

Journal of The International Association of Advanced Technology and Science

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

Dr. G. M. G Farok<sup>1\*2</sup> and Dr. Jose A. Garcia<sup>2</sup>

<sup>1</sup>York University, Toronto, Canada and <sup>2</sup>Ryerson University, Toronto, Canada

Abstract: Scope creep is a change which is an update or addition to the whole or a part of project has been requested when the project is running on significantly an underway. Scope creep increases work with level of satisfactions off as well as any one would expect, but over time the project seems to get bigger and bigger while his or her price remains the same. The stakeholder either seems to think that the "extra work" is within the scope of the original agreement, or simply doesn't realize that he or she is asking for more than was originally agreed. Either way, the project is losing money. Scope creep is a slippery slope and can be difficult to recover from. Once project manager accepts scope creep from one client s/ he is setting a precedent for the rest, and although s/ he may not have to physically hand over money as a result of scope creep, the effect is essentially the same. More time spent on a project than sponsor anticipated puts s/ he out of pocket.

Key Words: Creep, Project, Stakeholder, Scope, Report.

#### 1.0 Introduction

Scope creep can explain many things depending upon context. It is the process in which a project grows beyond its originally anticipated size. It should not be counted as a "cost of business." It should be in control of anyone business which means that scope creep should be a negligible or non-existent factor. According to project goals it defines SMART (Specific, Measurable, Action-oriented, Realistic and Timelimited) which means 'planning the work and working the plan' i.e., Scope= Schedule + Budget [1]. The

WBS process and the list of work packages intricate various elements of the project plan and project control in several ways [2]. Oftentimes organizations view themselves and their projects as being, too unique (they think, 'we are different') and ignore the lessons of history- the dilemmas, mistakes and solutions of the past [3]. Good clients and quality clients are focused on professional approach to project management and delivery. This is a win-win method and the change may come from client, co-worker, customer, stakeholder- usually whoever beneficiary of the project. They have requested they wish to get something done differently or would basically like the deliverables to be different then originally designed. This might be happened once or couple of times within the project life cycle [4]. Scope leads to change and the process of Change involved three stages: unfreezing, changing, and refreezing. Unfreezing is a situation recognized as being different, deficient, or inadequate in some way. Changing takes place when a new system or plan is implemented. Refreezing occurs when newly created design, processes or patterns of behavior and techniques become part of an organisation [5]. A very common reason for projects failure is the poor scope management and control. Scope Creep is the current leading cause of project failure globally according to the 2010 Global Survey [7]. scope creep is the tendency for a project to extend beyond its initial boundaries [12].

- **2.0 Control of Scope Creep**: The prevention of scope creep is very much unpleasant for project manager and it is not possible to 100% of the time. It depends on type of business, position, project size, relevant projects and final delivery date with PCR of the project. Project Management texts suggest that the original plans for projects are almost certain to be changed before the projects are completed. It has advocated to establish a change control process that can review and approve changes that are proposed by team members, requested by the client, or required by any authorities having jurisdiction [8].
  - a) Define Scope of Statement: Project has a charter. During the planning stage, there must have a statement that spells out the project components and packages with entire scope. All stakeholders should sign off the scope of statement which will make sure that beneficiaries are aware of the scope and expectations of the project. Project manager should follow agreed scope and use plenty of Scope Statement templates. Scope creep comes about as a result of a poorly defined scope of statements. In this contest, stakeholders aren't concerned about what is in project agreement; but they are concerned about their business. If they believe that project managers are liable to carry out works, they will ask them to do it. If they feel that something needs to be done in order for their outcomes to be met they may request it to project manager in all ideas by innocence or ignorance, depending upon how PMO look at it— without a second thought to the scope of project works.

That is why a clearly defined scope of works that is understood and agreed by both parties is so important. PMO should ensure that the works to be carried out are clearly and unambiguously worded in their agreement and project manager should get confirmation that the stakeholder has read the scope and is fully aware of what is and isn't included. In terms of keeping the long term happiness status, it is less about what is in the agreement and more about what they know is in the agreement. PMO should not accept those stakeholders to go into a project with expectations of service delivery that are not matched by the particulars of the scope of works and it is PMO responsibility to ensure that they are suitably and well informed.

- b) Financial Penalties: Some projects use to accept the changes requested with charges extra amount for those changes. Actually, scope creep comes down to an issue of finance — if the resources expended on carrying out a project exceed the desired amount then project manager will fail to manage his or her project perfectly. To minimize or avoid scope creep project manager must not only define the work breakdown structures but also he should have a crystal clear understanding of his/ her material and time involvement in the project.
- c) Price rights and insurance policies: Project materials pricing method will vary depending upon the nature of organizational business and the way in which project manager choose to approach the work but the key is in breaking down projects into their smallest constituent parts and ensuring that everything is accounted for. Then project manager can assign necessary resources to each individual portion of work and come out with a conservative costing. Usually it includes a contingency within project pricing in the region of 15%. But this isn't to allow for scope creep it is an insurance policy to account for potential discrepancies in any project estimate. At that point, project manager should not allow for scope creep; but it is something that project manager must endeavour to eradicate, not manage. As a result, with a clear scope of works and priced proposal, it is of course vitally important that the client reads, understands and signs off all necessary documentations. This marketing proposal sample demonstrates what a good scope of work should look like. Project management contract should clearly state that any additional work not stated within the scope of the works is considered as extra and must be agreed in writing by stakeholders and sponsor (s). In order to discourage add-on work, PMO should recommend a predetermined premium rate for additional works. While the growth of a project during its lifespan is often unavoidable, project manager can encourage project stakeholders to prevent such an outcome by

establishing repercussions of a higher price if all elements of work to be carried out are not included within the scope of works.

- New project request with changes: Sponsor (s) can consider another small project with those changes which are requested from stakeholders during project implementation period. There is less possibility for project managers likely to fall victim to scope creep if they have a solid understanding of what the stakeholders would like to achieve. When PMO is working with stakeholders, then project managers use to overruling focus must always be on the desired outcome in terms of project deliveries. Establishing an Elementary School for a new community doesn't indicate towards any kind of real business benefit, but providing a service by which you aim to increase social benefits by 30% for developing a clear expectation. That leads to a far reduced likelihood of scope creep. If PMO understands the outcome, then it should have a relatively clear idea of what project manager and sponsor (s) will need to do in order to fulfill the stakeholders' desires. Two types of service provisions: a) Passive: the stakeholder tells the sponsor (s) by PMO what is expected of them. b) Dynamic: the sponsor (s) works with the stakeholders to establish what they need in order to achieve their goals. There is another option at beginning of concepts by adding 15-20% margin to the estimate for obtaining realistic goals [6]. Project managers use to live with constant change, their team members often accept change as an unnecessary condition that impedes their creativity and productivity. Usually, advanced planning and proper communications can help to minimize changes and lessen their negative impact [9].
- **3.0 Relationship between scope change and scope creep:** It is not difficult for construction projects to witness a major scope changes, however, scope change and scope creep are completely different. "Scope Change is an official decision made by the project manager and the client to make a change to expand or reduce its functionality. Usually, scope change involves making adjustments to the cost, budget, other features, or the timeline [10]. Scope Creep is referred to as the phenomenon where the original project scope to build a product with different aspect slowly grows outside of the scope originally defined in the statement of work. It refers to scope change which happens slowly and unofficially, without changing due dates or otherwise making adjustments to the budget [11].
- **3.1 Analysis of causes:** Majority of respondents to field data implied that there are a lot of causes of scope changes: ignorance of stakeholders, delay in project execution, statement of scope intervention with political and PMO personnel, lack of data and technology, lack of management communication with leadership, Conflict of making the decisions (PMO staff, resources, environment etc) [Figure 1]. In addition,

scope creep is a poor understanding of the original project, changing market conditions and competing forces within a company. Scope creep is a management risk in most projects. Most megaprojects usually fall victim to scope creep. Its often results in cost overrun and behind schedule. This is difficult to counteract and remains a difficult challenge for even the most experienced project managers [18].

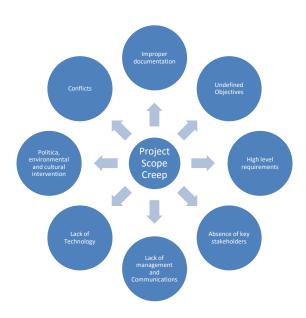


Figure 1: Causes of Project Scope Creep

- **3.2 Project Cost Evaluation:** The following guidelines should follow up to overcome scope creep:
- i) Prepare a detailed plan with clear concern of project sponsor before submission scope statement.
- ii) Estimate realistic goals and deliverables
- iii) To make audit time to time in project duration
- iv) To fix-up priorities
- v) To get project and required budget approval in time
- vi) Create a formal change process with possible causes of scope creep [Figure 2].

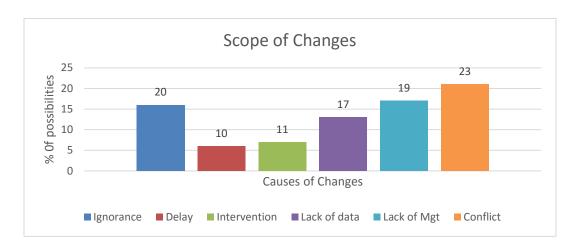


Figure 2: Main Causes of Scope Creep

The external changes include: customer requirement changes, environment changes, platform changes, poor understanding of customer requirements with contract signing.

- 4.0 **Strategies to control scope creep:** Project scope performs to deliver a product, service or result with the specified features and functions [14]. On the other hand, solution is a set of changes to the current state of the organization that are made in order to enable the organization to meet a business need, solve a problem to obtain opportunity [Table 1]. The following strategies can be used to avoid scope creep as well as effectively manage a project:
- i) Clearly identify business objectives
- ii) Define properly what is in play and what is not
- iii) Maintain well-defined project management and change management strategies
- iv) Active participation of all stakeholders in the project requirements definition phase
- v) Explain all affected legacy and 3<sup>rd</sup> party systems
- vi) Develop an effective functional specification for the project; i.e. start the building with blue print [13].

Table 1: Project cost with Scope creep comparison

No	Project	Budget increase in	Revise/ Final	Total	Direct	% for
	budget at	project implementation	project budget	variations	Cost due to	scope
	Charter (\$)	period (\$)	(\$)	(scope creep +	scope	creep
				risk + other	creep	
				factors)		
1	5,00,000	7,500	5,07,500	1.48	4,500	0.87
2	7,50,000	7,800	7,57,800	1.03	5,300	0.70

3	10,00,000	6,600	10,06,600	0.66	6,200	0.61
4	12,00,000	14,000	12,14,000	1.15	7,300	0.6
5	18,00,000	16,000	18,16,000	0.88	8,100	0.45
6	20,00,000	18,000	20,18,000	0.92	7,700	0.38

If the project manager does not speak to the intended users of the application early enough or does not include the right teams in the initial planning (legal, risk management, information security, compliance and so forth, he will undoubtedly has to add more features and requirements into the project. It should get buy-in form all critical stakeholders at the start of the project [Figure 3].

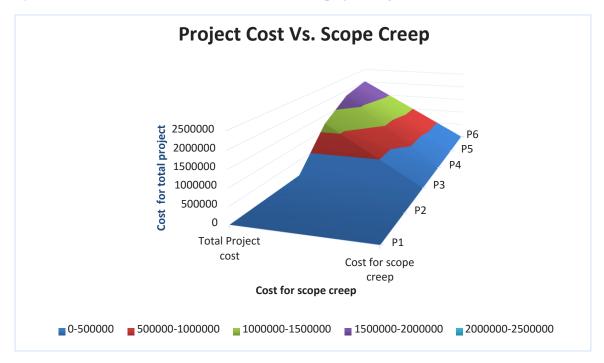


Figure 3: Project cost with scope creep

Projects are hard to fund and take a long time to deliver. This results in people trying to get every thing on time [16]. On the other hand, it should break large projects into small projects, the smaller the better. Project manager has to build in frequent opportunities for stakeholders to review small increments so he can make small changes that apply to small impact on scope [17].

**5.0 Results and discussions**: The cost of scope creep will be increased due to ignorance of key stakeholders, execution has started after years of completion of study, scope definition is not accurate, government officials are always ambitious and unrealistic regarding the outcome of projects, intervention and conflict in politicians and different government agencies, lack of leadership, communication and technologies.

There should be linking milestones and activities that are common in both the change management work plan and the master project work plan. It also suggested that change management activity is controlled to an overarching project management plan [15]. To control scope creep, a project manager should consider even minor adjustments to the original project scope carefully and rework time lines, consider revise estimates, include supplementary items and communicate with the stakeholders before integrating changes. This should filter out all but the most important concerns regarding time, cost and quality.

**6.0 Conclusions:** A project charter is an invaluable instrument in monitoring and controlling of project schedules, costs and deliverables. The process for avoiding scope creep; project management office should understand and cooperate the stakeholder opinion and project charter should define scope, service and price clearly. Scope creep is not something to be feared — it is something to be removed from the equation. Fortunately, the process by which anyone can be confident of avoiding scope creep, it implies to provide a top-quality service for the client in terms of assessing their needs and providing a solution that should deliver to a more than satisfactory standard. Otherwise, this uncontrolled changes for improper documentation, lack of stakeholder management, intervention of other causes and adding new objectives lead to delay the execution of project completion report.

**7.0 Recommendations:** A detailed project plan should manage stakeholder expectations. Project management profession can help reduce the impact of scope creep and eradicate this problem entirely. Continuous change leads to the loss of overall project control. It is important to remember that any non-scheduled work means cost and time against assigned project budgets. That's why project manager will accommodate 'minor' changes and request for data or work in project master plan.

#### **References:**

- 'Managing Projects'- 20 Minute Manager Series, Harvard Business Review Press, Boston, Massachusetts, USA, 2014
- 2. Cleland and King, System Analysis and Project Management, 258
- 3. Seymour Sara son in the Creation of settings and the Future societies, Jossey-Boss, 1972, San Francisco, USA.
- 4. Scope Creep- The Two Dirtiest Words in Project Management- Sandy Stachowlak- March 2014.
- 5. Lewin, K. (1951) Field Theory in Social Science, Harper Torch books, New York, NY.

- 7. Direct Cost of Scope Creep in Governmental Construction Projects in Qatar, Global Journal of Business and Management Research, Volume 12 Issue 14 Version 1.0 Year 2012, Type: Double Blind Peer Reviewed International Research Journal.
- 8. Meredith, J. and Mantel, S. J. (2000) *Project Management: A Managerial Approach*, John Wiley & Sons, New York, NY.
- 9. Thamhain, H. J. (1993) Effective Leadership for Building Project Teams, Motivating People, and Creating Optimal Organizational Structures in *The AMA Handbook of Project Management*, (Ed, Dinsmoore, P. C.) Amacom, New York, NY.
- 10. Skills & knowledge Of Cost Engineering 5th edition 2007, AACE (Association for the Advancement of Cost Engineering)
- 11. Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 10th edition 2009, Harold Kerzner
- 12. Practical Guide to Project Scope Management ,1st Edition 2008, Shyamkumar Narayana.
- 13. Ivy F. Hokes (1994), United States National Aeronautics and Space Administration (NASA).
- 14. PMBOK, 5th Edition, PMI, USA.
- 15. Nelson, K. (2011), Change management: Understanding the human dynamic of change, PMI Global Congress Proceedings, Dallas, Texas, USA.
- 16. Andrew Baker, Director, Service Operations, SWN Communications Inc.
- 17. Michael Greer, PM Consultant, Trainer, Author