

Data Dashboard Design Rules 101

An interviewer once asked the famous architect Frank Lloyd Wright if he'd ever wished for a fabulously wealthy client with unlimited resources so that Wright could design the house of his wildest imagination. Wright's response was, no he hadn't, because it was great limitations that resulted in his most creative and beautiful designs.

Dashboard report design is very similar. There is limited space to convey important information and there is limited time to capture the reader's attention. Like a Wright home, dashboards have to be elegant, imaginative and functional, to draw the user past the threshold and deliver an experience that is visually appealing as well as meaningfully informative.

Keep these principles in mind the next time you are faced with the need for a new dashboard design:

1. Think studio apartment.

A studio apartment is a small space in which each item serves a purpose; nothing is extraneous. The basic tenets of dashboard reports are very similar. A dashboard report helps people to:

Visually identify and monitor at a glance

on a

single computer screen or report page

the

most important trends, patterns and variances

needed to

think and reason

and

make informed decisions.

2. *Good construction matters.*

Just like good construction matters when a house is being built, it also matters when creating a dashboard report. A poor structure and cheap finishes may get the job done quickly, but eventually the shoddy work will show.

When building dashboard reports:

- **Emphasize the graphics and reduce the text.** The graphical presentation of information has the power to communicate more efficiently and with greater influence than text alone. If you need extensive text to explain your graphics then you have the wrong graphics.
- **Include information from diverse sources.** A combination of information, sometimes from seemingly unrelated sources, is often required to display the messages you need to convey in a dashboard.
- **All of the information needs to fit on one computer screen, one report page.** To improve the “span of control” over large and potentially varied volumes of data, your dashboard design needs to leverage people’s visual capabilities. This is accomplished by ensuring that all of the information fits on one screen, one page.
- **Grab attention and impart information at a glance.** A quick glance at a house with fresh paint, a new roof and several broken windows conveys important information to us. Broken windows on a well-maintained house immediately convey information. Your dashboard reports have to convey the same kind of “at a glance” insight. What is okay and what requires attention, or additional information for the user to take action?
- **Make it easy to get additional information.** A well-designed dashboard makes it easy to get at detailed information in the areas requiring attention. In our broken window example, if the house in question backs up to a baseball field, we now understand the source of the problem. The ability to drill down to detailed information or easily find supporting information in a report will make your dashboards immensely valuable to the user.

When designing your dashboard:

- Use concise display tools that convey the greatest amount of information in the smallest amount of space.
- Search for the best, correct tool to display information—this has nothing to do with bright colors or overly clever graphics. If a gauge works best then use it, but if the same information can be displayed with a more elegant spark line then use the more elegant solution—always.
- Put on your user glasses. Know whom the dashboard is for and what information is needed.

3. *Downsize.*

There is a clear trend in the U.S. housing market toward smaller, more sensible homes. We want our needs met and we still love beautiful homes—but we want something much more manageable.

The same is true in our work lives. We are bombarded with information and we want a simple way to get the information we need in order to make informed decisions.

Take the Frank Lloyd Wright approach to creating your dashboards. Use the intriguing limitations imposed to find creative ways to communicate all of the information you need to make the reports useful and beautiful.

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