

DOMO

# Creating an Effective Mobile BI Experience



The widespread adoption and dependence on mobile devices in nearly every aspect of our lives has brought with it a dramatic expansion of the mobile workforce as well. In fact, it's expected that by the beginning of 2013, 73 percent of the workforce will be made up of enterprise mobile workers. That revolution is changing the way business intelligence (BI) is delivered to end-users, with many companies now seeking a mobile-first approach to BI.

The benefits are clear: Studies show that organizations with mobile BI can make critical business decisions six times faster than those without mobile intelligence. But determining the right strategy and solution amid a mass of vendor claims, analyst reports and social discussions can be challenging at best. This brief attempts to clear up some of that confusion by highlighting four factors your organization should evaluate as you consider a mobile BI strategy:

- **Mobile device considerations**
- **Mobile BI user experience**
- **The role of cloud services**
- **Mobile BI security**

## Mobile Device Considerations

Do you have 100 percent control over the different types of mobile devices on which your users will consume your BI data? If your target audience includes customers, partners and suppliers, then the answer is "No." If your target audience consists of only employees, you might have 100 percent control today, but that control probably won't last long. All it takes to upset that balance is a new executive who wants to use an iPad instead of a corporate BlackBerry or an Android smartphone instead of a standard-issue iPhone.

The reality that you will likely have a mix of Android, iOS and other devices needs to play into your selection of BI solutions. This situation is even more apparent in organizations trying to save money and improve user satisfaction by moving to a Bring-Your-Own-IT (BYOIT) model. In a BYOIT environment, instead of provisioning users with corporate-approved mobile devices, users are provided an allowance to purchase their mobile devices of choice.

To ensure that your users can access your BI data regardless of their mobile device, you need a BI solution that leverages multiple methods and open web standards (e.g.: HTML5 and JavaScript) for visualizing intelligence data. It also needs to be

able to dynamically switch between those different delivery methods based on what methods the target device supports.

Unfortunately, many BI vendors have based their graphic and data delivery model on just one or two technology platforms. A prime example of this approach is those vendors that primarily rely on Flash, a once popular, yet proprietary technology for presenting graphics over the web. With recent announcements about reduced support of Flash on mobile devices, many BI vendors are now being forced to redesign, develop and extensively field test a new delivery platform. Obviously, that means their customers must either wait out the lack of support or invest substantial time and money to implement a different solution.

You also need to consider how your BI solution handles different screen sizes and resolutions. Does the solution require you to manually customize, build and support different flavors of a BI dashboard to fit the differing screen sizes and resolutions of your mix of tablets, smartphones and laptops? The excessive costs of such redundant development and support efforts can be avoided by leveraging a solution that automatically and dynamically adjusts the placement and layout of your dashboards based on the capabilities of any target device. This lowers

development and support costs and allows you to provide a consistent presentation of intelligence information regardless of what type of device is being used.

## Mobile BI User Experience

Many BI systems provide a great user experience when accessed from a desktop or laptop, but that experience often deteriorates on mobile devices. As a result, it becomes a significant challenge for the users of that system to fully leverage BI data when going mobile. One of the main causes of this poor user experience is a lack of consistency between the mobile and desktop user interfaces.

It's easy for users to fall in love with a beautiful interface that's also married to the convenience of an iPad. Unfortunately, history has shown that love will quickly die if mobile users try to actually use the interface and it doesn't perform beyond the most basic operations. Users have noted that a task such as drilling down into a dashboard, which might have only taken a single click while on their laptop, takes three or four taps to achieve the same result on a mobile device. This gap between the desktop and mobile experiences, which begins as a minor inconvenience, over time can become not only a significant irritation but also a major impediment to getting real work done while being mobile.

Another common problem is solutions that provide the same level of functionality on mobile devices as their desktop counterparts, but often with a mobile user interface that is significantly different than the desktop UI. In these cases, the mobile UI might not be as intuitive to use, may require different actions to achieve the same results, or may not provide the same at-a-glance useful information.

In either case, the user experience is greatly diminished and full of friction because of the dramatic differences each device offers. Ultimately, users expect and want their mobile BI experience to be as similar as possible to what they experience on their laptop or desktop—

the same look and feel, the same behavior and interactivity, and the same rich experience.

## The Role of Cloud Services

The rise of cloud services has given organizations the ability to shift more of their focus to core business efforts. By using an in-the-cloud BI solution to deliver critical data to your mobile users, you don't have to invest in and support additional hardware, software and security protocols within your four walls—and the cloud offers a number of unique capabilities that can enhance the overall value of mobile BI.

One of those capabilities offered by the cloud is the ease with which it lets you store your BI data in a single main repository that can be accessed from anywhere. You no longer need to maintain a separate, special data repository just for your mobile users. It eliminates the hassle and effort of maintaining multiple repositories and making sure there are no discrepancies in the data among different silos. It gives your users consistent and reliable access to the same BI data whether they're using a desktop, laptop or mobile device. As a result, you can be confident that all your users have the same version of the truth, no matter what device they use.

By having your main repository in the cloud, the BI solution should also allow your users to use the same URL and authentication credentials to access their intelligence data whether they're mobile or in the office. This consistency of access can eliminate the need for additional training and can greatly simplify the user experience. The importance of this ease and consistency is magnified for large organizations and if your target users include customers, partners and suppliers.

## Mobile BI Security

A frequent nightmare of IT leaders and company executives involves a mobile device with sensitive data that is accidentally lost or stolen. Of course you make sure all users' devices are password

protected and you have a comprehensive security infrastructure in place to prevent unauthorized access to backend data from mobile devices. But you also need to ensure that your BI solution supports and can leverage that infrastructure. For example, if you use single-sign-on based on Active Directory or LDAP, your mobile BI solution needs to support your single-sign-on method. Otherwise, you'll have to maintain—and your users will have to use—a separate authentication method for mobile. Ideally, your solution should support multiple, standard authentication methods so it will continue to work if you change authentication technology in the future.

In addition to your efforts in securing your devices and safeguarding web access to your BI data, you need a mobile BI solution that is backed by a vendor with the expertise and technology in place to ensure that if one of your mobile devices falls in the hands of an unauthorized user, there is no way for that unintended user to access your data. That includes security mechanisms that prevent access to data stored in the device cache or that keep your BI from ever being cached. The solution should provide you the ability to lock down access to your BI when employees leave the organization, partnerships dissolve, or devices end up in the wrong hands.

## Successful Mobile BI

While the BI market is crowded with mobile products, iPad apps and vendor claims about easy access to data on smartphones and tablets, only a small number of solutions can meet all of the criteria outlined in this brief. One of those solutions, Domo, provides an executive management platform that brings together the business intelligence data you need to know in an easy-to-digest, easy-to-analyze way. Equally important, Domo provides the same rich, intuitive and secure user experience whether you're accessing your intelligence data on a desktop, laptop or mobile device.

For more insights on how to develop a successful mobile BI strategy, visit [www.domo.com](http://www.domo.com), follow @domotalk or call 1-800-899-1000.

