White Paper: *Top Risk Mitigation Strategies* A Proven Software Implementation Plan for Integrated Project Controls

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ABSTRACT

This white paper explores ten common risks associated with software solution implementations. Best-in-class organizations invest in enterprise solutions. But sometimes the implementation fails to deliver a Return on Investment (ROI) because these risks were not recognized and managed. This paper offers strategies to mitigate these risks and implement your chosen solution successfully using a proven project controls software implementation plan.

INTRODUCTION

We see it happen too often. An organization makes an investment in an enterprise solution and then fails to integrate it with their company's culture and business processes. The reasons for implementing an enterprise software system are to improve productivity, gain more visibility of performance, and improve control of a business function. But too often, in the frenzy that comes with tight budgets and looming deadlines, organizations make simple mistakes that throw the implementation off course. This leads to confusion, delays, and sometimes cost overruns. Worse still, even once these mistakes are recognized, many projects fail to implement corrective actions in time and then do not deliver a return on the company's initial investment. While this paper focuses on how to successfully implement a project controls system, the observations here apply to an implementation of any enterprise system, be it ERP, Accounting, Analytics, Project Management, or others.

So, why focus on the implementation rather than the strengths of a particular product? Because achieving a positive ROI on your software purchase is as much about getting the implementation right as it is about choosing the right software for your needs. We have seen ERP products, using exactly the same modules to address the same requirements, succeed wildly at one client only to fail miserably at the next. The difference is almost always in how the implementation team was structured and the rollout effort managed. To effectively implement a system, you need more than just the right software. You also need the right people on your team and good processes that are aligned with the intended use of the system. This is where we can help.

With 22 years of experience and a proven track record of more than 1,000 implementations around the world in every major industry, we are confident of our experience at ARES. Based on this experience, let's explore ten of the more common risks we encounter when implementing new solutions for our clients.

The figure on Page 3 shows a Risk Heat Map with ten common risks organized by Probability and Consequence. These are certainly not the only risks you will encounter during your implementation. Each project is different, so it is important to implement a thorough risk management process that will regularly identify and evaluate new risks throughout the course of the project. But these are among the most common we see that – when not recognized or mitigated – lead to failed implementations.

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RISK HEAT MAP

Probability	Severity		
	Low	**Medium**	**High**
High	Low IT Support	Unrealistic Timeframe	Poor PM Procedures, Resources Not Dedicated to Project
Medium	Insufficient Expertise	Unclear Roles & Responsibilities	Poor Data Quality
Low	Implementation Team not Co-Located	No Subcontractor Buy-In	Lack Executive Sponsorship

RISK #1: POOR PROJECT MANAGEMENT PROCEDURES
(HIGH PROBABILITY, HIGH CONSEQUENCE)

In order to effectively implement and maintain a project controls system, stakeholders have to first define what they want out of the system. Steven Covey said it well in *The 7 Habits of Highly Effective People*: "You have to first start with the end in mind." By clearly defining important processes, procedures, and preferences beforehand, you can save time and avoid rework later.

One good example of this is having your company and project coding structures defined so that configuring the system to work with them is a quick exercise that does not draw focus from teaching users how to navigate the system. Few things can derail an implementation more quickly than long tangents or debates among the team regarding how data should be structured and what reporting outputs are desired for various stakeholders. These are decisions best locked down in formal documentation long before the system implementation begins.

Another example of this is the workflows and procedures that govern how various team members are expected to interact on the project and who is responsible for which information. If it is clear from the Project Management Procedures who owns certain types of data and who has responsibility for ensuring that data is available, complete, and accurate, then a system implementation can go quite smoothly. If these questions need to be worked out along the way, then expect confusion and delays.

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Surely, these issues can be addressed by a competent team. But they take time and input from multiple parties. There are often multiple workshops required to lock down decisions on Project Management Procedures and define coding structures that will meet the needs of all stakeholders and support all reporting requirements. Most system implementation schedules assume these things have already been done, so the schedules are designed for rapid rollout. If these Project Management tenants are not in place, however, not only does the implementation go off track, but there is often significant rework required that was never allowed for in the implementation budget.

Tip to Mitigate the Risk: Literally sketch together the perfect reports or dashboards by hand. With pencils and paper in-hand, draw concepts. Be sure to review existing policies and procedures to assure that coding structures are adequate for capturing and reporting data to the level of detail required by project managers and executive level personnel. If your company does not have Project Management Procedures in place already, then we recommend that you adopt an existing "sample" set from a consultant or a business partner. It is far easier to "red pen" than it is to create. In other words, it is easier to modify an existing set of documents than it is start from scratch and create a new set of rules.

RISK #2: LACK OF EXECUTIVE SPONSORSHIP
(LOW PROBABILITY, HIGH CONSEQUENCE)

We cannot overstate the importance of having active sponsorship from your executives in order to successfully implement a system. Firstly because you want your executives to approve of the end result and agree that the configured system meets their reporting and information needs. But more importantly, for the implementation process itself, you need your executive sponsor to enforce change.

Change is not easy and there will be resistance from team members who do not want to adopt a new way of working. You will need full commitment and constant reinforcement from the top to achieve change. Coach your executives to require that reports be delivered natively from your selected project controls system and to accept nothing else. If the output is not good enough yet, then the implementation team has work to do. But do the work and do not allow teams to default to old systems or create spreadsheet workarounds.

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Reports that are "massaged" in spreadsheets typically indicate lower productivity rates and that stakeholders are working around the new system. This can lead to eventual failure and wasted use of company funds. Encourage the team to follow the new company practices and offer training and support to make them comfortable and efficient.

Tip to Mitigate the Risk: As part of the implementation plan, interview and integrate your company's management feedback into the system configuration and increase the value they gain by moving to the new system. Review implementation risks and mitigation strategies on a regular basis with your company's management to increase managerial commitment to the system.

RISK #3: NO SUBCONTRACTOR BUY-IN
(LOW PROBABILITY, MEDIUM CONSEQUENCE)

Your efforts for change management during an implementation should not stop with your own team or your executive stakeholders. Your change management plan should include outside contractors who already have their own processes in place. If you want your implementation to succeed, involve your contractor community and collaborate with them to integrate their work procedures with your new project controls system. If they too gain value from your solution, their buy-in and acceptance will go a long way towards achieving a successful implementation. If they work against you in a passive aggressive fashion, then your job implementing will get that much harder. Your subcontractors may be an external stakeholder, but their commitment to the implementation will make a difference.

Tip to Mitigate the Risk: Involve key subcontractors throughout the implementation process and integrate their feedback, wherever possible, into the system configuration. Provide training and give subcontractors an opportunity to comment on the configuration of the system throughout the implementation process.

RISK #4: RESOURCES NOT DEDICATED TO PROJECT
(HIGH PROBABILITY, HIGH CONSEQUENCE)

People are important. Having the right kind of people can make the difference between success and failure. If a system has a sophisticated reporting tool, your team needs to know how to properly set up reports so that they are useful. Otherwise, you have a race car with a 12 year old driving it. Not ideal!

But more important is having those people focused on the task at hand – without distraction from other commitments. When system implementations are delayed or fail, it's not usually because the system lacked the capacity to meet the need. More often it's because technically qualified people who can properly interpret the data and configure the system were splitting time between other project work and your implementation.

This lack of focus due to competing priorities means you only get some of their attention – and only some of the value they are capable of bringing to

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your implementation. Keeping your team focused on setting up your system correctly and efficiently, without distraction from other commitments, will dramatically improve your probability of successful implementation.

Tip to Mitigate the Risk: Assign a dedicated Implementation Manager fully equipped to manage and oversee the implementation and train project personnel. Assign experienced Project Controls Engineers to your company's team and make them dedicated to the effort. An implementation project is a job for your A Team that thoroughly knows your business. It should not be a training ground for new resources.

RISK #5: UNCLEAR ROLES & RESPONSIBILITIES
(MEDIUM PROBABILITY, MEDIUM CONSEQUENCE)

Once you've picked the right team of qualified resources and gotten them fully focused on your project, then your next task is to make sure that Roles and Responsibilities are clearly defined. Otherwise the result is miscommunication between stakeholders (and often between clients and consultants). This risk may sound obvious, but we see it occur often during system implementations.

Tip to Mitigate the Risk: Fortunately mitigating this risk is easy. The first step is to create a matrix which defines each of the roles and corresponding responsibilities for the entire Solution Adoption Team, including all external consultants. The process of defining Team Roles could be as sophisticated as a full RACI Matrix (Responsible, Accountable, Consulted, Informed) or as simple as a Roles and Responsibility list (example on Page 7). The trick is to make sure something is put down on paper and then actively communicated to the project team. Once people know the roles and who has authority to do what, the implementation will go a lot more smoothly.

RISK #6: IMPLEMENTATION TEAM NOT CO-LOCATED
(LOW PROBABILITY, LOW CONSEQUENCE)

While today's technology does make it possible for teams to collaborate electronically from anywhere in the world, still nothing beats being able to solve problems and make decisions face-to-face. We've all experienced emails that were interpreted in ways the sender did not intend. And conference calls are only marginally effective when it comes to problem-solving. Face-to- face interactions where people can close the door, have productive discussions, and make decisions, are still the best way to get things done. If your project teams cannot be co-located, then build a project budget (and schedule) that allows for regular team interaction in-person. The money spent now will pay off in savings later by avoiding rework resulting from miscommunications and time lags between interactions. Plus, it improves the teamwork and a sense of pride in your project!

Tip to Mitigate the Risk: Whenever possible, work with a local implementation team and keep your own implementation team co-located, so that you can meet in-person and tackle company obstacles together.

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SAMPLE ROLES AND RESPONSIBILITIES FOR IMPLEMENTING A COST SYSTEM

Role (should be defined for both Client and Consultant)	Responsibilities	Effort Required
Executive Sponsor or Steering Committee	Ensure your Solution Adoption Team has the full support of development, IT, and implementation resources as needed.	Regular Reviews (at least Weekly)
Project Manager / Implementation Lead	Oversee implementation schedule to ensure proper resources are available to meet delivery dates and provide technical guidance as needed. Manages project, implementation, and data migration. Single interface to your company's project control manager. Responsible for technical, schedule, and cost success.	Full-Time
System Administrator	Manage connections to databases, user access, and project files as well as administration of data centers.	Full-Time
Super User(s)	Manage the enterprise level settings and tables during the implementation and during times of development or enhancement. They may also manage enterprise processes to streamline data interfaces and reporting on multiple projects. Also, they will provide training and support to new users after the initial implementation is complete.	Full-Time
Cost Management Process Leads and End-Users	Support mapping of Cost Management process to the application, manage the projects to be implemented initially, and are specifically responsible for the provision of quality data to support the initial population of the new system.	Full-Time
IT/DBA Specialist	Install or provide access to software, manage databases, and oversee physical IT assets.	Part-time (depends on size of rollout)
Integration Specialists	Familiar with the source systems to extract data for integration into project controls system. Do not need to be super users, but should be familiar with the purposes and usage of the data they provide.	As Needed – defined by integration design

RISK #7: UNREALISTIC TIMEFRAME
(HIGH PROBABILITY, MEDIUM CONSEQUENCE)

Most experienced project managers will agree that no matter how good the plan, no matter how strong the team, there will be issues and complications that nobody foresaw. So, don't make the mistake of setting unrealistic timelines that leave no room for error or time to correct those errors. You would not make this mistake when building your core asset or delivering your core service, so why do it when implementing your own system internally?

Build a project schedule that will set your team up for success and then hold them to it. Give adequate time to your dedicated team of personnel for a successful implementation. Make it clear that the implementation of the project controls system is their highest priority. Give them the opportunity to focus solely on a successful implementation and make sure that they have the training and tools needed to implement in a realistic timeframe.

Tip to Mitigate the Risk: Ensure that you have realistic timeframe for the implementation process to take place. Dedicate specific resources to the integration effort and relieve key resources of other responsibilities in order to ensure its success. Make sure they are held accountable with periodic status reports on the progress of the implementation.

RISK #8: LOW IT SUPPORT
(HIGH PROBABILITY, LOW CONSEQUENCE)

When companies purchase a project controls system, the IT department is not always included in the conversation. That's a big risk to your implementation schedule since there are many tasks where IT support is needed. If you've not arranged for dedicated (or mostly dedicated) IT support in advance, then you may find that simple tasks like installing or testing the application become delayed. More lofty tasks such as standing up DEV/QA environments or integrating with other corporate systems become an even bigger challenge that can delay your plan.

None of these issues are difficult to solve, but if not addressed they cost money and slow down the delivery of the solution. They can also lead to disagreement about what is trying to be accomplished and why it is being accomplished. So, make sure to get the IT stakeholder's commitment and confirm that everyone is on the same page in terms of roles, schedule, and expectations.

Tip to Mitigate the Risk: Include your company's technical team early-on so that they understand the scope of their involvement and have sufficient forewarning should they need to upgrade hardware, modify networks, or configure legacy systems in any way to connect with your new system.

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RISK #9: POOR DATA QUALITY
(MEDIUM PROBABILITY, HIGH CONSEQUENCE)

Using good data is key to a successful implementation. When implementing a new system, you need to start with clean, qualified data that reflects the full scope of your company's business. Many organizations start with data that is badly formatted, incomplete, or filled with errors. When things go wrong, it's natural for people to blame systems, when often it's data that wasn't properly vetted. Take ownership of your data and make it a priority to organize the data before it is provided as input for the project controls system.

Tip to Mitigate the Risk: Don't skip this step! The data you initially load into the system matters, so take the time now to make sure it is right. Remember, this is often the data used to demonstrate your newfound capabilities to your stakeholders. Designate an internal champion who can be objective and make sure that the system roll out does not suffer from data issues.

RISK #10: INSUFFICIENT EXPERTISE ON YOUR PROVIDER TEAM
(MEDIUM PROBABILITY, LOW CONSEQUENCE)

When you select a project controls system, make sure you are getting project controls professionals who not only know their product, but are actual project controls practitioners who understand unique, industry-specific best practices. There are lots of software providers out there with sophisticated sales engines and developers who will tweak their system any which way you like. But, if they do not understand your business or have real-life experience in project controls, then you are taking a big risk using them. Make sure your software provider – like ARES – is staffed with actual project controls professionals, who have deep technical and industry knowledge. At ARES, we do not rely on third parties to deliver projects. We apply our own expertise in the field and take ownership of our product being successfully implemented. This not only produces better implementations, but it facilitates more successful transfers of knowledge to the client teams – thus improving long-term adoption of the system.

Tip to Mitigate the Risk: Get a proven project controls solution by working with a team of project control professionals who both built their product and know how it should be properly implemented. Provide adequate training to each of your defined roles. Give workshops and develop helpful user guides to make sure that every process is aligned with your overall business goals. And finally, encourage your team to explore new features and capabilities. Get them excited about the new system and how it will help them!

CONCLUSION:

When implementing a project controls system, there are many risks involved. If you recognize and confront these risks head-on, they can be mitigated or even avoided altogether. Take advantage of the best practices discussed in this white paper and develop a Risk Register before you start your implementation. For each Risk (and there will be more than just the ten discussed here) identify the Consequences and then define corresponding actions to mitigate those risks.

Implementations can be overwhelming. But with a solid risk mitigation strategy in-hand and an experienced implementation partner at your side, you'll improve your prospects for a successful implementation and a positive Return On Investment (ROI). It's about more than buying a good system. You need the right people, processes, and procedures involved. And that's why ARES PRISM is the most trusted integrated cost management software. You get more than just a system, you get the whole package.

ABOUT THE AUTHOR:

Karl Vantine

Global Software Implementation Expert

Karl Vantine has been implementing ERP, Scheduling, and Earned Value Cost & Contract Management systems around the world for 20 years. Now living in Washington, D.C., Karl has lived and worked in Europe, Asia, Africa, and South America, where he has helped clients successfully implement new software systems as well as improve their related business processes for Program Management and Project Controls. Karl's specialty areas of expertise include SAP Integration, Program Analytics, Skills Development, Process Mapping and Procedure Definition, and Cost/Schedule Integration.

kvantine@aresprism.com

ABOUT ARES PROJECT MANAGEMENT LLC:

With 22 years of providing project management solutions to customers in multiple industries, ARES Project Management, LLC has the capabilities and expertise needed to help any client succeed. From scheduling, to developing work processes and procedures, to PRISM G2 implementation, ARES has the processes, the personnel, and the tools required to effectively manage projects, all backed by a reputation earned by solving our clients' toughest challenges. For more information about ARES PRISM, visit our website: www.aresprism.com.