

The Business Buyer's Guide to Self-Service Business Intelligence



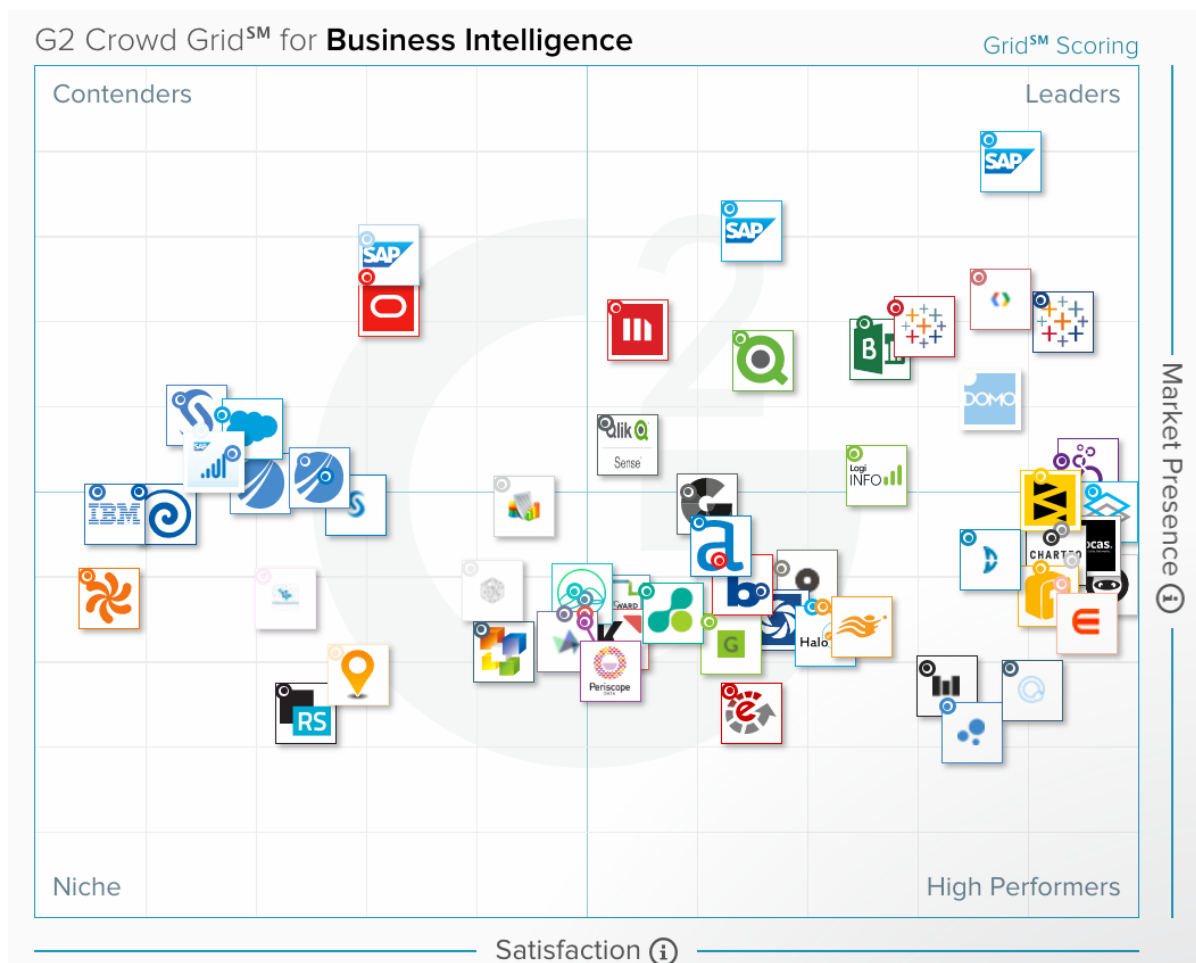
CHARTIO

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The State of Business Intelligence

According to research conducted by [IDC](#), “big data and business analytics worldwide revenues will grow to more than \$187B in 2019, an increase of more than 50% over the five-year forecast period.” As data proliferation becomes increasingly cost efficient and voluminous with each passing year, it’s no wonder that the Business Intelligence (BI) and Analytics market saw such exponential growth.



A Snapshot of the current Business Intelligence market. (Source: [G2 Crowd](#))

Just looking at the grid above is overwhelming. This is years and years worth of legacy BI solutions evolving and new ones entering the market.

While the BI market shows no signs of slowing down anytime soon, it’s only natural that the BI market continues to mature to meet the ever changing needs

and expectations of the buyer. With so many solutions on the market promising to “turn data into insights,” the BI market is fraught with competition—which puts the buyer at both an advantage and disadvantage.

- **Advantages:** BI companies will offer competitive pricing just to remain in the running with the buyer. Second, BI companies will continue to release feature after feature to remain a leader amongst the competition. Third, there are a lot of diverse choices available to meet the specific needs of each buyer.
- **Disadvantages:** The pool is so vast that it’s easy for buyers to get lost, making the buying process difficult. Second, BI evaluations have traditionally been the responsibility of technical-focused roles (data, IT, analyst, engineering) with little to no input from the business end user; however, business users are the ones who are increasingly driving usage and value.

In recent years, there has been an evolutionary shift from legacy, on-premise BI solutions to cloud-based, self-service solutions. This shift has been revolutionary in opening up the data floodgates to a wider user base and providing data transparency with significant ease of use, thereby enabling business users to be in the drivers seat of business analytics.

This shift can be attributed to a multitude of factors:

- The growing need to make business decisions faster, rather than waiting around for IT to set up a data connection or create a report
- The need to democratize data across an entire organization
- Business users wanting faster access to data, so they can become data-driven

Even though BI has been around for years, cloud-based BI is a more recent development. Having said that, evaluating a cloud-based BI solution is not simple—even for the most seasoned decision-makers. Much like legacy BI solutions, cloud-based BI is fraught with competition. The competition can be overwhelming for those of us in a business-oriented role because we might not know where to start.

As a business user, you don't need IT or an analyst to run a BI evaluation for you. As someone who understands the inner workings, metrics and responsibilities of your team, it only makes sense that you're leading the charge in choosing the solution that will answer your business questions.

Although industry analyst reviews can be a great starting point, they're often too technical and don't have the business user's needs in mind. Instead of providing more of those findings, this white paper will outline the entire evaluation process for self-service BI, provide a list of appropriate vendors and present case studies and use cases.

In an effort to avoid comparing apples to oranges, we're limiting the scope of this white paper to leading cloud-based, self-service solutions as defined by [G2 Crowd](#) as able to:

- Consume data from any source through file uploads, database querying and application connectors
- Transform data into a useful and reliable model
- Support data modeling, blending and discovery processes
- Create reports and visualizations with business utility
- Be configured and used by average business users with little IT involvement

The Benefits of Business Intelligence

Before diving into the benefits of Business Intelligence, let's first define what it means to a cloud-based, self-service Business Intelligence software.

According to [G2 Crowd](#), the software review site, "self-service BI software empowers business users to investigate company data and reveal patterns and insights. Self-service BI products are designed to be set up and used by average business users without the need for input by IT professionals."

As [85%](#) of business leaders believe big data will dramatically change the way they do business, self-service BI will be able to provide the fast insights that are needed to compete. Whether you're in B2B, B2C or academia, organizations are moving away from making intuition-based decision to data-driven decisions—self-service BI is the answer.

If the rapid growth of the BI market tells us anything, it's that companies need and want an analytical solution that will allow them to deliver insights that drive the business forward.

[Gartner predicts](#) that by 2018, most business users and analysts in organizations will have access to self-service tools to prepare data for analysis as part of the shift to deploying modern BI platforms. With this prediction in mind, let's dive into the high-level business benefits of self-service BI.

DATA BECOMES ACTIONABLE

[Studies show](#) that 2.5 Quintillion bytes of data are created every day and 90% of the world's data today has been created in the last two years alone, so where does all that data go? While most of that data isn't applicable for businesses, we can still draw the conclusion that the data must be analyzed and turned into actions.

Every customer interaction with your product is a data point, and once processed through a BI solution becomes an action that drives the business forward. A simple question such as 'how many customers churned' can be answered just by connecting data to a BI solution.

The insights provided by a self-serve BI solution gives you a quicker response to your business questions than ever before. Historically, a business user would have to request a report from IT, wait a few days for IT to run the report and then get outdated customer information. With the new world BI, anyone can run their own analyses in real-time. Ultimately eliminating the gap between raw data and insights.

INSIGHTS REMOVES GUESSWORK

With data becoming actionable, guesswork is removed from the equation. Providing access to data at a company-wide level allows for everyone to make their own decisions, based on data. Self-service BI solutions allow everyone to access data and create dashboards that enables them to answer and ask questions that wouldn't have been possible before.

Think about one of the main reasons why businesses fail: they miss their numbers because of guesswork. While intuition-based decisions are acceptable in certain situations, running a high-growth operation has no room for guesswork.

METRICS, WHEN AND WHERE YOU NEED THEM

Ever wondered what's happening to your product, inventory, business or app right now? As our phones, web and data speed gets faster and faster, on the other end of the spectrum we expect our metrics to update just as fast.

Luckily, self-service BI empowers us to fully understand what's happening right now via real-time dashboard and chart metrics.

Much like making data actionable, the next step is creating KPI dashboards across each department—ultimately ensuring that each one answers a specific question about the health of your business. So, with self-service BI, gone are the days of waiting on the numbers from IT.

VALUABLE INSIGHT INTO CUSTOMER BEHAVIOR

For every type of business, data is a specific business indicator: a customer interaction with your product, a prospect's every click on your company's website, a contact detail, etc. the list goes on.

To this point, understanding data is crucial for companies. Because understanding data means understanding your customer. Understanding your customer provides a clear roadmap at your customer's intention to renew their account, the features where they're having trouble, their company growth and potential for new selling opportunities and if they're not using the product altogether.

OPERATIONAL EXCELLENCE UNLOCKED

Streamlining operations and achieving operational excellence is the goal of every Executive and Operations team—no matter the size of the company or industry. Through self-service BI, you can easily track and optimize manufacturing costs, inventory, sales forecasts, funding and spend/budget.

Having the real-time insight into the operational performance of the company is paramount. It ensures that the company has enough runway to stay afloat, that they're not under or over producing their products and that their sales projections are on target.

Data is meant to be connected, explored and transformed into business insights. With the absence of self-service BI, data can easily go unnoticed. However, with knowing the high-level business benefits of self-service BI, business users can be assured that there's a return on their investment in a solution.

The Evaluation Action Plan: Self-Service Business Intelligence

As mentioned in the first few pages of this white paper, the evaluation process for a BI solution isn't easy. It's a sometimes arduous process for even the most seasoned decision-maker. Hurdles in the evaluation process commonly include:

- Broad objectives and endless possibilities, making it difficult to anticipate needs
- Identifying a start and end point to the evaluation process
- Not getting stakeholders involved early on in the process and therefore not understanding business requirements
- No clear goal in mind when it comes to BI success

We polled a handful of BI buyers at various stages in the process and have come to one conclusion: start the process by evaluating based on your business needs.

At its core, BI is meant to conceptualize business potential and performance by gleaning insights. So, it makes sense to start your evaluation process with getting requirements from you—the business end user and then determining what your company requires in a solution.

DISCOVERY: INPUT FROM STAKEHOLDERS

Much like evaluating any other tool, you'll want to get a list of requirements from those most likely to use the tool. Stakeholders can be those in your immediate team or leads from a select few departments, depending on the initial rollout.

Conduct interviews around what types of metrics each stakeholder tracks, their process in getting data around the metrics and what they want in an analytics solution. It's important to get stakeholder input early because they'll be the ones who ultimately use the solution.

During your talks with stakeholders we suggest asking questions around the following areas:

- **What are the pain points:** there’s no view into business data, there’s only a single view into data (i.e. no way to connect marketing activities with CRM data), outgrew current tool, BI seems too complicated
- **Features that are absolute necessities:** robust visualizations, drillable reports, shareability of reports and dashboards with colleagues
- **Data source connections:** compatibility with current data sources and tools like CRM, Marketing Automation, web analytics
- **Ease of use:** ability for a wide range of users to drive product adoption
- **Shareability:** ease of sharing reports, collaboration
- **Cost:** at large, BI solutions are not relatively low in cost. However, the high cost often outweighs the risk of not having a BI solution

With the requirements outlined by stakeholders, many evaluators will then ask around for recommendations, run a simple web search and attend a conference to see what solutions are on the market. During this stage, the evaluator will collect a list of five to 20 vendors and create a spreadsheet and compare each vendor’s offering to their own requirements list.

Vendor	Self-Service BI	Easy to Use	Data Connection	Demo Video	Notes
ACME	✓	✓	✓	✓	ACME Notes
Skynet	✓	✗	✓	✗	Skynet Notes
Tyrell Corp.	✗	✗	✓	✓	Notes

An Example Spreadsheet with Vendors and Requirements.

COMPARE: A LOOK AT THE LANDSCAPE

With a list of five to 20 self-serve BI solutions, you'll want to trim down the list and gain clarity in the different options. In the comparison stage of the journey, many evaluators will run through their spreadsheet again and do any of the following activities:

- Conduct a web search using applicable keywords (77% of buyers use Google search)
- Visit vendor websites (84.3% of buyers check vendor websites)
- Reference software review sites like [Trust Radius](#) and [G2 Crowd](#) (34% of buyers visit third party sites)
- Compile a list of features that most vendors offer to get a better consensus of the market

DEFINE: GAIN CLARITY IN OPTIONS

After a view into the self-service BI landscape, the next step is to create a more condensed list of vendors that immediately match your business needs. Remember, buyers of any product prefer to try before they buy—so look specifically for vendors that offer a demo and free trial of their product.

- Sign up for a demo to see the product in action
- If possible, sign up for a free trial of the product so they can test it out
- Read customer testimonials and case studies on vendor's website (41% of buyers read user reviews)
- Compare the packaged features from each vendor with your list of requirements

From this research, you'll get a clearer view on the capabilities of each vendor and can further define what you're looking for in a self-service BI solution. It's helpful to compare apples to apples here because you're looking directly for a

solution that can answer your business questions. For example, according to [Technology Advice](#), 22% of business users hope that their BI solution will be able to answer questions around sales forecasting.

CONSIDERATION: PROOF OF CONCEPT

Once you've determined which solutions will meet your requirements and have shown their value via a product demo, you'll want to put a few solutions through a product bake-off to see which one is best for your organization.

It's important to put these self-service BI solutions on a rigorous trial. After all they're going to provide KPIs across the company, so you want to make sure that they're easy to use and powerful enough to support your needs.

- **Bake-offs:** Allow users who will be creating dashboards and charts to use the solution and connect critical data sources
- **Capabilities comparison:** Most self-serve BI solutions offer a two week trial, make sure that you have enough time to test relevant features
- **Internal debate:** Assemble the internal stakeholders and have the end users who conducted the bake-off share their results and share applicable use cases for the solution
- **Cost:** evaluating products has a lot to do with price, so make sure that the ultimate solution is within budget and will have a clear ROI

SELECTION: PURCHASE OF A SELF-SERVICE BI SOLUTION

After weeks of tallying up business requirements, running through a product trial and price negotiations - it's time to decide on a solution. Of those we polled for this white paper, they found that the entire buying process takes anywhere from a few weeks to six months, depending on their organization's speed.

Remember, the goal is to purchase a solution that aligns with your business goals and is able to meet your needs. During the selection process, you'll typically run through the following activities:

- Contract negotiations / legal and accounting sign off
- Security sign off
- Contract signed / kick off / training / setup and implementation
- Show ROI

The Self-Service Business Intelligence Vendors

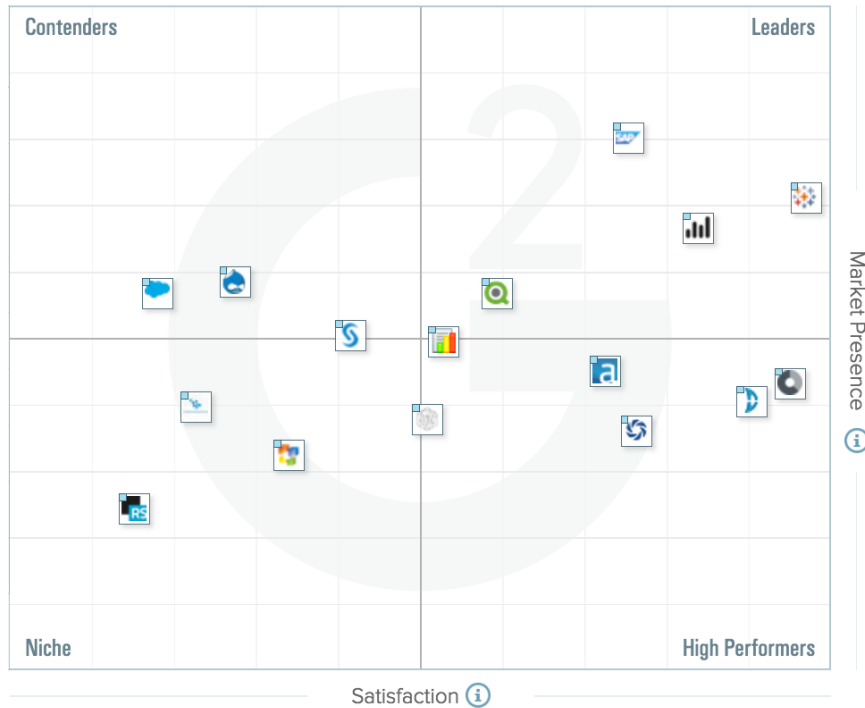
In the first page of this white paper, we shared a grid of all the leading BI platforms out on the market. While this grid is a great representation of what's out there, for business users, many of these BI solutions won't easily enable you to explore your data on your own.

Many BI solutions are still locked with the data, IT, analyst and Engineering teams, and are rarely focused around the business end user. Self-Service BI provides an opportunity for business users to explore their data and lead the charge in the evaluation process, rather than relying on IT.

As a reminder, self-service BI is defined as:

- A platform that can analyze data from any source
- Has the ability to transform data and facilitate the data discovery process for end users
- Offers reporting building and data visualizations
- Easy implementation and usage by the average business user with little involvement from IT

We worked with G2 Crowd and gathered a list of leading self-service BI solutions to jumpstart your evaluation process. Below is a snapshot of all the leading self-serve BI solutions currently on the market. While it's a much pared down version of the all encompassing grid we previously shared, it still plots 16 different vendors. For this purpose, we're only going to examine seven of the leading or high performing solutions as defined by G2 Crowd's report.



A Snapshot of the current Self-Service Business Intelligence Software. (Source: [G2 Crowd](#))

According to G2 Crowd, “the GridSM represents the democratic voice of real software users, rather than the subjective opinion of one analyst. G2 Crowd rates self-service business intelligence products algorithmically based on data sourced from product reviews shared by G2 Crowd users and data aggregated from online sources and social networks.”

Again, to better facilitate your self-service BI evaluation process, we’re tightening our scope to findings around satisfaction, popular features, implementation time and payback period. The findings will include data analysis around the following:

SATISFACTION

- Meets requirements: Analysis of whether the software meets all the expected business requirements
- Ease of setup: Setup process for the software based on reviews by G2 Crowd users
- Ease of use: Analysis of how delightful the software is to use by the end user and if he found it intuitive and improves his overall productivity

FEATURES

- Reports interface: Reports interface for standard and self-service reports is intuitive and easy to use
- Dashboards: Ability to create agile dashboards within the software
- Data Discovery: Users can drill down and explore data to discover new insights

IMPLEMENTATION TIME

- Average Months to go Live: The time frame from implementation to seeing valuable insights is using the software

PAYBACK PERIOD

- Average Payback Period (Months): The time frame on a return on investment in using the software

With the context provided, it's time to put the seven leading self-service Business Intelligence solutions head-to-head. The vendors are presented in alphabetical order and are as follows:

Alteryx

Alteryx provides a platform where analysts and line-of-business users (such as Sales, Marketing and Finance) can feel empowered with self-service analytics, giving them the ability to prep, blend and analyze their data.

As a service, Alteryx serves the Enterprise (1001+ employees) and Mid-Market (51 - 1000 employees) range of customers with top industries in Marketing and Advertising, Market Research and Internet.

Named as a “High Performer” by G2 Crowd, Alteryx performs at industry average for meeting business requirements, at above average in ease of use and above average in ease of setup.

Chartio

Chartio is a cloud-based data exploration solution that is simple enough for everyone to use yet powerful enough for the data team. Chartio enables users to explore, transform and visualize their data in real-time. The solution serves the Mid-Market (51 - 1000 employees) and Small Business (50 or under employees) range of customers with top industries in Internet, Information Technology and Computer Software.

Named as a “High Performer” by G2 Crowd, Chartio performs at industry standard for meeting business requirements, at above average in ease of use and at above average in ease of setup.

Dundas BI

Dundas BI provides an enterprise-ready BI and Data Visualization solution by offering an end-to-end, self-service and fully customizable solution that allows users to connect, interact and visualize their data.

According to the G2 Crowd report, Dundas BI readily serves the Enterprise (1001+ employees) and Mid-Market (51 - 1000 employees) range of customers with top industries in Information Technology, Hospital and Health Care and Computer Software.

Named as a “High Performer” by G2 Crowd, Dundas BI performs above average for meeting business requirements, at above average in ease of use and above average in ease of setup.

Microsoft Power BI

Power BI is a business analytics service by Microsoft and provides interactive visualizations with self-service BI capabilities, where end users can create reports and dashboards. Currently, Power BI serves the Enterprise (1001+ employees) and Mid-Market (51 - 1000 employees) range of customers with top industries in Information Technology, Computer Software and Civil Engineering.

As part of the Microsoft suite of tools, Power BI works well with Excel, while integrating with common databases such as Oracle and Microsoft SQL. With that, many customers that have already heavily invested in the Microsoft ecosystem will have a natural fit with Power BI.

Named as a “Leader” by G2 Crowd, Power BI performs at industry standard for meeting business requirements, at below average in ease of use and above average for ease of setup.

SAP Crystal Reports

With SAP Crystal Reports, users can create powerful and dynamic reports from any data source. SAP Crystal Reports serves the Mid-Market (51 - 1000 employees) and Small Business (50 or under employees) range of customers with top industries in Information Technology, Computer Software and Machinery.

Named as a “Leader” by G2 Crowd, SAP Crystal Reports performs above industry standard for meeting business requirements, at below in ease of use and at average for ease of setup.

Tableau Desktop

Tableau Desktop is a standalone application run on both Windows and Mac operating systems for developing dashboards and data visualizations. From the application, users can create reports, charts and run ad hoc analyses.

As a leader in the overall Business Intelligence space, Tableau Desktop (an offshoot from Tableau), serves both the Enterprise and Mid-Market customer base with top industries in Higher Education, Information Technology and Computer Software.

Named as a “Leader” by G2 Crowd, Tableau Desktop performs at industry standard for meeting business requirements, at average in ease of use and slightly below average for ease of setup.

Qlik Sense

Qlik Sense is a self-service data visualization and discovery application designed for individuals, groups and organizations to use their data in the decision-making process. Qlik Sense serves the Mid-Market (51 - 1000 employees) and Enterprise (1001+ employees) range of customers with top industries in Computer Software, Gambling and Casinos and Information Technology.

Named as a “Leader” by G2 Crowd, Qlik Sense performs at industry standard for meeting business requirements, at above average in ease of use and below average for ease of setup.

Head-to-Head Comparison

Let's examine how our vendors do in a head-to-head comparison in our specified categories.

	Industry Standard	Alteryx	Chartio	Dundas BI	Microsoft BI	SAP Crystal Reports	Tableau Desktop	Qlik Sense
Meets Requirements	85%	85%	86%	88%	85%	87%	86%	86%
Ease of Setup	83%	88%	88%	92%	85%	82%	85%	90%
Ease of Use	83%	87%	87%	87%	82%	76%	84%	86%
Reports Interface	N/A	68%	87%	84%	87%	85%	85%	83%
Dashboards	N/A	65%	91%	93%	85%	77%	92%	81%
Data Discovery	N/A	85%	82%	89%	79%	80%	86%	74%
Avg. Months to go Live	N/A	N/A	0.4	2	2.6	0.7	2.2	0.9
Ave. Payback Period (Months)	N/A	N/A	9	15	14	7	12	N/A

*** N/A is fewer than five responses were received for the question.

With the data above, you can then cross reference it with your list of requirements and move forward in your self-service BI evaluation process with more context and an idea of what to look for. While we might be biased in who you'd eventually choose, the overall takeaway is to choose a solution that best suits your business needs.

For the full G2 Crowd GridSM for Self-Service Business Intelligence - Winter 2017, [read it here](#).

CASE STUDY: Reaching Millions of Subscribers Through Data



theSkimm is a media company that makes it easier to be smarter. The company's inaugural product is the Daily Skimm, an email newsletter that provides readers with the latest news, trends and articles that they need to know to start their day. Founded in 2012, the Daily Skimm focuses on a simple and easy to read breakdown of the news.

THE PROBLEM: UNSUSTAINABLE AND INEFFICIENT PROCESS

In 2014, the Engineering team at theSkimm was resource-strapped and spending a large part of their time pulling data from disparate sources, exporting it and performing lightweight queries for the team.

"Before Chartio we were pooling multiple resources and it wasn't sustainable. We had a lot of questions and didn't have the resources to answer them.," said Ryan Stuczynski, Growth Lead.

Further, theSkimm's production database was difficult to access for the broader team. As the Growth Lead, Ryan knew that theSkimm needed a sustainable solution that would allow for anyone within their organization to access data and answer their own questions.

As theSkimm's popularity and subscribership grew, Ryan was finally able to justify the cost of investing in a Business Intelligence (BI) tool that would alleviate the strain on the Engineering team, scale theSkimm's initiatives and provide widespread access to data.

Based on Ryan's familiarity with the BI space, he went into the technical evaluation of tools with specifics in mind.

"What was important for us was having confidence that we'd have access to the data we needed to answer our questions. For theSkimm, this meant choosing a solution that didn't require upfront custom modeling."

Additionally, Ryan wanted a solution that would quickly connect with the seven plus disparate data sources that theSkimm uses, including the then-emerging Google Cloud SQL database, a key data source for theSkimm.

THE SOLUTION: BROADER ACCESS TO DATA

With Chartio, theSkimm is now able to pull data from disparate sources together, blend and layer the data to uncover critical metrics that typically would not be available in a standard database.

"Chartio has become the gateway into our production database and allows us to perform ad hoc analyses. Since we're a user centric product, using Chartio has allowed us to query and think of better ways to look at user behavior and optimize it."

With more than **4 million active subscribers**, theSkimm collects data from a handful of data sources ranging from MySQL, Amazon Redshift, Google Analytics and Localytics. In using Chartio to blend data together, theSkimm is able to track the lifecycle of a quality subscriber - a key company-wide metric.

To track quality subscribers, theSkimm looks at the first week behavior of the subscriber and from the analyses performed in Chartio, the Growth team is able to predict the probability of the user continuing to a subscribe or not.

"We run a lot of tests and are able to identify platform usage through Chartio. In tracking usage, we're able to surface trends and anomalies and act quickly based on the user behavior."

In choosing Chartio, theSkimm allowed for broader access of data to tech teams querying about subscribers, to Product so they can evaluate trends and to traditionally non-technical teams like the Partnership team to track campaigns.

THE OUTCOME: SKIMM'BASSADOR PROGRAM GROWTH

Over the course of the past four years, theSkimm has not only been able to build a substantial subscriber list, but they've been able to build a loyal community base program called the Skimm'bassadors. The program highlights users who are active and promote theSkimm brand in their communities.

Since the program's launch, the Skimm'bassador team within theSkimm uses Chartio to track referral numbers down to the specific user level and understand the overall health of the program.

"Chartio played a big part in the Skimm'bassador program last year, which grew 600% last year by tracking and analyzing the number of referrals we were getting each week and the number of new Skimm'bassadors joining the program each week."

APPENDIX: BI Solution Checklist

	Alteryx	Chartio	Dundas BI	Microsoft BI	SAP Crystal Reports	Tableau Desktop	Qlik Sense
Satisfaction							
Likely to Recommend							
Meets Requirements							
Ease of Admin							
Ease of Doing Business							
Quality of Support							
Ease of Setup							
Ease of Use							
Reports							
Reports Interface							
Graphs and Charts							
Dashboards							
Data Discovery							
Search							
Collaboration / Workflow							
Data Visualization							
Building Reports							
Data Transformation							
Data Modeling							
WYSIWYG Report Design							
Platform							
Sandbox/Test Environments							
Customization							
User, Role and Access Management							
Performance and Reliability							
Partner Applications							
Implementation Time							
Average Months to go Live							
Cost							
Price per License							

About Chartio

Chartio is on a mission to democratize data across organizations so that everyone can become a Data Hero. To that end, Chartio has built a cloud-based data exploration tool that is simple enough for everyone to use yet powerful enough for the data team. Chartio enables our customers to explore, transform and visualize their data in real time. Chartio has been named a “High Performer” BI tool by G2 Crowd in 2017.

CHARTIO

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