Advances in Project Management Series[1]

Project Performance Audit - A Methodology

Dr. Alexia Nalewaik FRICS CCP CCA
QS Requin Corporation, Pasadena, California

It all started on a normal workday, with two seemingly unrelated questions:

1. Why didn't this recent audit identify as many findings as the last one?
2. What can we do to win more audit work?

But they were related … and then, suddenly, I had a PhD.

Management consultants, by the nature of their business, live in a world where winning the work means survival of their firm, and improvements to their salary. Some will do whatever it takes to win the work. Others genuinely care about the service they provide. The two are not always mutually exclusive.

After analyzing over seven hundred audit reports, the answers to the two questions were clear. Work was being won by other firms because they were able to price their services very low. However, in order to do so, they were reducing the scope of the audit to the bare minimum required by law. Their audit reports were, at most, three pages long – and that included the cover page and managing partner's affidavit. In contrast, a performance audit with broader scope could yield a report 30 to 100 pages long. Second question, answered. As for the first question, that turned out to be a combination of audit team skills and scope (Nalewaik, 2013). And yet, the answers to both questions turned out to be more.

Projects, especially construction projects, typically apply specialized project management techniques to mitigate the volatility, cost overruns, significant delays in completion, and failures with which such projects are often associated. Audit represents one type of independent external oversight often utilized to provide an opinion on current project status and quality of management. However, variability in audit sampling and review techniques, team composition, scope, quality and availability of data, standards, and other factors can impact audit results. Unexpectedly, this research provided a contribution to two spheres: auditing and procurement. After answering the two initial questions, the research goal evolved to define key components in the execution of performance audits, in order to improve performance audit procurement and process, impacting findings and thus their applicability and usefulness as a project and organizational performance improvement mechanism.

[1] *The PMWJ Advances in Project Management series includes articles by authors of program and project management books published by Gower in the UK and by Routledge worldwide. To view project management books published by Routledge publishers, click here. See this month's author profile at the end of this article.*

The objectives of project performance audit are to: 1) reduce risk; 2) enable transparency and accountability; and 3) create a culture of organizational maturity. Inherent in performance audit are the three concepts of Economy, Effectiveness and Efficiency (Waring & Morgan, 2007). "Economy" emphasizes frugality and reasonability in the use of resources, "Efficiency" focuses on achieving results while minimizing waste, and "Effectiveness" assesses the level of success in attaining the intended results. In evaluating the "three e's", project performance audit addresses the intersectional universe of resources (input), results (output), and impact. By significantly reducing the audit scope, the research found that certain performance audits did not deliver the depth and breadth of review promised or even implied. This, in turn, led to an expectations gap, wherein stakeholders had assumed a "performance audit" would truly evaluate stewardship and other concepts (such as equity, legality, fiscal prudence, and rational / justified decision-making), but the reduced audit scope did not really do so.

The research results found that different types and quantities of findings were generated by different audit scopes. Typical audit findings tended to focus on routine procedural, accounting, and controls errors. On average, contract expenditure audits questioned 2.65% of expenditures, and performance audits of large complex programs questioned only 0.04% of expenditures. The majority (72.56%) of the performance audits in the sample yielded no findings or questioned costs whatsoever. When more expenditures and project documents were reviewed, the audit yielded more qualitative findings. Including technical experts on the audit team increased both the percentage of expenditures questioned and the number of qualitative findings. Applying audit standards at first appeared to have a negative impact on the number of audit findings, but it was later determined that the reduced number of audit findings were related to limited audit scope and a lack of technical experts on the audit team. The research concluded that the two biggest factors that impacted audit results were audit scope and the auditor's depth of project- and industry-specific expertise (Nalewaik, 2013).

Several years later, that research led to the development of a methodology for scoping and procuring performance audits. The predominant guidance available at the time was typically written by governmental audit offices, specifically for their projects, or by consultants eager to sell services; there existed no substantial guidance for the layman or practitioner. Books written on the topic of project performance tended to focus on metrics and benchmarking. The performance audit profession currently has no academic or practitioner journal, no formal education, no certification program, and no official regulation. As such, approaches taken can vary widely and unpredictably, creating even more expectations gaps.

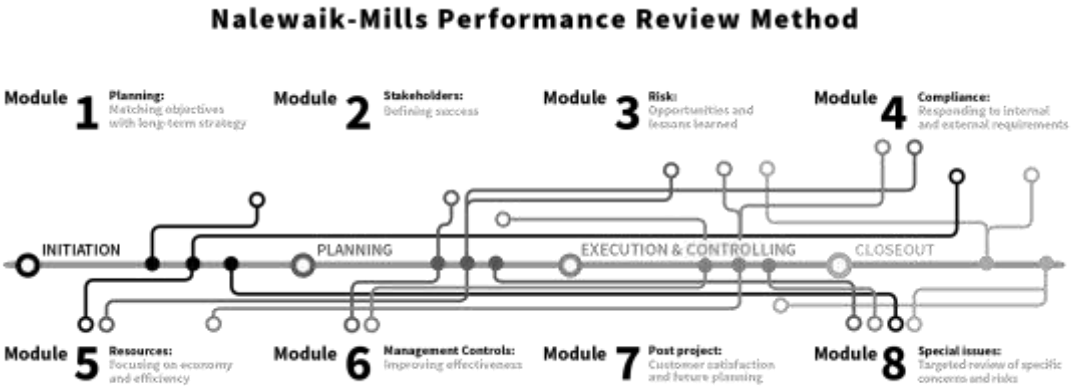
The Nalewaik-Mills Performance Review Method (Nalewaik & Mills, 2016) is designed to be a flexible, comprehensive, and modular approach that may be applied to complex, multifaceted or phased activities, projects, and programs; to both private and public sector; in construction; in non-construction industries such as information technology and manufacturing; and in other endeavors such as major event planning, company launches, and mega-activity implementations. It draws from best practices in a variety of fields: audit, governance, project controls, Total Cost Management (Technical Board, 2006), project management, risk management, and quality assurance; indeed, it enables the inclusion of best practices from any relevant sources, employing critical questioning in a system of interdependent problems. It is designed to be responsive to project and stakeholder needs at every project milestone. The modules can be reviewed individually, combined, and/or applied

on an as-needed basis, in any order, at any time.

Developing the audit scope requires a discussion about the cost-benefit of each module, and prioritization; by utilizing a flexible and modular approach, appropriate audit scope can direct audit resources to project elements that can benefit the most from the review. Finally, the methodology can also be used to help an organization mature by identifying controls gaps, recommending process improvements, and streamlining processes, thus decreasing variability in management, increasing resource optimization, improving the predictability of outcomes, and reducing risk. It encourages an iterative review cycle, in order to capture process and behavioral improvement opportunities.

As for standards, those written for performance audits were often just an amendment of existing financial audit standards (Davis, 1980), which (in turn) provide guidelines for audit engagement management (Brown & Craft, 1980), not audit methods[2]. The Nalewaik-Mills Performance Review Method is designed to be compatible with any required standards, especially the ISO (International Organization for Standardization) 19011 International Standard, Guidelines for Auditing Management Systems (ISO Copyright Office, 2011).

The method has been constructed as eight modules, which together cover the breadth of key project inputs, outputs, controls, and influences. The modules can each be included or not included as appropriate for the specific phase of the project and the needs of the organization. When subsequent audits are conducted, additional modules may be added, previously reviewed modules may be skipped, some modules may be revisited, and all previous audit findings should be reviewed. When applied singly or combined, the modules target the audit work to optimize findings and continuous improvement, without constraining the auditor's discretion in approach. The figure below (Nalewaik & Mills, 2016) shows both the modules and their applicability at different times during the project lifecycle.



[2] In a landmark decision, the AICPA's Audit Standards Board has very recently acknowledged that their auditing, attestation and consulting standards do not apply to the specific service of conducting a performance audit; as such, the standards are no longer required to be applied on performance audits (Audit Standards Board, 13-15 October 2015). While the author does not claim direct responsibility for this result, she does note that she repeatedly beat the U.S. GAO (Government Accountability Office) over the head with her findings from 2011-2013, and the question was asked of the AICPA by the GAO in 2013. Coincidence?

Very briefly:

- It can be said the success or failure of the project begins while it is still idea that is being formed. Module 1 - Planning addresses this phase of the project, focusing on the steps taken to create the project, matching project goals with organizational strategy and funding, and determining how best to achieve those expectations (effectiveness) while satisfying economy and efficiency expectations.
- Key to expectations of success, failure, effectiveness, and value are project stakeholders; success is a subjective concept, which can vary. Module 2 – Stakeholders considers the various stakeholders on the project, and their levels of interest, power, required input, and influence. Identifying stakeholders also means understanding their concerns, motivations, depth of understanding of the project, tolerance for risk, and likelihood to cause change.
- Risk, in the context of projects, is the chance or hazard of a loss, often commercial. Risk analysis identifies barriers to project performance, and opportunities to improve project performance. Module 3 – Risk focuses on understanding vulnerabilities, enabling the auditor to focus audit efforts, identify opportunities to strengthen controls, and evaluate steps taken to mitigate known risks.
- Module 4 – Compliance. The compliance element of an audit is a review of the project team or organization's adherence to processes, requirements, contract terms, laws, and policies & procedures. Regulatory agencies, funding source, or corporate governance may require a compliance audit. Issues identified during compliance audit may result in recovery of funds, streamlining of processes, and improvements to project and contract controls.
- The keywords of project audit (economy, efficiency, and effectiveness), at their core, focus on the utilization of resources as inputs. Resources to evaluate in Module 5 - Resources may include: money, time, materials, equipment, people, and more; the concept can be broadened to anything that is consumed during the project.
- Module 6 – Management Controls focuses on controls processes, policies and procedures. This includes softer concepts in governance and project management, such as organizational culture, communication, and reporting. The module focuses on improving controls mechanisms such that they are complete, optimized, reasonable, appropriate, consistent, and provide value. Management controls, as defined in projects, include project controls, procurement, accounting, project management, IT systems, and any other processes developed for the project.
- Project closeout, and the future of assets and deliverables produced by the project, are the focus of Module 7 - Post-Project. Much of what is reviewed is related to effectiveness, and the capture and future use of project data.
- Module 8 - Special Items exists as a placeholder for additional elements to review which have not been addressed in the other modules. This module is not intended to include elements that would typically be performed under a separate consulting engagement, such as: financial audit, inspector general investigations, formal risk modeling workshops, value engineering, claims analysis, etc.

After applying the methodology on a number of real-world projects, it was codified further in a book: *Project Performance Review: Capturing the Value of Audit, Oversight, and Compliance for Project Success* (Nalewaik & Mills, 2016). The intent of the book is not so much to teach about audit, as to help practitioners and client stakeholders understand the factors that impact performance audit results and effectiveness, so that they may appropriately define the performance audit scope, write the solicitation for services, and select the appropriate audit team. In doing so, the book goes into some detail about areas of specific concern to project stakeholders (grouped as modules), how those concerns evolve during the project lifecycle, and why each module and concept is important to project success. As such, the book also serves as a handy desk reference for project management concepts.

In terms of the questions that prompted this trip down the rabbit hole, both are addressed by the methodology, although not in a simplistic manner. The method is intended to support continuous improvement by identifying actionable findings, thus addressing Question #1. Theoretically, it also increases audit effectiveness, as the number of audit findings has long been accepted as a measure of audit quality (Cashell, Aldhizer III, & Eichmann, 1999). The answer to Question #2 isn't quite as easy. Creating the methodology and answering Question #1 also, in essence, created a niche market. Clients who commission an audit merely to satisfy audit requirements will still be inclined to limit the audit scope to the bare minimum and choose the cheapest audit proposal. However, clients and mature organizations who are committed to organizational improvement and transparency will be more inclined to appropriately broaden the audit scope and select an auditor with depth of experience in their industry. For those sophisticated project owners and stakeholders, the Nalewaik-Mills Performance Review Method applies. Use of the Nalewaik-Mills Performance Review Method is intended to support continuous improvement, a learning culture, increased organizational maturity, strengthened internal controls and project controls, transparency, accountability, stewardship, and empowered critical questioning without retribution.

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About the Author

Dr Alexia Nalewaik

California, USA

Dr. Alexia Nalewaik, FRICS CCP CCA is a project controls director and management consultant with 25 years of experience in the industry. She is President-Elect 2017-2018 of AACE International, Research Chair and Past-Chair of the International Cost Engineering Council, and the owner of QS Requin Corporation. She holds a PhD in project and program management, an MS in structural engineering, and a BA in physics. Alexia is a certified cost professional, a certified construction auditor, and a chartered quantity surveyor. She is a Fellow of AACE International, RICS, and ICEC.