

# **Do I really need my entire SharePoint portal squeezed into my smart phone in order to become more productive?**

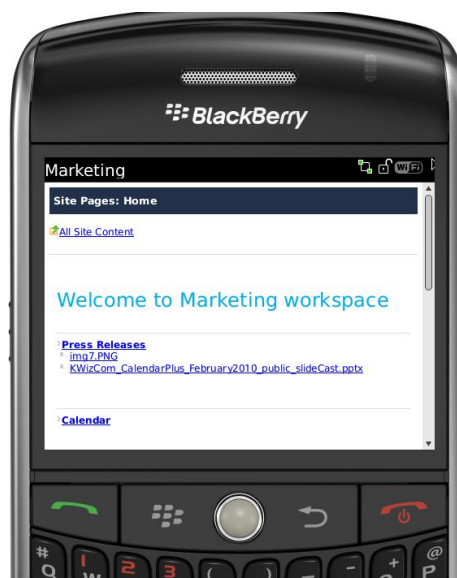
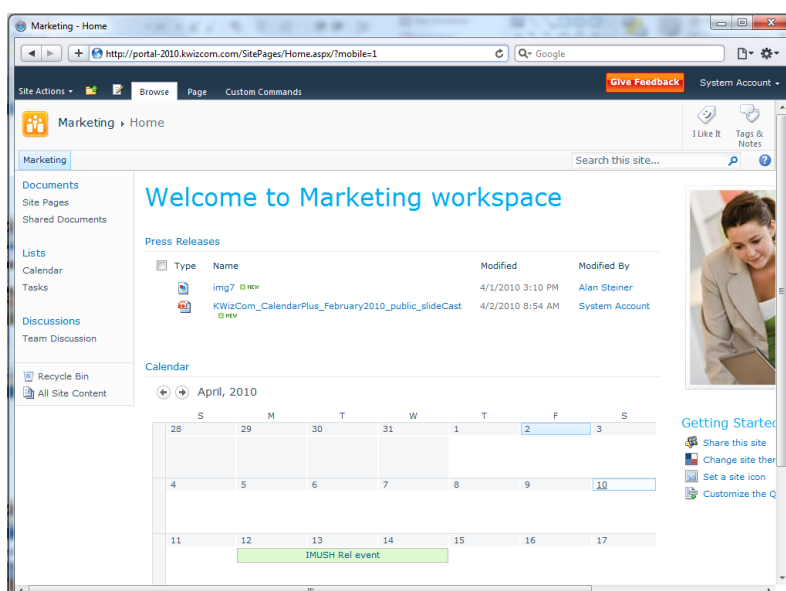


Nimrod Geva  
Product Group Manager  
KWizCom Corporation

## Overview

With SharePoint 2007, 2010, and now in SharePoint 2013, Microsoft offers its mobile users a “SharePoint mobile view”.

The basic concept behind this *mobile view* is to try and provide mobile users access to the same information that is available through SharePoint’s web interface. Of course this view is significantly limited view due to the mobile phone screen size, connection bandwidth and browser capabilities.



Some vendors provide an enhanced UI that better renders the SharePoint view for smart phones such as BlackBerry or iPhone. However, they are delivering virtually the same concept as SharePoint out-of-the-box: provide the user with the same information and in much the same way as provided by SharePoint’s web interface.

Some key questions we hope to answer here:

**Are the needs of a mobile users, while “on the road”, the same as their needs while working at the office?**

**Or are there specific and common tasks that we can provide our mobile users with on their smart phones that will make their mobile SharePoint experience less frustrating and more efficient?**

**Can we integrate and make optimal use of both the SharePoint and the mobile platforms?**

## Information-oriented interface vs. Task-oriented interface

I don't know about you, but when I work at the office (or at home), I use a 22" monitor, and I love it! (Not the work, the screen of course).

With that monitor, I can easily see all the information offered to me by our SharePoint portal. Like any other web portal or workspace, such an *Information-oriented interface* provides me with menus, links and other rich navigation means that enable me to easily access all the information that is available in the portal.

If I fail to navigate to the information that I need, I will probably use the Search mechanism, hoping to find what I need among the search results returned by the portal's search engine.

So, **information-oriented interfaces** display and provide access to everything that users might need, and users simply have to navigate and pick the information they require.

The situation is quite different while I'm out of the office, on my way to a meeting, in a meeting or on my way to my car after finishing a meeting:

- Screen size is VERY limited
- Keyboard is much less convenient
- I am on the move
- I have much less time
- Every page-refresh costs money! (although data plans do cost less these days)
- I need specific types of information, or to perform very specific actions related to the common activities that I perform while out of the office.

What is for sure is that while I'm on the road, the last thing I need to see is all the information available in my SharePoint portal, squeezed into my 3" Blackberry screen.

What I do need to see is **ONLY the information that supports, and more critically, drives my out-of-the-office activities.**

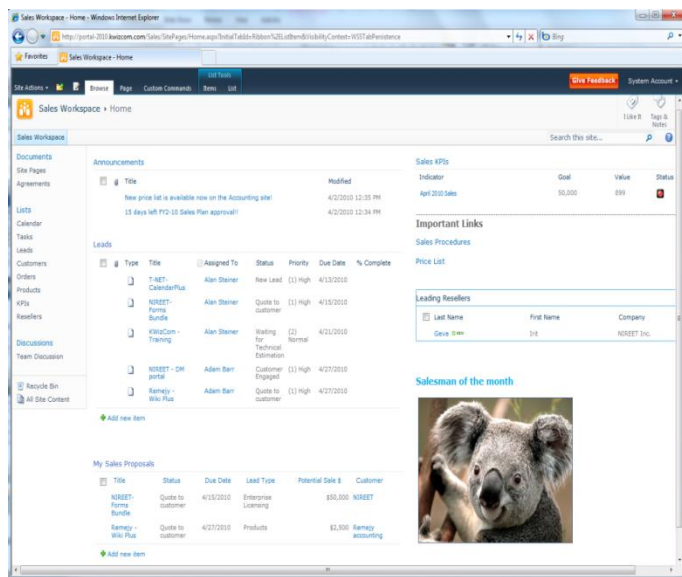
In other words, instead of an Information-oriented interface that shows me all the available information, I need a **task-oriented interface** that shows me the exact information and actions that I need while I'm on the road.



This means a much more focused interface is needed, or more specifically:

- **Show me less menus, less links, less information**
- **Show me menus and information relevant to my role and to the fact that I am out of the office!**

So, for example, let's imagine that this is my **Web Sales Workspace** which I use while I am in the office



While I am out of the office, I do not need all this information while going from one sales meeting to another, using my smart phone. It is a frustrating navigation experience to try and wade through this on a phone screen to get to precisely the tasks and information I need to make my meetings productive, note my follow-ups and to make sure I am prepared for the next call.



**What I need is a Mobile Sales Workspace** that shows me only what I need:

- My Sales KPIs
- My leads
- Our company's price list
- Create a follow-up task

**That's it!**

While I am out of the office, running from meeting to meeting, this makes the best use of my time, my phone and my SharePoint portal.

## Generic vs. Context-sensitive interfaces

Technically speaking, SharePoint provides a great generic (and flexible) tool for managing structured data with Lists. SharePoint lets you create a list and define the required columns (SharePoint supports a wide variety of field types). Once you create the list, you automatically get all the required New/Edit/View forms, and a set of generic menus such as Edit properties, check-in/out, Delete and other list item menus – all enabling you to manage any type of structured data.

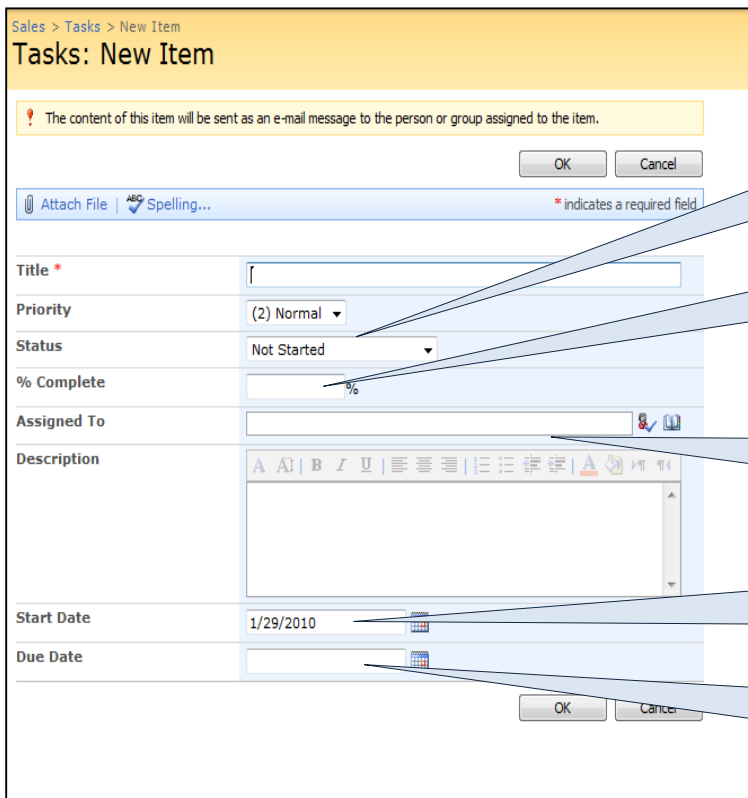
Whether you are managing Tasks, Events or Announcements, these generic menus are the same, providing you with a generic and consistent interface.

### What is the problem with the Forms, or, wouldn't it be nice if SharePoint list forms could be a bit smarter?

By saying “smarter” I mean that I wish that SharePoint lists could behave differently according to the current situation, and display **different fields** and **different menus** according to:

- **Who the current user is**
- **The type of information he or she requires**
- **State of the current record (values of other fields in the current item)**

As an example, let's say I wish to create a **follow-up task for myself** after I had a meeting with a customer. This is the task form that I have to fill-out in SharePoint:



This is new task. Why do I need to see this field? Of course the status is “Not Started”)

Again: why do I need to see the “% Complete” field for a new follow-up task?

This is a follow-up task for myself, so it can automatically get the [Me] value and I don't need to see it now

For a follow-up task I would like not to see the “Start Date” field, and have it be equal to [Today]

Could you please validate that the “Due Date” value is always later than the “Start Date” value?

So, for a new follow-up task (that usually I would like to create immediately after I finish a meeting with someone), about **half of the New Task form fields are irrelevant**. They are irrelevant due to the **context** of this follow-up task:

- According to the way I work, follow-up tasks are always in high priority. This may not be true to other types of tasks that I create while I am in the office.
- When I create a new follow-up task, its status is always “Not started”. So because of the state of this task (a new task that I am just now creating), this Status field is not relevant and should not be displayed at all.
- Since it is a follow-up task for myself, I do not need to fill-out the “Assigned to” field. I would like it to be automatically mine, at least until I get back to the office, and not to be displayed at all in this form.
- As for the “Due Date” field...This is certainly one of the best examples that demonstrate why SharePoint tasks (as all other lists) are just generic lists with no context. When dealing with tasks, there is no logic in setting the due date to be earlier than the start date of a task. The problem is that the SharePoint Tasks list does not contain this logic (or context in other words), since it is just a generic list with some columns that look relevant to tasks. When I create a task I expect that the value of Due Date field will be validated to be later than the Start Date, otherwise it has no meaning.

The fact is though that we are all used to working with SharePoint’s generic list form that always show all the fields, regardless of the type of information, state of the item or the current user’s role. We always have to see and update all the fields. However, it would be much more efficient if I could see only relevant menus and fill-out the fields that are relevant to the current context.

But what if, to go back to the previous example, we could create a custom menu called “New follow-up task” that displays **a new task form with only three fields** (Title, Description and Due Date fields)? It is clear that such a form will be **much easier and faster to fill-out**.

By the way, the challenge we present here is not really new. Task-oriented and context-sensitive interfaces have been developed for many years in various industries such as Avionics systems (small monitors for pilots, having to make decisions under stressed situations) and medical equipment (small screens showing critical medical information to the medical staff).

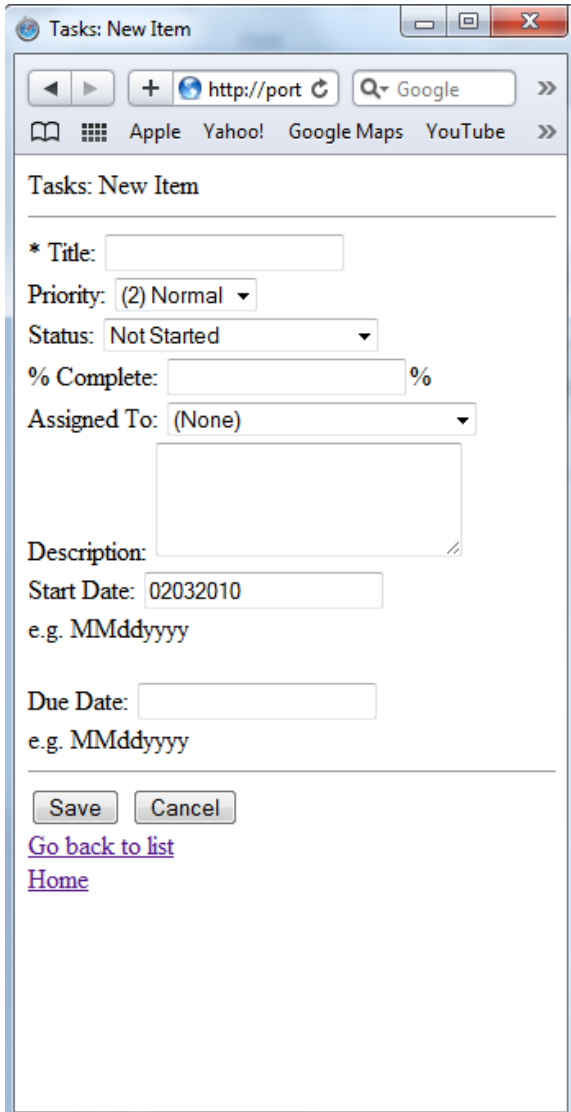
**The solution is always the same: where we have display limitations, the interface must become more focused and smarter to allow users and the platform to perform optimally.**





## The relevance to mobile SharePoint interfaces

While the fact that SharePoint list forms are not context sensitive is not something related specifically to mobile users, i.e., this issue exists also in SharePoint web interface. However, the problem is much more painful while trying to work with SharePoint from a smart phone:



The screenshot shows a web browser window titled "Tasks: New Item". The address bar shows "http://port". Below the browser window is a form with the following fields:

- \* Title:
- Priority: (2) Normal
- Status: Not Started
- % Complete:  %
- Assigned To: (None)
- Description:
- Start Date: 02032010   
e.g. MMddyyyy
- Due Date:   
e.g. MMddyyyy

At the bottom of the form are two buttons: "Save" and "Cancel". Below the buttons are two links: "Go back to list" and "Home".

With even the most advanced smart phones, the keyboard is much smaller, the screen is much smaller (so you have to scroll after 4-5 displayed fields), and there is much less inclination to wait for unnecessary page-refreshes.

That is why it is **not enough just to render SharePoint into some nice-looking mobile view**. Without making the mobile view much more focused and smart, it will be a frustrating and time-consuming process for users. Most importantly, it will certainly not make mobile users more productive with SharePoint.

## The solution: An intelligent SharePoint mobile interface that is both task-oriented and context-sensitive

There are several solutions available today, some relying on more development and others less.

To deliver an intelligent SharePoint mobile interface that is both task-oriented and context-sensitive, you need the ability to create smart forms and integrate these with custom actions at the menu level on a smart phone platform.

- **Smart Forms**

This means turning the SharePoint list forms into powerful, context-sensitive forms and adding the following capabilities to them:

- Field-level dynamic permissions
- Dynamic default values
- Dynamic field constraints
- Field-grouping

- **Custom Actions (Menus)**

This means creating custom menus in list-level and in item-level, enabling the easy implementation of the exact menus required by business users, instead of having the same generic menus that have no context. These custom menus are context-sensitive, which means they are displayed only to the appropriate users, and only in the right situation.

- **Mobile Extensions**

This means that, principally, this layer exposes the smart forms and the custom actions to mobile users and supports all types of mobile clients. Moreover, this layer allows the creation of custom mobile pages. These custom mobile pages are not just a “thin version” of the SharePoint web pages; these are custom-tailored pages for which the precise content is definable through the use of reusable mobile page parts (same metaphor as web parts, but only in mobile pages).

Together, these three layers of the solution enable the creation of a **custom-tailored, focused mobile interface that answers any mobile users’ specific needs!**



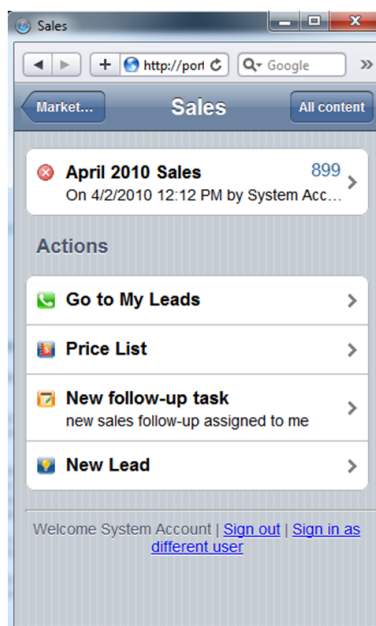


The solution we've designed at KWizCom for SharePoint mobile users is called the "[SharePoint Mobility Bundle](#)". It focuses on providing smart interfaces that dramatically reduces the time needed for a user to perform the required activities while he or she is on the road.

The [SharePoint Mobility Bundle](#) is designed both for Web and for Mobile, and consists of the three layers outlined above: smart forms, custom actions via the menus, and a dedicated mobile extension for the smart phone platform.

This solution provides users with the **exact custom mobile interface** they need to support their out of the office activities, **without any development required at all!**

So, instead of having your mobile work force collaborate by trying to scroll through a mobile rendering of the typical SharePoint screen, that mobile interface can look like this:



## Summary

We all are going mobile. I can say for myself that about 1-2 hours a day, I perform work-related tasks on my smart phone. And the bottom line is that the last thing mobile users need is a SharePoint web portal/workspace squeezed into their smart phones.

If you wish to provide your mobile users with the same SharePoint level of service as they get in the office, you must consider the mobile phones' limitations by delivering a task-oriented and context-sensitive interface. Look for an integrated solution, such as that offered by KWizCom, that will provide mobile users with a real productive interface, and not just a tool to view various items.

## About the Author

### **Nimrod Geva, Product Group Manager of KWizCom**

One of KWizCom's founders, Nimrod has over 15 years of experience in software design and development for real-time avionics systems and Microsoft-based IT systems, as well as a decade in marketing and business development.

Nimrod is responsible for KWizCom's product roadmap, as well as providing considerable support for the company's marketing and sales teams.

He can be reached via email [nimrod@kwizcom.com](mailto:nimrod@kwizcom.com)

## About KWizCom

Since 2005, KWizCom has provided innovative software components to over 5,000 companies worldwide. KWizCom's solutions expand Microsoft SharePoint, Project Server and Dynamics CRM out-of-the-box capabilities, streamline workflow, maximize efficiency and enhance over-all productivity for hundreds of thousands of users.

KWizCom's Mobile Extensions are an AT&T certified solution, and support Blackberry, iPhone, Symbian and Android phones.

KWizCom, a Gold Certified Microsoft Partner, is headquartered in Toronto, Canada. Please visit [www.kwizcom.com](http://www.kwizcom.com) to find out more about KWizCom's clients, people, partners and solutions.