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## achieve marketing dashboard nirvana

Practical tips for quickly building and  
maintaining these data insight tools

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## What is a dashboard?

*It's simple really. In the words of one of the leading educators about business dashboards, a dashboard is a...*

*"A visual display of the most important information needed to understand and manage one or more areas of an organization which fits on a single computer screen so it can be monitored at a glance."*

*- Stephen Few, Perceptual Edge*

There's no doubt that Stephen Few chose his words wisely. Let's dissect his choices.

- "visual display" Like a car's dashboard, the information dashboard must be displayed visually. People need to see patterns, trends and changes without reading text or numbers.
- "most important information needed" The information included should be selected carefully. While there is certainly a wide range and depth of useful information, only a select subset of information is presented.
- "to understand and manage one or more areas of an organization" It's critical that a dashboard be focused on a key objective or management need. A dashboard should not be expected to enlighten the user on every aspect of all the organization's issues. Instead, a dashboard is intended to help the user understand and manage one or more distinct areas.
- "fits on a single computer screen" Dashboards are intended to be used on computer screens – where their target audience can quickly review and engage with them.
- "monitored at a glance" Finally, the dashboard must be able to be monitored with a glance. What does that mean? That the dashboard is clean and free of extraneous graphics or information. Graphs, their trends and patterns, are obvious and clear for the intended audience. Changes in metrics are easy to identify and unexpected outcomes are easy to spot.

## Why a dashboard?

Now that we have a clear picture of what a dashboard should deliver technically, it may be useful to consider why are dashboards so important? Because well designed dashboards will enlighten and empower the business on a periodic basis. Truly great dashboards will enable better decisions and inspire new, unforeseen questions in the business that can deliver transformational results in long-term success.

*Great dashboards enable better decisions and inspire new questions in the business.*



## Real-world dashboard challenges

While dashboards can deliver great value in your organization, there are many common challenges in successfully creating, deploying, and supporting them.

- Finding, cleaning, analyzing and incorporating the right data sources can consume much of your dashboard project's development time. In fact, data management often consumes 50-70% of project time. Many teams hit this roadblock unexpectedly and may abandon the project in frustration.
- Dashboards will go unused if the targeted user base is not considered, consulted and used to validate the final product. If the dashboard is lacking useful information, confusing or overloaded with extraneous information, users will not adopt them in their every day work. Examples of audience quotes about unfulfilled dashboard project might include, "We thought it was cool, but it doesn't quite tell us what we truly need to see if the program is on target."
- Many commonly touted dashboard tools can require weeks of expert programming. Even worse, the developers required of some of these dashboards are not business analysts, but rather expert developers that can be hard to secure. This issue can be avoided by selecting the right dashboard platform, one that requires no programming knowledge but rather uses analysis results and simple menus to enable dashboard development.
- The skills and knowledge of good data presentation and dashboard design principles are rare. Regardless of the chosen tool and access to good data, poor presentation of results can prevent the audience from seeing and understanding the outcomes hidden in the data.
- There are marketing-specific challenges as well. For example, many marketers have inadequate metrics to shed insight into and across their programs. Often, critical data is locked up in program and vendor-centric data "silos". Or, multiple cloud data sources used by SaaS (software as a service) marketing platforms are overly simplistic and difficult to pull meaningful data from.

So, how can you overcome some of these challenges? Let's tackle these issues by sharing advice regarding making the data available to your dashboard and creating great dashboards.

## Creating a question-ready data store

To make even the most basic dashboard effective, you'll want to create a question-ready data store. This is the process of bringing together the necessary data for your dashboard, in particular it is the data needed to regularly access

*The key is to think about the information that is needed, not the information that is available. In most organizations, there is a big difference.*



your dashboard in a clean and consistent form. This doesn't have to be complex – it could be simple spreadsheets. Ideally, you'll want to have your efforts saved in a data store that could be shared with a wide array of dashboard projects over time.

Marketing programs could incorporate a wide range of data sources, often you'll want to combine key data at the customer level incorporating a variety of metrics and dimensions including:

- Demographics
- Behavioral data
- Web activity
- Event records
- Transactional information
- Campaign results
- E-mail response

The key is to start simple but iteratively improve the quality and range of data feeding your dashboard. As the breadth and depth of the data improve, the value of your dashboards will soar and time to develop and manage new, related dashboards will typically decline.

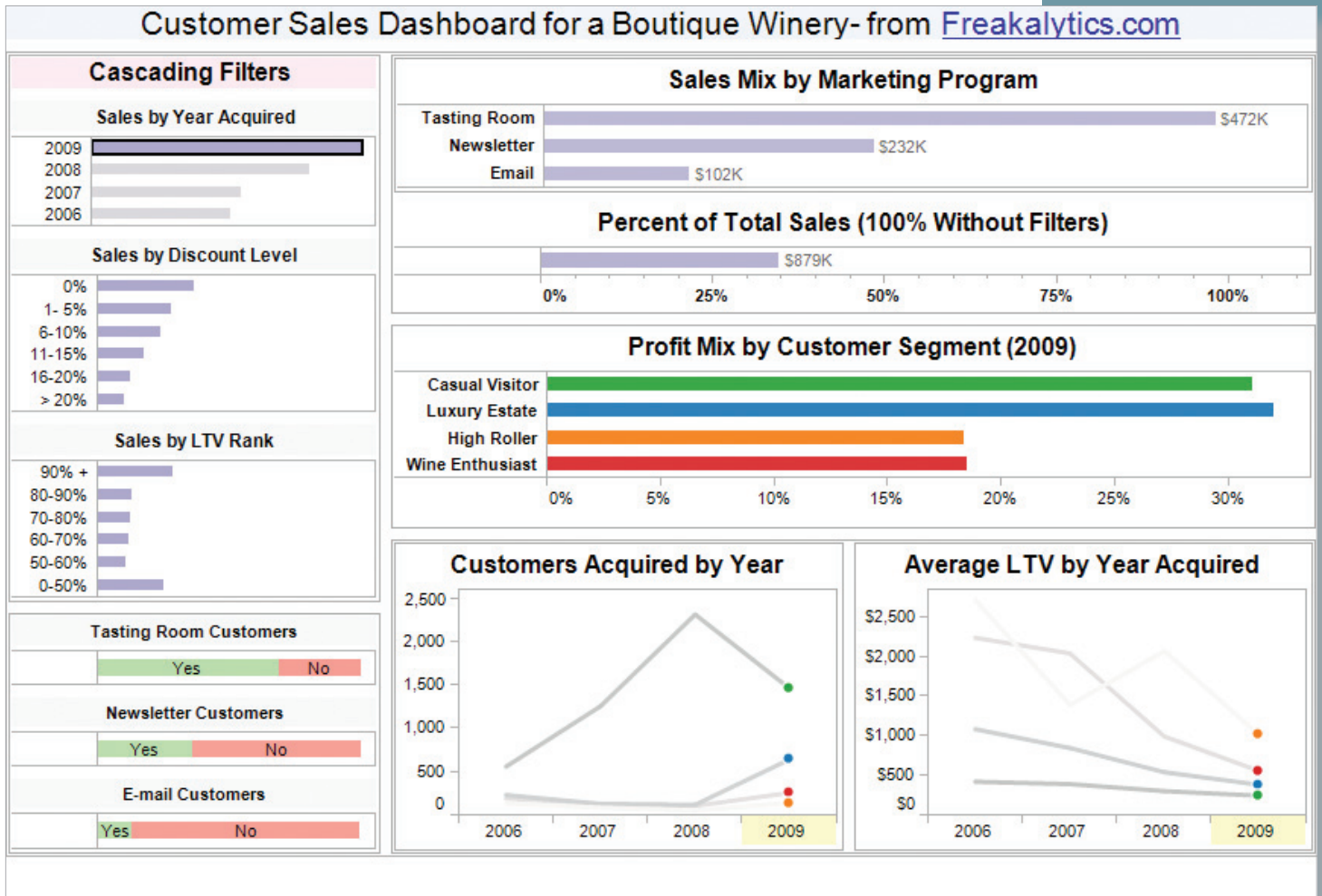
Creating a data store is typically an iterative process with significant value available in each iteration. If you think of each iteration as a short, quick mini-project (with an ideal length of 2-6 weeks) and can rally team resources around those short bursts of focused activity, you may be able to achieve all your data goals in three to seven iterations and result in a holistic, customer-centric data store available for a wide range of marketing dashboard needs.

There really is no perfect approach to creating a data store. The key is to get started and get started with a basic, simple approach. For example, while long-term trends may be important, start with a rolling 12-month period.

Once you have your question-ready data store in place, you'll find you can take that data and enhance it with new kinds of metrics including Lifetime value (LTV) or even predictive analytics (using statistical or data mining models to predict consumer behavior). The insights you can gain from estimating LTV for new customers, or being able to create and use meaningful segments at the customer level will bring a whole new level of cost-justification to your dashboard project.

### **Creating a great dashboard**

The secret to a great dashboard is ensuring that it answers important business questions. So the primary consideration in creating a great dashboard is understanding the business goals of the dashboard audience. Search for and jointly identify the key questions around those business goals.



#### Information First

When first considering and brain-storming your dashboard, it is often a good idea to ignore data availability and current reports. Instead, ask what information is needed by the audience rather than the information that is currently available. In many organizations, there is often a big difference between what is desired and what is currently being collected and used.

Once you've defined the critical information needed by the dashboard audience, then you can work through the data planning process and scope iterations to make the right information available. Keys to this process include:

- Separating strategic from tactical questions. Your dashboards will be more effective if you separate these by audience and deliver the right scope for each one.
- Break down the questions into small but meaningful indicators, measures or components.

**Figure 1:**  
*Strategic Sales Dashboard for Newer Customers. A great dashboard not only answers the big questions at a glance but lets users ask their own specific questions. In this case, the user can ask the same questions as detailed in the first image but has interactively filtered the results to examine customers who were acquired in 2009.*

Figure 2:

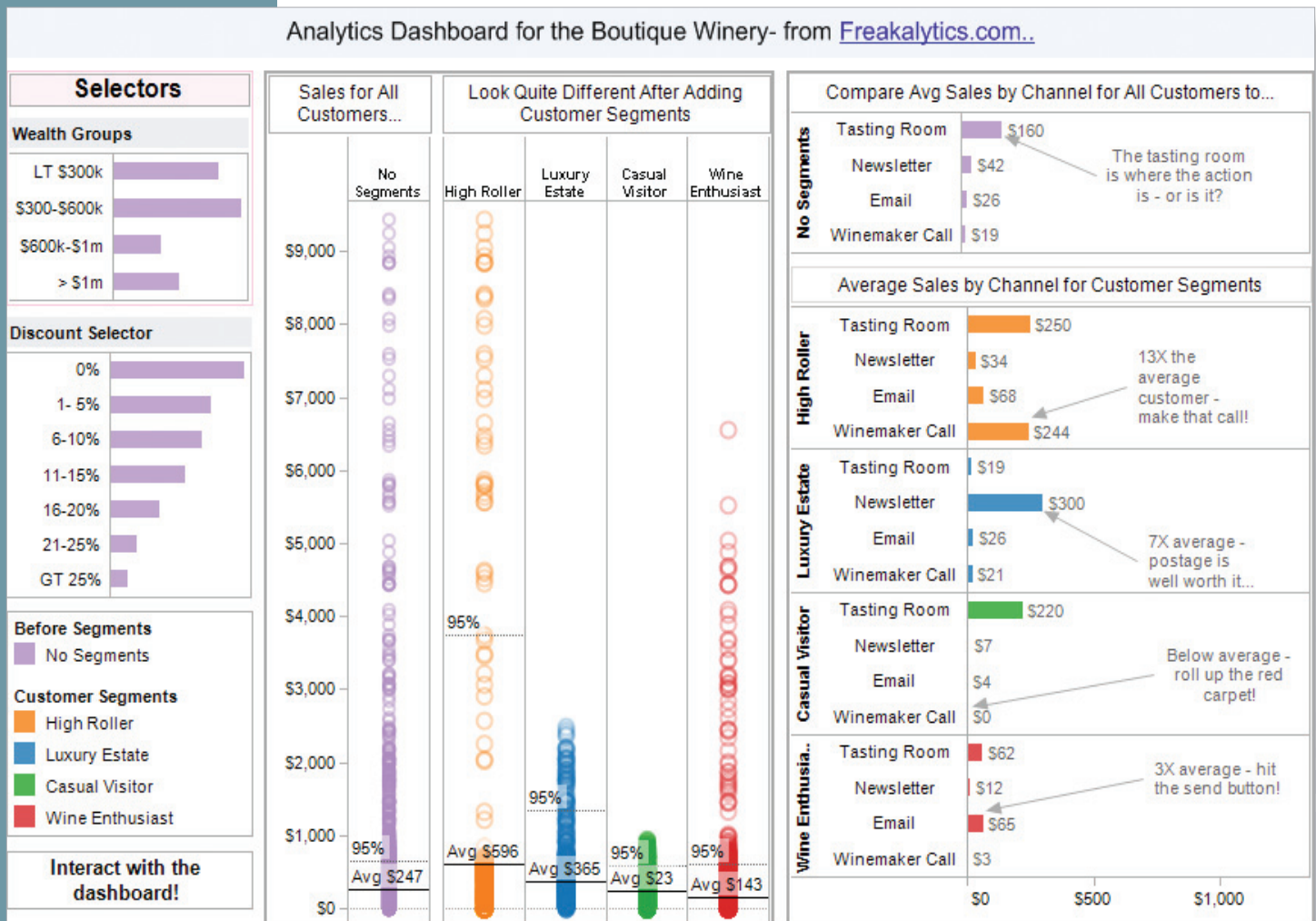
Overall Analyst Dashboard. As expected for an analyst, this dashboard is more detailed and provides a higher level of specificity. While the analyst can monitor trends at a glance, the dashboard also supports the ability for the analyst to filter or highlight specific data groups or even to drill into any data and export the details for deeper analysis.

- Identify the minimum set of data required to answer the questions with the dashboard.
- Pair the minimal data elements with the available data elements.
- Create a plan to capture the missing data elements required for the optimal long-term success of the dashboard.

Keep in mind that different dashboards will have different purposes and therefore will have different design requirements.

### Designing great strategic dashboards

For strategic dashboards, keep it simple and avoid revealing too much complexity or detail. Above all, make it easy to interpret at a glance. Graph types that are easy to read are the best choices: bar charts, line charts or bullet graphs.





Your dashboard views should be clearly aligned with the core set of strategic priorities for the subject being addressed. For example, if a strategic priority for a product line is to increase the number of first-time customers, then have a view that is labeled exactly as that, using the language typically used by the dashboard audience. By easily identifying simple trends, the business targets and progress against those targets, you will make it indispensable for your audience.

If you add interactivity to your strategic dashboard, restrict it to simple check boxes for filtering and basic drill-down or highlighting by clicking. It is also a good idea to include automated filtering based on the user of the dashboard. Automated user filtering can reduce the scope of data based on the user's interest, such as filtering to the specific region managed by a user or a product line based on their responsibilities.

Naturally, the definition of "simple" varies by audience so be sure to test your dashboards with your audience and refine them as needed. It is often a good idea to plan on receiving and acting on feedback over several iterations of the dashboard.

Be attentive to data response issues. Since it's a strategic dashboard, you'll likely have a more senior audience, possibly including executives. So while analysts and operation staff may accept slower query times since analysis is a large part of their work, executives will rarely accept long query times. If necessary, schedule or aggregate the data updates to achieve response times of less than 5 or 10 seconds.

Strategic dashboards should be designed with the idea that your audience will use them every few weeks or so. This should influence your assumptions about range of data used and levels of detail that may be useful.

### *Great analytic dashboards*

Dashboards for analysts and people managing at the operations level have different requirements than strategic dashboards. These dashboards will typically include greater detail with a greater breadth of metrics and may include greater levels of interactivity, including combinations of filtering and highlighting directly from the views.

When designing analytic dashboards, you should assume they will be used daily or weekly, so your data store will need to support at least daily or weekly updates. Analysts will want to drill-down to explore the details, particularly the outliers or exceptions. The analytics dashboard will likely be used as a launching point for deeper questions, so it should be easy to launch ad-hoc analysis from the dashboard. Since analysts often want the detailed data and understand the complexities of data querying, they may accept slower query times in exchange for access to the details. So, you might limit use of data aggregations unless absolutely necessary.





### *Some general design considerations*

While there is some opinion involved in “good” design, here are some basics based on my many years of successes and failures:

- The most important metrics and the highest-level information should be near the top and towards the left in Western languages countries.
- Details, text tables and supporting information is generally best on the bottom right.
- Use colors judiciously: ask “Does adding color add value and make interpretation quicker”?
- Ruthlessly eliminate extraneous information, what expert’s term “chart junk”. For example, is your company’s logo really necessary for an internally-facing dashboard? Does this add value for the users?

Once designed, make sure your dashboard passes the “usefulness” test! For example,

- What story does your dashboard tell?
- Will this story excite and inform your audience?
- Can it be understood in less than a minute?
- Can it be understood in black and white?

Be sure to ask your audience what they can see and diligently listen to their response. Will it meet and even exceed their needs? Are their simple enhancements that would improve the dashboard? It isn’t uncommon for the audience to overlook key points before they are presented with a working version.

## **Conclusion**

Dashboards can be an incredibly effective tool for marketers. They help working teams focus on the right areas, easily communicate with and inform management as to strategic marketing issues, and help managers identify and solve emerging issues early. Your dashboards should enlighten and empower your audiences, enabling better decisions and inspiring new questions across the business. But core to effective dashboards is listening to the audience, designing them in alignment with needs, consolidating quality data and delivering solid metrics.

Examples of two marketing dashboards developed for a boutique winery can be accessed at [www.freakalytics.com/visual-marketing](http://www.freakalytics.com/visual-marketing).





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