

PM on Tablets: Are We There Yet?

by Stacy Goff, ProjectExperts CEO

Three years ago, as we defined the requirements for an update to the IPMA (International Project Management Association) website, we came across research predicting that by 2015 over 50% of all internet traffic would be from mobile devices. Given this information, a truly *responsive* website, one that worked equally well across all devices, immediately became a top-priority requirement for the new IPMA website. Since then, our judgment has been proven correct, as the rate of “mobilization” has kept up, if not exceeded, the prediction.

Who is the audience for this article, and for the idea of *Project Management (PM) on Tablets*? Our audience includes innovative project managers, Project Management Offices, project teams, and other key stakeholders, especially those who affect the success of your projects the most: Sponsors, internal customers, and managers or decision-influencers. The audience includes both those who create *and* consume project information.

1. Why Should You Care?

Several reasons, including the observation that those who embrace game-changing innovations are first to reap the increased efficiency, effectiveness, and communication power those innovations offer. Of course, “early birds” also sometimes run into dead ends, and can find great concepts that never quite deliver their promise.

Why I Care: I tend to be an early adopter in project management. I wrote PM software for mainframes in 1968.¹ Then, early in the microcomputer revolution, I produced PC-driven pm methodologies, with online references, advanced estimating and risk management methods, templates, and reusable project plans.² More recently, I projected the future of the PM Software industry.³ I have long been an enthusiast for automation’s support (and for re-use of project knowledge and intelligence) for projects’ beneficial societal change.

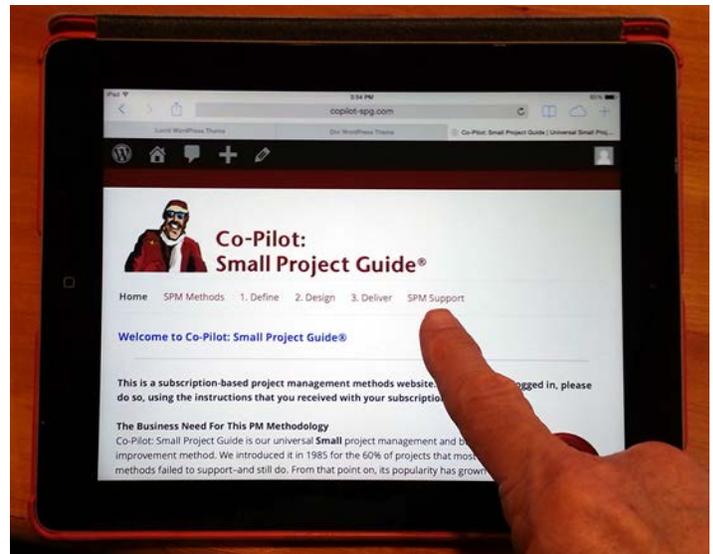
2. Mobile Devices Today

Today, much of the web traffic from tablets and smartphones is for four types of activities:

- Web browsing;
- Email and texting;
- Entertainment: ebooks, music and movies; and
- Games.

Yes, we know *you* don’t participate in those last two activities... but you know people who do.

These are mostly consumption activities, not what your enterprise would consider to be “real work.” Certainly, much of your email can qualify as real work, but that is neither the greatest device use nor your greatest value as a project or program manager. So what is the potential for harnessing these new technologies for your project communications?



3. Establishing a PM Methods Context

A year ago, when we saw that the above predictions about shifts in internet traffic were coming true, we looked at a few of our ProjectExperts project management methodologies,⁴ and decided that it was time for them to become responsive. But how would a responsive pm methodology make a difference?

Answer: By improving content creation, and broadening access by stakeholders to our project communications. How? Today's most-useful pm methodologies include these key components that deliver value to their customers:

- High level processes, most-often including scalable concept-through-realization Life Cycles and reminders about key Results, used as guidance and reminders for those who already know most of what they need;
- More detailed procedures, for those unfamiliar with the ways one could produce needed work package results; and, ideally, tips, insights and guidance from those who have done this procedure many times;
- Clear roles and responsibilities for each participant in the project—including Sponsors, Resource Managers, Customers, Technical and Sector Experts, Team members, and other Stakeholders;
- Organizational guidelines, sample policies, and executive guidance for maximizing project value;
- Key decision-points, with suggested review types, and guidance or criteria for go/no-go decisions;
- Project communication support, including methods and templates to support interim reviews, change control, issue management, risk management, status tracking, progress reporting, and lessons learned;
- Templates for project and product results. These are usually much more than a PM Plan, because they also include the trail of decision-influencing insights, from initial concept and business case, through requirements, alternative solutions, validation results, and of course, verification that you met the business need.

As you review the above list, you must realize that no one uses all this information in every project. However, one of the purposes of offering this project-supporting information online is to make it easier to access, search and comment—especially when you are not in your office, with the convenience of your intranet, or in-house enterprise network, where much of this information is often stored. And we note that this is an improvement from the early 1980s, when your “pm methodology” often meant 8 large three-ring binders on your bookshelf.

You might also observe that all but the last two items on the list are for *information consumption*; only the last two involve *information creation*—and thus the subject of our analysis, and the topic of this article.

4. The Device Types

To make a useful comparison, we began with known devices—the desktop and notebook PCs, and added three more types of devices that are in popular use today. Note that it may not be a fair comparison to consider phones and tablets in the same category, because of the challenges in doing real work on small screens. Note also, that we “cheated,” adding external keyboards to each device if needed, to speed our information creation.

- A. Desktop and notebook PCs
- B. Apple tablets and phones
- C. Android tablets and phones
- D. Windows RT tablets and phones

Reminder: Our focus in this article is on mobile devices, we included desktop and notebook PCs as a baseline. This is what we are accustomed to, and is a great frame of reference for the usefulness of mobile devices.

Each device type has its advantages, separate software support ecosystems, and file storage options. Even for our first device type, *Desktop and notebook PCs*, there are many operating systems, including Windows, Mac OS, Linux flavors, and others. Why is this important? The greater your device variety, the simpler you should make your other decisions. Selecting one Device would be the easiest implementation, but in a BYOD Bring-Your-Own-Device era, you cannot assume your team will be happy with just one device type.

5. Your Next Step, Software

Your Device decision has made this next step easier. Or if you selected *all the devices*, it is harder. Information browsing is easy on all devices, although the screen size of cell phones does impact usefulness.

A more complex challenge is active use of structured Templates to guide the information collection and communication throughout your project. Typical template types, beginning with the most-often-used, are:

- a. Document templates
- b. Spreadsheet templates
- c. Project Management software templates

Note that options b and c above may be interchangeable, or you may choose to use both. Microsoft has said that Excel is the most-used PM software solution in the World. But they also offer a powerful project management software package, Microsoft Project, and Project Server.

a. Document templates: For years, document software choices have been limited. After Microsoft Word vanquished most of its competitors in the 1990s, that was the easy choice. *For our baseline, we score Microsoft Word with a grade of A as a desktop information creation tool for PM methods.*

Other options are also available:

OpenOffice begun as open source, was sold and transferred several times, and today is a viable competitor. It also has a useful sibling, *LibreOffice*. Among their advantages: They are free. One distinction: They don't have macros. That is an advantage for those who fear the hacker danger of macros, and a disadvantage for those who use macros in their templates in *Microsoft Word*. These packages work with Device type A, Desktops and Laptops, mentioned above. *We score OpenOffice and LibreOffice a B as an information creation tool for projects.* The reason for the B: They seem to prefer to save files natively, rather than in the .doc or .docx format—and can lose some document formatting.

For Device type B, the *Apple tablet and phones*, *Apple's Pages* (\$) software is popular. It imports most Microsoft Word templates just fine; we have recorded information on them (painfully on a cell phone), and saved the files. When imported back into Word, the correct formatting remains. We have had trouble with some actions, such as hiding the comments, but *Pages* is a viable solution, scoring a B+ as an information creation tool for projects. Microsoft's recent release of Office for iPad would score an A, except for two factors: The monthly cost, and its preference for storing all files in Microsoft's private cloud. *We score it B+*. Update 2015: Microsoft now offers their Office for iPad apps for free.

For Device type C, *Android tablets and phones*, Google Drive/Docs works very well. Word documents do lose some of their formatting. We did try other apps, but their advantages are minimal: *Quickoffice* worked fairly well; *KingOffice* did work, but not as well. We were surprised at the usefulness of the templates in the Android devices—even on the phone they were usable. *We score Google Drive/Docs on Android a B as an information creation tool for projects.* Note that you can also use Google Drive/Docs on an iPad. *Shhh!*

We tested our document templates on Device type D, a *Windows RT tablet*. These come with a cloud-based version of *Microsoft Office*, including *Word*, and we were surprised at how well this works. The only feature



SP1

SP1 The Define Phase; Project Definition Document

Complete the Define Phase and Project Definition Document in 2 days or less; manage the Phase as one activity. Begin this Phase when you have access to all the participants.

You might not perform all the activities of this Phase, or you might add project-unique activities. Review the Define Phase activities and results pages below and check the ones you plan to do.

Activities: Record completion dates of results as you finish them at below right

SP1 Project Definition Document *

- | | |
|--|---------------------------------------|
| SP10 Start Project and Plan First Phase | |
| Project Charter <i>Lite</i> | <input type="checkbox"/> SP10-1 _____ |
| Initial Project Information | <input type="checkbox"/> SP10-2 _____ |
| Initial Effort and Cost Forecast Assumptions | <input type="checkbox"/> SP10-3 _____ |
| Small Project Risk Management | <input type="checkbox"/> SP10-4 _____ |
| SP11 State the Problem or Opportunity | |
| Problem Analysis | <input type="checkbox"/> SP11-1 _____ |
| Opportunity Analysis | <input type="checkbox"/> SP11-2 _____ |
| SP12 Define Scope and Objective | <input type="checkbox"/> SP12-1 _____ |
| SP13 Understand the Current Environment | <input type="checkbox"/> SP13-1 _____ |
| SP14 Define Requirements for the Solution | <input type="checkbox"/> SP14-1 _____ |
| SP15 Establish This Project's Priority | <input type="checkbox"/> SP15-1 _____ |

some people will miss is the macros—which, as mentioned above, will be viewed by others as an advantage. *We score Microsoft Word on Windows RT tablets an A as an information creation tool for projects.*

So far, so good: Overall, we are seeing encouraging results in the use of tablets as an information creation **and collaboration** tool for PM methods. Even the cellphones we tested worked at least passably well. Of course, the solutions above are device-specific: What happens if you have multiple people on your team, and each has their own preference for devices and apps? We'll share more on this question later.

b. Spreadsheet templates: Your choices for document software will influence your choices for spreadsheet software. Our pm methods have several spreadsheet templates, used (optionally) for planning and tracking at the high-level, for the overall project, and at the detailed level, for each phase of the project.

Our baseline software for Desktops and notebooks is *Microsoft Excel*. *With macros enabled, it gets a score of A. We score LibreOffice Calc a B.*

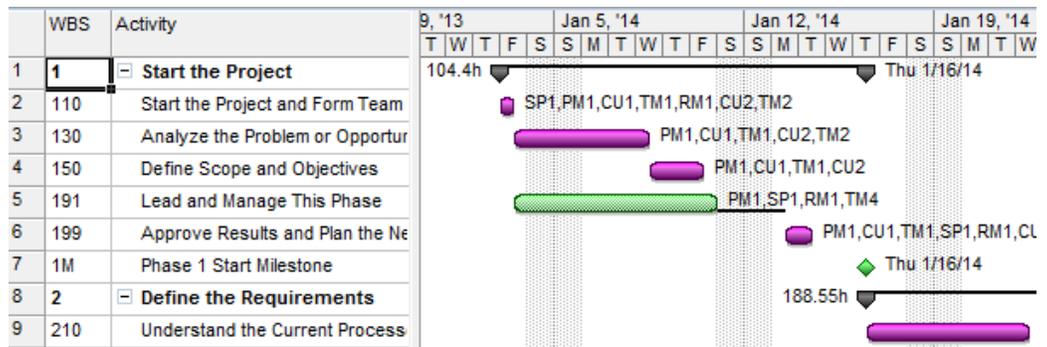
WBS # /Act #	Activity Description	Precedent Activities	Responsible and Involved	Est'd Effort	Duration	Rvw	Planned Start	Planned Finish
1	Start the Project		\$6,240	104h	6.5d		3-Jan	14-Jan
110	Start the Project and Form Team		SP1,PM1,CU1,TM1, RM1,CU2,TM2	11h	0.5d		3-Jan	3-Jan
130	Analyze the Problem or Opportunity	110	PM1,CU1,TM1,CU2, TM2	43h	3.0d		3-Jan	6-Jan
150	Define Scope and Objectives	130	PM1,CU1,TM1, CU2	23h	2.0d	U	6-Jan	8-Jan
191	Lead and Manage This Phase	110	PM1,SP1,RM1,TM3	10h			3-Jan	10-Jan
199	Approve Results and Plan the Next Phases	191, 150	PM1,CU1,TM1,RM1, CU2,TM2,SP1	18h	1.0d	SCM	10-Jan	11-Jan
1M	Phase 1 Start Milestone	199					14-Jan	14-Jan
2	Define the Requirements	Insert a Row	\$11,311	189h	14.0d		14-Jan	4-Feb
210	Understand the Current Processes	199	CU1,TM1,CU2,TM2	48h	4.0d		14-Jan	18-Jan

For mobile devices, here are a few sample options, and their relative scores: For Apple iPads and iPhones, *Apple Numbers*—after they correct the recent update, that produces crashes; score: *C*. Or, consider *Office/Excel for iPad*, scoring *B+*. For Android, either *Google Docs*, score of *B*, or *Quickoffice*, score of *C*. For a Windows RT device, *Microsoft Excel*, score of *A*. Easy, huh?

c. Project Management Software templates: Only serious project teams should consider this alternative to the use of Spreadsheet templates. Most project managers barely use 25% of the capabilities of Microsoft Project—and licensing is expensive. The learning curve for dedicated project management tools, plus their cost (especially for a whole team), suggest that this option is best for full-time project managers of large projects.

Why do we suggest **any** pm software tools, then? Because many organizations require that all projects be imported or managed in a separate repository, so talent and other prioritized resources can be managed across all initiatives. Besides, serious project managers don't really use Excel, Visio and Powerpoint slides to produce a plan and schedule that is "merely enough to get an approval," do we?

For pm software on desktops and notebooks, as a comparative baseline, we do like Microsoft Project (or Primavera 6, for that matter), *each scoring a B+*. Why the lower baseline score? We score these lower because of their complexity and cost.



For free, open source pm software, we have recommended OpenProj in the past; now our favorite is Project-Libre; *we score it a C*.

For tablet-based apps for pm software, it is very important to be able to import and export from Microsoft Project or Excel. A text-based Work Breakdown Structure or task list might be acceptable. Lack of easy import/export is one reason for the lower scores below. Another reason is that it appears that some of the available tablet packages are really just front-ends for proprietary cloud-based offerings, something we reject.

For Apple tablets consider Project Planner HD, *scoring C*, xPlan, *scoring C*, or SG Project Pro (\$\$), *scoring C+*. For Android tablets, consider GanttMan, *scoring C* or Project Schedule Free, *scoring C*. Windows RT: Project Timeline, *scoring C*. It looks like there is a lot of room for improvement in pm software apps for tablets. By the way, we really do like the mind-mapping software that is increasingly available (both free and fee) for tablets. In some cases, they can be used as an optimum project management software tool for information sharing. Similarly, we have also used a number of simple calendaring apps for managing small projects.

In addition to the above, what other options exist? There is an ever-increasing number of “cloud-based” solutions, some of which are quite good. They tend to work on multiple platforms. Because this is more of a corporate decision than a personal one, we believe you should ask your own Project Management Office. Ask them, but be sure to convey your decisions about tablet platforms and other software selections.

6. Your File Location

Your final decision is influenced by your earlier ones. Your first question: Local device or some central location? In the case of Desktop and notebook PCs, this question depends on whether you manage your suite of project templates for one project on your local PC or in your enterprise network. For our baseline Desktop grades, *we score both local and network an A*. Assuming, of course that this was a decision, not an accident.

But for our range of mobile devices, local storage may not be as useful as “the Cloud.” Why? Because, to achieve its maximum value, project information must be shared. And nearly all the mobile devices currently make sharing project information more difficult than they should.

Your Cloud solution might be one of the currently-popular options, such as Google Drive, DropBox, Box, OneDrive (formerly SkyDrive), iCloud or others, or it could be your own Corporate Cloud. But note that your prior decisions may limit this option. At this stage in their development, each provider either makes it easiest for you to store your information in their cloud, or makes it difficult to share it elsewhere.

And, because you are probably not coming up with one universal project-wide tablet standard (much less an enterprise-wide standard), our inclination includes the following suggested combinations, where the letters relate to the Device types:

A: Local or internal network; *score of A*

AD: Local or internal network; or Local plus a Cloud solution when out-of-office; *score of B*

AB, AC: Possibly local, and a Cloud solution, depending on your other choices and preferences; *score of B*

BCD: A Cloud solution, depending on your other choices and preferences; *score of C*.

The reason for the lower scores is because of the added complexity of combinations of solutions, which can result in data integrity, security, version control, and user complexity issues. All of which can be overcome with good decision-making, organizational standards, easy-to-use technology, and team member training.

7. Overall Scoring

From the information above, you may already be able to answer the question in our title: *Are We There Yet?*

Our answer: ***It depends***. The more complex your project, the more stakeholders who need to communicate, the less likely it is that that you are close-to-ready to use mobile devices to manage your projects. That does not mean that your team members cannot connect via mobile—they just can’t do end-to-end task management—and that is even before we get into the nuances of assignment tracking and timesheet submission.

Note that we have not commented on the actual tablets and cell phones we evaluated;⁵ we are focused on the pm tools. And the tools we evaluated may be volatile: Some will disappear, and new ones will emerge. But for now, for smaller and simpler projects, you can see that we are getting close to ***being there***. At least for those who are adventuresome and willing to be the pilot group. Let’s see how our scores come out overall:

Feature\Device	Desktop/Notebook	Apple tablets	Android tablets	Windows RT tablets
Word Processing	MS Word A; Open-Office or LibreOffice B	Page B+ Office for iPad B+	Google Drive/Docs B	MS Word A
Spreadsheets	MS Excel A LibreOffice Calc B	Numbers C Office for iPad B+	Google Drive/Docs B	MS Excel A
PM Software	MS Project B+ ProjectLibre C	Project Planner HD C	GanttMan C	Project Timeline C
Your File Location	Local or Network A	B-C	B-C	B-C

8. So How Did Those PM Methods Perform?

This was not an exhaustive research study; we are sure there are many mobile apps that we have missed. In fact, as we completed this article, the popular company Wrike has introduced their product for mobile devices. We will need to look into them, and see how they compare. There are several other “cloud based” providers that we have also omitted, such as ProjectPlace, BaseCamp, and many others we have evaluated in the past. This analysis did show us a lot about developing a multiple-mobile-device support system for project managers. The pm methods worked very well for information consumption on mobile devices—showing the benefits of responsive design. This inspired a thought: For our desktop project work, we prefer a two-monitor setup, with references on the left and current actions on the right. Today’s mobile reference support is so good we could see using an iPad and notebook that way. Maybe we can even get more done when “on the road.”

For “doing real work,” involving information creation with pm methods, adding a keyboard was essential. And while smaller projects were workable on tablets, to make larger projects manageable, we need improvement in the software. The greatest improvements needed are in word processing software. Most PM templates are less-effective outside of Microsoft Word. Helpful notes and guidance in the templates that can be hidden or shown don’t hide well in other software; the checkboxes don’t check; the text boxes don’t always work well. The most important factor to resolve, especially in a BYOD (Bring Your Own Device) environment, and especially with larger teams, is your file location decision, or as that popular George Carlin routine went, “***a place to keep your stuff***.”

9. Summary

To summarize, as we state in the title of this article, “***Are We There Yet?***” And the context is using tablets and mobile devices to manage projects. Today’s pm methods, when designed for responsiveness—are effective and appealing when used as a reference. To our greatest concerns of screen size, we have already seen pico projectors and 4-foot hi-res screens projected in virtual glasses—meaning that you could soon see and share greater resolution than you have on your desktop setup.

We think tablets (and probably other personal devices, like watches and fancy glasses) are another major shift in a continuing series of technology innovations. And here is one last take-away that is especially interesting to us: While Microsoft’s Windows RT and Surface 2 tablets are reviled by some, they were one of the best-performing *real work* options in our analysis. In part, this is because of the multi-decade dominance of Microsoft Office. But our answer to the *Are We There Yet?* question for doing “real work” remains: ***It depends***.

It depends on the size of the project, its complexity, the number of people participating in it, and their technology literacy and eagerness. It depends on the choices you make about the devices, the software solutions and your file locations. File location is the most important question to resolve, and smart enterprises are in the process of resolving it right now, because they see the value of being first in their market to make this shift part of their next competitive advantage. For small projects, *we are here now*. As we resolve the open questions for larger, more complex projects, the answer will soon change to: ***Absolutely: We are here now.***

About the Author



Stacy Goff, *the PM Performance Coach*, is CEO of ProjectExperts, a global Project Management consulting firm. He was also co-founder and 2009-2015 President of IPMA-USA, and he served from 2011-2014 as IPMA VP of Marketing & Events. In 2015 he was named as an IPMA Honorary Fellow. And he has served as a member of Project Management Institute since 1983.

In addition to his global training and consulting, Goff speaks at conferences around the World on topics related to the advancement of project and program management competence, and improved PM performance. A Project Management practitioner since 1970 and consultant since 1982, he helps improve enterprise, department, project team or individual pm competence, effectiveness and performance.

An insightful consultant, prolific writer and dynamic speaker, Mr. Goff offers workshops of interest to Executives, Managers, Program and Project Managers, and individual contributors. His Project Management tools and methods are used by government agencies, Enterprises, consultancies and individuals on six continents. By the year 2000, he had exposed over 45,000 people to the world of Project Management. And, he does not just teach project management, he lives it. Email: Stacy@ProjectExperts.com; website: www.projectexperts.com.

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¹ We've long had an interest in project management software. For example, in 1968, we wrote a suite of programs to analyze and plot, on a Calcomp plotter, an up-to-1000-activity project scheduling precedence diagram. In that era, the input to our program was punched cards. It took three overnight submissions to the operator to "crash the model." When donated to the Calcomp user library, it threatened the viability of two companies that offered less-powerful features.

² THE Guide, developed in 1984-85, was a pc-based project management and systems engineering methodology, with a unique Plan By Example™ tool that created, in less than 10 minutes, nearly perfect project schedules—complete with a full work breakdown structure, cost and duration estimates, and resources assigned. Project Managers could then identify the top several actions managers could take that would reduce cost or duration—such as assigning top talent, instead of average talent.

³ In Chapter 9 of the 2009 PMI® book, *Project Management Circa 2025*, we cite the cultural, social and professional implications of the continued expansion of both the range of support and the breadth of the relevant audiences for project management software. We move beyond portfolio management systems, and suggest storage, transfer and re-use of knowledge and experience, together with IntelAgents, who perform your needed research. We envision three-dimension holographic virtual collaboration, and other project-supporting tools that are not commonly considered to be part of the PM toolbox.

⁴ We tested our mobile devices with Co-Pilot: Small Project Guide®, our universal small project management method, and MinProj™, our universal medium – large project management and business improvement methodology. Note that there are many other popular methodologies that are also making the transition to responsiveness for mobile device usefulness. Most of our findings will also relate to these other methods. Ours were easily accessible, and convenient to use in our study.

⁵ For those who are curious about our mobile devices, we used an Apple iPhone 5, Apple iPad 3, Samsung Android S3, a 7" Google Nexus Android tablet, and a Microsoft Surface RT tablet. Our baseline Desktop/notebook PC was a Lenovo Thinkpad T420.