

The Unspoken Additional Constraint of Project Management

By Gary Hamilton, Gareth Byatt, and Jeff Hodgkinson

Whether you are a novice just embarking upon your career in project management or a seasoned veteran, you are most likely familiar with the project management concept of the “triple constraint”. The triple constraint of Scope, Time and Cost (Editor’s note: Or sometimes, Time, Cost, and Performance) is perhaps as well recognized within project management as Maslow’s hierarchy of needs is recognized by practitioners of psychology. Nowadays, three extra constraining factors of managing Risk, Resources, and Quality are often added to the “original triple”, making a total of six factors (or constraints) of project management. The Project Management Institute’s PMBOK® Guide, 4th Edition is an example of a recognized Standard that incorporates this thinking.

We put forward that there exists an important additional constraint to managing projects which is always considered in project needs but not necessarily thought of as a key constraint: ‘user or customer satisfaction’.

Achieving user/customer satisfaction is fundamental to a project’s success. Your project may be very successful in developing an end result that is of high quality, within costs, and delivered on time, however, if end users are not satisfied, the risk to the sustainability of the project’s final outcome is significant. It may lead to a lower than anticipated ROI (Return on Investment) and perhaps costly new projects or “upgrades” to replace or alter the original outcome. This is an important issue, as the focus on projects and programs to achieve sustainable benefits is increasingly recognized as a vital factor to their success. History is littered with examples of well-developed and thought out products that never gained their intended market share. No doubt you can think of several such examples from your own observations. Why did they fail? Such products may have been described as “Ugly”, “Clunky” or “Over Priced” (or maybe all three). In the end, they will have failed to provide the end user/customer what they wanted, and these people had better alternative options from which to choose.

According to the Meta Group, 60% – 80% of project failures can be attributed directly to poor requirements gathering, analysis, and management. Other research concludes that poor business analysis will cause a project to be three times more likely to fail. It is our contention that a significant portion of the “analysis” that should be conducted is appropriate “end user” analysis, in whichever form it may be. It may take the shape of market analysis, or internal user/customer analysis, to include assessments of “real” end users and customers. Understanding and documenting end user attitudes, behaviors, needs and expectations will better prepare the Project Manager and their team to manage the project to meet end-use expectations and therefore increase the probability of project success and the realization of anticipated benefits.

So what are some steps that can be taken to analyze users?

According to the PMBOK® Guide, a project’s quality management plan should describe how the project management team will implement the performing organization’s quality policy. The quality policy is likely to contain thresholds for quality metrics such as defects density, failure rate, and reliability. Organizations that are customer driven should also consider inclusion of user satisfaction into their quality policy. Examples include the number of customer complaints per unit sold, or achieving a high percentage (%) user satisfaction with a product based on a multi-question end user survey covering all aspects of the product.

An example of validating end user needs early and helping them to “visualize” the need, is prototyping. This method is one of three User-focused project lifecycle options (Proof of Concept, Prototyping, and Pilot). Prototyping is commonplace in product development. Models of proposed buildings are made and reviewed before construction (both physical and virtual). Concept cars are built before they are added to the production lines. Beta versions of software packages are developed before their final versions are released.

To maximize the probability of success, representative samples of users who are expected to use or purchase these products should be included in usability studies involving the prototypes, and from whom feedback on the products or services is solicited. During the usability study, the user group will be given the new product or service and asked to use it. Some are blind tests, where the user does not know they are being watched, and others are tests where the user is aware they are being studied for their responses. Each type of usability testing has its own merits and should be based on the user and product. What is important from a project management perspective is your project should plan for and include these usability tasks, whatever they may be, into your project schedule.

Regardless of the mechanism being targeted, it is vital to consider end user satisfaction when managing projects. In effect, it is “baking in” targets to realize benefits from the project. Quality and satisfaction activities may add time and costs to a project, but they have the potential to reduce the total costs of the project by preventing rework, limiting future enhancements or, even preventing a company from launching a product that diminishes their organization’s reputation or worse be found to have a safety hazard(s). It is important to be pro-active in this regard.

Do not wait for your project to complete to conduct a user satisfaction survey as the first indication of user perception. Users groups should be engaged throughout the project lifecycle – and from an early stage. Think of it this way: many projects come to be as a result of users demanding a change, while others are chartered as a result of an authorized person or group desires. Regardless of the origination of the project, user representation should be included as early as the requirements gathering phase on your project and continued to be monitored throughout at key project milestones. This early engagement of users will serve to validate the project assumptions and requirements, and allow ample time to make modifications before the project’s closing phase.

Summary

In conclusion, unless end user satisfaction is considered as an additional constraint, your project may deliver a lower ROI than anticipated, and have a higher potential of failure. Representative samples of users should be engaged early during the project, and usability activities added to the Work Breakdown Structure (WBS) of projects in order to mitigate against these potentially high impact risks.

Editor's Note

Articles from this trio result from distributed development. Gary is located in Tennessee, Gareth is in Sydney, and Jeff is in Arizona. They. One author originate a subject idea, then the three collaborate by email, rotating revisions from the first draft to the final to complete the article. They write articles together for fun, and their main motivation is to share ideas and foster discussion with their fellow program and project managers. They plan to do a few articles each year and will send to *asapm* as they are finalized. *Thanks guys!*

About Our Authors



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See Jeff at the PMI Global Congress 2010-North America as he will be co-presenting a paper on, "Value of the PgMP® Credential in the Working World".

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