

Data Visualization for Mobile Devices with OBI 11g

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ABSTRACT

In today's fast-paced world, executives and managers demand access to their business intelligence systems at all times and particularly through their smart phones and tablets. However, small screens require a different approach to the presentation of analyses results. This paper highlights some of the information from the forthcoming Oracle Press book on Data Visualization for OBI 11g. In the presentation at Collaborate, you'll learn which graphs and charts to feature and which to avoid, you'll see how to use visual cues to orient users, and how to balance the drive for "self-service" business intelligence by making smart development choices.

TARGET AUDIENCE

This paper is especially geared towards managers and report creators using Oracle Business Intelligence for users of mobile devices.

EXECUTIVE SUMMARY

After attending this session, viewers will know what to include and what to avoid to create engaging dashboards for a mobile platform.

Learner will be able to:

- Offer specific best practice guidelines for the design of OBI displays on mobile devices
- Demonstrate Oracle BI Mobile App Designer
- Demonstrate how to coordinate dashboard designs across multiple display choices
- Discuss needed development work to enable an effective self-service OBI implementation

BACKGROUND

The Oracle BI presentation server was designed to serve information to a web browser. With Oracle Mobile BI, (and then Mobile BI HD), this capability was extended to the iPad. In the meantime, mobile platforms have taken over the user community. Now everything needs to be mobile-enabled. This presents an interesting question. Do you design reports and dashboards for the browser running on a PC, or do you design for a mobile platform? What about Android-based tablets?

ORACLE MOBILE BI

Using Oracle Mobile BI HD, users can navigate the same reports and dashboards as browser users. This avoids having to have two sets of dashboards – one for browsers and one for mobile. But, the interfaces are different. Screen resolutions are different and especially, the touch interface makes a difference in how people use the technology. As well, the mobile nature of tablets invites a different use case, perhaps altering the sorts of information that people want to use

Here you can see a BI dashboard and the same dashboard on a mobile device:



One of the things that Oracle BI Mobile HD does is to re-orient dashboards to fit on mobile screens better. So in the below example, you can see how the information is reformatted.



Oracle BI will also move around the elements to capitalize on screen real estate.



Many BI dashboards are not well designed. They are a conglomeration of reports. Little thought was given to how the reports should be organized. Once this is translated to a mobile platform, this just gets worse. Many dashboard creators would be well served to return to basic principles of design.

For example, here are some best practices for tables:

Best Practices for Table Design

- Eliminate unnecessary gridlines
- Enable column and row sorting
- Avoid scrolling (if possible)
- Display significant figures
- Judiciously use conditional formatting
- Avoid putting text in color unnecessarily
- Left justify text cells
- Right justify numerical cells
- Align the decimal point for numerical cells
- Use thousand separators
- Prefer smaller tables
- Write informative titles for tables
- Be transparent about data selection
- Write informative column head descriptions
- Denote scale and units of numbers when necessary (e.g. thousands, millions of cases)

Graphs are often overlooked when designing BI systems, but they often are more useful from a data visualization capability than tables. They allow you to compare values more easily. There are lots of fancy graph types, but the basic types of line (for continuous dimensions such as time) and bar will serve you best. Stay away from 3-dimensional effects that are only “eye candy.” All they do is distort the data.

In our presentation we will show several examples of dashboards before and after modifying to work with best visualization practices.