

Unit 9 ePortfolio Activity

Beginners Engineering Project Management

- **What is scope creep?**

Scope creep is an unexpected event that adds additional features and functionality to a project's original scope without the corresponding adjustments to time, budget, or other project resources (Santos, 2021).

It has several detrimental effects to the success of projects such as missed deadlines, incorrect deliverables, increase in budget, and a potential free-for-all attitude that anything goes. Aizaz et al. (2021) points out several factors that drive scope creep:

1. Lack of formal communication plan.
2. Lack of risk analysis planning.
3. Poor stakeholder management.

However, the most critical factors that cause scope creep, identified from their research, is communication (100%), project complexity (80%), lack of knowledge (60%) and unrealistic expectations (54%).

- **What aspects of a project are dependent on scope creep?**

Aspects of projects affected by scope include project requirements, project schedules and budget. Not only these two obvious points, but other project dependencies that may be impacted by scope creep include project stakeholders like finance team, customers, development teams or external product vendors.

- **How to balance the competing requirements when scope creep occurs?**

As a project manager, I would balance competing requirements by assigning a weighting value to each that considers variables such as

- cost-to-benefit ratio.
- What is the impact of not implementing the requirement?

- number of man-hours estimated.
- (specialised) knowledge requirements.
- *Urgency* of the requirements (is it a production issue or life-threatening bug).
- Which *stakeholders* are impacted by the requirement?

Competing requirements are then assigned a weighted score of the variables, and it therefore becomes a mathematical judgement of which competing requirements will make it to delivery.

- **How do you stop scope creep?**

It is impossible to prevent any form of scope creep in a project in part because no single organisation knows one hundred percent the full set of requirements for delivery from beginning to end.

1. Identify stakeholders and their concerns, roles, and responsibilities in a project. Consider the use of a RACI (Responsible, Accountable, Consulted, and Informed) matrix to inform the impact each stakeholder has.
2. Clearly define the project's scope and goals and have stakeholders sign off on the scope (Farok and Garcia, 2016).
3. Establish a change control process to manage.
4. Use Agile processes for project management because it supports frequent changes. Agile allows product owners and customers to collaborate, control and verify the scope during each iteration. However, using Agile for project management introduces frequent change risks to the project (Marnada et al., 2022)

References

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- Farok, G.M.G. & Garcia, J.A., 2016. Scope creep monitors level of satisfaction, cost of business and slippery slope relationships among stakeholders, project manager, sponsor and PMO to execute project completion report. *Journal of Advanced Research in Business Management and Accounting*, 2(2):15-23.

Marnada, P., Raharjo, T., Hardian, B. & Prasetyo, A. (2022). Agile project management challenge in handling scope and change: A systematic literature review. *Procedia Computer Science*, 197:290-300.

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