KPU International Journal of Engineering & Technology
Volume 6, Issue 2, Sep. 2026
e-ISSN:2790-0819, p-ISSN:2790-0800

Date Received: 2025-11-26
Date Accepted: 2026-07-06
Date Published: 2026-09-30

Effects of Incorrect Scope Definition on Success of Construction Projects in Kabul City

WAHIDULLAH MAHMOOD[1*] & MOHAMMAD NAJIM WAHEDY[2]

[1]Student of Master of Science, Dept. of Construction Engineering Management, Faculty of Construction Engineering, Kabul Polytechnic University (KPU), Kabul, Afghanistan. Email: wahidullahmahmood@gmail.com.

[2]Professor, Dept. of Construction Engineering Management, Faculty of Construction Engineering, Kabul Polytechnic University, KPU Campus, 5th District, Kabul, Afghanistan. Email: m.najim.w@kpu.edu.af.

Abstract

The role of scope of work (SOW) in construction projects has been underestimated for decades, and this is one of the reasons for the failure of most projects in Afghanistan, especially in Kabul. These projects share many of complications, challenges, and greater severity with unattended goals. Failure to define tasks and objectives clearly in the SOW is catastrophic, a confusion of the objectives and the project. This paper assesses the effects of incorrect scope definition on the success of construction projects in Kabul City.
To study the SOW, a mixed-methods research approach is used. This approach involves collecting both quantitative and qualitative data to provide an all-inclusive understanding of the research problem. This approach ensures that project results are reliable, accurate, and applicable in real-world scenarios.
The paper identified gaps and recommends possible solutions to improve the execution of construction projects with consideration of a comprehensive SOW to contribute the reduction of negative impacts on the success of construction projects in Kabul City.
The findings will be helpful for project managers, contractors, and other stakeholders in the construction industry, as well as for policymakers and regulators responsible for delivering projects. In due course, the paper aims to advance project outcomes and increase efficiency and effectiveness by using the comprehensive SOW; construction projects can be completed on time and within budget, as well as ensure maintaining a healthy profit margin.

Keywords: Construction, Project, Scope, Success.

* Corresponding Author

https://doi.org/10.68924/84mkpk78

1. Introduction

Within construction project management, every project initiates with a plan. A general contractor can't plan for success on a project without a well-thought-out idea of exactly what needs to be done. That's where a SOW document comes in. It's difficult to overstate the importance of a well-articulated scope of work for the success of a construction project. It serves as a vital document that outlines the activities, objectives, milestones, deliverables, and outcomes of a project.

A construction scope of work (SOW) is a document that provides a clear and detailed description of the work that needs to be done to complete a construction project successfully. It outlines the tasks necessary to transfer a project from an idea to a real-world building and allocates those tasks to project team members. It gives each party direction, while offering a complete picture of project goals and expected results. It's hard to overstate the importance of a well-articulated scope of work for the success of a construction project, as this document helps direct budgeting, planning, and execution of the project from start to finish. An incomplete or misunderstood scope of work can lead to inefficiencies, rework, and disputes. The SOW document lives with other critical project documents, like construction contracts and budgets, as it is foundational for all the work done on the project. The designer or engineer may create the document, sometimes with the help of the owner's representative or an outside consultant. A Construction Scope of Work document is a contractual agreement used to define the work a subcontractor is to perform. It should make clear to all parties involved what a contractor is being paid to complete, when they will complete it, and any specific methods and techniques to be used. On a high level, the SOW should allocate responsibilities and set clear expectations. (Eckas A & Eckas A. 2024)

A scope of work will provide:

- Work required, including objectives and deliverables
- Who is taking on the responsibility and risk?
- Schedule and timelines
- Additional requirements and project details such as admin and management processes

A well-crafted SOW is critical for avoiding project delays and miscommunications. By providing a detailed scope, all parties will have a foundational document that will cut any ambiguity from the project. (Eckas A & Eckas A. 2024) The scope of a project can be defined in terms of the functionality which the project is envisioned to offer, accomplish, or sustain. Project scope management describes that the project includes all of the work required, and only the work required, to complete the project successfully (PMBOK). The main purpose of scope definition is to divide the major deliverables into smaller and more manageable components for easy execution. It also puts forward the intended span of work probable and the expectations about any ensuing postponements. (Arupjyoti Nath and Mohd. Mukit Momin, 2014)

The basic drive to defining scope is to clearly designate and gain covenant on the coherent boundaries of your project. Scope statements are used to express what is within the precincts of the project and what is outside those boundaries. The more facets of scope you can recognize, the better off your project will be. (Arupjyoti Nath and Mohd. Mukit

Momin, 2014) A well-developed project scope statement provides the project team with information the team needs to design and implement the project execution plan. The well-developed project scope also provides the team with an understanding of the purpose of the project and the basis for defining project success. (University of Minnesota, 2016)

2. Methodology

This study applied mixed method, namely: questionnaires, direct observations, and document revisions. A questionnaire is a research tool that consists of a set of questions or other types of prompts that aim to collect information from a respondent. A research questionnaire is typically a mix of closed-ended questions and open-ended questions.
Open-ended questions offer the respondent the ability to elaborate on their thoughts. The data collected from a data collection questionnaire can be both qualitative and quantitative in nature. A survey questionnaire was developed and distributed to construction professionals, including project managers, contractors, and beneficiaries, to collect data on the effect of scope of work on the success of construction projects in Kabul City. The advantage of using observational evidence is that it often provides extra information about the topic being studied. The observations can be so valuable that one may even consider taking photographs at the site. The researcher observed the site multiple times in order to see the progress of the project and also to check the quality. This mixed-methods research approach provided a comprehensive understanding of the effects of scope of work on the success of construction projects in Kabul City. This approach ensures that the project results are reliable, accurate, and applicable in real-world scenarios.

3. Findings and Analysis

In this paper, the developed questionnaires were distributed; 47 questionnaires were received from the selected populations. Formal and informal discussions were conducted with selected managerial-level respondents like project managers, site managers, contractors, clients, architect/engineer and others. In line with this, document assessment, formal and informal discussions, and observations on construction sites were carried out for further data collection. After questionnaire distribution, answers were recoded into the SPSS program, and then an appropriate statistical analysis was adopted to test the hypotheses. Cronbach's Alpha was used to test reliability; it reached up to 81.4% for all statements, which is very good. According to the data collected, it’s found out that, 97.8 % of the respondents reached an agreement that an incorrect scope of work is the main factor impacting the overall success of construction project completion. The collected data were analyzed, and the following results and findings were obtained:

Table 1. Clearly defined SOW contributes to the overall project success

Does a clearly defined SOW contribute to overall success of a construction project?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	34	72.3	72.3	72.3
	Agree	12	25.5	25.5	97.9
	Disagree	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

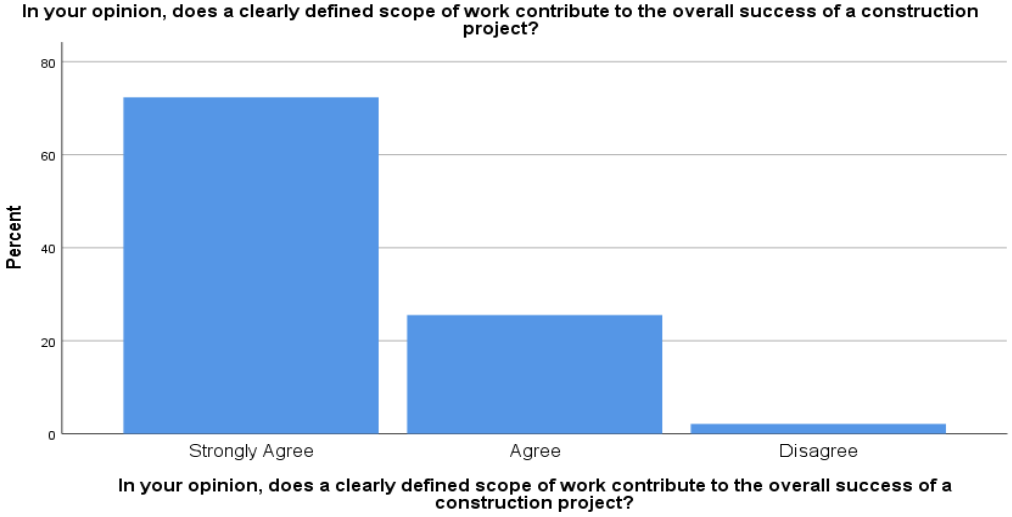


Fig. 1. Clearly defined SOW contributes to the overall project success.

The above table shows that:

- 72.3% of the respondents strongly agree.
- 25.5% of the respondents agree.
- 0% of the respondents are neutral.
- 2.1% of the respondents are disagree
- 0% of the respondents are strongly disagree

Table 2. Project success reflects positively on scope management process

Do you think the project's success reflects positively on the scope management process?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	26	55.3	57.8	57.8
	Agree	18	38.3	40.0	97.8
	Disagree	1	2.1	2.2	100.0
	Total	45	95.7	100.0	

Missing	Neutral	2	4.3		
Total		47	100.0		



Fig. 2. Project success reflects positively on scope management process

The above table shows that:

- 55.3% of the respondents are strongly agree.
- 38.3% of the respondents are agree.
- 4.3% of the respondents are neutral.
- 2.1% of the respondents are disagree
- 0% of the respondents are strongly disagree

Table. 3 SOW determines stakeholders' trust and overall success

Is the scope of work critical in determining the stakeholders' trust and overall success and of the construction project?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	26	55.3	55.3	55.3
	Agree	21	44.7	44.7	100.0
	Total	47	100.0	100.0	

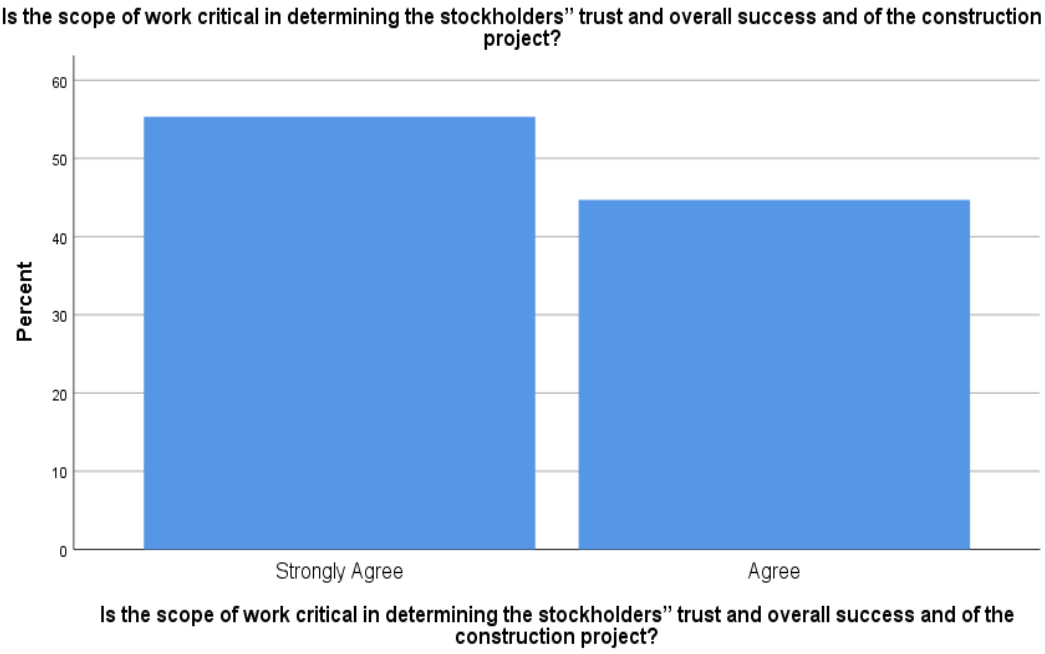


Fig. 3. SOW determines stakeholders' trust and overall success

The above table shows that:

- 55.3% of the respondents are strongly agree.
- 44.7% of the respondents are agree.
- 0% of the respondents are neutral.
- 0% of the respondents are disagree
- 0% of the respondents are strongly disagree

Table 4. SOW is main factor contributing project success

Do you believe that the scope of work is the main factor contributing to project success?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	25	53.2	58.1	58.1
	Agree	18	38.3	41.9	100.0
	Total	43	91.5	100.0	
Missing	Neutral	4	8.5		
Total		47	100.0		

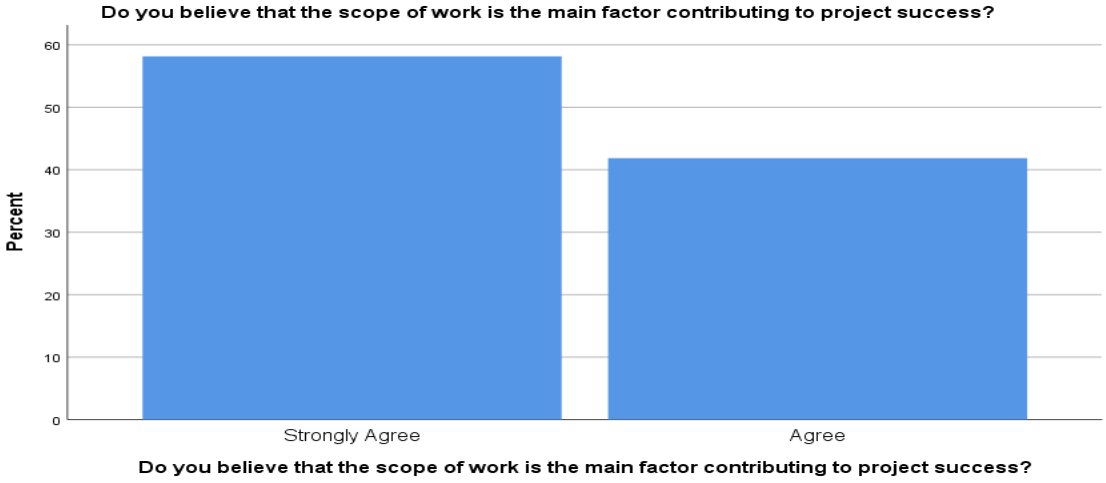


Fig. 4. SOW is main factor contributing project success

The above table shows that:

- 53.2% of the respondents are strongly agree.
- 38.3% of the respondents are agree.
- 8.5% of the respondents are neutral.
- 0% of the respondents are disagree
- 0% of the respondents are strongly disagree

Table 5. Scope definition affect the quality of project final deliverables

In your experience, does scope definition affect the quality of the project's final deliverables?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	33	70.2	73.3	73.3
	Agree	12	25.5	26.7	100.0
	Total	45	95.7	100.0	
Missing	Neutral	2	4.3		
Total		47	100.0		

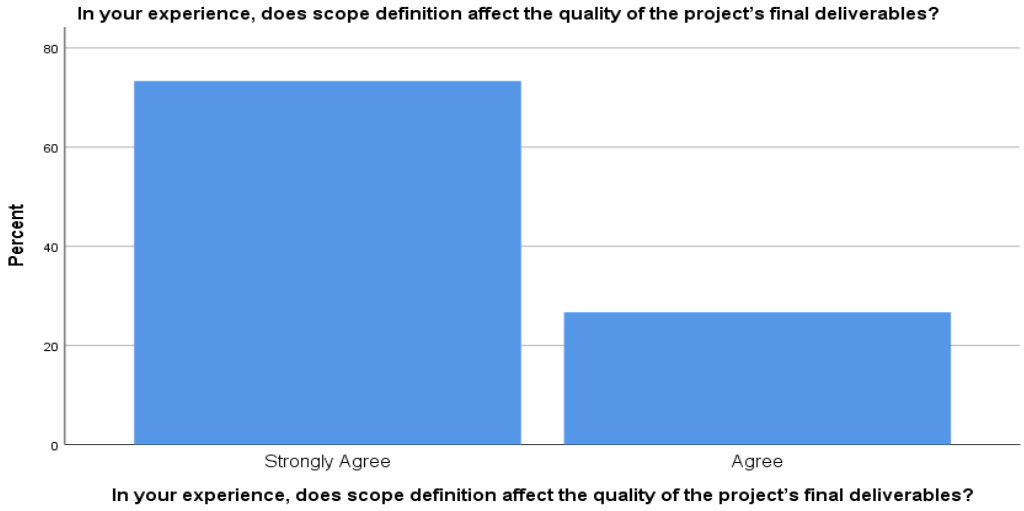


Fig. 5. Scope definition affect the quality of project final deliverables

The above table shows that:

- 70.2% of the respondents are strongly agree.
- 25.5% of the respondents are agree.
- 4.3% of the respondents are neutral.
- 0% of the respondents are disagree
- 0% of the respondents are strongly disagree

Based on the research findings, most of the respondents came to an agreement that incorrect scope definition is one of the major factors that affect project success. Having a clear and detailed scope before the project begins will guarantee the success of the project; in this case, employers have to decide on the project charter before the project starts and work according to the plan.

4. Conclusion

The paper aimed to assess the effects of incorrect scope definition on the success of construction projects in Kabul City. It identified the gaps and recommended possible solutions to improve the implementation of project management practices, with consideration of a comprehensive scope of work to contribute the reduction of negative impacts on the success of construction projects in Kabul City.

The questionnaire focused on five questions that affect project success by incorrect scope definition. The project scope of work in the analysis section in accordance with the research objects before feeding it to the SPSS data analyzer in order to draw the response percentages and make it easy for analysis. 47 respondents have answered the questionnaire, and based on the analysis carried out, the following conclusions have been drawn. According to the data collected, it was found that:

- 97.8 % of the respondents reached an agreement that a clearly defined scope of work contributes to the overall success of a construction project;

- 93.6 % of the respondents reached an agreement that the project's success reflects positively on the scope management process;
- 100 % of the respondents reached an agreement that the scope of work is critical in determining the stakeholders' trust and overall success of the construction projects;
- 91.5 % of the respondents reached an agreement that the scope of work is the main factor contributing to project success;
- 95.7 % of the respondents reached an agreement that scope definition affect the quality of the project's final deliverables.

Generally, with consideration of the research, it can be concluded that SOW requires careful attention because of the fact that, the incorrect and unclear SOW has a huge impact on project success. Through this study, it identified the gaps and recommends possible solutions to improve implementation, with consideration of a comprehensive SOW to contribute the reduction of negative impacts on the success of construction projects in Kabul City.

As the SOW is a very common part of the project documents in all over the world, very little specific research or papers have been found on it. Unfortunately, the role of SOW in construction projects is undervalued for decades, and this has been the reason for the failure of most projects in Afghanistan.

The findings will be helpful for project managers, contractors, and other stakeholders in the construction industry, as well as for policymakers and regulators who are responsible for delivering construction projects. In due course, the study aims to advance project outcomes and increase the efficiency and effectiveness of the projects. By using the comprehensive SOW, construction projects can be completed on time and within budget, as well as ensure maintaining a healthy profit margin.

5. Recommendations

Based on the findings of the research, the impacts of SOW on construction project success were identified; therefore, it is recommended for the construction industry:

1. All construction organization put more attention to the project scope of work by equipping project managers/officers with the concept and application of project SOW training via consideration of a comprehensive specialization curriculum;
2. The design and planning departments should further restructure to accommodate the responsibility of preparing clear and comprehensive SOW;
3. An independent project team /focal person is established/assigned so that it will be possible to effectively deal with construction project scopes during implementation;
4. It is also strongly recommended that further research is conducted on how the project scope affects the performance of construction projects, and the relationship between SOW and overall success of the construction project. practice of construction projects and the overall success /performance of projects in the organization in particular, and at the country level in general.

6. Acknowledgements

First and most of all, I sincerely thank the Almighty Allah for giving me the endurance to complete this research. Permanently superior recognition and deepest gratitude shall go to my parents, whose unwavering support and encouragement have been the foundation of my success. I am forever grateful for their sacrifices and love.

Next, I would like to express my deepest appreciation to my advisor, Dr. M. Najim Wahedy, Head of the Department of Construction Engineering Management. His invaluable guidance, unwavering support, and insightful feedback have played a pivotal role in shaping the progress of my project and my personal and educational growth.

I am extremely thankful to all those who lent me a hand in obtaining the information and data related to this work; especially, all friends, colleagues, and engineers for their willingness to provide me with all the necessary data and for allotting their time to respond to many of my questions.

Last but not least, warm appreciation and special thanks shall go to my family for their patience and support throughout.

7. Abbreviations

Abbreviation	Detail
KPU	Kabul Polytechnic University
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
SOW	Scope of Work
SPSS	Statistical Package for the Social Sciences
WBS	Work Break Structure

References

[1] Rose, K. H., & Indelicato, G. (2016). Book Review: A Guide to the Project Management Body of Knowledge (PMBOK® Guide), fourth edition. Project Management Journal, 40(2), 104. https://doi.org/10.1002/pmj.20125

[2] Arupjyoti Nath and Mohd. Mukit Momin, (2014), PROJECT SCOPE MANAGEMENT: A PIVOTAL TOOL

[3] FOR PROJECT'S SUCCESS. International Journal of Management, IT and Engineering http://www.ijmra.us

[4] University of Minnesota, (2016), Project Management from Simple to Complex, UNIVERSITY OF MINNESOTA LIBRARIES PUBLISHING.

[5] Edward R. Fisk, PE and Wayne D. Reynolds, PE, (2013), Construction Project Administration, Tenth Edition.

[6] Adrienne Watt, (2014), Project Management- 2nd Edition

[7] JACK R. MEREDITH, SCOTT M. SHAFER and SAMUEL J. MANTEL, JR., (2017), Project Management, A Strategic Managerial Approach, Tenth Edition,

[8] Project Management Open Resources and TAP-a-PM, (2012), Project Management Skills for all Careers, Attribution URL http://www.linkedin.com/in/maurajones

[9] JACK GIDO, JIM CLEMENTS, and ROSE BAKER, (2018), Successful Project Management, Seventh Edition, Printed in the United States of America

[10] Scope of work in construction: the only guide you need. (2024, July 30). Downtobid. https://downtobid.com/blog/scope-of-work-construction

[11] LetsBuild. (2023, September 19). What is scope of work in construction? Letsbuild. https:www.letsbuild.com/blog/scope-of-work
[12] Eckas, A., & Eckas, A. (2024, January 23). Understanding scope of work in construction. Knowify. https://www.knowify.com/blog/scope-of-work-construction
[13] Riches, S. (2024, August 30). Scope of Work in Construction Projects Guide and SOW Template. REBIM®. https://rebim.io/scope-of-work-in-construction