

## Data Visualization Best Practice

When building reports and charts there are some best practice in data visualization that you would want to take into consideration. Business Intelligence has changed the way users consume and react to data. A good visual report is easy for the brains to absorb, process data and make decisions. One thing to note is that if you're staring at your chart for too long then you may want to consider re-designing the chart.

Some Key Points in designing a good report are:

1. **Encode meaning to chart.** Be precise and clear about the question you want answered.
2. **Chose the best chart type.** Yellowfin has various chart types. We will not go into details about the different chart types today because of time constraints. If you're not sure which chart type to choose you can choose 'Auto Charts' and let yellowfin choose the best chart type for you.
3. **Formatting and Clarity.** To give your chart more meaning, make use of titles, description, labels, legends, color etc. for quick and accurate consumption of data.
4. **Highlight what is important to tell your story.** You can use conditional color formatting and annotations to highlight important message you want the user to see.
5. Make your report **interactive** by making use of filters, drill through, brushing, time sliders.
6. Last but not least **Share** the data to influence people. You've created this amazing report so why not share it with the appropriate users. Sharing can be done by using export , dashboards, broadcast (sends report periodically to users or alerts when data goes above threshold) and storyboards for presentation

## Dashboards Best Practice

Dashboard is a step away from a list of reports that we see in Amanda where you open up the report that you are interested in and run it. Dashboard is more visual. It's a simpler way to consume data quickly in order to make decisions by just giving the user what they need to know. It's also interactive and collaborative.

Some best practice in creating dashboards are:

1. **Design for a specific purpose.** You need to know your audience and design for that specific purpose. E.g. executive team, sales, project management or inspectors? Create a different dashboard for each subject.
2. **Plan your Dashboard.** Decide on the charts and create them in a logical order. Ensure that you have all the data you need in the data source and that the data is trusted. Decide on security of each dashboard. For example, finance reports should only be visible to executive management.
3. **Summarize your dashboard.** Start with the bigger picture then allow the user to drill down. Do not overwhelm the user.
4. **Decide on the Layout of dashboard.** Add most important report first. Allocate reports according to importance. Keep related reports on same dashboard tab. Long dashboards tabs are less effective; it's better to create sub-tabs. Many reports on the same tab also affect performance. Users do not want to wait long for dashboard to load.
5. Add **Clarity** by making use of formatting, title and description fields.
6. **Highlight what is important.** You can do so by using conditional formatting and annotations. For example, colors to highlight extreme flags so that at a glance users can quickly know what is good/bad.
7. Make it **interactive** by using filters, drill down, brushing, time sliders, tooltips, GIS Maps
8. **Share.** Dashboards are more meaningful when you share it.