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Windows Phone 7 Series - what the new mobile platform hides in itself



[Mobile World Congress 2010](#) which has passed in February, 2010 has done a lot of noise concerning new mobile platform Windows Phone 7 Series. However, many details have been opened only at [MIX 2010](#) which has passed in March, 2010. Windows Phone 7 Series platform is really good, in it the breaking changes are made, which have given the second life for mobile platform Microsoft. However, apparently on the numerous responses, these changes have been misinterpreted by many also they have drawn incorrect conclusions. Actually the majority of decisions very logical and correct, and they will help a platform to leave on new, better level. Therefore over a period several posts I will tell about various aspects of a new mobile platform and developing for it. The story will be constructed from a point of view of application developers for mobile platforms.

So, the first that is evident by consideration Windows Phone 7 Series are very courageous and radical steps of a developers team on change of a direction of development of the platform. If before Windows Mobile it was taken up a position as a mobile platform for the business applications, being, as a matter of fact, by the facilitated variant of the desktop operating system now Windows Phone 7 Series is taken up a position as a platform oriented to the end user. Badly it or is good? Let's try understand. For this purpose let's look for what scenarios mobile applications are developed:

- business applications;
- end user applications.

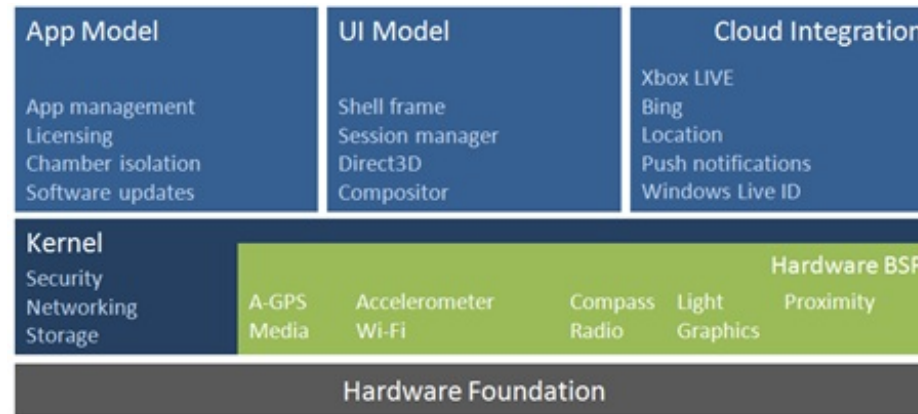
It is easy to guess that requirements for applications for end users much more above. Really, huge number of users of smart devices are reading of mail, communicate in various social networks and IM, use them for photography, etc. Thus much smaller number of users is using the devices for operation with corporate documents or operation in any corporate system. It means that the overwhelming number of users of similar devices in a greater degree requires simple applications for daily usage and in smaller – in business applications. At the same time the success of a platform is defined by that, how much well she solves problems of the users. Therefore it is not surprising why such step has been taken. However, it at all does not mean that the corporate user is forgotten, simply to it is given slightly less attention.





At such approach the success or failure of a platform strongly depends on that, how much actively independent developers will develop applications for a new platform. Therefore the goal of developers of Windows Phone 7 Series consisted in making this process simultaneously simple and flexible. It means that the developer of applications should create new applications, spending thus the minimum efforts on infrastructure support (mechanisms of construction of user interface, upgrade, operation with the data, application protection etc.). Therefore the applications programming is based on two main platforms – XNA and Silverlight. The XNA platform approaches for creation of game applications while Silverlight it is used for all other cases. However, it does not mean that you cannot create games on Silverlight or, on the contrary, the application for RSS-feed reading on XNA. Apparently, in both cases the managed code is used that allows to make applications more controlled and inspected from the operating system. As a whole it is possible to present a development platform as follows.





Windows Phone 7 Series supports superset of Silverlight 3. It means that we can easily migrate existing Silverlight-applications on a mobile platform. Thus the application can work equally correctly both on PC, and on the mobile device. With XNA platform a situation are similar – the code developed once can work simultaneously on PC, XBOX and the mobile device. It allows to the user to use similar possibilities on all specified devices and by that to increase efficiency of its work. Also this applications can be connected with a cloud. In Microsoft it names as the concept of three screens and cloud.



For an applications development there is separate edition Visual Studio Express for Windows Phone which is free. Also probably to develop for Windows Phone 7 Series, using Expression Blend. These and other tools can be found on a developer.windowsphone.com

portal.

As the Windows Phone 7 Series platform is oriented in a greater degree to the consumer the important role in it is occupied with user interface. In this question it was accepted to make use of solution successful experience of user interface Zune HD and to use similar graphics solution. Developers names this solution as “Metro design language” is not simply colour design user interface, it is the whole philosophy of how it is necessary to build user interface. The Metro contains some the main ideas:

- the user interface does not contain excesses (like various gradients) – it is simple and clear, but at the same time saves the attractiveness;
- large fonts are used only;
- definition of accents in the application becomes by means of a colors;
- the special attention is given to fonts.

Whether the user interface is successful consumers will estimate, however it already was a success among users Zune HD, therefore it is possible to assume, as here it will find the consumer.

Last about what it would be desirable to tell, considering Windows Phone 7 Series is an attempt of a developers team of hardware standardization. Experience with Windows Mobile (when hardware supports differs from model to model) has shown that it very much complicates a life to the developer. Entering accurate standards, Microsoft gives the chance to developers to be precisely assured in, whether there is available this or that device and it possesses what characteristics. Thus, Windows Phone 7 Series contains minimal requirements to a hardware platform which look like this:

- CPU - ARM v.7;
- RAM – 256 Mb;
- multi-touch display;
- sensors: A-GPS, accelerometer, compass, light;
- camera;
- GPU (DirectX 9).

Badly it or is good, what there are the hard limitations exists to the device? I think that it is very good. Manufacturers of mobile devices



most likely will find forces for creation of a similar platform, and to developers of the application it will allow not to be limited of old devices.

As a result, it is visible that the Windows Phone 7 Series platform is second life of a Microsoft mobile platform which stands to win. Whether there will occur this success will show time. Further we will continue to consider features of Windows Phone 7 Series and we will speak about various aspects of development for a new mobile platform.

