

TABLEAU FOR MARKETING ANALYTICS

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Hello, my name is Christine Gardner and I am a consultant that is here to help you understand how a business intelligence tool can help to improve your company's ability to make strategic decision in order to grow and provide the best service to your customers.



OVERVIEW

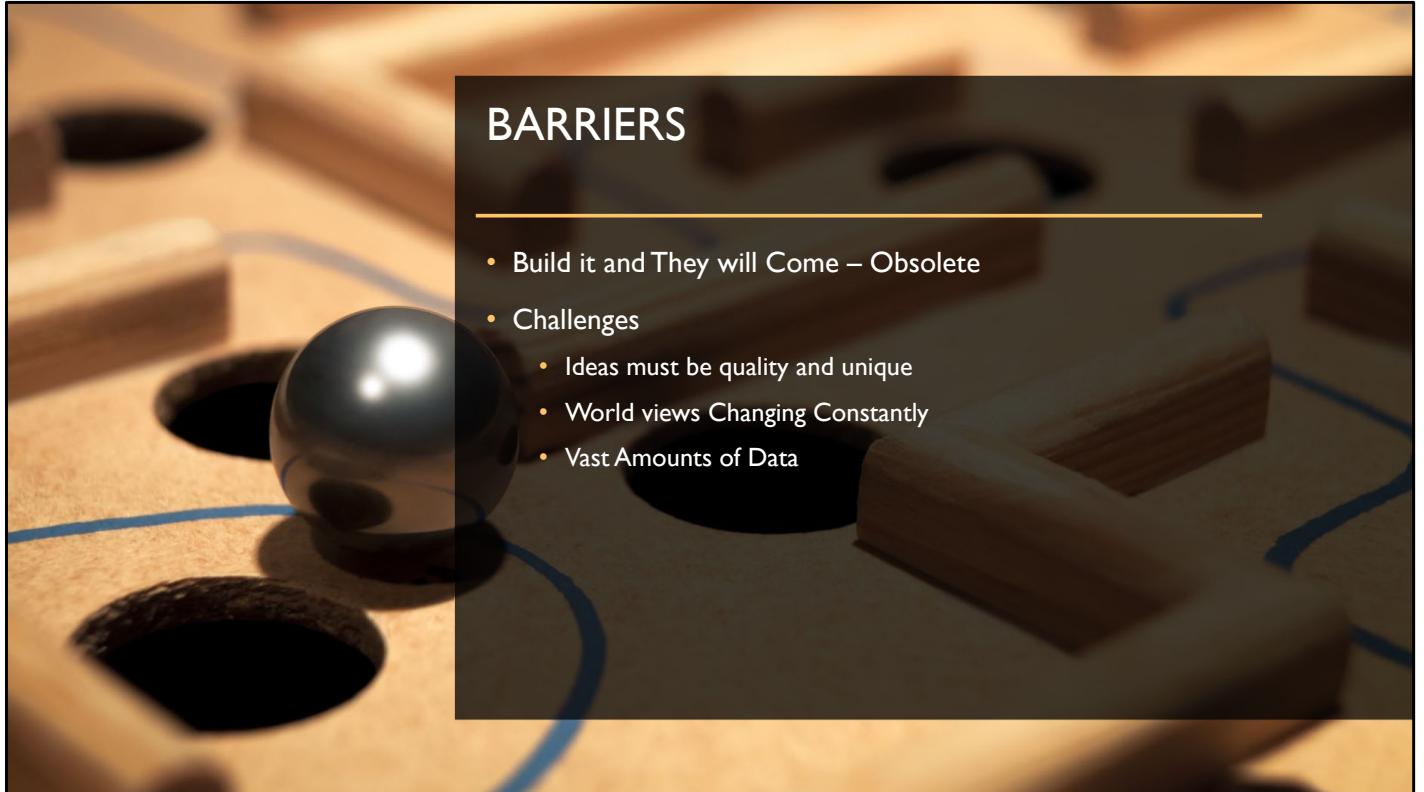
- GENERAL STATE OF MARKETING
- CHALLENGES
- SOLUTIONS
- TABLEAU
- EXAMPLE OF BUSINESS INTELLIGENCE IN ACTION
- CLOSING REMARKS

First lets talk about the general state of the marketing industry and the common challenges that companies just like Rare media are faced with. Then we will cover how business intelligence solutions mitigate those challenges. I will then present how Tableau a powerful business intelligence tool can answer your specific needs. Lets discuss the current state of the marketing world.



GENERAL STATE OF THE WORLD OF MARKETING

According to Hemann (2018) “data and digital analytics have accelerated the pace of marketing unlike ever before, pulling analytics experts into the spotlight. The explosion of data driven decisions making has shifted marketing strategies and analyst tools in big ways” (pg. 17). These changes make it difficult for companies to provide the quality services that they are working hard to deliver to their customers. This is why in today’s society companies need tools to gain insights faster and process data in a way that provides valuable insights that will impact their customers positively. Marketing companies are fighting to keep their competitive edge, while balancing metrics and studying new theories. Choosing the right business intelligence tool can help to mitigate a lot of the issues that Marketing companies face while freeing up resources. Business intelligence tools are basically a “method of enhancing the performance of business through the provision of robust assistance to decision making, enabling access to actionable information” (Maaitah, 2023, pg. 44). Using these tools gives marketing companies an upper hand in all the challenges that they face in this constantly changing world.



BARRIERS

- Build it and They will Come – Obsolete
- Challenges
 - Ideas must be quality and unique
 - World views Changing Constantly
 - Vast Amounts of Data

As a marketing company you are most likely aware of the challenges that Marketing companies face in the 21st century. There is a high demand for unique and quality ideas. The world is constantly changing, and just as fast as the world changes data production has skyrocketed. Lets talk about these challenges in a little more detail.

It's easy to decide that as a company you want to provide better services, but there are challenges to overcome with any goal. Specifically in the field of marketing companies need to supply the cutting edge ideas, fast. This can be difficult because there is such a large amount of data that can be gathered. On top of that the World is constantly changing, people are forming new views and changing perspectives on the daily. Having just a basic solution with no unique benefit is outdated, because consumers are searching for quality.

According to Hemann (2018), "we have moved far away from living in a digital world of 'if you build it, they will come.' 'socail technologies and mobile devices have accelerated the fragmentation of the Internet. Your audience is scattered like bits and pieces across a vast network of sites and platforms. This means you have to source data from more platforms of several different types'" (Hemann, 2018, pg. 80). That vast amount of data is scattered in unorganized forms that make it seem almost impossible to gain insights or

craft valuable solutions. The need is there for companies to have and use this information but the inability to gather, sort and analyze can restrict the growth of a business. Resources are critical when trying to achieve business goals. Rare Media's focus is servicing the customer and providing their customers with visibility that not only gets their name out there but increases the use of their services and sales of their products.



EVER CHANGING WORLD

The world is constantly changing. According to an article on the Wall street journal, “The amount of data we produce every day is truly mind-boggling. There are 2.5 quintillion bytes of data created each day at our current pace, but that pace is only accelerating with the growth of the Internet of Things” (Marr, 2023, para 1). The shear volume of data present in the world presents a problem that most companies have trouble solving. How do you wrangle that data, sort out the pieces that apply to you, and apply it in a way that is beneficial to your customers? These challenge can be seen a lot in the world of marketing, but with any problem there is always a solution, which I will cover after we see what other hurdles Marketing Companies just like Rare Media face.

ASTRONOMICAL VOLUME OF DATA

FILTERING THROUGH EVERYTHING AND DETERMINING WHAT IS RELEVANT.

All of these challenges are interrelated. The constant shift of world views adds to the volume of data present.

The mass volumes of data makes it difficult to gain insights.

Gaining Insights is a small portion of the problem that is a result of having to process large volumes of data.

But in order to ensure unique insights companies require the ability to gather data from multiple sources.

Gathering data from multiple sources can be difficult because of variance in formatting and compatibility of various platforms.

After you are able to gather, clean and present your data the world may have already moved past your insights making your observations obsolete.

The need to be flexible is a major necessity, so that your data can grow and change with the current trends. The large amounts of data present in the world makes this very difficult.



Some other challenges include

Managing your current business.

Measuring internal metrics and external metrics

Identifying strategic growth opportunities

Etc.

But there are some pretty great resources out there and I will cover one of those resources today.



BUILD IT BETTER

- Tools for Quality Solutions
- Fast Insights and Faster Conclusions
- Flexibility
- Scalability

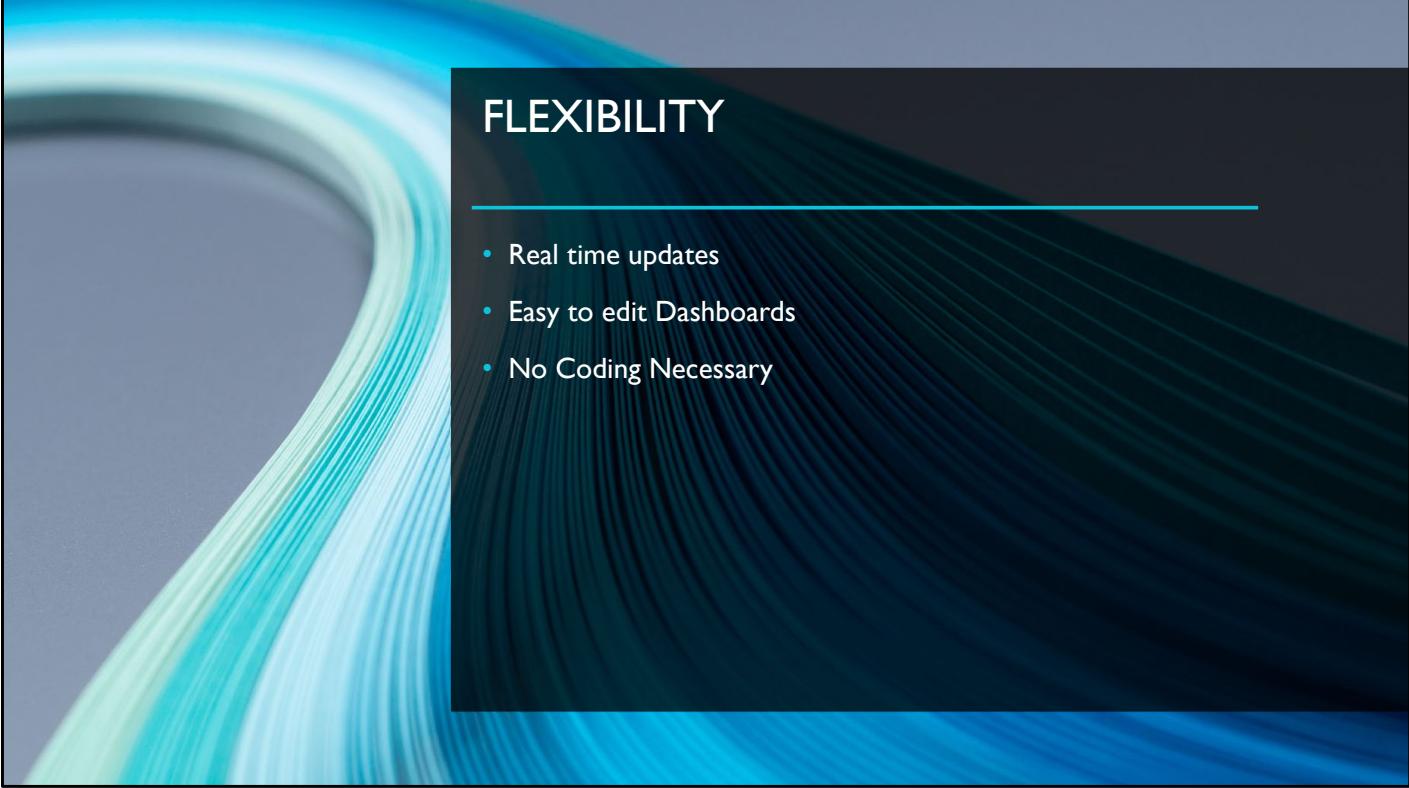
Even though there are lots of challenges in providing quality services in the field of marketing there are resources that can help you gather valuable insights faster. These tools can help you flex to meet the current and ever changing needs of your customers. There are various tools that can be used but there is one that I believe will be able to effectively handle your specific business needs. This tool is Tableau. Properly implementing this tool will aid in helping your company to better achieve its strategic goals and be more successful. Tableau is a user friendly Business Intelligence tool that empowers its users with the ability to build vibrant and insightful visualizations with ease. Insights can be gained in minutes with the drag and drop of different attributes. In this fast paced world technology needs to be fast and easy to use and maintain. Tableau is all of these things. Tableau can provide all of these benefits to your company. Let me show how Tableau can bring your company closer to achieving your strategic business goals.



FAST INSIGHTS

- Prebuilt Solutions
- Drag and Drop Interface
- Various Input Formats

Tableau has a unique advantage over other Business Intelligence solutions because of its ability to provide fast insights. These fast insights are a result of the no code required environment and how easy it is to draw conclusions from the visualizations that can be built on that platform. According to the chief information officer at Brown Foremen Tim Nall “historically with a new product we would have gone to social media, probably some TV advertising or maybe a billboard here and there. But now with Tableau, we are able to really look at the value of that spend in those various areas” (Brown, para. 4). Tableau really helps companies determine what campaigns are worth the money so that they can be more efficient in reaching their strategic goals. Even if your metrics change or your company wants to realign their efforts Tableau can provide a wide range of flexibility. This brings me to the next point.



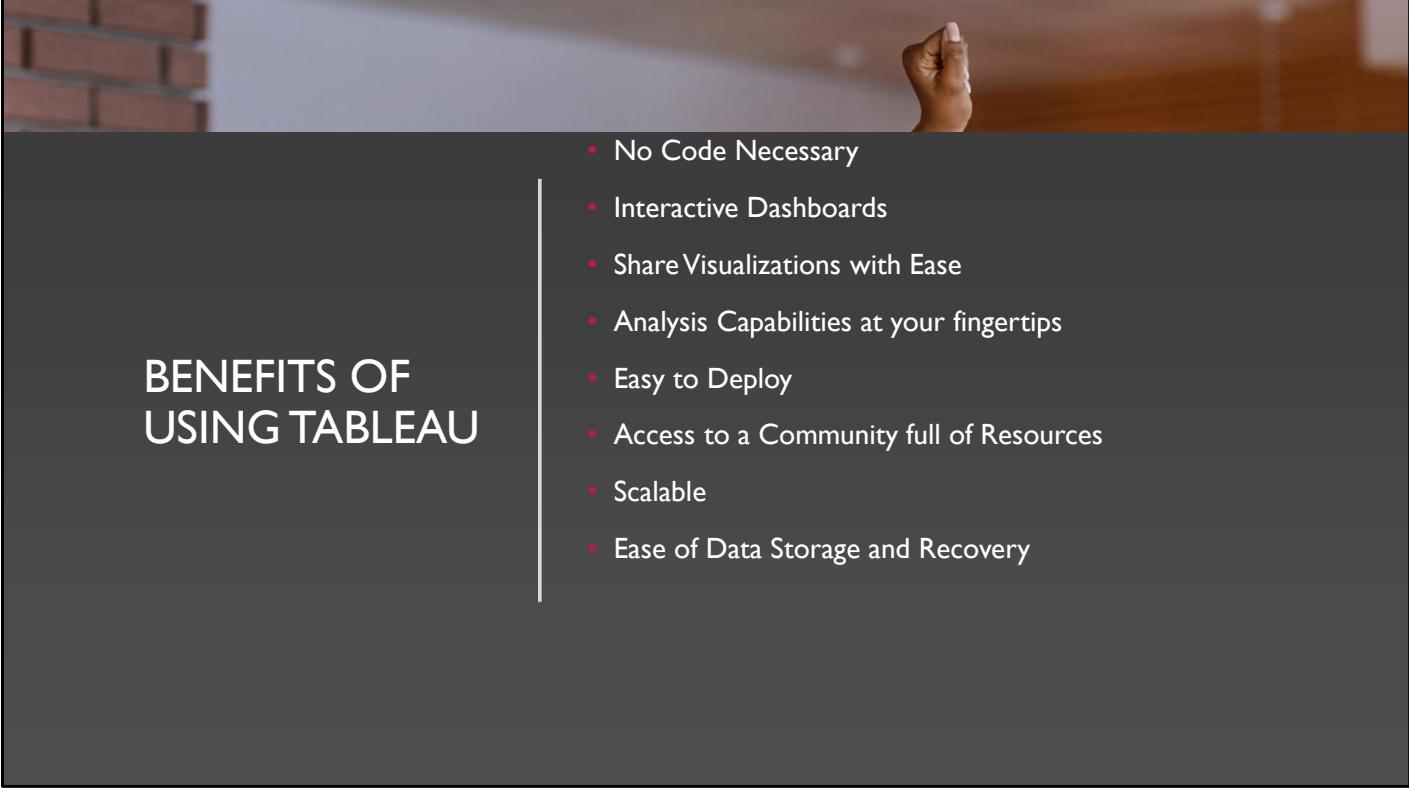
FLEXIBILITY

- Real time updates
- Easy to edit Dashboards
- No Coding Necessary

With Tableau your data analysis approach can follow the path of your questions, because you are not wrapped up in all the technical details that are usually required to gain insights. With most other business intelligence tools you have to be a subject matter expert to gain any value from the platform. With Tableau the user has extreme flexibility without having to be a subject matter expert. Users can have live connections to data with the ability to update sources with ease. One of the major benefits of Tableau can be seen when users need to change their data “simply edit your file and refresh. Want to change chart types, add a second axis, see the difference over time or the running total? All of these actions are a single click or drag and drop away” (Ross, 2013, para. 4). When you need to use an entirely different data set you can change your data connections without using any code. Not only can you flex your insights to fit your business needs but Tableau makes it very easy for your tools to match your company’s growth.



Tableau is really scalable. This can be seen by the products successful use at large companies like Pepsi. Pepsi uses Tableau as an end product in their data analysis activities. According to a Supply chain Data Analyst Mike Riegling “we’re able to turn customer data around and present it to the rest of our company, in a way that everyone can understand, faster than our competitors” (Pepsico, para. 5). This is what makes Tableau so valuable, even on a large scale with massive amounts of data the Pepsi company is still able to outperform its competitors. Some business intelligence tools are perfect for the size that your company is currently at. But with all the success that your company is likely to gain from using a business Intelligence product, choosing a tool that is able to scale with the rapid growth of a business is key.



BENEFITS OF USING TABLEAU

- No Code Necessary
- Interactive Dashboards
- Share Visualizations with Ease
- Analysis Capabilities at your fingertips
- Easy to Deploy
- Access to a Community full of Resources
- Scalable
- Ease of Data Storage and Recovery

There is a long list of problems that Tableau helps its customer base tackle. Here are a few of the major benefits that are present when using Tableau.

There is no need to code.

Without coding users can still create interactive dashboards or visualizations that are easy to publish and share.

Tableau also stands out when it comes to the ease of analysis capabilities. With easy-to-read visualizations the conclusions are right at the users' fingertips.

The platform is easy to learn and use to deploy the foundation for new analytical conclusions.

Plus don't worry about getting stuck, when a company needs help they have access to a full community of resources.

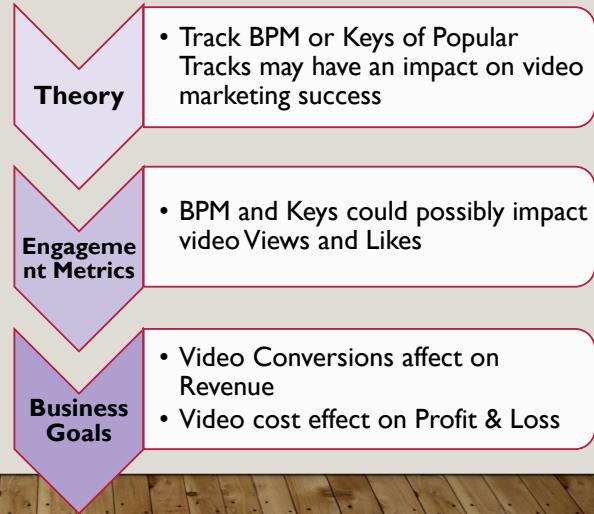
This platform also scales with ease while allowing users to manage data storage and data recovery.

These are just a few of the general benefits.

Let's talk more in detail on what Tableau can do for your company with an example on the type of theories that Rare Media could solve.

SCENARIO FOR BUSINESS INTELLIGENCE SOLUTION

- Form a Theory to Test
- Test Theory in Relation to Engagement Metrics
- Quantify the effect of Engagement Metrics in respect to Business Goals



As a marketing company you are always looking for better ways to service your customers. According to Raymond (2023), “in marketing, data analytics is the practice of gathering and analyzing data, from various digital sources, to gain actionable insights into a company’s digital marketing” (para. 4). This theory demonstrates gathering insights from multiple different data sets. One of the services that Rare Media provides customers is video marketing, which presents the opportunity to use insights to create quality products that attract more viewers. The business intelligence tool Tableau can help you optimize the success of your video marketing services by allowing you to test theories and make strategic decisions and tie the results to important engagement metrics. These metrics can then be tied to Rare Media’s overall business goals by presenting the impact on critical values such as revenue, cost, and conversion rates. Tableau basically allows you to bridge the gap between ideas and actionable insights.

DATA SETS FOR TABLEAU BUSINESS INTELLIGENCE SOLUTION

Spotify Data Set	You Tube Data	Marketing Metrics
<ul style="list-style-type: none">- BPM- Track Keys- Track Id- Track Title- Number of Streams- Number of Times in Spotify Playlist	<ul style="list-style-type: none">- Title- Video Id- Track Id- View Count- Like Count- snapshot date	<ul style="list-style-type: none">- Video Id- Clicks- Conversions- Conversion Rate- Cost- Revenue- Profit & Loss

Here is some background on the data sets and how Rare Media would set up their data to flow into Tableau.

To demonstrate the possible insights that your company could gain from using Tableau there were three sets of data gathered. These three sets of data are going to combine with the focus on testing the theory of the impact of track attributes on profit and loss. These data sets will help demonstrate how users at Rare Media can use information about the tracks that are chosen for video marketing to understand the impact on customer engagement and customer conversions, if it has any affect at all.

The first set of data is composed of the most played tracks on Spotify in 2023. This data was mixed with You tube data that tracks common engagement metrics including views and likes of videos on YouTube. The last data set shows an example of how a marketing company can gather metrics that help to show the success of a marketing campagin bridging the gap between engagement metrics and profit and loss data.

In order to get all of these data sets to work together I needed to decide on a primary key for the track titles so they can be linked to their impact on the campagin. These result are hypothetical and are intended to show how you can combine various sets of data and gain insights that help your company to

make faster strategic decisions. In a world where insights come from multiple sources it is important to be able to funnel all of your information to one central location and test theories that can affect the success of your company. Theories like this help companies to decide on what parts of the company to invest more time and resources into. This theory will open up the door to insights on what tracks can increase conversion or if the track chosen for a video campaign has a negligible affect on the revenue collected from the video.

BPM AND TRACK KEY RELATION TO POPULAR TRACKS



The first step in the business solution is to test the theory. Companies are always going to have new ideas on what pieces of the company affect the bottom line. In this case Rare Media could test the theory of BPM or of the Key of a track and its affect on the success of a marketing video.

First the company can analyze which attributes are the most popular. In order to see what beat per minute is the most common amongst the most popular tracks. Tableau allows users to build a dashboard that pools tracks that have the same BPM and ranks each group by the total number of streams on Spotify or the total number of Times a Track appears in a Spotify Playlist. These insights give the user an interesting snapshot and a foundation to test the rest of the theory.

The same can be done with the musical Key of a track, which is shown right below the graphic for BPM. According to the dashboard the stakeholders can easily conclude that The most popular songs on Spotify in 2023 fall into the category of 120, 110, 95, 124, 92 or 150 BPM. The viewers can also conclude that the most streamed tracks, and the highest number of tracks in a Spotify Playlist are played in the key C#.

These insights give the user an interesting snapshot and a foundation to test the rest of the theory.

(N. E., 2023)

BPM AND TRACK KEY RELATION TO POPULAR TRACKS



With Tableau dashboards are easy to customize and tweak, so here is the previous dashboard with a few alterations. This dashboard now contains a graphic that depicts the track title of the highest streamed songs on Spotify for each BPM group. This level of customization is great for a marketing company when they are trying to find valuable insights and make connections. This data can now be connected to the next level of data. Let's see how this data can be tied into and hypothetically tested in relation to engagement metrics.

ENGAGEMENT METRICS



Rare Media would be able to use the analytics provided by YouTube data set to record the number of likes and views for each video. Tableau would allow Rare Media to see if the popular tracks effect the views and likes of the marketing videos posted to You Tube. Rare Media would be able to use this data to make conclusions on how to interpret the result of the initial theory. Analyzing this data may show that the track choice does not have a great impact on the video's success. Or users may conclude that track choice is directly related to a videos views and likes. Depending on the conclusions Rare Media will need to move forward and make decisions based on the insights that they gain. These insights can become part of the strategic growth opportunites that positively affect conversions, and revenue.

(Asaniczka, 2023)

MARKETING METRICS



This dashboard presents the hypothetical effect of track choice on commonly used marketing metrics. The videos with the most likes are presented as well as how those likes affect revenue and conversion rates. Videos that are tagged as the entry point for conversions are higher on the list. These videos can then be analyzed further by the company to see what attributes impact the success of the video. Since Tableau is extremely flexible and easy to use Rare Media can test multiple theories without spending a lot of money, time, and resources on collecting and formatting the data. Tableau can help Rare Media turn theories into strategic plans that impact the bottom line of their company as well as their customers satisfaction.

(D, M., 2022)

MARKETING METRICS



From this dashboard Rare Media can conclude that even though some videos have a high conversion rates and high revenues most videos report at a loss for the company. This could lead Rare Media to focus their strategy on improving methods for video creation to scale back on cost while providing a greater value.

The company could analyze the effect of the Key of a track on user engagement. If that theory is proven to drive engagement, then Rare Media could use that insight to acquire rights to less expensive tracks that are played in a key that has been proven to drive customer engagement. Acquiring less expensive tracks that provide more engagement will help to reduce production cost and increase revenue. This type of theory helps companies realign their resources around effective campaigns that result in more profit. Tableau plays a crucial part in the analysis that is required to uncover insights like this. Since this platform is extremely easy to use the company can increase the number of insights that they make that are similar to the ones that were presented today. The possibilities are endless within video marketing and that is just one of the services that Rare Media provides. So the number of strategic improvements that Rare Media could make cover a wide range if applied to the companies' other services. With Tableau Rare Media has the opportunity to increase their profit in a strategic and effective manner.

(D, M., 2022)



TABLEAU IS THE TIP OF THE ICEBERG

- Room to grow
- AI and Machine learning capabilities
- Cloud capabilities
- Security for effective data management
- Can be used across multiple Platforms

Tableau Desktop is the Tip of the iceberg

It gives companies room to grow

While providing the opportunity to use AI and Machine learning capabilities
As well as Cloud capabilities.

It provides exceptional security for effective data management and can be used across multiple platforms. Tableau is the key to tackle and foster growth. According to Maria “business data has become an invaluable asset for companies of all sizes and industries and their importance is only expected to grow in the coming years” (Maria, 2023, pg. 3) which means that this is your chance to prepare your company to take on competitors and wrangle data like never before with the help of Tableau.



TABLEAU IS WORTH IT

Tableau is worth it. Other solutions may have competitive pricing compared to the plan pricing for Tableau, but “its bundled features and capabilities catering to the entire data analysis needs” are what make it worth the price (Komiskey, 2023, para. 36).

Tableau is an investment, but this investment will help your company achieve its strategic goals with ease. The tableau creator license for reference is the license that has full capabilities. This license is “priced the same for either Tableau Server or Cloud, the cost of a Tableau Creator license is \$75 per user per month, billed annually, amounting to \$900 per user per year (as of August 2023)” (Komiskey, 2023, para. 17). Depending on the number of users this may seem like a steep price, but keep in mind the time savings, improved decision making, collaboration, knowledge sharing, and scalability that Tableau brings to the table.

TABLEAU DOES SOOO MUCH MORE

- Gain Insights on:
 - SEO Optimization
 - Employee Performance
 - Product Quality
 - Everyday Business metrics

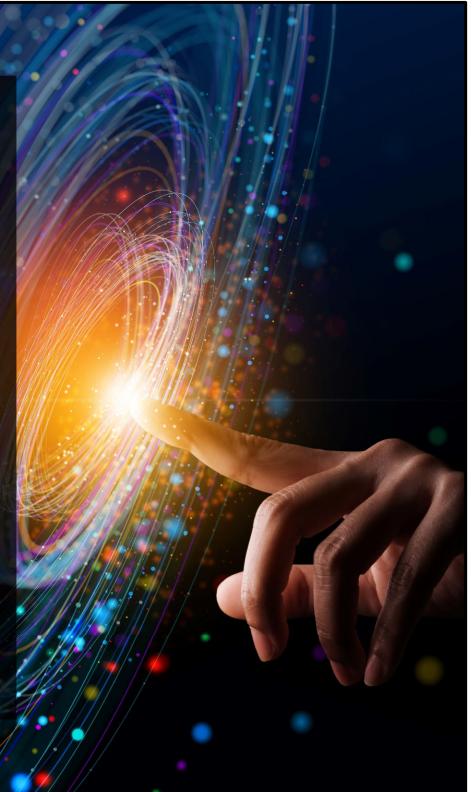


Tableau can do so much more. Testing theories to uncover solutions is only the tip of the iceberg when it comes to the insights that Tableau can help Rare Media uncover. Rare Media can use Tableau to gain insights on SEO Optimization, employee performance, product quality, and everyday business metrics.



Tableau can help your company test theories fast and with ease. Empower your staff to ask questions and find answers. Gather data from various sources and create custom dashboards and visualizations that are easy to share with the team and stakeholders. Tableau is a great investment when it comes to Business Intelligence solutions. Tableau helps your company to obtain extremely valuable insights that aid in making strategic decision that will improve your company. Give Tableau a try and watch as your company grows well aligned with your strategic business goals, with increased customer satisfaction. Thank you for your time today and please feel free to contact me with any questions.

SOURCES:

- Asaniczka. (2023, November 12). *Daily trending YouTube videos (113 countries)*. Kaggle. <https://www.kaggle.com/datasets/asaniczka/trending-youtube-videos-113-countries>
- Brown-Forman transforms marketing strategy, scaling Tableau to 1,000 users on the cloud. Tableau. (n.d.-a). <https://www.tableau.com/solutions/customer/brown-forman-maker-jack-daniels-scales-1000-users-month-subscription-pricing>
- D, M. (2022, September 29). Shopping mall paid search campaign dataset. Kaggle. <https://www.kaggle.com/datasets/marceaxl82/shopping-mall-paid-search-campaign-dataset>
- Hemann, C., & Burbary, K. (2018). Digital Marketing Analytics: Making sense of consumer data in a Digital World. Pearson Education, Inc.
- Komiskey, L. (2023, August 26). *Tableau pricing demystified: True cost of your tableau investment*. DataDrive. <https://godatadrive.com/blog/tableau-pricing#:~:text=Tableau%20is%20often%20considered%20expensive,the%20entire%20data%20analysis%20needs.>
- Maaitah, T. (2023). The Role of Business Intelligence Tools in the Decision Making Process and Performance. *Journal of Intelligence Studies in Business*, 13(1), 43–52. <https://doi.org/10.37380/jisib.v13i1.990>
- Maria Popescu, M.A. (2023). The Era of Business Intelligence Tools. *FAIMA Business & Management Journal*, 11(2), 3–4.
- Marr, B. (2023, September 12). How much data do we create every day? the mind-blowing stats everyone should read. Forbes. <https://www.forbes.com/sites/bernardmarr/2018/05/21/how-much-data-do-we-create-every-day-the-mind-blowing-stats-everyone-should-read/?sh=7d0e6e5560ba>

SOURCES:

- N. E. (2023, August 26). Most streamed Spotify Songs 2023. Kaggle.
<https://www.kaggle.com/datasets/nelgiryewithana/top-spotify-songs-2023/>
- Pepsico cuts analysis time by up to 90% with Tableau + Trifacta. Tableau. (n.d.).
<https://www.tableau.com/solutions/customer/pepsico-cuts-analysis-time-90-tableau-trifacta>
- Raymond A. Mason School of Business, William & Mary. (2023, August 11). The importance of data analytics in digital marketing. William & Mary.
<https://online.mason.wm.edu/blog/data-analytics-in-digital-marketing>
- Ross Perez Senior Director of International Product Marketing. (2013, May 8). Two common Excel analysis problems and how to solve them. Tableau. <https://www.tableau.com/blog/two-common-excel-analysis-problems-and-how-solve-them-23172>

