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Guide for How to Read Efficiently

Academic Reading Helper

ELSEVIER

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Does Agile work? — A quantitative analysis of agile project success

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Highlights

- We examine the relationship between agile methodologies and success through a global survey.
- We examine whether there is an empirical relationship between extent of agile use and success.
- Hybrid agile/waterfall methodologies are used in the majority of projects reported.
- Agile use improves time, budget and scope goals and is most effective at improving stakeholder satisfaction.
- There is a positive relationship between agile use and reported project success.

Introduction

Academic reading can feel difficult at first, especially when the language, structure, and expectations are unfamiliar. However, you do not need to read everything word by word. A more effective approach is to break the process into three simple stages: before reading, during reading, and after reading. This can help you focus on the main ideas, understand key evidence, and turn reading into something useful for tutorials and assignments.

01

Before Reading

Preview the article by checking the title, abstract, and headings. This helps you understand the topic and structure before reading in detail.

02

During Reading

Focus on the main point, key ideas, and evidence. Do not worry about understanding every word immediately.

03

After Reading

Write a short summary, note one question or response, and identify what may be useful for class or assignments.

Step 1: Before Reading

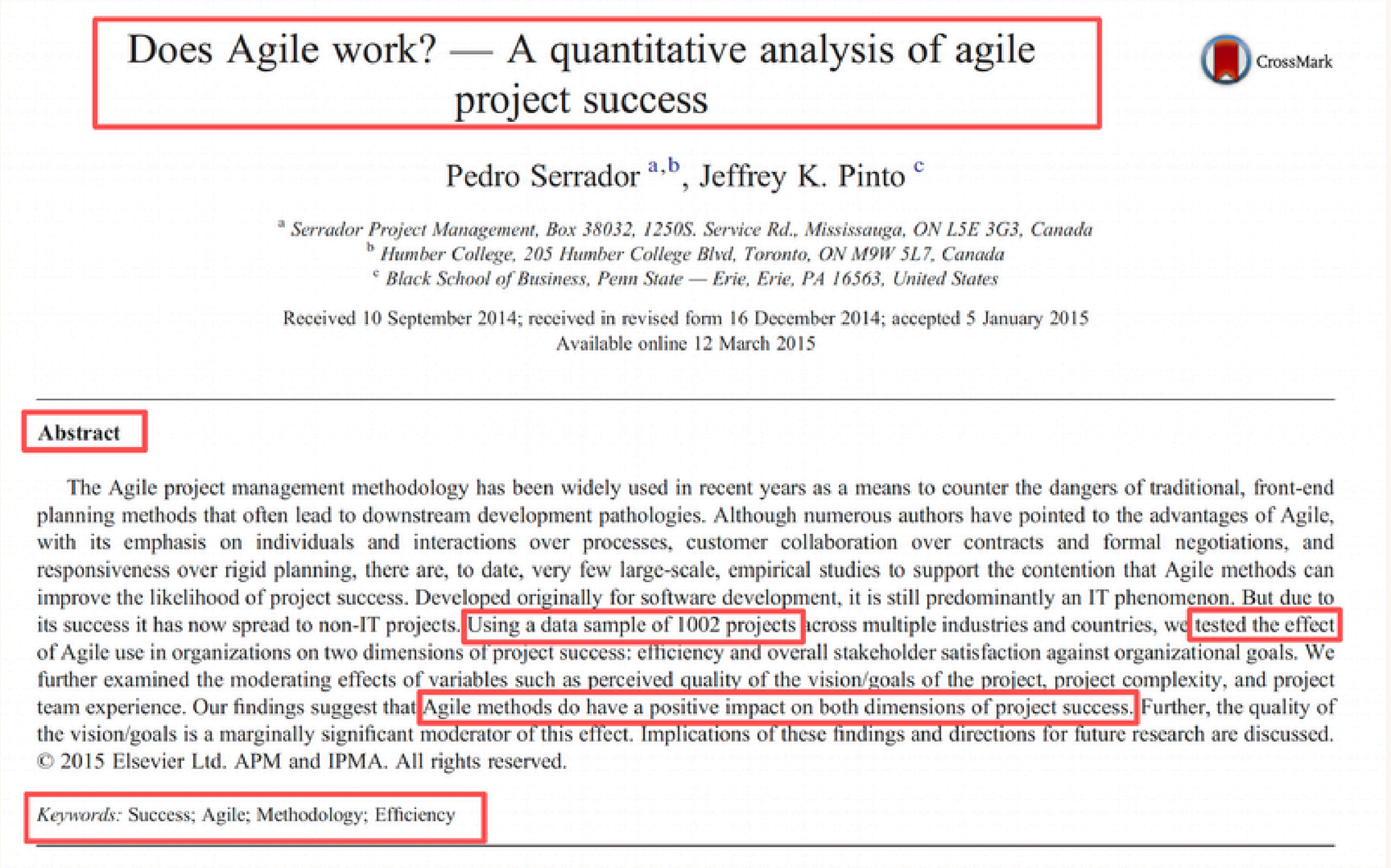
Preview the article

Ask yourself:

1. **What is this article about?**
2. **What is the main research question?**
3. **What kind of answer does the article seem to give?**

What to do

- **Read the title**
- **Read the abstract**
- **Check the keywords**
- **Predict what the article will discuss**



Does Agile work? — A quantitative analysis of agile project success

CrossMark

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Abstract

The Agile project management methodology has been widely used in recent years as a means to counter the dangers of traditional, front-end planning methods that often lead to downstream development pathologies. Although numerous authors have pointed to the advantages of Agile, with its emphasis on individuals and interactions over processes, customer collaboration over contracts and formal negotiations, and responsiveness over rigid planning, there are, to date, very few large-scale, empirical studies to support the contention that Agile methods can improve the likelihood of project success. Developed originally for software development, it is still predominantly an IT phenomenon. But due to its success it has now spread to non-IT projects. Using a data sample of 1002 projects across multiple industries and countries, we tested the effect of Agile use in organizations on two dimensions of project success: efficiency and overall stakeholder satisfaction against organizational goals. We further examined the moderating effects of variables such as perceived quality of the vision/goals of the project, project complexity, and project team experience. Our findings suggest that Agile methods do have a positive impact on both dimensions of project success. Further, the quality of the vision/goals is a marginally significant moderator of this effect. Implications of these findings and directions for future research are discussed.

Keywords: Success; Agile; Methodology; Efficiency

Example: What can we learn before reading the full paper?

Title:
This article is about whether Agile works, especially in relation to project success.

Abstract:
The study used a large sample of projects and finds that Agile has a positive impact on success.

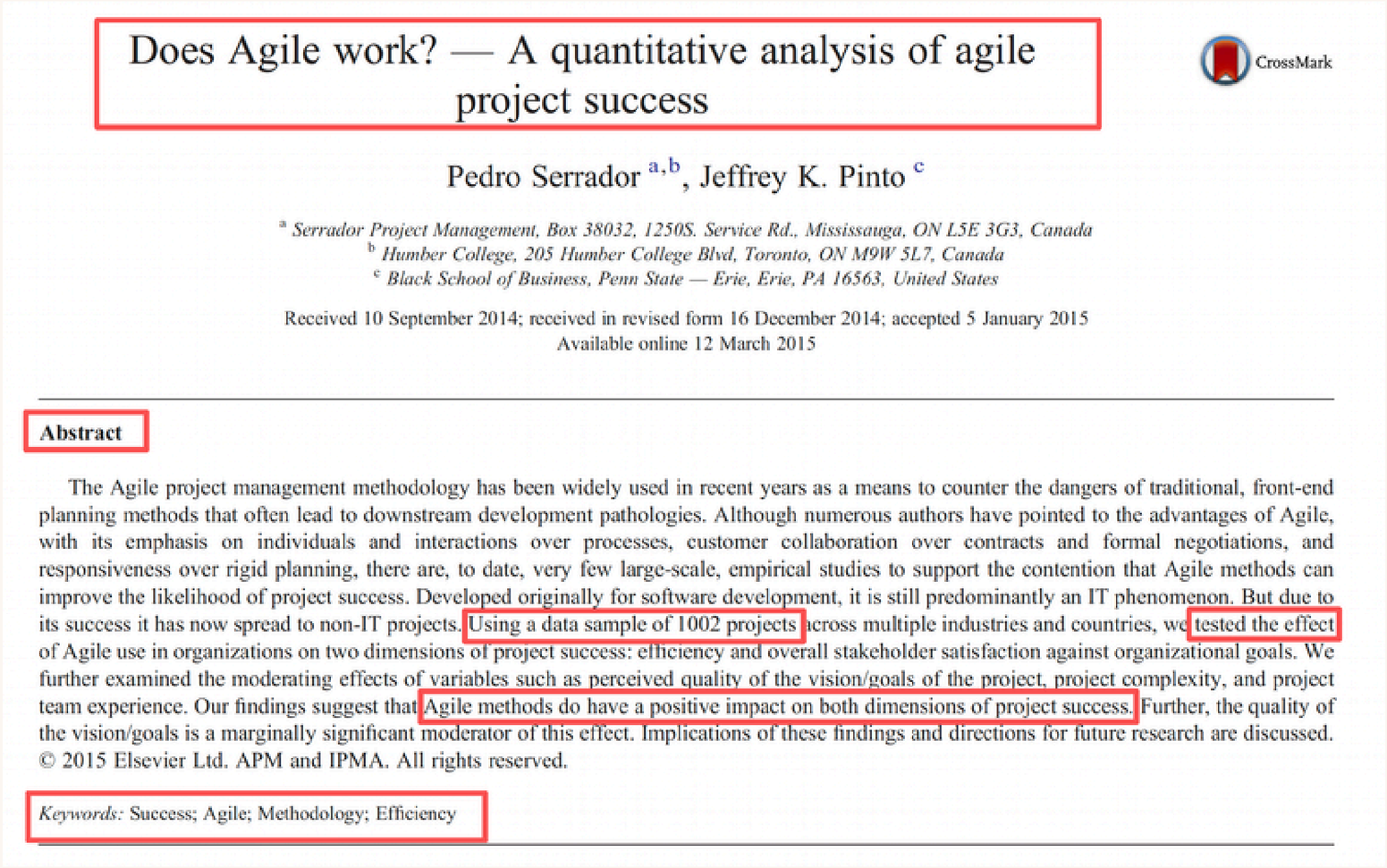
Keywords:
The main concepts are Agile, success, methodology, and efficiency.

Ask yourself

1. What is this article about?
It is about whether Agile project management works, especially in improving project success.

2. What is the main research question?
The main question is whether Agile methods improve project success compared with more traditional approaches.

3. What kind of answer does the article seem to give?
It seems to give a positive answer, suggesting that Agile has a beneficial effect on project success.



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Keywords: Success; Agile; Methodology; Efficiency

Step 2: During Reading

Focus on the main point, key ideas, and evidence

What to do

- Read one paragraph at a time
- Ask: What is the author mainly saying here?
- Highlight 1–2 key ideas
- Look for evidence, examples, or explanations
- Mark unfamiliar or unclear parts and move on

Ask yourself

1. What is the author mainly arguing in this section?

2. What key ideas support this argument?

3. What evidence or example is used?

Step 2: During Reading

Main Point

The author stated why traditional planning methods may not work well in dynamic projects.

team and management at Motorola failed to see that during the course of the project, quickly expanding cell phone networks would undercut Iridium's satellite phone business model.

It is with this setting in mind that researchers and practitioners began seeking alternative methods for project implementation, recognizing that traditional models for planning and execution may not be optimal or tuned for the specific challenges that projects face. Indeed, it is due to these challenges that "light weight" project management techniques such as Agile have been gaining popularity since first developed (Dybå and Dingsøyr, 2008).

Part of the ethos of Agile methods is that less initial planning is better and an evolutionary process is more efficient (Dybå and Dingsøyr, 2008). Agile methodologies contrast with traditional project management approaches (such as waterfall) by emphasiz-

Key supporting idea

Agile is presented as a more flexible alternative to traditional project management.

2008).

Part of the ethos of Agile methods is that less initial planning is better and an evolutionary process is more efficient (Dybå and Dingsøyr, 2008). Agile methodologies contrast with traditional project management approaches (such as waterfall) by emphasizing continuous design, flexible scope, freezing design features as late as possible, embracing uncertainty and customer interaction, and a modified project team organization. Further, Agile is described as iterative and incremental, seeking to avoid the standard approaches that emphasize early design and specification freeze, a fixed project scope, and low customer interaction.

These more traditional project development approaches pursued a goal of logical sequencing that required deliverables to be set in advance and project development evaluated based on performance at a series of capabilities gated reviews. Unfortunately, evidence continues to accumulate suggesting that a rigid development process can result in significant downstream pathologies, including excessive rework, lack of

Evidence

The Iridium case is used as an example to show how a project can fail when it does not adapt to change.

Unfortunately, evidence continues to accumulate suggesting that a rigid development process can result in significant downstream pathologies, including excessive rework, lack of flexibility, customer dissatisfaction, and the potential for a project to be fully developed, only to discover that technological advances have eclipsed the need for it. So, for example, to revisit the post-mortem analysis of Motorola's Iridium project, it became clear that in dynamic environments, projects need to cope with changes in technology during the course of their development both for technology and other projects. If assumptions fail, unsuccessful projects can often result. "While useful as a guide, excessive detail in the early stages of a project may be problematic and misleading in a dynamic environment" (Collyer et al., 2010, p. 109).

Though Agile methods are continuing to gain in popularity and are spreading beyond their original birthplace among software development projects (Dybå and Dingsøyr, 2008), little research has been done as to whether Agile projects

Example:What can we notice while reading?

Main point

The author argued that traditional front-end planning methods may not work well in dynamic project environments, which is why Agile has become more popular.

Key ideas

One key idea is that Agile differs from traditional approaches by emphasising flexibility, continuous design, customer interaction, and responsiveness to change. Another key idea is that rigid development processes may create downstream problems such as rework, dissatisfaction, and lack of adaptability.

Evidence / example

The article used the example of Motorola's Iridium project to show how a project can appear successful in technical terms but still fail because it did not adapt to changes in the business environment.

Ask yourself

1. What is the author mainly arguing in this section?

The author was arguing that traditional project planning can be too rigid, and Agile offers a more flexible alternative.

2. What key ideas support this argument?

The section explained that Agile allows more flexibility, later design decisions, more customer interaction, and better responses to uncertainty.

3. What evidence or example is used?

The author used the Iridium project example to show the risks of not adapting to change.

Step 3: After Reading

**After reading, take a few minutes to turn the article into something useful.
You do not need long notes. A short summary, one useful idea, and one question or response can help you remember the reading and prepare for class discussion or assignments.**

What to do

- Write a short summary in your own words
- Record one useful idea or finding
- Write one question or response
- Think about how this reading connects to class or assignments

Ask yourself

1. What is the most important message of the article?

2. What idea from this reading may be useful later?

3. What is one question or response I have after reading?

Example: What can we write after reading?

Short summary

This article examined whether Agile project management improves project success. Using data from 1002 projects, the study found that Agile has a positive effect on both project efficiency and stakeholder satisfaction.

One useful idea

A useful idea from this article is that project success should not be measured only by time and budget, but also by stakeholder satisfaction and broader project outcomes.

One question / response

This article suggested that Agile improves success, but I want to ask whether Agile works equally well in all industries or mainly in fast-changing environments such as IT and high technology.

Ask yourself

1. What is the most important message of the article?

The most important message is that Agile methods are positively associated with project success.

2. What idea from this reading may be useful later?

The idea that project success includes both efficiency and stakeholder satisfaction may be useful in future class discussion or writing.

3. What is one question or response I have after reading?

One possible response is to question whether Agile is equally effective across different industries and project types.

Reference

Serrador, P., & Pinto, J. K. (2015). Does Agile work? — A quantitative analysis of agile project success. International Journal of Project Management, 33(5), 1040-1051. https://doi.org/https://doi.org/10.1016/j.ijproman.2015.01.006