Warning Signs of Project Failure and Resolution Methods

About 20 percent projects fail while an additional 42 percent of projects are challenged where the reasons for failure are generally known and therefore preventable.[1] Project failure can occur at any time during the project lifecycle but success only occurs at the end. Identifying failing projects early in the lifecycle is critical in helping organizations prevent cost overruns and potential misallocation of corporate resources.[2] In the case of information technology investment, the worldwide cost of project failure is estimated to be $3 trillion or 4.7 percent of global GDP.[3] Too often organizations will continue to fund failing projects without considering the implications of the sunk and opportunity costs.

They continue to waste time, money, and resources on projects that may no longer add value for the organization. They also fail to understand that cancelling a project does not imply failure if a better opportunity presents itself or if the project resulted in a valuable learning experience. Projects can also function as an option in which an organization makes an initial investment, and subsequently increases that investment as it learns more about the project and resolves risks and uncertainties.

What can your organization do to identify the warning signs of project failure? Once you have identified these symptoms of failure, how can you correct the errors and move towards success? And, how do you know when to cancel or suspend a project? The sooner you can identify the warning signs, corresponding causes of failure and corrective actions, the less costly it will be to your organization.

Through our consulting practice we have developed an executive framework to explore answers to the questions above. This framework is designed to highlight warning signs that executives and project sponsors should watch out for and recommendations for corrective actions. While many of the causes of failure and warning signs identified may occur in more than just one stage, our framework presents those that are most common at each stage. We use PMI Process Areas for simplicity and consistency.

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

Kenny & Company
Management Consulting

About Us

Kenny & Company is a management consulting firm offering Strategy, Operations and Technology services to our clients.

We exist because we love to do the work. After management consulting for 20+ years at some of the largest consulting companies globally, our partners realized that when it comes to consulting, bigger doesn't always mean better.

Instead, we've created a place where our ideas and opinions are grounded in experience, analysis and facts, leading to real problem solving and real solutions – a truly collaborative experience with our clients making their business our business.

We focus on getting the work done and prefer to let our work speak for itself. When we do speak, we don't talk about ourselves, but rather about what we do for our clients. We're proud of the strong character our entire team brings, the high intensity in which we thrive, and above all, doing great work.

What's Inside

Initiating ..... p 3
Planning ..... p 4
Executing ..... p 4
Monitoring and Controlling ..... p 5
Closing ..... p 6
Conclusion ..... p 7
About the Author ..... p 7

For a complete list of **Kenny** & **Company** publications and information about us, please visit our website www.michaelskenny.com or email us at info@michaelskenny.com.

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

Executive Framework – Warning Signs of Project Failure

	Initiating	Planning	Executing	Monitoring and Controlling	Closing
Activities	1. Analyze the business needs and requirements 2. Decide on deliverables including the desired features, functions, and acceptance criteria 3. Align project goals and objectives to the business requirements	1. Create an approach to deliver desired output 2. Create a project plan and schedule 3. Form project team based on skills and experience necessary for the project	1. Break down project plan into small detailed tasks and assign to each team member 2. Coordinate people and resources to build deliverables according to project plan 3. Perform testing and inspecting to ensure desired output is produced	1. Observe and measure project performance to identify variances from the project plan 2. Identify potential problems and perform corrective action	1. Evaluate project deliverables and address whether desired goals and objectives were achieved 2. Document best practices and lessons learned for use in future projects
Common Causes of Failure	1. Failure to define business need, requirements and acceptance criteria 2. Misaligned and unclear business goals and objectives 3. Lack of support from Executives and Stakeholders	1. Poor planning and design specifications 2. Improper project approach and methodology (Agile, Waterfall, etc.) 3. Lack of change control process	1. Lack of efficient project management 2. Lack of resource and inadequate skills 3. Poor review and testing	1. Lack of controls (Earned Value, Burndown, etc.) 2. Poor change, risk, financial, performance, and quality management 3. Lack of Quality Assurance and Quality Control	1. Deliverables fail to meet the business nee, requirements and acceptance criteria 2. Inability to adapt to changes in business needs and requirements 3. Failure to realize the desired business value
Warning Signs	1. Lack of Executive and Stakeholder interest and involvement 2. Poor communication across the organization and within functional departments	1. Over or under planning 2. Changing cope and project focus 3. Differing "mental plans" about requirements and acceptance criteria	1. Lack of project team interest and involvement 2. Excessive micromanagement 3. Change in resource allocation and utilization	1. Failure to achieve key milestones or sprints 2. Problems with key metrics 3. Decrease in quality work product	1. Excessive rework and corrections after delivering the product 2. Limited user interest and involvement 3. Unanticipated problems with other functions in the organization
Recommendations	1. Develop high level Business case that links project requirements to organization's strategy and objectives 2. Establish a Project Charter 3. Review current Communications Plan and identify areas of breakdown 4. Avoid creating hardline time box for initiating stage 5. Conduct detailed Before Action Review (BAR) by leveraging prior experience	1. Utilize experienced PMs and PMOs to review planning documents and use standard estimating models and ranges to improve accuracy 2. Confirm scope, budget, and schedule via contract or agreement and adhere to the constraints 3. Establish a PMO to ensure project process ownership and to establish project plans 4. Document requirements and acceptance criteria to ensure alignment 5. Formalize the methods of project team communications and create feedback loops	1. Establish a culture and environment where the project team can openly communicate issues and call out ineffective leadership 2. Identify ineffective project team members and provide additional guidance or replace them 3. Perform frequent updates on project status and communicate to executives and stakeholders 4. Implement policies that prevent employees from working excessive overtime 5. Perform a trade-off analysis before shifting resources to troubled projects	1. Initiate PMO involvement when failing to achieve milestones 2. Identify key metrics and collect data to measure and analyze performance 3. Execute change, risk, financial, performance and quality management plans 4. Create a rotational quality assurance team to confirm quality meets organizational standards 5. Survey users to capture feedback post implementation	1. Capture effort expended on rework to apply to the closing project and force streams of rework back into a project governance structure 2. Channel requests for improvements, updates and/or additional functionality back into an ideas portfolio 3. Create a process and plan for benefits realization dictated by the PMO and governance body 4. Create a repository containing best practices and lessons learned 5. Conduct detailed After Action Review (AAR)

Figure 1: Executive Framework – Warning Signs of Project Failure

Initiating

Projects begin in the Initiation stage where business needs and requirements are identified. During the Initiation stage the "Why" question is answered about the project, whether it is to improve top-line by investing in future growth or improve the bottom-line by improving operations and cutting costs. The business requirements identified should be both discrete and measurable with clearly defined acceptance criteria. The business case should clearly demonstrate the benefits and values of the project and should help to align the goals, objectives and requirements of the project with the overall strategy of the organization.

Common Causes of Failure

Projects can fail in the Initiation stage because there is little or no real business need, the business goals are unclear and do not align to the overall corporate objectives, acceptance criteria is unclear, or there is a lack of support from key executives, stakeholders, or business owners.

Warning Signs:

Lack of stakeholder and executive involvement - Examples include key stakeholders stop attending meetings, stop actively participating in the Initiation stage, or they have shifted their corporate and functional department priorities. Lack of stakeholder and executive involvement implies changing corporate priorities, competing leadership objectives, and/or internal corporate communication issues. The lack of involvement creates a lack of leadership and guidance later for the project team. Shifting priorities could also signal changes in funding and the contribution of project resources.

Poor communication across the organization and within functional departments - An example of poor communication includes stakeholders, executives, and project members not communicating effectively and often. This implies the organization's ability to respond to changes in business priorities and focus, competitive market conditions, laws and regulations, technology shifts and unanticipated costs will be hindered. Such changes may require immediate action and a breakdown in communication will delay any response to change. Communication must be open, honest, and periodic to allow the organization to react quickly and receive decisions in a timely and effective manner. If functional departments work as silos rather than as interdependent teams, information and knowledge sharing as well as collaboration will cease to exit.

Recommendations

- Develop the business case and create a list that clearly links the project goals and requirements (prioritized with clear acceptance criteria) to the organization's business strategy and objectives. Stakeholders and executives are more likely to be engaged in a project with a compelling business case where the need and value is clearly understood.
- Establish a Project Charter to ensure stakeholders and executives are aligned to the projects goals and objectives. The project charter should set a clear expectation of scope, objectives, and participants in a project.
- Review the current Communications Plan and identify areas of breakdown. Complex projects require paths for escalation and processes that enable project

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

personnel to communicate important questions and issues to ensure immediate resolution.

- Avoid creating a hardline time box for the Initiation stage. When building a product from a number of unknowns developed from gaining consensus, additional time may be needed to confirm and align on the project's purpose.
- Conduct a detailed Before Action Review (BAR) leveraging prior experience.

Planning

Once the purpose of your project is confirmed and stakeholders and executives are aligned on that purpose, you can move to planning the project. During the Planning stage you should answer the "How" questions of execution. This includes determining the approach and methodology to deliver the desired output, creating a detailed project plan and schedule, and finalizing the project resources based on the skills and experience needed for the project.

Common Causes of Failure

Projects often fail in the Planning stage because of poor project preparation, inadequate design requirements, improper project approach and methodology (Agile or Waterfall for example) and because no change control process is in place. Poor project planning results from planning resources lacking experience and knowledge. For example, a product manager with little experience in software development will have difficulty writing an adequate product backlog with clear use cases for a software development project.

Warning Signs

Over or under planning - Examples include project plans not containing enough detail and not addressing major risks or plans containing too much detail. Changes are expected in all projects and it is unreasonable to anticipate and plan for every scenario. Many details will need to be worked out during execution. Determine how much time to spend planning based on the experience of your project team, whether you have executed similar projects in the past, and how complex the project is. On the other hand, make sure you have at least planned for the most critical and complicated portions of the project.

Changing scope and project focus - For example, if the project is falling behind schedule, the project manager (PM) and team may decide to scale or eliminate features and functionality to meet milestones. Conversely, it could be the case that features and functionality are added to meet new business requirements. Whatever the case maybe, assessing why the scope is changing and how it is impacting the project can help identify problems. Changing scope is expected in most projects however the changes must be agreed upon and consistent with the goals and objectives of the project.

Executives should consider canceling or suspending projects where the scope changes lead to increasing costs without an increase to benefits

Differing "mental plans" about the requirements and acceptance criteria - For example, if requirements and acceptance criteria is not documented, expectations and assumptions about the project may vary for executives, stakeholders, and the project team. Working from differing mental plans implies the project team and the stakeholders are not aligned. Your project is likely to fail if people are working from different "mental plans." The project team and stakeholders are unlikely to be aligned unless the requirements (prioritized) and acceptance criteria are clearly communicated. This will help to create more effective project communication and pertinent discussions aligned to meeting the objectives of the project and the business.

Recommendations

- Utilize experienced PMs and Project Management Offices (PMOs) to review planning documents for the appropriate level of detail. Use standard estimating models and ranges to improve accuracy.
- Confirm scope, cost, and schedule via contract or agreement and adhere to the three constraints.
- Establish a PMO to ensure project process ownership (RACI)[4] and to establish plans for change control, risk mitigation, financial and budget, performance, and quality management. Consider using plans from similar projects that have worked well in the past and that is agreed to by leaderships and subject matter experts (SMEs).Document requirements and acceptance criteria to ensure executives, stakeholders, and project team are aligned.
- Formalize the methods of project team communications and create feedback loops to constantly refine the process. Find tools that will help your organization collaborate and share feedback and opinions about issues relating to the project.

Executing

Once the project plan is solidified and approval and agreement from executives, stakeholders, and the project team is received, you can begin executing. The primary objective in this stage is to coordinate your resources and execute the plan.

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

Common Causes of Failure

Project failure in the Execution and Controlling stage is a result of weak project management, lack of resources with the correct skills, and a lack of change, risk mitigation, financial, performance, and quality management. Additionally, project failure can be exacerbated by executives failing to suspend or cancel projects that have minimal chance of any success. Continuing to pursue projects that add little value results in time and money that can be used better on other projects or initiatives. Changes in the business environment, market conditions, competition, and technology could cause the suspension or cancellation of a project if the cost and benefits have shifted dramatically.

Warning Signs

Lack of project team interest and involvement - Examples include a project team that is not engaged and provides limited feedback and interest. This implies the team is not committed to the project plan and lacks confidence in management or the project team lacks confidence in their ability to execute the project as planned. This might be because the schedule and budget are unrealistic or the team lacks the experience and skill to execute the plan. The project team should be involved in the planning so that the project plan and approach is approved and agreed upon by both management and the project team.

Change in resource allocation and utilization - Examples include employee turnover and/or significant amount of over-time due to project issues. Utilization rates will spike due to delays, bottlenecks and/or other issues that require attention. Utilization may also spike because productivity has decreased and the project personnel is not exhibiting the velocity necessary to keep the project progressing as planned. If a project is on track and on schedule, there should be little or no overtime. Overtime could serve as a quick fix but can also result in poor employee health and burn out. Additionally pulling resources from other projects may not only decrease efficiency and velocity as a result of the learning curve but also endanger healthy projects. Complex projects cannot be broken down into discrete tasks without communicating with other team members and without establishing complex interrelationships between the tasks and the team members performing them.[5] Thus, adding additional resources to a late project could result in additional delays.

Excessive micromanagement - For example, management closely observes and controls the work of the project team and constantly asks for status updates. This implies management does not trust project staff to perform their respective duties satisfactorily. An increase in micromanagement is typically a sign that management has lost its ability to control progress and ascertain project status. When projects are in danger of failing, management is likely to ask their project team for more budget and status updates and issue more change requests.

Recommendations

- Identify ineffective project team members and either provide additional oversight and guidance or replace them with more qualified personnel.
- Establish a culture and environment where the project team can openly communicate issues, concerns, and call out ineffective leadership, including excessive micromanagement.
- Implement policies that prevent employees from working excessive overtime (i.e. circuit breaker functions for excessive overtime).Perform frequent updates on project status and aggregate the reports into a summary view for executives and stakeholders.
- Perform a comprehensive trade-off analysis before shifting resources from healthy projects to troubled projects.

Monitoring and Controlling

The Monitoring and Controlling stage consists of observing and measuring the project performance during execution and identifying any variances from the project plan. Potential problems must be identified and corrective action must be performed.

Common Causes of Failure

Project failure in the Monitoring and Controlling stage is a result of a lack of controls (i.e. Earned Value or Burndown) and poor management in change, risk, finance, performance, and quality. Additionally, projects fail due to a lack of Quality Assurance and Quality Control.

Warning Signs

Failure to achieve key project milestones or sprints - For example, schedule slippage that may cause significant impact to the project. Several resources and activities are dependent on the completion of the activities preceding them. Thus, schedule slippage creates a bottleneck or constraint on resources, and may prevent the project from progressing as planned. Milestone intervals should be small and discrete (unambiguous and measurable). Make sure the milestones are result and not effort oriented.

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

Problems with key metrics - Examples include not tracking important metrics or failing to track metrics accurately. Many failing projects will have metrics that are either measured incorrectly or manipulated so they do not accurately reflect the project's health. Commonly used metrics are based on earned value measurement (EVM) and include the cost performance index (CPI), estimate at completion (EAC), schedule variance (SV), and schedule performance index. Agile organizations may use additional metrics such as Burnup to track completed software delivered, Burndown to track effort remaining, and Velocity to track team productivity. Unless your project manager and team are accurately tracking the key metrics and using the appropriate metrics criteria, you may be missing out on one of the easiest warning signs to spot.

Decrease in quality work product - For example, project personnel may sacrifice quality to meet deadlines or quality decreasing as a result of complacency. As problems arise in projects, project personnel may reduce quality control and assurance efforts as well as testing and inspection efforts due to time and resource constraints. Ultimately this results in poor quality and/or defective work product that not only puts the current project at risk but also puts the organization's reputation at risk.

Recommendations

- Initiate PMO involvement when failing to achieve milestones. For example, employ a triage unit, consultants, and/or other resources to assess health of project and provide recommendations.
- Identify key metrics and collect data to measure and analyze performance on cost, schedule, quality, and/or productivity. Start by reviewing the current metrics used, verify they accurately reflect the project's state, and check for deviations outside of acceptable range. Identify other key project management metrics that should be implemented to help manage the project.
- Execute change, risk, financial, performance and quality management plans. If your existing plans are not adequate, root cause the problem areas and revise the plans.
- Survey users to capture feedback post implementation to ensure the desired benefits are realized.
- Create a rotational quality assurance team to confirm quality meets standards of organization.

Closing

Closing a project includes evaluating project deliverables and addressing goals and objectives achieved. Once a project has been completed or canceled, it is beneficial to document best practices and lessons learned for use in future projects. Although spotting warning signs this late in the project will not yield the same benefit you can expect in earlier stages of the project lifecycle, it fosters an environment of continuous improvement in the organization.

Common Causes of Failure

Projects falter in the Closing stage as a result of deliverables failing to meet the business requirements and the organization's inability to adapt to changes in the business environment. Organizations may either hide excess work or mark projects finished prematurely. Even if the deliverables meet the business need and requirements, failure can still occur as a result of the organization failing to realize the desired benefits of the project. Additionally, failure can be attributed to not capturing best practices and lessons learned and failing to utilize them in future projects.

Warning Signs

Excessive rework and corrections after delivering the product - Examples include the end product failing to deliver on the features, functionality, and quality promised. Delivering a product to the user that is not of quality and does not meet requirements could result in project failure and could also hurt your organization's reputation in the future.

Limited user interest and involvement - For example, clients or users are not using the end product. This implies the product does not meet the clients or users expectations and thus the business need and/or desired benefits have not been realized. It is critical to keep the user engaged through the whole project to avoid any disconnect between the project efforts and the end-user needs. It could also be the case that product meets the business need and requirements however the benefits have not been fully realized by the end-users due to a lack of a benefits realization process and/or plan.

Unanticipated problems with other functions in the organization - For example, an operational improvement may have unexpectedly increased overhead costs. This implies not enough time was invested in business process work to understand cross functional impacts. Organizations that fail to perform a business process and trade-off analysis early in the project lifecycle may ultimately have to deal with costly repercussions.

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

Recommendations

- Capture effort expended on rework to apply to the closing project, and force streams of rework back into a project governance structure.
- Channel requests for improvements, updates, and/or additional functionality back into an ideas portfolio. As needs and requirements change, continue to perform ongoing updates and maintenance.
- Create a process and plan for benefits realization dictated by the PMO and governance body.
- Create a repository containing best practices and lessons learned to avoid making the same mistakes in the future. Force teams to schedule time to brainstorm items at project closure.
- Conduct detailed After Action Review (AAR). Involve seasoned experts.

Conclusion

Our executive framework seeks to help executives understand and recognize the warning signs of failing projects early and how you can prevent project failure. The warning signs of failure are intended to not only help you improve project success but also to identify the projects that should be cancelled or suspended because alternative opportunities may yield more value for your organization. Why waste your organization's time and money on projects that are likely to fail? Regardless of which lifecycle stage your project is in, knowing and paying attention to warning signs of failure increases the probability of project success.

About the Author

Marcin S. Grobelny is a Management Consultant at Kenny & Company and has over seven years consulting experience. Marcin has led projects relating to process improvement and optimization, business strategy, and has performed cost and schedule forensics on disputes, claims, and distressed projects. Marcin holds a Bachelor's of Science in Managerial Economics from the University of California, Davis and a Master's of Business Administration from University of California Berkeley's Haas School of Business.

This article was first published on www.michaelskenny.com on July 23, 2012. The views and opinions expressed in this article are provided by Kenny & Company to provide general business information on a particular topic and do not constitute professional advice with respect to your business.

Kenny & Company has licensed this work under a Creative Commons Attribution-NoDerivs 3.0 United States License.

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

Notes

1. The Standish Group International, Chaos Manifesto 2011, reports that over 20 percent of projects will fail; and another 42 percent of projects will face significant challenges, such as delays, budget overruns, and/or with end products with less than the required features and functions. It is reasonable to assume that these numbers are even larger for the subset of large transformational programs. The accuracy and quality of the Standish Group Chaos Report has been rightly questioned in recent years. However it does provide a consistent longitudinal sample it will be taken as directionally correct for the purposes of this report. The Standish Group Chaos Reports may not be a good indicator of software development project performance but they are a good indicator of systemic failure of planning and estimating processes.
2. Adapted from Project Management Lifecycle, Copyright Method123 Ltd.
3. Worldwide Cost of IT Failure by Michael Krigsman, April 10, 2012, ZDnet.
4. RACI stands for Responsible, Accountable, Consulted and Informed. Our personal preference is to drop Responsible and just use Accountable in a “RACI” matrix. There is often confusion leading to lack of true accountability between the Responsible and Accountable roles.
5. The Mythical Man Month, Fred Brooks, 1995.

© 2017 Michael S. Kenny & Company LLC. All rights reserved.

Kenny & Company
Management Consulting

Kenny & **Company** is a management consulting firm offering Strategy, Operations, and Technology services to our clients.

Who We Are

Partner Led

Our Partners are personally committed to our clients and lead every engagement.

Experience, Perspective and Passion

We average over 20 years in professional services and bring tailored approaches to every client engagement.

Focused, Collaborative, High-Impact

We work side-by-side with our clients in highly focused teams to solve complex business problems.

Client First

Our highest priority is our client's professional and personal success. We believe clients should expect more.

Guarantee Our Work

We guarantee our clients complete satisfaction every engagement every time.

Contact Information

Firm Headquarters
Serving San Francisco, Silicon Valley & Los Angeles
1710 South Amphlett Blvd.
Suite 302
San Mateo, CA 94402

Northwest Office
Serving Portland & Seattle
707 SW Washington St.
Suite 925
Portland, OR 97205

For inquiries: info@michaelskenny.com

To see additional publications and learn more about us, please visit our website at: www.michaelskenny.com.

Also, follow us on: