

# Faster, better, cheaper

*Agile approach in managing mobile software projects*

*By Artur Bialy*

The world is moving at the faster pace these days, competition increases that speed even further. Business processes have to keep up the pace as well as the software that implement those processes. Software projects become more complex and the aforementioned speed puts a lot of pressure on the timeline and project management.

Despite the fact of the speed another complexity is shining on the horizon.

According to Google Research ([http://services.google.com/fh/files/misc/multiscreenworld\\_final.pdf](http://services.google.com/fh/files/misc/multiscreenworld_final.pdf)) smartphones are the most common starting place for online activities such as searching for services and information.

Tablets are replacing home computers and laptops. Consumers are getting mobile and are moving at the great speed, they change devices and are online using multiple sources.

How to manage software projects in such a complex and fast moving world?

One of the solutions to that problem is an **AGILE** approach.

Being AGILE means quickly adapt to the customer needs, think in the customer business language and develop software in close collaboration with the customer. This customer oriented approach gives the tremendous handicap while working with complex environments.

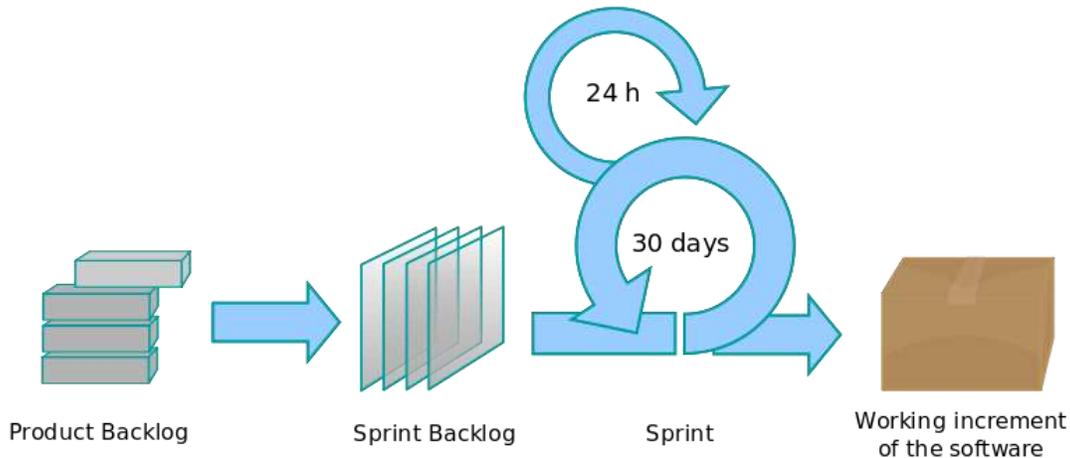
The production of the software in the agile approach uses iterative and incremental process. It means that the product is built in distinct time boxes (iterations) in an incremental way (adding the desired features one by one).

The diagram below shows the Agile approach using SCRUM framework. Scrum is an iterative and incremental agile software development framework for managing software projects and product that was designed especially for complex projects.

All the work starts from the Product Backlog, which is the set of all requirements. The whole scope resided there in the Product Backlog.

Then the work is carried over in multiple iterations (called Sprints in SCRUM). Subset of the Product Backlog is chosen (by the customer and the team) for each iteration. The subset is chosen in a way that allows it to produce a working increment of the software

for each iteration. That working increment actually presents the usable piece of software. That approach allows working closely with the customer and getting the feedback very fast.



SCRUM process, source: Wikipedia ([http://en.wikipedia.org/wiki/File:Scrum\\_process.svg](http://en.wikipedia.org/wiki/File:Scrum_process.svg))

Mobile application development adds another complexity to the management process - user interaction. Tablet and smartphone interfaces rely heavily on the user interaction and a graphical design. Those elements are critical for the product success.

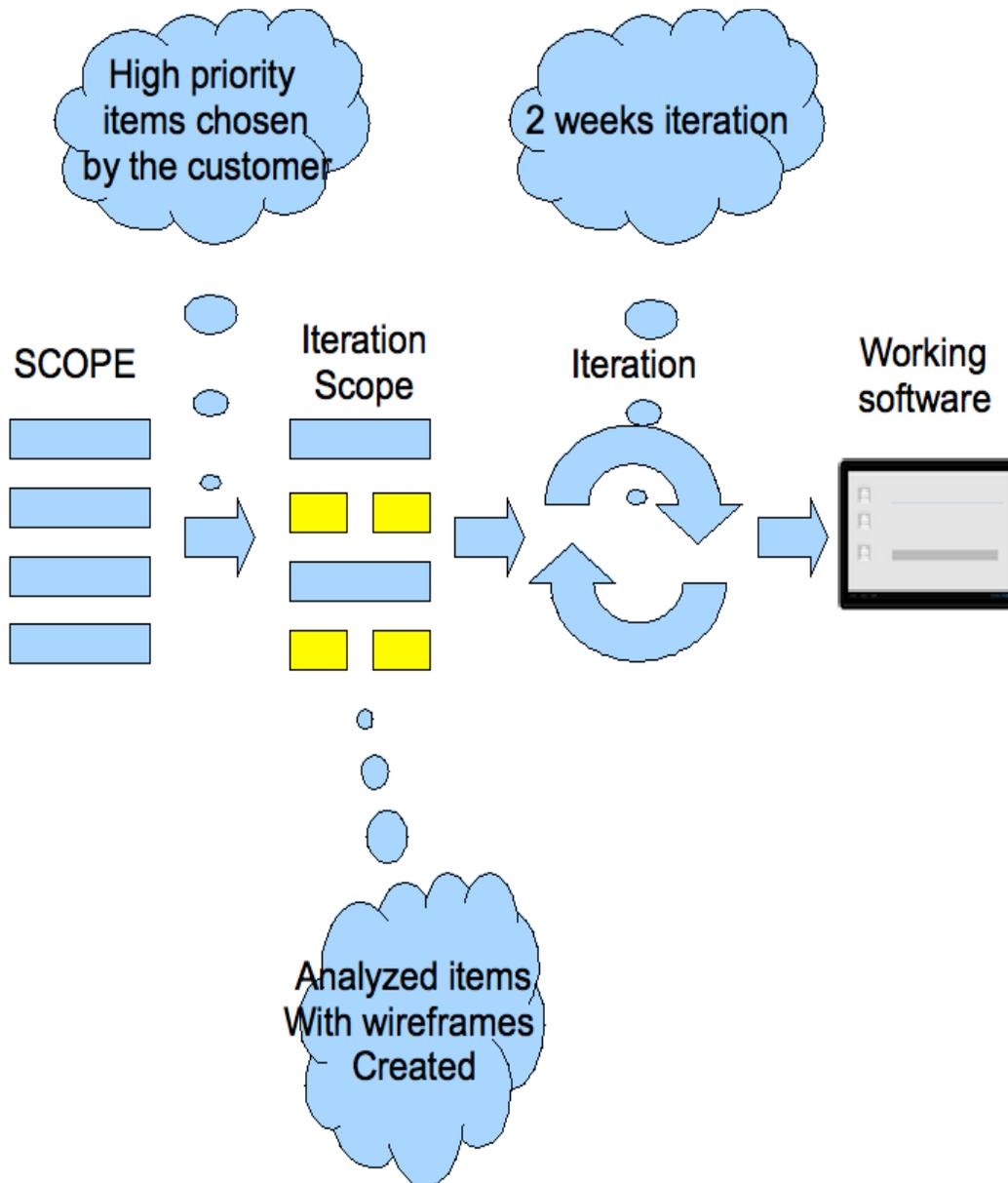
We are going to present an actual test study conducted on the real mobile project. The goal of the project was to create a mobile application that would advertise the dentist practice. The customer was a dentist specialist from El Dorado Hills, CA. The company that was running a project was a lean mobile software vendor - **Tabletized.us** (<http://www.tabletized.us>).

The customer had a vision of having strong marketing message in the mobile space. He wanted join the mobile revolution, being able to advertise in mobile channels and keep in touch with his patients via mobile devices. The project had very tight budget, not well defined scope, very demanding customer (who did not have much time to cooperate) and short timeline.

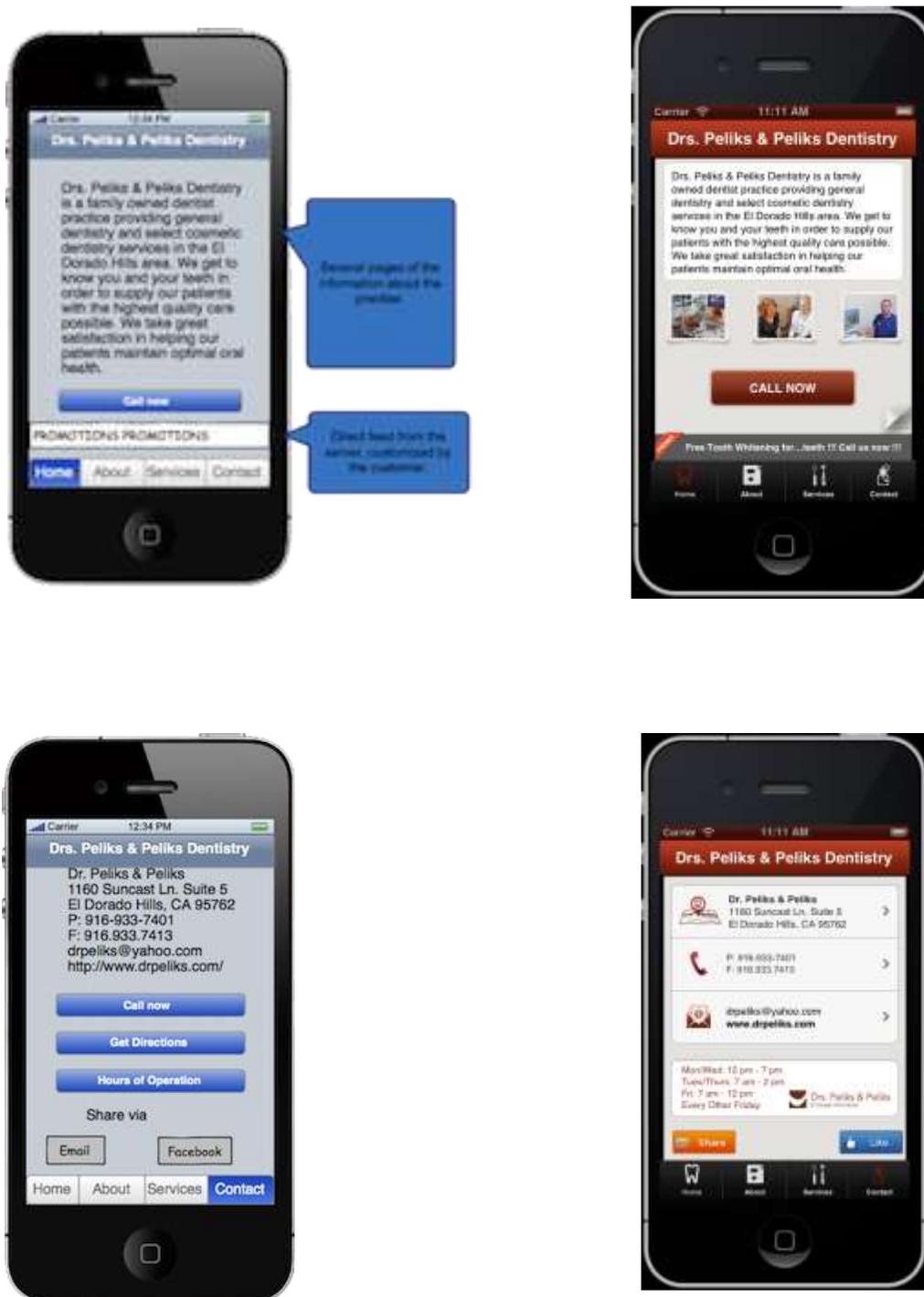
In order to quickly deliver a working application that would be aligned with the customers' expectations a modified Agile process was used.

On top of the actual Agile/SCRUM processes, the detailed prototyping process was used to quickly get the clear requirements and align them with the customer. Before each iteration the detailed wireframes were created and discussed with the customer. Based on the feedback the mockups of the actual screens were used to start the development work. At the end of the iteration the working software was presented to the customer. After his approval the next iteration started using the same process.

The diagram below shows the actual agile process that was used in the development effort.



The experience on this project clearly showed the usability of the Agile method in the mobile domain space. The direct feedback from the customer and quick pace of the development allowed the company to deliver full working application with couple of iteration. The prototyping effort along with the detailed mockups used on the project guaranteed the success at the end. The new application was very well perceived by the customer and it allowed him to jump start his marketing effort in the mobile space. The Agile process allowed him to get his vision implemented as working software within couple of weeks with minimal effort from his side.



Picture: From wireframes to the working software.

The Agile methodology is very well suited for mobile software development. Those projects require high speed of development. They are usually complex in terms of requirements and they need customer involvement to be really successful.

## About the Author



### ARTUR BIALY

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**Artur Bialy** is an experienced project manager, program manager and technical manager/leader, with approximately 15 years of experience managing IT projects on various levels. He has managed the implementation of complex internet applications, data warehouse and real-time systems. Artur has worked in various roles for international companies in Poland, Ireland, France and Spain. He is an expert in IT project management, business intelligence and real-time applications. Mr. Bialy graduated from the University of Technology and Science, the Department of Computer Science, where he was conducting research into Intelligent Agent Systems and Artificial Intelligence. Artur holds Masters Degree in Applied Computer Science. He also holds the Project Management Professional (PMP ®) certification from the Project Management Institute (PMI®) and is an active member of PMI; he was a founding member of the PMI Poland Chapter. He is involved in new agile project management practices, works as an active Scrum Master and helps in implementations of lean/agile practices. He is certified Scrum Master and as one of few in Poland - Certified Scrum Practitioner (CSP) by Scrum Alliance. Artur is a Member of PMI® and the Scrum Alliance (Certified ScrumMaster). Artur Bialy lives in Kraków, Poland and can be contacted at [artur@bialy.eu](mailto:artur@bialy.eu). Artur's project management blog can be found at <http://www.bialy.eu>.