

# Why Risk Management Activities are not Properly Implemented in Projects? Implementing an Effective and Proactive Risk Management Office (RMO)

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Executive Summary

With the concepts of deploying project management offices (PMO) probably very fresh in the minds of most project contracting organizations not as large as some multinational organizations, why consider a new “overhead” concept? Executives might feel a risk management office (RMO) is just that: an automatic increase in organizational overhead at a time when the economic landscape would argue against such a decision. This paper will show how an organization that does as few as 5 to 10 projects a year, or that manages over \$1 million USD in contracted projects could benefit from the establishment of a RMO.

The most offered benefits of any expenditure in the project management arena has been the increase of productivity, reduction of expenses, improvement in revenue, reduction in customer rejection, increase, well, you get the image. The purpose and benefits of a RMO can assist with these business goals, but are more oriented towards preventing risk potentials (future events that will *negatively* impact a project) from reducing the value a project was chartered to provide the organization. While these future events have less than an axiomatic chance of occurrence, to be reactive to their existence places the organization in an ever downward spiral of playing “catch-up.” The recent Deep Water Horizon/BP Gulf oil spill is the only example needed to explain this scenario.

This paper will answer two major questions an organization will have concerning the establishment of a project risk management office (RMO):

1. What does a RMO provide my organization that would justify its existence?
2. How do I put a value on the benefits of establishing an RMO?

The six (6) major functions of an appropriately designed and managed RMO will be detailed to illustrate their utilization within an organization’s project management environment with a discussion of how to properly size a RMO to an organization’s project involvement. Finally, a short treatise on how to understand the value of risk analysis and management (RAM) activities to an organization will be provided since with the establishment of a RMO, the authors suggest the centralization of these activities within that structure.

A RMO has and can provide measurable value to an organization or a performing project management contractor by supporting and managing the RAM activities that are often ignored or reduced in priority until a risk potential unfortunately triggers into life. At this point, it is moot as to the value of RAM activities – ‘would of, could of, should of’ are often heard in these board and conference rooms. They are the hindsight comments of those that are about to be saddled with the consequences of their inactions.

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## What is a RMO?

As with any management activity established by an organization, a risk management office (RMO) needs to provide planning, direction, support, and troubleshooting to its internal and/or external clients in an amount sufficient to justify its costs in terms of funds, time, and effort. A RMO must also meet these conditions in order to justify its existence, but must also leap one additional hurdle – that of being something “we have not done before.”

The decision to accomplish a novel task, take a new direction, think in a different manner, or implement a creative response always comes with their own barriers to entry – that of uniqueness. Such a barrier parallels the chartering of projects in most organizations since by definition every new project should be a unique activity or else be a mislabeled operation.

Establishing the concept of a risk management office (RMO) will take additional effort to overcome these natural tendencies of organizations to safely “just say no” to actions not well established in recent history. Do not be frustrated if the early attempts are thwarted or met with the cold stares and silence of disapproval. The purpose of a RMO can be of significance to a project performing organization.

## Purpose of a RMO

A risk management office (RMO) in similar fashion to its general management cousin, the project management office (PMO), serves to provide projects with a solution to the one major weakness of projects – their temporary life times. In other words, projects by their nature are temporary activities and thus cease to exist upon the successful completion of their goals and objectives, or the early demise if the project goes “off-rails.”

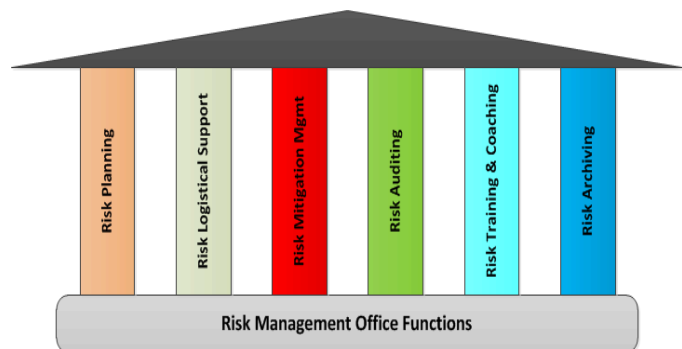
With their limited existence, projects are often negligent in the archiving and placing into organizational memory the lessons learned, the successful actions, or the painful mistakes of completed projects. In the area of risk

analysis and management (RAM), this omission can be even worse due to the currently low priority that RAM activities are given in most project performing organizations.

For an organization that provides project management services or consulting to other business or government agencies, the purpose of a functioning RMO is even more important to its continued existence. The BP Gulf oil spill disaster alone should have ended this discussion in all cases except where size and number of projects does not meet the suggested minimums detailed later in this paper. With the ever increasing litigious nature of business today, not having a RMO is another argument in favor that a performing organization did not take all necessary and prudent actions to prevent project failure.

## Functions of a RMO

Both a RMO and PMO with their existence not bounded by the schedules of attempted projects, provide the longevity and persistence to preserve the memory of project activities that successful project performing organizations must exhibit in this very competitive economic environment. However, just providing such an archiving function is not sufficient for most organizations to establish such activities. The following complete list of RMO functions provides the basis for this additional value:



1. Risk planning,
2. Risk logistical support,
3. Risk mitigation management,
4. Risk auditing,
5. Risk training and coaching, and
6. Risk archiving.

Each function will be described in how it can add value to the performing organization's project management activities regardless if directed internally or for contracted completion.

## Staffing a RMO

Proper assignment of qualified personnel to a risk management office (RMO) can determine the RMO's ability to achieve the benefits listed in this paper that a properly established and supported office can provide. The questions arise as to how many members and what levels of capabilities are required?

First, unless the organization is managing programs or even portfolios of projects for which these organizations should have already established a RMO (unfortunately, a state that the authors have found not to be the norm), project performing organizations should begin to centralize their risk analysis and management (RAM) activities once projects of sufficient size and complexity begin to be negatively impacted by triggered risk potentials. In other words, as the number, size, and complexity of projects being managed increases to where project scopes, schedules, budgets, and quality requirements are being impacted by risk potentials that have not been properly controlled, an organization should consider the establishment of a RMO.

Secondly, the necessary percentage of assignment and requirement skills for RMO personnel varies according to the number, size, and complexity of the projects for which the RMO is providing its services. The authors have discovered that initially a functioning RMO does not have to require full-time assignments nor the need for top-

level risk management credentialed personnel; however, as the risk analysis and management (RAM) activities grow so will the need for skilled, risk management personnel.

The following staffing and skills requirements are given as guidelines:

Staffing/Skills	# Projects	Total Budgets	% Cost for RMO	Complexity	Contracting
0.5 FTE – no RMP	3 or less	< \$1,000,000.	5.6%	Low	Always a RMP
0.5 FTE – RMP	3 to 5	\$1 – 2,000,000.	3.8 – 7.5%	Low to Med	Always a RMP
1.0 FTE – No RMP	5 to 7	\$2 – 5,000,000.	2.3 – 5.6%	Medium	Always a RMP
1.0 FTE – RMP	> 8	> \$5,000,000.	< 3.0%	Med to High	Always a RMP
Adjust as needed					

Assumptions: Non-RMP manager at \$90,000/annum  
 RMP manager at \$120,000/annum (RMP is a PMI-Risk Management Professional certificate holder or equivalent)  
 Overhead: staff \* 25%, and % Cost = Staff + overhead

These staffing and overhead costs for the RMO will be used in the final discussion of this paper to show how value can be added by the expenditure of these funds for the purpose of RAM activities.

### Authority of a RMO



The level of authority of a risk management office (RMO) should parallel that of a properly established and positioned project management office (PMO); however, in most organizations, this is not the organizational perspective that is often encountered. The authors have found that most PMO managers are perceived as being in a supervisory or management role as opposed to the more appropriate supporting and coaching role. The role of the RMO should be that of support, coaching, assistance, guidance, and training – not of management, decision making or control EXCEPT in the functional role of risk mitigation plan execution. This role does not have a parallel in the PMO analogy, and is dealt with in a separate section of this paper.

The primary reason for the RMO like a properly authorized PMO to provide a non-supervisory role is for the RMO to be seen as “go to place” for its functions to be effectively utilized by the project teams to which it is providing services. In a supervisory or managerial role, project managers may be hesitant to “ask the boss” for assistance when this is precisely what the project manager should seek of the RMO. The appropriate role of the RMO could be analogized as that of attorney, accountant or doctor whereby the project manager can be assured of confidentiality until control points are passed which demand organizational management involvement.

### RMO Functions



The function of a risk management office (RMO) while not in format different than those of a properly constituted project management office (PMO), they differ significantly in both content and intensity; thus, organizations are cautioned against the urge to combine the RMO into the PMO. The difference in philosophy, focus, and management styles could render both operations ineffective.

The following constitute the main functions of a properly organized RMO, but they are not necessarily the only functions that can be assigned to the RMO, nor are they needed at the same level of detail or intensity given the organizational project sizes and complexity profiles. Each organization will find its initial deployment of a RMO somewhat unique, and must be flexible in its creation, staffing, and funding.

The most important function a risk management office (RMO) can provide to its constituents is that of proper risk planning and organization. Most projects do not implement effective risk management due to the nature of risk being a future, possibly non-existent concept. The authors have heard questions and statements such as:

- “Why waste time and effort on something that may not happen?”
- “That has never happened to us before; why worry about it now?”
- “I have more important things to worry about than risk!”
- “We don’t have money to waste on things we can buy insurance for,” and etc.

Effective and proactive risk planning is the only proven method for risk control as the insurance and re-insurance industries have discovered over literally thousands of years of underwriting and covering losses. The insurance underwriting associations today do not just write insurance for clients, they get involved in their operations in an attempt to reduce the risks for which they have provided this transference of impact.<sup>[1]</sup>

Risk planning should begin early in a project’s life cycle<sup>[2]</sup> with the discovery of the project’s key stakeholders down to the sign-off of the risk management plan by the project management and sponsors. In addition, risk planning as with all project planning activities needs to be refreshed as the project progresses towards completion.

## Function #2: Risk Logistics and Support



Logistics and support activities are usually taken as the heart of what any management office should provide to its constituents, and the authors do not dispute this belief. However, these functions are just the beginning of the value which a risk management office (RMO) can provide an organization.

As companies realize their responsibility for reducing risk potentials within their projects, they will strive for a more effective risk management strategy. The RMO can be a central piece of that strategy. The RMO should be a coordinator as opposed to being the sole decision maker for risk activities. This balances the RMO responsibilities with the project managers, key stakeholders and team members.

In other words, as decisions on appropriate risk actions fall to project managers and team members, a RMO should provide the framework and integrated risk management approach thereby stabilizing the RAM activities for the impacted projects. This framework begins with providing the following logistics and support components:

Suggested logistics provided by the RMO: (planning framework for management of risk related resources)

- Design a unified and integrated risk management framework for all project RAM activities,
- Design a standard risk policy across the enterprise for project management efforts,
- Design standards of project risk governance,
- Design effective risk management communications procedures,
- Develop proactive risk mitigation plan implementation procedures, and
- Develop a compliance-aligned risk activity auditing program.

Support functions of the RMO: (actions and services provided by the RMO to constituent projects)

- Providing standardized templates, forms, and documents,
- Centralizing a risk repository for lessons learned,
- Providing SME (subject matter expertise) for risk governance issues raised in team meetings,
- Provide standardized risk processes, procedures, and tooling,

- Provide risk mitigation plan implementation execution and management services,
- Improve communications concerning the RMO's services and functions to the organization,
- Implement risk reporting system defined by the logistics framework,
- Maintain the Risk Value Management (RVM)<sup>™</sup> performance and valuation system,
- Train, coach and mentor team members on proper risk analysis and management (RAM) procedures,
- Conduct senior-level briefings on RAM activities, policies, and progress, and
- Conduct project-level RAM activity audits as specified by auditing policies.

### Function #3: Risk mitigation Management (Plan Execution)

The authors know that this function will be the most controversial, but they contend this function is also the clearest way for a risk management office (RMO) to prove its worth to a project performing organization. An organization that does not consider risk analysis and management (RAM) activities of importance would not support proactive risk mitigation. This attitude leaves such an organization in a reactive position upon the triggering of a risk potential. Reactive risk management has been offered in support of the newer IT software project management methodologies such as Agile/Scrum/XP<sup>[3]</sup>, but in the world of physical deliverables, reacting to a problem can in most cases exacerbate the impact beyond what it would have been using a more proactive approach to project RAM activities.

Alternately, an organization could task its RMO to be responsible for the creation of appropriate risk mitigation plans and in managing those plans that are required due to the triggering of a risk potential into existence. The authors contend that the RMO staff is probably the most proficient at managing risk mitigation plans and less emotionally involved in making the tough decisions that will impact the project's future.

The implementation of this new policy for performing organizations will likely be one of the most contentiously debated suggestions of this paper; however, consider the alternatives that a project manager who is responsible for the daily operation of a project is now responsible for managing activities that may jeopardize the future successful outcome of his/her project. The execution of risk mitigation plans should be managed by those first with the appropriate risk training, and secondly, with the detachment required of an issue-troubleshooter.

### Function #4: Risk Auditing

The auditing of risk analysis and management (RAM) activities in a project should not be left to those responsible for the daily operations of the project since it can be argued that they will not take the necessary time nor put the required effort into potential conflicts of interest. The project manager and his/her staff have their schedules filled with reality and physicality, not "smoke and mirrors" with which risk potentials can be perceived. Auditing of the RAM activities also requires more specific training and sensitivities than most project managers may be skilled in completing. This is similar in fashion to the requirements that financial auditing not be a normal function of the accounting department for most organizations, but an external activity usually performed by an independent firm or an internal auditing department that reports directly to the organization's governance board.<sup>[4]</sup>

Risk auditing should at a minimum include the following checks, reviews, and inspections:

1. Completion and accuracy of stakeholder register,
2. Status, accuracy, and progress of risk documentation and communications:
  - a. Risk management plan,
  - b. Risk register, risk matrix, and risk dictionary, or the integrated risk definition base (RDB)<sup>™</sup>,
  - c. Risk identification methods and results,
  - d. Use of standard risk templates, forms, and documents, and
  - e. Status of risk reporting, and

- f. Status or risk communications to stakeholders.
3. Compliance with any regulatory or legally mandated risk requirements,
4. Status and progress of necessary risk mitigation plans,
5. Status and progress of implemented risk mitigation plans,
6. Risk training and coaching efforts for team members,
7. Risk valuation and performance tracking (such as RVM™),
8. Risk archiving and storage of:
  - a. Lessons learned,
  - b. Risk identification methods and results,
  - c. Response plans (implemented or not),
  - d. Risk expenditures, and recording of balances remaining, and
  - e. Risk documentation.

The level and frequency of risk auditing will vary according to the organization's size, complexity, and legal requirements given its project risk exposure and/or liabilities. Performing adequate risk auditing is another method for arguing the performing organization took all necessary and prudent actions in order to professionally manage a project according to its customers' contractual demands.

#### **Function #5: Risk Training & Coaching**

Risk management offices (RMO) can provide a significant impact to an organization's professional image by having sufficiently trained and skilled project team members in the discipline of risk analysis and management (RAM). The training level and detail is tailored to the organization's project profile and contracting activities. In other words, a performing organization may want to have more skilled RAM project management team members than a small to medium sized (SMB) organization only accomplishing projects for its internal customers. The RMO personnel should be knowledgeable and skilled in providing different formats of risk training from simple eLearning type presentations that can be completed by the team members at their discretion, to the more elaborate 2 to 3 hour PowerPoint presentations where team members are schooled in the proper manner in which to reconnoiter for risk potential triggers, or how to identify and report suspected risk potentials. In some cases it is more cost advantaged to contract these training needs to be performed by an external risk consulting firm.

Coaching for the more senior project management team members can be accomplished during informal, "brown bag" lunch sessions of 20-30 minutes covering important topics such as valuing risk activities, managing risk mitigation plans, etc.

#### **Function #6: Risk Archiving**

Finally, the importance of an organization in maintaining a history of its risk analysis and management (RAM) activities can be over-emphasized. Without the storing and ability to retrieve the stored information, an organization is not able to increase its effective deployment of RAM solutions. The RMO is most appropriate activity to accomplish this archiving function since at the end of a project's life cycle, many details are lost in the rush to "button everything up," and move to the next project. The archiving of the RAM activities can assist the RMO in providing better and more effective risk management information to its constituents as well as reducing the amount of "new document creation" that simple archiving of previously utilized forms and templates could provide.

The most appropriate method for archiving RAM activities from completed projects is through the use of currently available document or content management systems. In the Microsoft world, the use of SharePoint databases has become the most accepted and available solution for the archiving and retrieving of all levels of project and risk management documentation. The Linux/UNIX world has similar toolsets for such functions.

Regardless of the methods used for archiving RAM activity information, its ease of access and retrieval will determine its long term value to the organization. If the information archived requires significant effort to find, retrieve, and then understand, its utilization and thus impact will be diminished. The authors suggest that the archived information be available through a simple web browser interface using simple search techniques. The archives need to be used, not simple stored and forgotten.

### Valuing RAM/RMO Activities (A RVM™ system)

Deciding to deploy a risk management office (RMO) still leaves the major question:

*‘how do we prove the value of risk analysis and management (RAM) activities to support the existence of a risk management office (RMO)?’*

In a very brief discussion, the authors provide a glimpse into their method <sup>[5]</sup> for valuing RAM activities which they have labeled risk value management (RVM)™. Developed for use with their clientele, the RVM™ is a method in similar to the well-known project performance tracking methodology of earned value management (EVM) <sup>[6]</sup>. For information on the details of the authors’ RVM™ technique, the reader is recommended to contact the authors using their email addresses listed in the subsequent section. The need for a method to value RAM activities has always existed; however, due to the futuristic nature of risk management, it has always been seen as a “manana problem.”

In valuing RAM activities, the authors have developed a technique that captures the two necessary components of risk evaluation:

1. How accurate are the predictive capabilities of an organization’s RAM activities in assessing the risk potential’s cost of impact (RCI), and
2. How well does an organization manage the responses towards triggered risk potentials (issues)?

The RVM™ technique uses both a risk variance (*RV*)™ and risk performance index (*RPI*)™ to provide tracking and evaluation numbers for those interested in discovering how RAM activities have impacted their projects. The risk variance model illustrates the value of the predictive ability of the RAM effort to both analyze the risk potential correctly for cost of impact (*RCI*) and probability of occurrence (*RPO*). These numbers produce the risk potential’s risk expected value (*REV*) as indicated by the following formulization:

[1]

$$REV_n = RCI_n * RPO_n$$

for any particular risk potential (*n*).

The risk variance (*RV*)™ component of the RVM™ can be used to show the amount of variance (positive is good, and negative is poor), the RAM activity produced in its effective management of the risk mitigation plan upon its implementation as the risk potential triggered to become an issue. Prior to the risk potential becoming an issue, the risk variance component shows that all effort is considered overhead since until a risk potential becomes a reality, all expenditures are in effect proving a negative – a very hard job indeed. The risk variance (*RV*)™ value allows for the accounting of risk valuation for inclusion into the organization’s financial management systems since it delivers an absolute value denominated in the project’s currency.



The formula for the RVM™ risk variance ( $RV$ )™ component is contained in the following relationship:

[2]

$$RV_n = RCI_n - RAC_n$$

for any particular risk potential ( $n$ ),  
where ( $RAC_n$ ) is the risk actual costs of the risk mitigation plan.

It can be shown that the total risk variance ( $RV$ )™ for the project can be calculated using similar functionality for a more complete picture of how the entire project is accomplishing its RAM activities.

The second component of the authors' RVM™ system is the risk performance index ( $RPI$ )™ which provides the technique for comparing the efficacy of a project's RAM activities across different projects since the ( $RPI$ )™ is a normalized value that can be used to compare RAM valuations regardless of the size, complexity, or budget of any particular project. The ( $RPI$ )™ component of the RVM™ provides the risk evaluation of effective response plan management in this normalized form for use in project management control.

The formula for the RVM™ risk performance index ( $RPI$ )™ component is described as follows:

[3]

$$RPI_n = \frac{RCI_n}{RAC_n}$$

for any particular risk potential ( $n$ ),  
where ( $RAC_n$ ) is the risk actual costs of the risk mitigation plan.

Again, it can be shown that the total risk performance index ( $RPI$ )™ for the project can be calculated using similar functionality for a more complete picture of how the entire project is accomplishing its RAM activities.

Both RVM™ components along with their project-wide counterparts can now be used by project managers, sponsors, and key stakeholders to gain an understanding of how RAM activities have impacted their projects.

## Conclusions and Summary



A properly constituted risk management office (RMO) can be a powerful tool in assisting an organization to obtain a more effective perspective on the impact that risk analysis and management (RAM) activities have on their project management efforts. Realizing that in this modern world of increasing populations, globally-dispersed projects, interactions with other cultures, and demanding legal/regulatory requirements, the need to ensure adequate risk management is clear. A RMO can provide the central clearinghouse for RAM activities to many projects thereby decreasing its "per use" cost of implementation. The functions and services that have been presented by the authors can move an organization towards maturing its RAM activities thereby illustrating to its customers and clientele that it is serious about the business of risk management and control.

Readers are invited to consider that the most effective manner in which to quickly and accurately establish a working risk management office (RMO) is contract with a firm such as the authors' to provide their organizations with a customized RMO plan and working template. Another efficient approach is to have an external firm actually setup and operate the RMO as an external, strategic partner in similar fashion to the manner in which UPS provides the shipping and receiving functions for computer manufacturing companies.

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## Trademarks

MCLMG reserves the following as trademarks and evidence of company preeminence:

RDB: as 'risk definition base'      RVM: as 'risk value management'      RV: as 'risk variance'  
RPI: as 'risk performance index'      RAC: as 'risk actual costs'      RCI: as 'risk cost of impact'

## Authors' Biographies

For more information and project management philosophy-choice consulting, please contact the authors with your questions or comments:



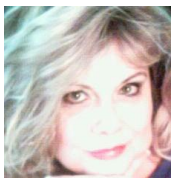
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Paul H. Lohnes has been active in project management for over 25 years beginning soon after he left the US Navy in 1981. After obtaining his BS (CS) and teaching as an adjunct at the UC Berkeley's Extension University for 6 years during which time he completed his MBA (Finance/Op Mgmt) at Golden Gate University, San Francisco, Paul started up a private consulting practice in project management of technical and computing projects. His clients over the years have included Fortune 100 companies in telecommunications, computing, networking, and finance in addition to developing and delivering over 500 technical and management seminars to over 10,000 attendees around the world.

Mr. Lohnes holds the PMI PMP certification, and is currently beginning the application process for the PMI's new risk management certification, the RMP. Mr. Lohnes is completing projects in the upstate New York area and returning to the MD/VA/WDC area for the purpose of starting a new company offering advanced project and risk management services to clients needing such components to their business management endeavors. Mr. Lohnes has developed several proprietary risk management and indexing tools that he uses in service of his clients and customers.

Finally, Mr. Lohnes is actively involved in the PMI's new community of practice endeavors with both blogging on troubled projects/project rescuing, and risk management topics and the mentoring of new project management consulting practitioners.



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Ms. Wilson has an impressive resume and work history both in and around the Washington, DC area. She is a USAF veteran and a graduate of the University of Maryland with a Bachelor of Arts.

Ms. Wilson is also a holder of a Masters Degree in Management Information Systems from Strayer University.

Being one of the first women to obtain the Risk Management Professional certification from the Project Management Institute, Ms. Wilson is in high demand both as a project risk consultant and risk analysis team leader. She has held several, high-profile project management and business analyst positions at firms contracting with the US Government.

In 2010, Ms. Wilson formed her own management consulting firm, CWP Management Group, in support of her clients in providing risk analysis and management services for sophisticated organizations realizing the value of proactive risk profiling activities.