

The Silent Killer of Projects: How to Manage Scope' Creep

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Abstract:According to PMI's 2018 Pulse of the Profession® 52% of projects completed in 2018 experienced scope creep or uncontrolled changes to the project's scope—up from 43% five years prior.

This paper delves into the concept of scope creep, examining its primary factors and adverse effects. Furthermore, it offers valuable recommendations and guidelines on how to proactively anticipate, plan, and manage scope creep.

Keywords:Scope Creep, Project Management, Change Control, Stakeholder Management, Project Requirements.

Introduction:

What is Scope Creep?

At first mention of the word “Creep”, some might find it funny, humoring, or even amusing: “If you take the word literally, they say that scope is creeping. Scope is creeping? What on earth does that mean? Bugs creep. In rush hour, traffic creeps. But scope? Scope is an inanimate thing. It can't creep. Not all by itself, it can't. If scope is creeping, it's because someone is creeping it”. (Emery, 2003), but what exactly is Scope Creep?

To gain a better understanding of the subject matter, we need to establish clear definition of several key terms first:

Scope:

“The sum of the products, services, and results to be provided as a project.” (Project Management Institute, 2017, p. 722). Or as defined by (Watt, 2014) a scope of work that defines what is included in the project and what work is outside the project. (Kuprenas & Elhami, 2003) define the scope of the project as the basis of the design. What actually constitute a scope will vary by type of project.

Scope creep:

PMI PMBOK® GUIDE Sixth Edition defines Project Creep as: “The uncontrolled expansion to product or project scope without adjustments to time, cost, and resources.”.

During the year of 2018, more than 50% of the projects have experienced scope creep out of which 33% of the projects were PMI's top performers. (Project Management Institute, 2018) This statistic highlights the prevalence of scope creep in the project management industry.

A key point to take into consideration from the aforementioned definition is “uncontrolled expansion”, changes to a project are a natural, even an inevitable part of any project. As long as these changes are controlled and tracked, the project is safe from scope creep, it is that when those changes

are unaccountable, untracked, and original resources which should be dedicated to the original scope are utilized for these changes, scope creep occurs.

How Scope Creep Occurs?

Scope creep manifest itself in different ways. It can occur through small numerous changes, or it can occur through a fundamental change in the approach to the design. (Kuprenas & Elhami, 2003). (Riaz & Muhammad, 2022) conducted research that categorized the causes of project scope creep into three distinct factors: technological factors, organizational factors, and human factors. These factors serve as an overarching framework within which lie numerous subfactors.

From the research above, it becomes evident that scope creep is a complex subject, with multiple factors contributing to its occurrence.

In this paper, we will explore the most significant factors that contribute to scope creep.

Stakeholders Involvement:

Stakeholder are individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio. (Project Management Institute, 2017, p. 723)

Multiple reasons can affect scope, below are the main contributes to scope creep, research shows that more than 50% of the changes during a project is the source of changes stems from project stakeholders (54%) cause for changes in project are stakeholders (Table 1) so it is only right is to create a strong stakeholders management process. (Nahod, 2012)

	Cause of changes	% Of changes	Source of changes
1	Investor's change requests caused by additional recognized needs for a project	25%	Project Stakeholders
2	Partially incomplete project documentation	21%	Project Stakeholders
3	Change of technology caused by lack of availability of designed technology in the market	18%	Project conditions
4	Lack of concrete construction material in region caused by high or low current demand	12%	Project conditions
5	Lack of financing for the timely completion of a project	10.5%	Project conditions
6	Contractor's change request for easier operations, higher income, within the allowable limits for the project	8%	Project Stakeholders
7	Project documentation alignment with new regulations adopted in the period between project design and realization	4%	Project constrains
8	Other	1.5%	Project conditions

Empirical studies have shown that conflicts between project managers and stakeholders primarily stem from differing perceptions between these two parties. (Olander & Landin, 2005). Uncertainty in projects arises when they request changes in their scope, which originates from the needs,

expectations, and interests of stakeholders. These requested changes can lead to uncertain events such as scope creep and even project termination.

To effectively manage stakeholders, it's crucial to conduct stakeholder mapping. This process helps determine the importance of each stakeholder and their level of authority. Olander & Landin conducted research on two construction projects in Sweden and provided recommendations for stakeholder management. Their findings highlighted the significance of stakeholder mapping in optimizing project outcomes.

Lack of a clear Project Scope:

Lack of a clear project scope is one of the primary reasons behind scope creep, which gradually leads to an over-sized project. (Bjarnason & Regnell, 2012)

Project scope serves as the foundation and key premise of any project. A well-defined scope of work is crucial for the success of any project. When requirements are not clearly or adequately defined at the outset, ambiguity prevails. This lack of clarity opens the door for ongoing modifications as stakeholders and team members interpret the project's objectives differently over time.

This is clear in (Project Management Institute, 2017) definition of project scope management:

“Project scope management encompasses the processes required to ensure that the project includes all the necessary work and only the work required to complete the project successfully.”

Lack of strict Change Control Process:

A strict Change Control Process is fundamental in project management to ensure project objectives are met within the defined scope, timeline, and budget. The absence of a rigorous CCP can lead to project delays, cost overruns, scope creep, and reduced quality of deliverables.

Implementing a strict Change Control Process ensures that project changes are managed effectively, supporting successful project outcomes.

What Are the Impacts of Scope Creep?

Missed Deadlines:

Scope creep often results in additional tasks that extend project timelines. According to (Kerzner, 2009), the accumulation of unplanned activities can lead to significant schedule delays, as project teams struggle to accommodate extra work within finite time constraints.

Budget Overruns:

Implementing additional features without corresponding budget adjustments frequently causes financial overruns. unforeseen requirements typically escalate costs beyond initial estimates, straining project resources and funding.

Team Burnout:

Constantly shifting goals due to scope creep can negatively affect team morale and productivity. As noted by (Schwalbe, 2011), continuous changes to project objectives create stress and diminish focus, leading to increased burnout among team members.

Stakeholder Frustration:

When project expectations are poorly managed, stakeholder trust can deteriorate. (Larson & Larson, 2009) emphasize that unmet expectations, fueled by frequent scope changes, can erode confidence and satisfaction among stakeholders.

Recommendations for Managing Scope Creep

Stakeholder Management

Effective stakeholder management is essential for controlling scope creep. Conducting stakeholder mapping helps determine their influence and interest levels. Techniques such as the Power/Interest Grid (Ackermann & Eden, 1998) are effective tool for this purpose.

(Olander & Landin, 2005), in their study of two construction projects in Sweden, highlighted key lessons for stakeholder management:

- Engaging stakeholders in exploring alternatives and solutions to meet project goals.
- Receiving honest feedback and establishing open channels of communication.
- Identifying stakeholders' bases of influence, which evolve throughout the project lifecycle.

Building strong relationships with stakeholders is equally critical. (Palmer, 2013) emphasizes that trust and continuous engagement foster stakeholder support and reduce resistance to changes. Moreover, project managers often err by agreeing to changes to appease stakeholders. While stakeholder satisfaction is vital, project managers must confidently uphold project boundaries. As suggested by (Kerzner, 2009), maintaining a balance between flexibility and adherence to project objectives is key.

Scope Management:

Drawing clear and firm lines between what's in scope and what's out of scope is key to keeping projects on track and avoiding scope creep. While these items may seem different, they're both equally important. Your scope should cover everything clearly and concisely—think documentation, licenses, ongoing support, and stakeholder involvement—all neatly defined within its boundaries. Make sure every item is specific and measurable so there's no room for confusion. And it's crucial that everyone on the project team, along with key stakeholders, understands and agrees to what's included. Think of it like an insurance policy—you don't want any grey areas if there's ever a disagreement. (O'Donnell, 2021)

Change Control Process

Implementing a robust change control process is fundamental in managing scope creep. The process should include:

Change Request Submission: Formal documentation of change proposals.

Impact Analysis: Assessment of time, cost, and resource implications.

Review and Approval: Evaluation by a change control board (Project Management Institute, 2017).

Communication: Clear communication of approved changes to all stakeholders.

Implementation and Monitoring: Ensuring changes are executed as planned and monitored for impact.

Conclusion

Change is a natural, inevitable part of any project. However, uncontrolled changes can lead to scope creep, which gradually undermines project objectives. To manage scope creep effectively:

Project managers must enforce clear, strict change management processes while appreciating stakeholders' perspectives (Turner, 2009).

Understanding the stakeholders' views helps project managers navigate the delicate balance between project constraints and stakeholder needs.

Clear scope definition and stakeholder alignment on change impacts, such as schedule extensions or budget increases, are crucial.

Ultimately, project managers are responsible for safeguarding the project scope. By adhering to structured change control processes and fostering strong stakeholder relationships, they can mitigate the risks of scope creep.

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