all previous insights is available at this level.

| Item Details | | | | | | | |
|------------------------------------|----------------|--|--------|-------|----------------|-----------|------------|
| Items details - STORE 2313- NEEDLE | | | | | | | |
| Subcategory | Citemno | Items | Turn | Sales | Forecast Sales | Inventory | Avg. Price |
| 1 | 9781446303917 | STITCH ALPHABETS & NUMBERS | 0.0000 | 0 | 0 | 1 | \$24.00 |
| | 9781454701378 | COMPLETE BK OF CROCHET STITCH DESIGN THE | 0.0000 | 0 | 0 | 1 | \$19.00 |
| | 9781573675895 | CROSS STITCH CHRISTMAS CREATIONS | 1.0000 | 1 | 0 | 1 | \$14.00 |
| | 9781596356177 | CROSS STITCH TREASURES FOR CHILDREN | 0.0000 | 0 | 0 | 1 | \$14.00 |
| | 9781844487462 | INACTIVE LIBERTY CROSS STITCH | 0.0000 | 0 | 0 | 1 | \$21.00 |
| 2 | 9780811710930 | EMBROIDERY BASICS | Null | 1 | 0 | Null | \$19.00 |
| | 9780811712860 | ART OF BOUTIS THE | 0.3333 | 1 | 1 | 3 | \$22.00 |
| | 9781454703631 | DOODLE STITCHING EMBROIDERY & BEYOND | 0.0000 | 0 | 1 | 2 | \$14.00 |
| | 9781454708595 | DOODLE STITCHING THE HOLIDAY MOTIF CLCTN | 0.3333 | 1 | 1 | 3 | \$16.00 |
| | 9781573675734 | SUNBONNET SUE REDWRK COLLECT ALL SEASONS | 0.0000 | 0 | 0 | 1 | \$14.00 |
| | 9781574215007 | EMBROIDERY | Null | 1 | 1 | Null | \$9.00 |
| | 9781574215092 | 500 SIMPLY CHARMING DESIGNS FOR EMBROIDERY | 0.6667 | 4 | 2 | 6 | \$14.00 |
| | 97816000595813 | DOODLE STITCHING THE MOTIF COLLECTION | 1.0000 | 4 | 3 | 4 | \$14.00 |
| | 9781607055723 | FREE FORM EMBROIDERY | Null | 1 | 2 | Null | \$29.00 |
| | 9781607056633 | EMBROIDERED & EMBELLISHED | 1.0000 | 2 | 2 | 2 | \$26.00 |
| 3 | 9781607058333 | GIRLS GET STITCHING | 0.0000 | 0 | 1 | 2 | \$21.00 |
| | 9781607058991 | TEENY TINY MENAGERIE | 1.0000 | 3 | 2 | 3 | \$21.00 |
| | 9781603336100 | BEAD EMBROIDERY STITCH SAMPLES MOTIFS | 1.0000 | 4 | 2 | 4 | \$17.00 |
| | 9781620337288 | ARTFULLY EMBROIDERED | 0.0000 | 0 | 2 | 1 | \$24.00 |
| | 9781782210610 | MODERN SASHIKO | 0.0000 | 0 | 1 | 1 | \$14.00 |
| | 9781782211617 | A Z OF EMBROIDERY STITCHES | 0.0000 | 0 | 0 | 1 | \$19.00 |
| | 9781782211778 | A Z OF STUMPWORK | 0.0000 | 0 | 0 | 2 | \$19.00 |
| | 9781844487004 | WHITEWORK | Null | 1 | 0 | Null | \$21.00 |
| | 9781574219180 | RAG RUGS | 0.0000 | 0 | 0 | 2 | \$12.00 |
| | 9781881982821 | WIDE CUT PRIMITIVE RUG HOOKING | 1.0000 | 1 | 1 | 1 | \$24.00 |
| 7 | 1579906443 | HIP KNIT HATS | Null | 1 | 1 | Null | \$24.00 |
| | 9780312663334 | SIMPLE KNITTING | 0.0000 | 0 | 1 | 1 | \$24.00 |

Figure 8. USEReady sample dashboard 3

1.4. Implementing MAD

Creating an efficient dashboard requires strategically applying the MAD lens to both the stages of dashboard creation: the visualization and the data aggregation stage.

When applied first at the visualization stage to gather and bucket KPI's at different levels, MAD helps create a roadmap for subsequent data aggregation on the database or ETL (Extract-Transform-Learn process) side.

Quite often pulling all transaction data to compute information at the Monitor or Analyze level hinders dashboard performance and results in slower page load time.

Implementing MAD framework can help structure the data for dashboards so that its granularity increases progressively as we move from Monitor to Analyze to Detail levels. Each level could potentially have its own data source.

When the number of records being pulled at the Monitor and Analyze level are specific to the KPI's being displayed, the dataset sizes become more manageable.

In other words, this translates into faster page load times as the BI tools are pulling only a few hundred to thousand records for display, as opposed to pulling all transaction data.

The MAD framework combined with some general dashboard-creation best practices can vastly enhance the utility of a dashboard. Here are some pointers for creating good dashboards:

1. Display only the metrics that are most relevant to the target audience.
2. Maintain a natural information flow throughout. Humans are typically trained to read left through right, top to bottom. Hence, these are also good signposts for the direction of

information flow in a dashboard. Any deviation from this flow of thought usually confuses (and sometimes frustrates) the user and perhaps takes away from the essence of the information being conveyed.

3. Important metrics on charts should have enough space and be made conspicuous to catch the user's attention.

4. Generally speaking, 'less is more' and 'keep it simple' are good rules to follow.

5. Minimize the use of tabs while maintaining clarity and readability.

6. Use colors consistently for same or similar metrics, for e.g. all price fluctuations can be shown in green, all geographies can be shown in red etc. Colors have a unique effect on the way we process information and positively enhance the way users correlate data.

7. Where possible and relevant, create dashboards that allow for user interactivity. For instance, through filters, drill through capabilities, time frame analysis etc. dashboards that provide the user the ability to understand their business or to find solutions to their business problem in insightful ways, make for a very positive user experience.

2. Long Pole in the Tent – Optimizing Workbooks

Long Pole in the Tent "LPiT" is a framework used to optimize Tableau workbooks on both the Desktop and Server. The LPiT is a concept of identifying and remediating the worst offenders in a step by step process to improve performance.

The process should be adopted for all workbooks and dashboards, not just ones with obvious slowness. The cumulative impact of hundreds or even thousands of workbooks on the server can be felt by all, so including the

process for authors and site administrators maintain cadence on performance benefits all.

- Optimize your dashboard on Tableau Desktop before publishing to server, using performance analyzer to identify and remediate bottlenecks
- Use TabJolt with performance analyzer to identify and remediate Tableau Server issues related to published dashboards

2.1. Desktop Optimization

As a Tableau dashboard author there are many factors to consider when designing a visual analytics experience that is insightful, easy to use and performant. Depending upon the data ingested and organizational standards, what's considered performant for one may not be the same for another.

Typically, users interacting with a dashboard expect calculations and filtering to take just a couple seconds, if not instantly. To design well performing dashboards requires education, as well as practice. Running performance recordings of your dashboards before publishing for community consumption can identify the problem areas for remediation.

We will run through the steps of performance recording and identifying the Long Pole(s) in the Tent, that after remediation can make the user experience exponentially better.

To start, identify a Tableau workbook in which you would want to record performance. For reference, we will include screenshots of this process being performed through Tableau desktop on a dashboard we created.

First, if you have not already done so, familiarize yourself with the workbook, take notice of the different filtering options,

scenarios in which calculations may run as selections are made, as well as any built in actions, such as selecting a high-level KPI and being taken to a detailed worksheet.

Now add a new blank worksheet, saving and closing out of the workbook and Tableau, as you want to clear any cache from your last session that impact the results of your recording.

Next, reopen the workbook and you should be brought to the blank worksheet you just added. Now go to the top menu and select “Help”, “Settings and Performance”. To begin recording click on “Start Performance Recording”.

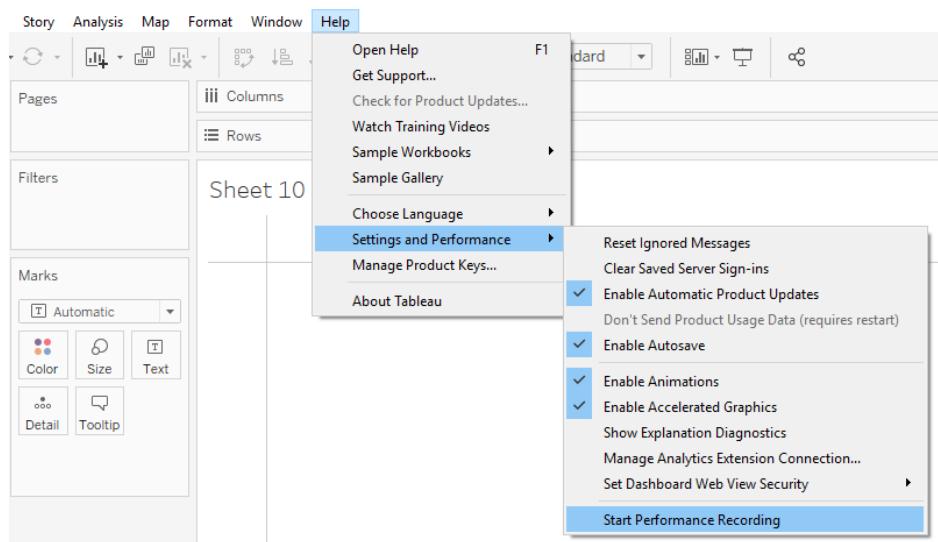


Figure 9. Tableau Desktop Help Feature, (Tableau Desktop, 2020)

Next, click on the worksheet or dashboard which normally appears when you open the workbook.

Now interact with the dashboard, as you would anticipate others to interact. Navigate through the different filtering options, click on the visualizations to highlight different sections, as well as returning to the previous state.

Also, if the dashboard has actions defined to take the user to a different dashboard, select those as well, remembering to return to previous dashboard. All the while you are making these selections, Tableau Desktop is tracking your actions and how long each of the actions took.

Once you are finished with the activities you want to record, return to “Help”, “Settings and Performance”, this time selecting “Stop Performance Recording”. Tableau will compile the performance data then open a secondary instance of Desktop with a Performance Summary dashboard. We can see the results in the screenshot below.

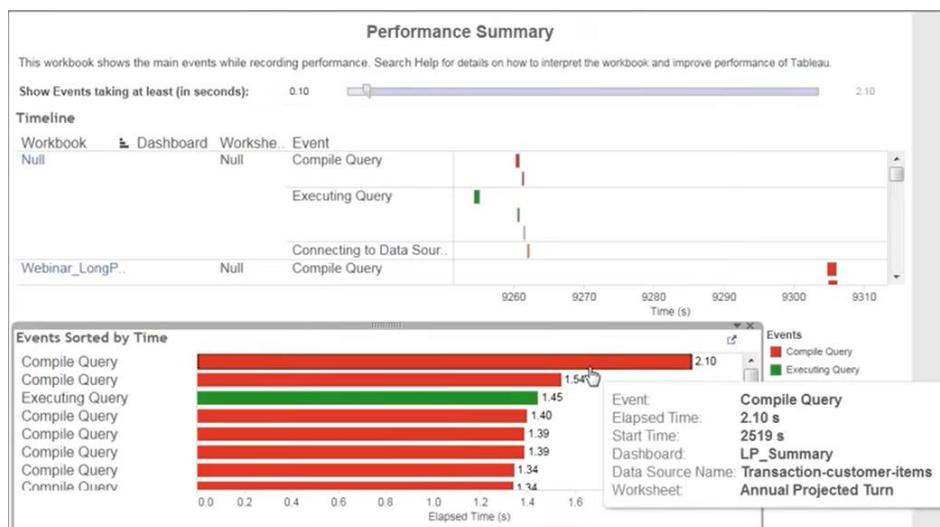


Figure 10. Tableau Performance Summary for “ACME Corporation” sample workbook created by USEReady

‘The Long Pole in the Tent’ is the query or connection activity that takes the longest to perform. As highlighted in the previous screenshot, the longest running query 2.1 seconds is Compile query on our “LP_Summary” dashboard.

Compiling of a query will be cached by Tableau for the next user, so if the longest running query is to compile, it can be excluded from your performance review, as it does not have a significant impact on the workbook performance. You can exclude an event by hovering over it, right clicking and

choosing the option to “Exclude”. After this exclusion, the next event then becomes the Longest Pole in the Tent. If needed, continue excluding any Compile Queries that might be the longest running events.

After excluding compile queries, we look at the next longest running event, which happens to be an Executing Query taking 1.45 seconds.

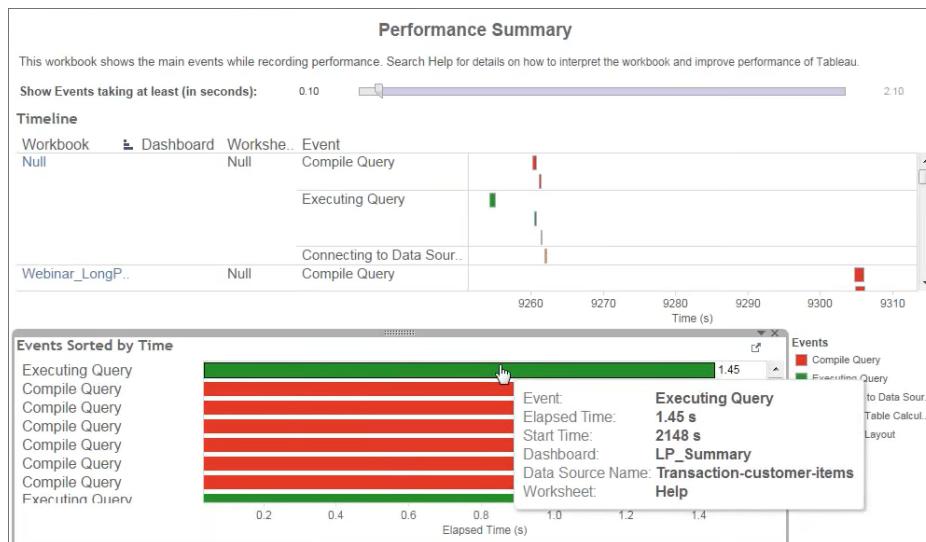


Figure 11. Tableau Performance Summary for “ACME Corporation” sample workbook created by USEReady

We can review the details of the Executing Query by hovering over the Elapsed Time, right clicking and choosing “Copy” and “Data”. Then paste that data into Notepad, which will look something like this:



```
1 Command
2 "(restrict
3   (order
4     (aggregate
5       (project
6         (select
7           (project
8             (table [Extract].[Extract])
9             (
10               ([tmn:dtrs:qk]
11                 (to_datetime
12                   (truncmonth [dtrs])
13                 )
14               )
15               ([ccategory] [ccategory])
16             )
17           )
18           (and
19             (>= [tmn:dtrs:qk] #2014-01-08 00:00:00#)
20             (<= [tmn:dtrs:qk] #2015-03-01 00:00:00#)
21           )
22         )
23         (
24           ([ccategory] [ccategory])
25         )
26       )
27       (
28         ([ccategory] [ccategory])
29       )
30     )
31   )
32   (
33     ([ccategory] asc)
34   )
35 )
36 ([ccategory])
37 "
38 "
39 "
```

Figure 12. Event Data represented in Notepad

We see that the time is used processes a query called “ccategory”. When I refer back to workbook, and the worksheet called “Help” I can see that it is referring to a custom calculation with a large string manipulation perform the calculation on the database or create a parameter with the associated options listed out.

If I am able to make these changes to the calculation, improve the related performance that Long Pole in the Tent is now eliminated, and you can move onto the next.

The causes for performance degradation within a workbook can be numerous, but with the foundational skills to isolate the cause and take the needed steps to remediate the Explorers and Viewers of the associated dashboards will have a better

user experience and the workbook will consume less resources when published on the Tableau Server, positively contributing to the Agility of the environment.

For more information on running performance recordings on desktop workbooks and dashboards, refer to Tableau help at help.tableau.com/current/pro/desktop/en-us/perf_record_create_desktop.htm

2.2. Server Optimization

Once a dashboard is published on the Tableau Server, the negative impacts of poor performance can be multiplied by a number of factors including the concurrent users accessing the dashboard. The Occurring after a dashboard is published up to the Tableau Server.

TabJolt, a command line utility released by Tableau and available in the public domain. It is available to help Tableau Server Administrators gain greater visibility into the performance of the server and see how it scales with different workloads. It can also be used by dashboard authors from the desktop, to load test the different views once the dashboard has been published on Tableau Server.

View and Interact load test setting the load scenario to the number of concurrent Tableau Interactors and Tableau Viewers to test.

These numbers would likely vary on different dashboards. For example, a dashboard containing data used to plan each day's activities, would likely see a high number of concurrent users early in morning and perhaps little usage later in the day.

Information on installing and using TabJolt for load testing can be found at help.tableau.com/current/blueprint/en-us/bp_load_testing.htm

TabJolt is available for installation on GitHub along with links to YouTube videos to walk you through using
github.com/tableau/tabjolt

CHAPTER 3

DEVELOPING ANALYTICS PROFICIENCY

After deploying an Agile Tableau implementation and IT creating a program for monitoring and maintenance, next you will look to define best practices for putting the power of discovery in the hands of the business and enabling the end-user community.

As a leader in Self-Serve Analytics, Tableau Software is designed to put the power of data and insights into the hands of many. Whether you are part of a reporting/analytics team or a business user looking for easy access to make quick decisions, Tableau empowers both the author and the explorer or viewer. While it is nowhere near as complex as most legacy reporting platforms, the more knowledgeable you are of Tableau's best practices and features, the better and more insightful the experience will be.

By establishing standards for different roles and enabling Tableau users with training and best practices, not only will the analytics consumers benefit from reporting that's easier to navigate and interpret, but IT will now be able to better support a high-performing environment for all users.

The challenge for many organizations is determining who should be trained and to what extent. All too often, organizations forgo purchasing formalized training altogether because at the time of a license purchase, the user is not identified or the extent of the usage of Tableau is unknown.

While there is a multitude of reasons why Tableau users would be undereducated, including the cost of classroom training, the key for BI leadership and stakeholders is being knowledgeable of the available enablement and understanding when formal curriculum training is needed or when the use of free materials provides the required learning.

Tableau has defined the recommended skill needed for different user roles and those definitions can be located at help.tableau.com/current/blueprint/en-us/bp_skills_tableau_education_role.htm

Large enterprises often develop a Tableau Center of Excellence/Enablement (COE) to support their community of Creators, Explorers, and Viewers. Creating a COE can also be beneficial to mid-sized and small organizations since its existence formalizes the relationship between IT and the business, sets standards for proficiency of users, and is often the starting place for developing a community for people to share insights and receive support. The idea of creating or even sponsoring a COE can be daunting, even though there are enough available resources to leverage and technology created to support the related activities.

For the remainder of this chapter, we will be reviewing the key areas of establishing and evolving Tableau proficiency, including advancing education, measuring the skillsets and activities of users, and realizing the importance of sharing analytics best practices. To these topics, we will be adding information on how the Community Center provides a space to advance proficiency with its included content, as well as options for customization.

1. Education

Data, being skillfully evaluated by an analyst or decision maker may be an organization's greatest asset. Whether using Tableau or another visual analytics platform, an active approach at continually developing skills is required to fully realize the benefits of valuable data.

Many organizations take pride in providing access to data to larger or different groups, as compared to others or compared to what they may have done in the past. The key to benefitting from providing greater access to data is developing a comprehensive education program to support the organization's different business roles. There are numerous platforms with available Tableau training, both free and for a fee that should be considered when developing an education plan for enabling users.

In addition to Tableau-specific skills, users need to understand the company-specific processes around working with data and become comfortable with technologies that help them develop data-related skills. Given the vast diversity of skills and backgrounds of employees in an organization, there is no one-size-fits-all model for training and enabling individuals.

With years of experience working with customers to optimize the end-user experience, we recognize that almost all occurrences of less than optimal performance has been related to users publishing content that has been poorly designed or modified. Whether capturing more data than needed in queries or not correctly integrating various worksheets, not only is the consumer experience unpleasant, multiple dashboards, but the consumer is consuming more server resources than needed, creating a slower experience for all.

The challenge for many enterprises is siloed groups and independent users who are not aware of the enablement resources available to them. Optimally, an organization would have developed a Tableau or more encompassing Analytics COE. However, just because a COE exists does not mean it supports the entire enterprise or that it has the needed mechanisms to effectively communicate to all users with respect to the available training and the process to request it.

As a good starting point to build a Tableau enablement strategy for users, Tableau offers a variety of curriculum-based, in-person, or virtual training classes led by an instructor or computer-based, self-guided mode. Additionally, Tableau offers free videos for someone who is deciding if Tableau is the right platform for their use case. Information on all Tableau's offerings can be found at www.tableau.com/learn.

In addition to the training available through Tableau, many other for-fee and free-learning tools offer training on Tableau. Often, these training systems offer à la carte options allowing users to select specific functional areas on which to focus their learning efforts. A common oversight is an organization's

existing learning system that may offer Tableau training as one of the many options.

Whether Tableau or third-party hosted, for a fee or for free, there is a multitude of education options available. So why isn't everyone in your organization a Tableau expert? With so many available training options and formats, users often get stuck in decision paralysis. If they struggle to procure fee-based training, they often aren't aware of the other options. Or if they are searching the Internet, finding reliable resources can be a challenge.

The key to enabling Tableau users with the right training requires the following:

- Define the various user roles within your organization, as well as the appropriate learning for each. Tableau has defined out the learning paths for the different types of roles and guidance can be found at www.tableau.com/learn/learning-paths
- Identify and leverage any existing training offerings, which requires a partnership with the organization's learning management team.
- Most importantly, communicate the available training to all current and future Tableau users and update regularly as new features are introduced.

To assist Business Intelligence and COE leaders, the Community Center offers a customizable one-stop shop to define the Tableau training strategy in your organization and easily share that information with all Tableau users.

The Community Moderator, in partnership with other analytics stakeholders, should define a holistic education and skill-building plan for all Tableau users. An enablement plan that pre-exists in your organization can be executed by leveraging the Community Center, or the portal can be used as a framework on which to build your plan.

The screenshot shows the 'EDUCATION' section of the Tableau Community Center. On the left, there's a sidebar with links like Home, Education (which is selected and highlighted with a red box), Skill Belts in a Box, Analytics Showcase, Discussion Forums, Communications, User Groups, Events & Webinars, and Help & Support. The main area has a search bar at the top right. Below it, a table lists 11 training classes. The columns are: Class, Class Details, Open Registration Info / Schedule, Private Training Info, and Computer Based Option. The rows include: Desktop I, Desktop II, Desktop I & II, Desktop III, Prep I, Visual Analytics, Web Authoring, Art + Data, Custom Data Workshop, Server Administration, and Server Architecture. Most classes are listed as 'In-Person' or 'Live Virtual'. Under 'Private Training Info', all entries show 'On-Site' except for 'eLearning' next to 'Web Authoring'. Under 'Computer Based Option', all entries show 'eLearning' except for 'On-Site' next to 'Server Administration'. At the bottom of the table, it says 'Showing 1 to 11 of 11 entries'.

| Class | Class Details | Open Registration Info / Schedule | Private Training Info | Computer Based Option | |
|-----------------------|----------------|-----------------------------------|-----------------------|-----------------------|-----------|
| Desktop I | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Desktop II | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Desktop I & II | Course Details | In-Person | Live Virtual | On-Site | |
| Desktop III | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Prep I | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Visual Analytics | Course Details | In-Person | Live Virtual | On-Site | |
| Web Authoring | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Art + Data | Course Details | In-Person | Live Virtual | On-Site | |
| Custom Data Workshop | Course Details | In-Person | Live Virtual | On-Site | |
| Server Administration | Course Details | In-Person | Live Virtual | On-Site | |
| Server Architecture | Course Details | In-Person | Live Virtual | On-Site | |

Figure 13. Education Module, Community Center

Pre-populated with Tableau training course descriptions and information, the Education section of the Community Center can be customized by the Community Moderator.

| Class (hover over for description) | Class Details and Topics Covered | Open Registration Info / Schedule | Open Registration Info / Schedule | Private Training Info | Computer Based Option |
|------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|-----------------------|-----------------------|
| Desktop I | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Desktop II | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Desktop I & II | Course Details | In-Person | Live Virtual | On-Site | |
| Desktop III | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Prep I | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Visual Analytics | Course Details | In-Person | Live Virtual | On-Site | |
| Web Authoring | Course Details | In-Person | Live Virtual | On-Site | eLearning |
| Art + Data | Course Details | In-Person | Live Virtual | On-Site | |
| Custom Data Workshop | Course Details | In-Person | Live Virtual | On-Site | |
| Server Administration | Course Details | In-Person | Live Virtual | On-Site | |
| Server Architecture | Course Details | In-Person | Live Virtual | On-Site | |

Figure 14. Tableau Training Classes

In the form of an interactive table, the above default section will be included in the Education Section on all Community Centers. All information and links refer to information on

www.tableau.com/learn/classroom and
www.tableau.com/learn/training/elearning

Below are the recommended education paths for the Tableau User role:

| | Creators | Explorers | Viewers |
|----------------|--|---|---|
| Training | Instructor led Classes eLearning Instructor led Custom Workshop | Web Authoring Class eLearning Instructor led Custom Workshop | Free Training Videos Individually published interaction guides |
| Certifications | Desktop Specialist (after completing Desktop I or equivalent learning) Desktop Qualified Associate (after completing Desktop II) Desktop Certified Professional (after completing Desktop III and Visual Analytics) | Desktop Specialist (after completing Desktop I or equivalent learning) | |

Figure 15. Training and Certification Recommendations

Whether replacing the Tableau-delivered training or supplementing with another, the Moderator can easily add additional information from the Education section of the Community Center. Following are examples of additional information to be considered:

- Links to the enterprises' Learning Management System or Learning Team
- Links to an external Learning Management System such as LinkedIn Learning, Udemy, Coursera, and so on
- Company- or department-specific information on how to request or purchase training
- Organization-specific education paths by roles
- E-mail or contact details on how a user could get more information

2. Measurement

We mentioned in Chapter 2 (Creating an Agile Environment) that this Practitioner's Guide will deviate slightly from Tableau Blueprint as it relates to the concept of Measurement. Within Measurement, Blueprint places the Server Administrator and Site Administrator activity of measuring license usage, identifying resource-intensive workbooks, archiving unused workbooks, and evaluating extract refreshes against peak utilization.

We have included these topics as part of Agility, because these activities are performed by a smaller group of individuals acting as gatekeepers and who impact the performance of a Tableau implementation.

In this Practitioner's Guide, the concept of Measurement takes a wider meaning with a broader audience of participants in mind. As more organizations embrace self-service analytics, Business Intelligence leadership recognizes the benefits of faster insights but also the risks in not establishing a standard of proficiency. Once a standard is established, the next or larger challenge is motivating users to advance their skills and then measuring success throughout the enterprise.

You may be thinking that Tableau learning options were just reviewed as part of Education and that should be enough to ensure proficiency. Unfortunately, it is not. Many large enterprises often leave it to individual lines of business or departments to fund and coordinate training, which leads to a wide discrepancy in skills between individuals in the same role but working in different groups.

Organizations that prioritize analytics and insights need to define a common standard and measure against those standards, recognizing that fee-based resources are not always available to all Tableau users.

An additional challenge when trying to develop the proficiency of Tableau users is providing the motivation to participate. Just offering a wide variety of learning options may not be enough. With the busy work schedules faced by most today, setting aside time for learning often gets overlooked.

The benefits of learning or a what's-in-it-for-me mindset may be elusive for many, while the organization touts the achievements of a few "data visualization rock stars" because the broader community lags so far behind.

Overcoming these challenges and seeing measurable increases in proficiency can be as simple as implementing new thought processes and supporting tools. Whether trying to sell a product, advance social change, or increase an analytic community's Tableau proficiency, an effective way is to incorporate fun. Gamification of activities or learning has been proven to increase participation by unlocking an individual's desire to have fun and compete against simple goals.

An example of this is in 2009 when Volkswagen executed on what they referred to as the Fun Theory (The Fun Theory, 2015), a concept to increase the visibility of their efforts in producing environmentally friendly technologies. Volkswagen began its campaign by asking this question: If they make it fun, can they get more people to choose the stairs over the escalator?

They produced a viral video showing their efforts to convert the steps exiting the Odenplan subway station in Stockholm into a working piano and then incorporating footage of people choosing the stairs over the escalator. Volkswagen encouraged the public to produce and post their own videos, offering a prize for the best. The reported results showed that when the stairs were musical black-and-white piano keys, usage increased 66% over the escalator.

A good way to incorporate fun into learning is with the use of Skill Belt.

Embedded in the Community Center, Skill Belt encourages user participation by defining relevant learning activities that, when completed, add to an individual's points that can be measured both personally and against the larger community. Tableau technical skills are increased, as well as skills related to a specific functional area such as analytics for Financial Services, Healthcare, and so on.

The skill-building exercises vary in duration and interactivity, which lets learners choose their own paths to proficiency. The use of recognition awards encourages activities such as volunteering to help others with Tableau challenges or identifying a significant business impact using Tableau. Sharing a leaderboard fosters healthy competition within departments and the enterprise while also identifying the experts within the community.

The screenshot shows the Tableau Community interface with the 'Skill Belt' section highlighted. At the top, there's a navigation bar with 'COMMUNITY', 'Summary', 'Skill Belts', 'Merit Badges', 'Awards', and 'Leaderboard'. Below that is a search bar 'Choose your galaxy' and a dropdown 'Tableau'. On the right, there's a profile picture for 'Jeff' and a 'Jeff' link. The main area features a 'Skill Belt |' section with a progress bar showing '0 / 6 Skill Belts'. A button 'Resume your Jedi training' is visible. To the left is a profile box for 'Jeff El Koury, Senior Program Manager' with a rank of '1' and '1620 Points'. Below this are sections for 'Merit Badges |' (0 / 2 Badges, 'Collect first Badge') and 'Awards | You are a Tableau Teller' (2 / 6 Awards, 'Collect remaining Awards').

The screenshot displays the Tableau Community Skill Belt application. It includes a navigation bar with 'COMMUNITY', 'Summary', 'Skill Belts', 'Merit Badges', 'Awards', and 'Leaderboard'. A search bar 'Choose your galaxy' and a dropdown 'Tableau' are also present. On the right, there's a user profile for 'Jeff' with a picture and the name 'Jeff El Koury, Senior Program Manager'. The main content area shows a 'Skill Belt |' section with a progress bar indicating '0 / 6 Skill Belts' and a button 'Resume your Jedi training'. To the left is a profile box for 'Jeff El Koury' with a rank of '1' and '1620 Points'. Below this are sections for 'Merit Badges |' (0 / 2 Badges, 'Collect first Badge') and 'Awards | You are a Tableau Teller' (2 / 6 Awards, 'Collect remaining Awards').

Figure 16. Skill Belt

In the Skill Belt application, learning is divided into three categories that include individual skill building and positively impact the business and its peers.

- Skill Belts – A series of incremental achievements earned after collecting the required number of points. Skill Belt points are earned after completing and verifying Tableau learning modules. The subject matter is consistent with increasing general Tableau and analytics competencies. All Tableau users benefit from collecting points and increasing their Skill Belt level.
- Merit Badges – Earned when a series of learning modules pertaining to a specific function area are completed. This can be customized for different organizations or functional teams. For example, learning modules specific to financial reporting may be relevant to some, but others may be interested in building skills in a different functional area.
- Awards – Encourage Tableau users to put their skills and learning to good use by volunteering to help others and seeking opportunities to use Tableau to make significant contributions to the organization.

The end-user experience with Skill Belts is designed to be engaging yet simple to navigate. Upon launching the application, a user is taken to a personal summary dashboard. The user will see his or her Skill Belts rank in the enterprise, the number of points collected, and any progress toward achieving a Black Belt. Also displayed on the summary page are the Merit Badges and Awards received.

The screenshot shows the Tableau Blueprint Summary dashboard. At the top, there is a navigation bar with tabs for "Summary" (which is selected), "Skill Belts", "Merits Badges", "Awards", and "Leaderboard". To the right of the navigation bar are links for "Choose your galaxy", "Tableau", and a user profile for "Jeff". Below the navigation bar, there is a summary card for "Jeff El Koury" (Senior Program Manager) with a rank of "2" and "1400 Points". The main content area is divided into three sections: "Skill Belt" (with a progress bar for "Youngling" and a call to action "Resume your Jedi training"), "Merit Badges" (with a progress bar for "Tableau Prep Guru" and a call to action "Collect remaining Badges"), and "Awards" (with a progress bar for "Tableau Teller" and a call to action "Collect remaining Awards").

Figure 17. Summary Section, Skill Belt

From the Summary dashboard, Skill Belts can be accessed either from the top navigation bar or by clicking on the button to resume training.

Once in the Skill Belts section, your current attainment will be shown at the top, with all the available content listed below. You can scroll through the listing of modules or search on a specific module or topic. Modules not completed will show 0% with an option to “Start,” and completed modules will show 100% with an option to retake.

Skill Belts

The screenshot shows the 'Skill Belts' section of the Tableau Community Center. At the top, there is a horizontal progress bar representing the Jedi belt levels: Youngling, Jedi Initiate, Jedi Padawan, Jedi Knight, Jedi Master, and Jedi Grand Master. Each level has a circular progress indicator showing 0%. Below the progress bar, there are three content modules:

- Applying Graphic Design Principles to Dashboards**: Hands On | 60 minutes. Description: In this webinar, we will consider how common design mistakes can diminish visual effectiveness. Watch to learn how placement, weight, font choice, and practical graphic design techniques can maximize the impact of your visualizations. Status: 100% complete. Action: Retake >
- Wikimedia Is a Treasure Trove**: Blog | 15 minutes. Description: Wikipedia is perceived to be so important that an article in Wired magazine even ran an article headlined "Is Wikipedia As Important As the Pyramids?" The piece stated: "The sheer monumental compilation of 19 million entries in 282 languages has already had a greater cultural impact worldwide than most of the other 936 sites recognized for 'outstanding universal value' on the World Heritage list." Status: 0% complete. Action: Start >
- 5 stylish chart types you should use**: Blog | 30 minutes. Description: As our Tableau community members show every day, there are endless inventive ways to visualize your data. And while bar graphs and pie charts have their place, sometimes an advanced chart can be the perfect fit to convey the most important insights, on sight. Here we offer 5 advanced chart types to bring your data to life! Status: 0% complete. Action: Start >

Figure 18. Skills Belts Section, Skill Belt

Categories of content:

- Hands On
- Suggested Readings
- White Paper
- Milestone
- Best Practices
- Above & Beyond
- Feedback
- Challenge Exercise
- Blog
- Achievement
- Introduction
- Story Telling

Upon completion of the modules, you will be either presented with a small quiz to test your learning or be asked to verify that you have completed the content or activities.

The Community Center and Skill Belt Moderator, as introduced in Chapter 1, can easily add modules, add quizzes, and adjust the criteria for obtaining the next level belt.

Like Skill Belts, the Merit Badges and Awards sections are populated with modules and activities chosen by the Moderator for relevance to users and business impacts, with the Moderator configuring the criteria for achievement.

Merit Badges

The screenshot shows the 'Merits Badges' tab selected in the navigation bar. There are three completed badges listed:

- Finance expert**: Hands On | 15 minutes. A Now Way To Visualize an Income Statement. If you are in finance this is a must watch! I challenge you to make a balance sheet based on this vid!
- Tableau Prep Guru**: Hands On | 10 minutes. We're all in the never-ending search for resources that will help us pick the "best" chart for the situation. The Financial Times Graphics team created the Visual Vocabulary to help all of us make better chart choices..
- Best Practices**: Best Practices | 10 minutes. Join this webinar to see how our Finance Team uses Tableau to visually analyse and report all of our financial data. See how we combine data from our financial technologies and then analyse that data within Tableau to discover new insights that empower our finance team and key business stakeholders.

Figure 19. Merit Badges Section, Skill Belt

Awards

The screenshot shows the 'Awards' tab selected in the navigation bar. There are four awards listed:

- Tableau Medic**: Achievement | 240 minutes. Help out your peers and go above and beyond the volunteerism requirement by working 4 office hours at your company. Doing this on your own? Host office hours on the slack channel and help your virtual peers.
- Tableau Nurse**: Achievement | 480 minutes. Help out your peers and go above and beyond the volunteerism requirement by working 8 office hours at your company. Doing this on your own? Host office hours on the slack channel and help your virtual peers.
- Tableau Doctor**: Achievement | 720 minutes. Help out your peers and go above and beyond the volunteerism requirement by working 12 office hours at your company. Doing this on your own? Host office hours on the slack channel and help your virtual peers.
- Tableau Teller**: Achievement | minutes. Create \$250,000 of value from identifying savings (e.g., lower expenses), opportunities (e.g., higher revenue) or avoiding risk (e.g., fines).

Figure 20. Awards Section, Skill Belt

Leaderboard

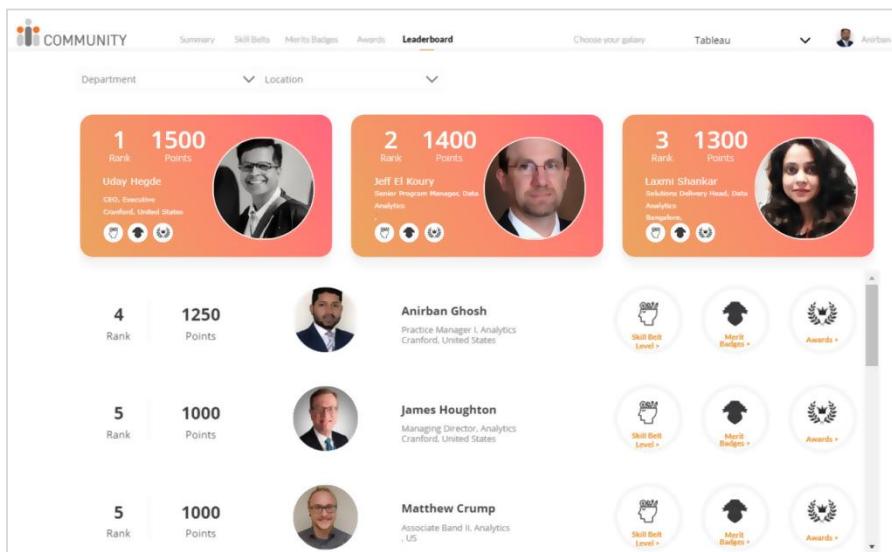


Figure 21. Leaderboard Section, Skill Belt

The leaderboard displays the ranking of the top Skill Belt point holders, highlighting the first through third place leaders at the top. Rankings default to the enterprise but can be filtered by Department/Line-of-Business or Location.

Individual users become motivated to improve their skills and increase their ranking. New Data Rock Stars are identified as the analytics community grows. The Community Moderator will have access to proficiency reports showing the progress and usage of all users.

3. Analytics Best Practices

Enabling Tableau users with analytics best practices supplements their learning and helps build a common standard for formatting in an organization. Best practices could include standards and processes for the discovery, interpretation, and presentation of data. They could include style guides, color palette, and templates for reporting.

common metrics. This type of information should be shared and readily accessible to all Tableau users.

The Community Center Analytics Showcase contains many examples of different types of dashboards, which are available for download and can be used to connect to your data. Most often these dashboards are used for reverse engineering, which holds two key benefits. The author has access to a best practice visualization they can apply to their data, and by breaking down and rebuilding the visualizations, additional learning occurs.

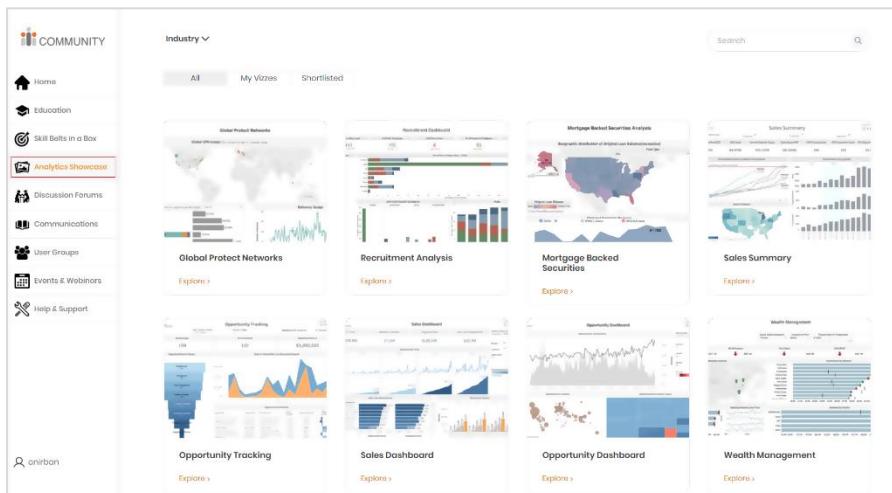


Figure 22. Analytics Showcase Module, Community Center

The pre-populated best practice dashboard examples span verticals that apply to most enterprises such as Sales, HR, IT, Operations, Recruitment, and more. There are also dashboards aligned to specific industry topics such as financial services, investment, accounting, and healthcare.

After identifying a dashboard of interest, click on Explore to open and interact with the visualizations. Because they don't include any proprietary information, the pre-populated dashboards are fully downloadable, which include the Images, the Tableau Workbook, and the underlying data.

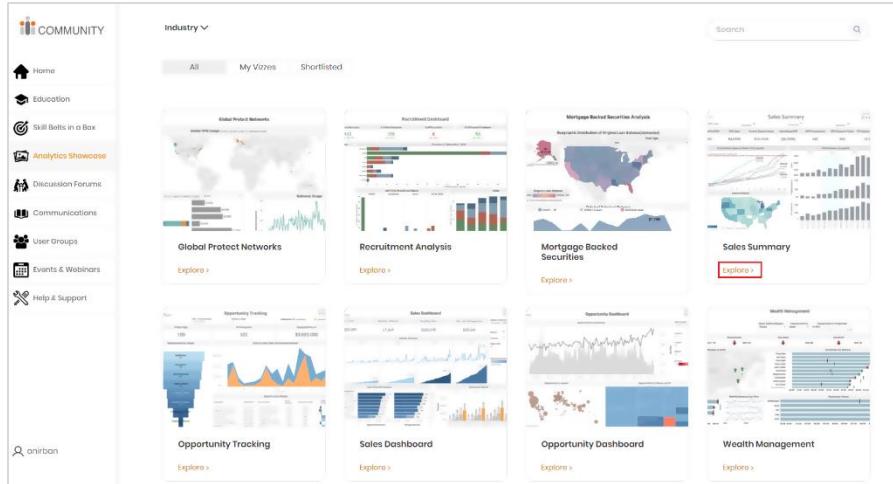


Figure 23. Explore Option, Analytics Showcase Module

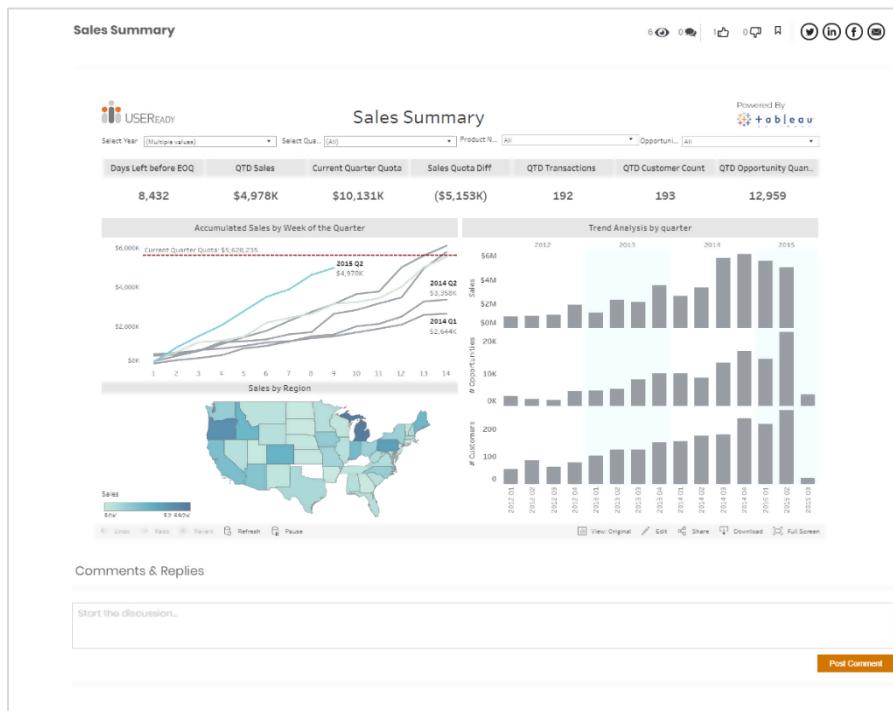


Figure 24. Interactive Tableau Dashboard in Community Center

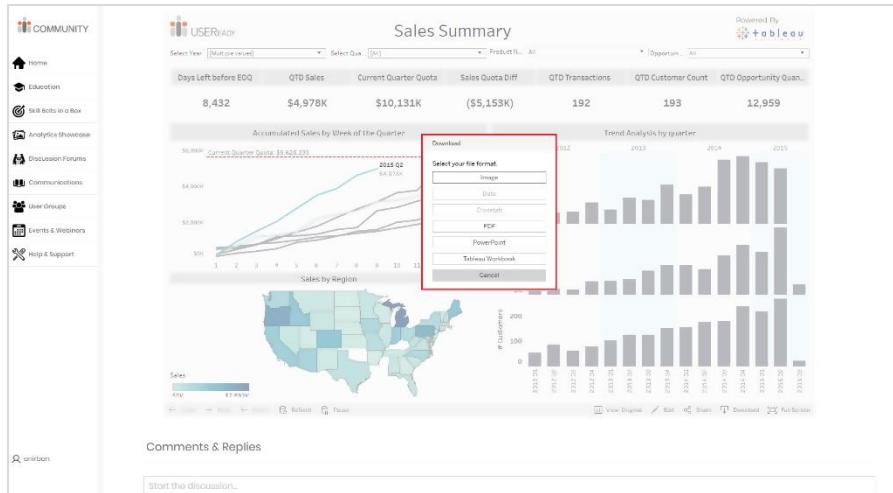


Figure 25. Tableau Dashboard Download options, user-level security enabled in Community Center

The Moderator for your Community Center can also post dashboards representing best practices in your organization. For this instance, the dashboard, visualization, and underlining data will remain in your organization's server environment.

The Moderator can also include in the section Organizational Assets that have been defined as follows:

- Visual Style Guide
- Dashboard Layout Template
- Dashboard Review Checklist
- Metadata Checklist
- Presentation Guideline

Additional Information on best practices can also be included. They might include links to Tableau's best practices for visual analysis, choosing the right chart or graph, or designing efficient workbooks.

CHAPTER 4

DEVELOPING AN ACTIVE COMMUNITY

In Tableau Blueprint, the term Tableau Enablement Intranet (Tableau Blueprint Help, 2019, pg. 155) is introduced as a series of communication topics that should be shared across your enterprise.

The idea is to anticipate questions and proactively share information related to onboarding, governance policies, and procedures, as well as develop a forum for Tableau users to interact on and receive support. In this chapter, we will review the best practices for communicating relevant information, enabling your Tableau users to easily connect with one another and establish a process for supporting your entire Tableau community.

You may be one of many people within your organization who are responsible for executing the recommended Tableau best practices or likely one of many Tableau stakeholders impacted by those practices.

As Tableau grows in popularity, the community of users will expand geographically and throughout new departments and lines of business. The challenge becomes an exercise in applying the best practices, along with the mechanisms to foster adoption, that are easy for others to follow.

Similar to beginning an exercise routine or diet, starting is easy. The challenge becomes applying the directions correctly and sticking with the program. That is where a combination of both best practices and a technology solution can make the difference.

Leveraging a technical solution such as the USERReady Community Center, as introduced in Chapter 1, Section 2, can accelerate community growth by providing a central platform with built-in communication capabilities and the flexibility to easily incorporate processes that may differ by department or region.

The Community Moderator can validate the information sources and easily measure usage through default and customizable reports.

Establishing a robust Tableau community that benefits individuals with enablement support and the organization by expanding the usage of best practices would have three layers:

- Information proactively shared
- A forum for engagement among users
- Formalized support with a defined escalation path

We will cover these layers in further detail throughout this chapter. We will also review the best practices for implementing effective communication, developing a community, and establishing help and support procedures.

1. Communication

A successful implementation of Tableau to foster a strong data culture requires an effective communication plan. That is especially important with Tableau since most organizations leverage the capabilities within in order to put data directly into the hands of their end users to make more timely and accurate decisions.

Continuing with Tableau's concept of Enablement Intranet, your organization's communication plan should serve all Tableau users and stakeholders and should easily scale since the use of Tableau will inevitably grow in number across geographies.

By developing a comprehensive and maintainable communication plan, you'll be supporting all your other efforts to build analytics skills, enable self-serve capabilities, and support the overall community of Tableau users. The types of communication to be developed should include but not be limited to a discussion forum, a communications library, internal blogs, user groups, upcoming and recorded

webinars, regional events, onboarding guidelines, newsletters, and support information, including FAQs.

1.1 Discussion Forum

A discussion forum is the place where people can get answers to questions and solve problems through peer-to-peer exchange. As our workdays get more technically complex and traditional support resources scarcer, peer-to-peer help is often the fastest way to resolve an issue and continue with work. For Tableau users in your organization, questions and needed help will fall into the following two categories:

- a. General or applicable to all Tableau users
- b. Organization-specific preferences and best practices

However, beyond those two categories, Tableau users may have questions pertaining to data modeling and usage, which can also be answered by peers.

The Community Center Discussion Forum section will be the place for your Tableau users to post questions and help others. Users also have the ability to search for previously answered questions, tag favorites, link directly to their questions, and view what's most popular. The Community Moderator, IT, and key stakeholders should actively review the forum for items worthy of becoming a proactive communication to all and questions that go unanswered.

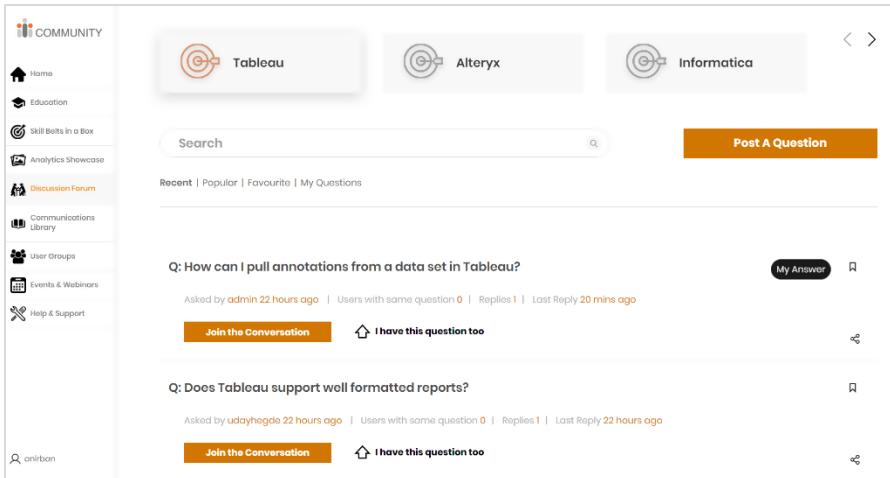


Figure 26. Discussion Forum Module, Community Center

For those general Tableau questions not already answered in your organization's internal Discussion Forum, it's possible to link directly to external forums and, by default, the Discussion Forum links to Tableau's Community Forum. If a person finds an answer in a different forum and thinks others in the organization might benefit, he or she can easily post the information by copying and pasting the URL.

As the forum grows, the Moderator should establish a regular cadence for reviewing and potentially archiving content since the context could be specific to a Tableau version no longer in use. As with other sections of the Community Center, the Moderator can add, modify, or remove aspects of the Discussion Forum. An example would be adding a forum that is visible and usable just by the Tableau and data leaders in your organization.

1.2. Communications Library

The Communications Library is a collection of posted information and archived notifications. It supplements any direct e-mails. As the go-to location, Tableau users know they will be able to find any relevant communications. The types of communications to include are archived meeting minutes,

blogs containing information internal and external, visualization topics, a visual of the day gallery, redundant e-mail notifications, or any other information that does not fit into a specific category.

The importance of maintaining the Communications Library is that whether a user lost, never got, or forgot about Tableau information, there is a central place to go for all communications enterprise-wide.

Governed by the Community Moderator, rules should be established for the types of communication to be shared, how long they will be available for reference, and how individual users are able to contribute. Another item to include in the Communications Library would be a directory of Tableau users with information on role, location, and department.

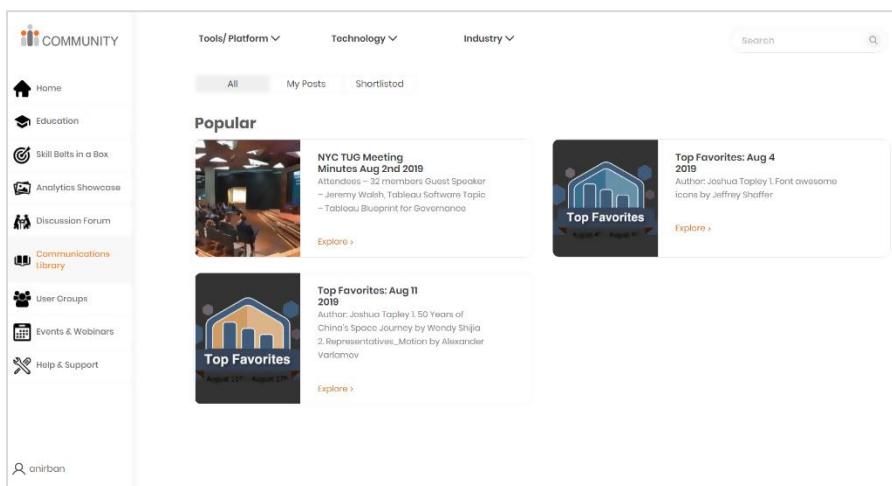


Figure 27. Communications Library Module, Community Center

2. Community Engagement

The idea of a community leads someone to think of working together to accomplish more than a single individual through collaboration. One of the more common community examples is your neighborhood; everyone is concerned about the well-being of themselves and others.

People take pride in their neighborhood, working to keep it safe and clean and helping others in need. That concept also applies to business or technology communities, especially Tableau.

In a fairly short period of time, individuals and organizations have identified the unique characteristics in Tableau that foster excitement around insightful and visually appealing analytics. Whether or not it was intended, the creativity that people bring to their Tableau visualizations leads to the desire to share and support others in their journey to modern analytics.

When building a community and defining activities for engagement, we should consider users in all Tableau roles and levels of experience. The activity formats should balance between in-person and virtual. When possible, activities should be recorded since conflicting priorities too often limit participation during the scheduled time.

Promoted events and activities should be balanced between external and internal to your organization. Organizations just starting to use Tableau or those beginning their modern analytics journey should identify and share relevant external events and activities.

As your organization grows or for organizations with a mature group of Tableau users, coordinating internal events for the enterprise by location or functional area of expertise will hold the most relevance and accelerate the growth of your community. Those events could include an internal Tableau day, Data Dr. Sessions, or an analytics showcase where selected Tableau users in your organization could present their use cases.

2.1 User Groups

Establishing a user group is a logical way to accelerate the analytics community in your organization and encouraging

others to join an existing group. The benefits of a user group include sharing ideas, solving problems, and solidifying the importance of the given area. There are two types of user groups in which Tableau users should be encouraged to participate: internal and external.

Internal User Groups should be started and led by passionate analytics leaders who are skilled in Tableau and familiar with how the various groups within the organization are using Tableau. Agenda topics should be aligned to the interests of the participants and should welcome feedback to ensure engagement is maintained. All levels of Tableau users and analytic stakeholders who may not directly work with the application should be included.

Public Tableau User Groups have been established in large and most medium-sized cities. These groups are led by a combination of Tableau users, Tableau employees, and Tableau partners.

Some public groups have a wide variety of participants from all backgrounds, and others may be formed to support a specific objective such as Tableau users aligned to financial services or a student Tableau group at a university.

Tableau.com contains information on numerous global and regional public groups available for participation by your users. The key is to help identify those with the most relevance and encourage participation.

Whether internal to your organization or the public, a Tableau User Group meeting should include some skills development for the participants, success stories with analytics, highlighted Tableau use cases, and leaving plenty of time for questions and networking. Group meetings – in person or virtual – should be recorded for review by those unable to attend. Your company's Community Moderator should identify the closest TUGs to all the various work locations, posting that information on the Community Center.

The User Groups section of the Community Center provides a central location for your Tableau users to see the user groups internal to your organization, as well as the external groups chosen to be highlighted. Information on the groups, the expectations for participation, and the registration process can be included. For the internal groups in your organization, the portal can be used for new members to join with a simple click.

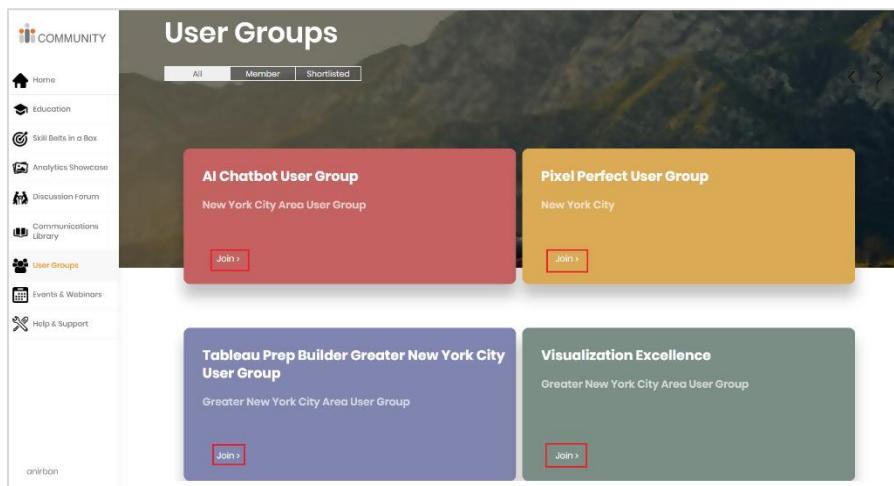


Figure 28. User Groups Module, Community Center

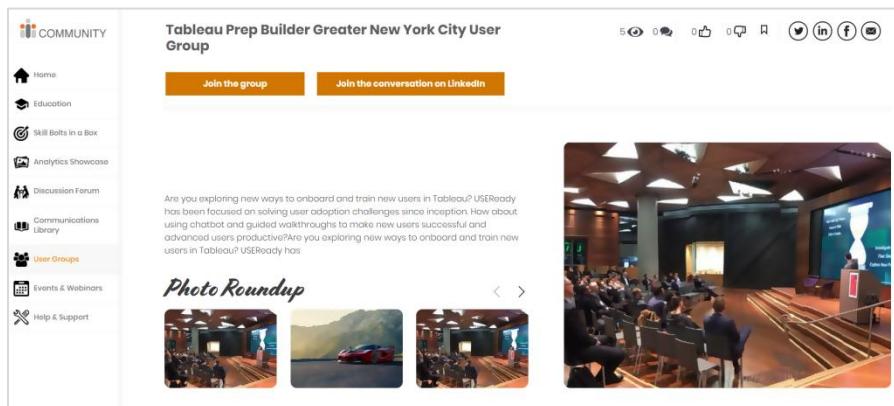


Figure 29. Inside User Groups Module, Community Center

2.2 Events and Webinars

Part of building a Tableau community involves coordinating information sessions and meet-ups. The locations, subject matter, and formats of these activities should be considered to support the various interests of the broader user base. The activities should not be limited to Tableau User Group members or exclude people not directly using Tableau. In many cases, the Tableau organization or Tableau Partners will participate in delivering events for your organization, as well as provide expertise. Below are a few examples of commonly scheduled Tableau events:

- Company-wide Tableau Day
- Lunch and Learns
- Analytics Webinars
- Conferences
- Events hosted by the Tableau Community, such as Tableau Public Virtual Challenges (e.g., Makeover Monday)

In the Events and Webinars section of the Community Center, the Moderator can post information about in-person, virtual, and recorded events.

Similar to the User Groups section, the portal can be used to manage the registrations for your internal events, and direct links can be provided to users for things external. As the number of events and webinars grow, users can easily filter or search on what is of interest to them.

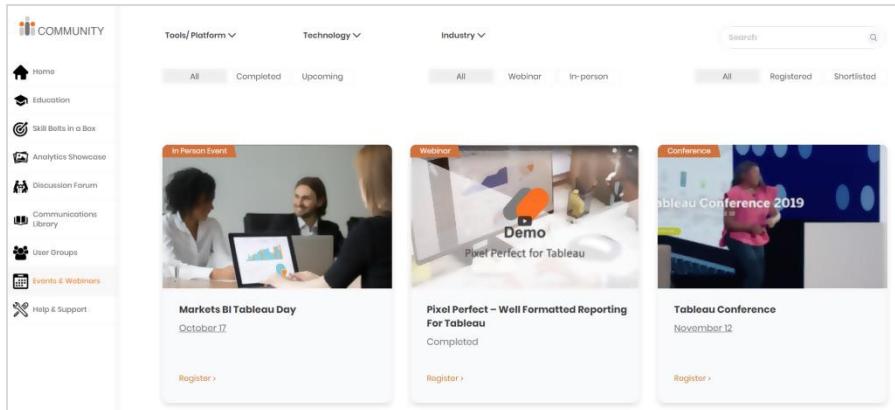


Figure 30. Events and Webinars Module, Community Center

3. Help and Support

Defining and executing a Tableau or analytics support model is a continually evolving process. When assessing, ask these questions: What are the enterprise level goals for this application? Do they differ by department and for the end-user? Is there a clear path to Tableau access and enablement? The answers to these questions should be consistent but not limited to just a single aspect of a community.

Your organization's defined support processes should be included in the Help and Support section of the Community Center. The information provided should be clear, prioritized, and tailored to the end-user, leading back in a self-service direction whenever possible. Leveraging technology such as the Community Center helps organizations convey the right information, especially when it comes to company-specific processes that may differ among departments or geographic regions.

When choosing what help and support information to provide, it's best to start with the most common questions, being mindful that they may change over time. Grouping information by topic will also help enhance the user experience and prioritize critical information toward the top.

The defined support processes should include information on requesting a Tableau account and links to the requisitioning tool or individual.

Consider the possibility that a user may be completely unfamiliar with Tableau during this stage, so including an overview of Tableau, the various roles, and the company policy would be helpful. As mentioned before, many companies' processes differ by department, so be sure to clearly outline any differences. And since many organizations leverage Tableau subscription licensing, Tableau usage is monitored, and licenses may be revoked for non-use, but a user's account remains. Identifying a separate process for restoring a license may be beneficial.

Along with providing information on accessing Tableau, the support process should also reference company-defined roles for Tableau users, as well as the appropriate paths for licensing and enablement. In the Community Center, that can be accomplished by linking users from Help and Support to the Education section of the portal where all this information has been previously defined.

Other items to include in the Help and Support section are the identification of Tableau Site Owners, how to connect, and an FAQ section with answers to common questions. Most critical to include are escalation paths for unresolved questions and problems. That can include references to existing support collateral and peer-to-peer support but should not lead the user into an endless loop. Contact information for support teams or centers of excellence should be provided as part of the information posted in the Community Center.

There are also several resources that Tableau has made available through Tableau.com that can be included with your organization's support page. They include the following:

- Tableau Desktop and Web Authoring feature comparison

- Signing into the different versions of Tableau Server or Tableau Online
- Best practices for setting up a Tableau site
- Exploring and analyzing data from a view
- Developing custom views, sharing views, subscribing to views, and commenting
- Best practices for utilizing data-driven alerts



Figure 31. Help and Support Module, Community Center

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WE HELP USERS SUCCEED WITH DATA.

ABOUT THE BOOK

Following the best practices defined within Tableau Blueprint and leveraging a technology solution such as USERReady's Community Portal and Skill Belt, this guide will assist Information Technology and Business leaders in developing a high performing team of users and a robust culture of analytics throughout their organizations.



JEREMY WALSH

Senior Strategic Customer Success Manager | Tableau

Tableau Blueprint outlines the processes and best practices to develop a culture of self-service analytics and fully realize the value of your data. Following this practitioner's guide and leveraging USERReady's Community Portal can expedite the journey to developing proficiency and building a strong community of users across your enterprise.



MICHAEL HOLCOMB

Senior Strategic Customer Success Manager | Tableau

Tableau Blueprint is a step-by-step guide to building the capabilities you need to create a successful Data Culture in your organization. In this practitioner's guide, you'll find helpful information to inspire, support learning, and drive excitement around data.



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