Risk Management Maturity

Improving the Effectiveness and Maturity of Risk Management Processes

Getting Better Project and Business Performance from Your Management of Risks

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Welcome

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About Ten Six

• Specialists in enterprise Project Portfolio Management and Earned Value Management
  – Global customer list
  – Offices in USA & UK
  – Experienced staff – average 25+ years
  – Experts in Oracle Primavera P6 & Deltek tool suites
  – Unique consulting & training services
Learning Objective

• **Provide** you with a model of best practice risk management that can help you to determine where to focus attention to improve risk management

• **Share** our experiences and lessons from the successful implementation of risk management framework to improve project risk management maturity
Why This Topic

• Many project failures can be linked to ineffective risk management
• Risk management maturity is not well understood
• Risk management deserves to be considered as an improvable process with standards, as is PM, PgM, software development, et al
Risk Concepts

• **Risk:** The likelihood that a project will fail to meet its objectives because of an event or condition

• **Risk Management:** is aimed at reducing the uncertainty of outcomes (business decisions, project decisions, work done by the team and suppliers, etc.) and/or the impact of a risk event
Risk Management Process

Benefits of the RM process – when done well:
• Increases the likelihood of project success
• Identifies threats as well as opportunities
• Specifies actions to reduce the probability or impact of those threats to the project.
• Promotes dialog and understanding of the program between all stakeholders
• Can be continuously improved

The risk management process is carried out iteratively in all phases (Pre-initiation to Project Closeout)
Examples of Risk Management Failures

- **Example 1:** $500K FFP A&E ACoE project is late and over budget because no one asked the team what risks existed in their WBS legs during the planning process.

- **Example 2:** Construction project failed because of pressure to pursue low project cost targets, even though risk management processes were in place – pressured team to understate project risk exposure; cost overruns were caught late and were an embarrassment.

- **Example 3:** Risk plans and processes in place, but poor quality schedules and poor relationship with customer resulted in understating full risk exposure; jeopardizing program success; only by replacing management via new contractor brought program back under control.
Who Benefits from Risk Management?
View of Risks Vary With Role

Risk Management is important from strategy/vision to project delivery

- **Sponsors/Management**: Growth, ROI, CAPEX, OPEX, reputation, dates, safety....
- **Customer**: financial outlay, delivery dates, reputation, political....
- **Program/Project Manager**: schedule, costs, quality, resources, safety....
- **Team Members**: my work, other’s work that affects me, safety....
- **Suppliers/Subcontractors**: schedule, demand, reputation, safety....
Everyone Gains IF:

• All on the same team with success as the goal
• Risks are acknowledged and understood
• Risk management process is robust, known and understood and consistently applied and improved from top to bottom the organization
  – Business decision making
  – Projects
  – Suppliers
  – Delivery and operations
  – Customers and other stakeholders
• Risk is dealt with explicitly, effectively and efficiently
Risk Management Maturity Model

- Sponsor and Management
- Identify Risk
- Analyze Risk
- Plan Risk Response
- Link PM Systems
- Environment & Principles
Risk Maturity Model

**Ad-hoc**
- Limited if any risk management
- Many surprises
- Frustration
- Heroics

**Basic**
- Rudimentary risk processes – primarily project focused
- Inconsistent application
- No predictive
- Some senior management
- Some information available

**Defined**
- Risk processes documented – some pre-project
- More consistent application
- Limited predictive modeling
- More senior management
- Customer and suppliers involved
- Basic information available

**Improving**
- Risk management used at earliest stages
- Risk management is integral to project management and investment stages
- Senior management actively involved throughout
- Tailored information

**Optimized**
- Risk management fully integrated
- Lessons learned and fed into upcoming projects
<table>
<thead>
<tr>
<th>Area</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
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<tbody>
<tr>
<td>Sponsor and</td>
<td>No involvement or policy, little/no risk information, no</td>
<td>Little use of risk info; limited</td>
<td>Some management proactive engagement, reporting risks</td>
<td>Management is proactive; using risk information</td>
<td>Policy in place; information</td>
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<td>Management</td>
<td>connection with external customer; no risk sharing with customer or</td>
<td>exposure of risks, very limited</td>
<td>but not used well, conflicts,</td>
<td>regularly with some gaps; risk</td>
<td>sought and provided regularly; RM integral to all decisions; customer</td>
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<td></td>
<td>suppliers; end users not involved</td>
<td>customer involvement, unclear agreements, supplier risk info limited;</td>
<td>management integral to risk decisions</td>
<td>sharing is more balanced with some holes</td>
<td>involvement integral to risk decisions</td>
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<tr>
<td>Identify Risk</td>
<td>Risks are ignored or only occasionally identified; no use of formal</td>
<td>Risks may be identified but</td>
<td>Upstream risks are</td>
<td>Risks are passed down and</td>
<td>Risk ID done from earliest</td>
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<td>means to identify risks; slow or no response to risks that are</td>
<td>are called issues; term &quot;risk&quot; may be frowned upon; some limited</td>
<td>sometimes passed along from</td>
<td>used in project risk planning; extensive use of identification</td>
<td>stages of investment decisions; Risk info passed</td>
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<td></td>
<td>newly identified; surprises</td>
<td>top down risk info conveyed; some formal risk identification</td>
<td>upstream; risks identified using more extensive risk ID</td>
<td>tools and methods; RM is</td>
<td>along to projects; tools, experts, different methods</td>
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<td></td>
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<td>mechanisms used; slow response when new risks ided;</td>
<td>mechanisms formal meetings to ID risks used; PM starting to</td>
<td>is expected as part of PM</td>
<td>used to ID risks as dictated by project; new risks are rapidly</td>
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<td></td>
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<td>show up in idng risk; risk logs may be created;</td>
<td>role; RM ID methods are adjusted based on project</td>
<td>addressed; RM part of everyone’s job</td>
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<td>lifecycle;</td>
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<td>Analyze Risk</td>
<td>Vague and unhelpful risk descriptions; issues tracked, but not risks;</td>
<td>Some better risk descriptions; standard may exist but is not</td>
<td>Standard for risks is used but</td>
<td>Most risk standards are in</td>
<td>Risks standards are in place</td>
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<td></td>
<td>informal and subjective basis for prioritizing risks; no</td>
<td>consistently applied; probability and impacts may be</td>
<td>some gaps; probability &amp; impact in use; RYG; mitigation</td>
<td>place; synergy is important to ID and done; risk owners</td>
<td>and consistently applied; syns are always considered; different views</td>
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<td></td>
<td>contingency estimates; little or no formal mitigation</td>
<td>be done informally; prioritization poor; limited risk</td>
<td>identified; risk owners usually assigned; risk synergies</td>
<td>assigned and accountable; RYG and other mechanisms</td>
<td>of the risk information are considered; risk owners are always</td>
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<td></td>
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<td>sympathy; intelligent but not fully developed;</td>
<td>being identified but not fully</td>
<td>used to analyze risks; risk</td>
<td>identified and accountable</td>
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<td>developed;</td>
<td>impact nearly always</td>
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<td>assessed</td>
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<td>Plan Risk</td>
<td>Risk response planning is</td>
<td>Risk response planning is</td>
<td>Risk response planning is required and done</td>
<td>Risk response planning is</td>
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<td>Responses</td>
<td>poorly done, if at all; no</td>
<td>informally done; ROI/CBA may</td>
<td>thoroughly but some lapses; ROI/CBA integral part of the</td>
<td>is done well and rigorously</td>
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<td></td>
<td>RO/CBA done when</td>
<td>be done from time to time; monitoring of responses is</td>
<td>analysis; consistent and rigorous monitoring done; risk</td>
<td>and rigorously and</td>
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<td></td>
<td>considering responses; no</td>
<td>left to individual risk owners; may some pre and post mitigation</td>
<td>response planning usually part of stakeholder</td>
<td>risk triggers/monitoring are</td>
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<td></td>
<td>monitoring of responses; no project plan adjustment; no</td>
<td>analysis done;</td>
<td>discussions; plans are adjusted</td>
<td>integral to risk management;</td>
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<td></td>
<td>pre- or post mitigation comparisons</td>
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<td>customer, suppliers, sponsors</td>
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<td>are part of the discussions; plans are adjusted</td>
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<td>Link PM System</td>
<td>RM and PM are disconnected; RM is one size fits all; no</td>
<td>RM and PM are somewhat connected; some RM planning is</td>
<td>RM &amp; PM are strongly linked; risks are managed across and</td>
<td>RM &amp; PM are done well and</td>
<td></td>
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<td></td>
<td>linkages with proj plans; RM is</td>
<td>done with project planning; informal risk</td>
<td>beyond project scope; plans are fully aligned and integrated; risk</td>
<td>standard and to standard; RM is adapted to</td>
<td></td>
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<td></td>
<td>“extra”</td>
<td>reviews and reporting; weak</td>
<td>modeling is done well; risk information is captured for use but</td>
<td>project drivers; plans are fully aligned and integrated; risk</td>
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<td>linkages to schedules; no historical data</td>
<td>not accessed; RM roles are done per standards</td>
<td>modeling is done well; reporting is done based on roles/needs;</td>
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<td>archived info used</td>
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<td>Environment &amp;</td>
<td>People are fearful to identify</td>
<td>ID-ing risks are is accepted but</td>
<td>ID-ing risks is expected and encouraged; RM plans are</td>
<td>ID-ing risks is actively sought</td>
<td></td>
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<td>Principles</td>
<td>risks or stymied in their efforts; little trust between team and</td>
<td>not promoted; RM plans are</td>
<td>updated regularly and briefed to team; RM practice is</td>
<td>out by PM; RM plans are</td>
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<td>stakeholders; RM may be penalized based on their efforts;</td>
<td>made available to team; RM role is developed and recognized; RM practice</td>
<td>is recognized; team RM is</td>
<td>integrated into roles and</td>
<td></td>
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<td></td>
<td>considered disruptive; RM info is seldom used; RM role is</td>
<td>is acknowledged; some trust in</td>
<td>is expected as part of everyone’s job; generally high</td>
<td>processes; trust is strong and</td>
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<td></td>
<td>not supported</td>
<td>place but not consistent</td>
<td>trust</td>
<td>communications is good; RM</td>
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<td>process is seen as supportive of project success</td>
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Credit: The Project Risk Maturity Model by Marty Hopkinson
• Senior Management is leading in RM
• Managing up: sharing and reporting information
• Managing out: External customer
• Customer and supplier risk sharing
• Expectation that risk data is complete
• End user involvement in requirements and use risks

SPONSOR - MANAGEMENT IN VolVEMENT
Senior Management’s Role

• **Why Important:** Sets the expectation that RM is important
  • **Low Maturity:** No top level risk policy in place, management is absent in risk domain; hard for PM to get support for RM
  • **High Maturity:** RM is expected and supported from outset of decisions to invest in projects; risk management is be managed in/through subs, contracts, and users

• **Actions/Steps to Improve:**
  – If management: set policy in place require RM to be implemented; reinforce with questions and expectations and legal frameworks in contracts
  – If not management:
    • Demonstrate by doing risk management;
    • Develop processes and involve stakeholders, subcontractors, in reviews, decisions

• **Benefits:**
  – Sets expectations about risk management
  – Tightens linkage of projects to business objectives
  – Involves subs et al in managing risk
  – Sets the stage for a culture of managing risks
Sharing Risk Information with Senior Management

- **Why Important:** Informs sponsors and management and assures them that they can influence events
- **Low Maturity:** No risk information sharing; management in dark about risks’ impact; crises are prevalent
- **High Maturity:** Management involved in RM and able to be proactive
- **Actions/Steps to Improve:**
  - Involve management at key points in the risk process
  - Obtain information about business investment decisions related to the project and link project risks information
  - Speak in “language” of decision makers (management, customer, end users)
- **Benefits:**
  - Moves organization in direction of supporting risk management
  - Fosters communication and trust
  - Give management means to engage proactively and intelligently
  - Able to manage “bad” news better
Risk Management Process Exists

• **Why Important:** No process, no way to improve
• **Low Maturity:** None or ad-hoc RM processes; sporadically applied; limited focus and poor risk information; crises driven
• **High Maturity:** Process is well documented; integral part of project management and how business is conducted

• **Actions/Steps:**
  – Design and develop or adopt a risk management process
  – Craft risk management plans for select “test” projects
  – Get an expert in RM to assist

• **Benefits:**
  – Useful and usable project
  – Supports and is supported by Risk Policy
• Top-down risk identification (Upstream – downstream)
• Risk identification techniques (methods, history, RBS, etc.)
• Methodical and adapted to stage/phase
• Responsiveness when new risks identified
• Using project management (e.g. EV) to identify risks
• RM as an integral role

Identifying Risk
Risk Identification – Top Down?

• **Why Important:** Identify *sources* of risk
• **Low Maturity:** Haphazard if done at all
• **High Maturity:** Starts are outset of investment decision; lower level risks are linked to sources

• **Actions/Steps:**
  – Ask: What are requirements and objectives? What is most important? What is the project context? What will have greatest effect on project success?

• **Benefits:**
  – Keeps the project “out of the weeds” and focused on the ultimate goal
  – Engages sponsor, management, suppliers, PM and team
Risk Identification Methods

• **Why Important:** Need complete list of potential risks
• **Low Maturity:** Haphazard, narrowly focused; limited time spent
• **High Maturity:** Variety of methods are used; facilitator/risk manager may execute this; expected and endorsed
• **Actions/Steps:**
  – Familiarize yourself with the various methods-techniques
  – Conduct formal risk identification meetings
  – Use multi-disciplinary teams (including external experts)
  – Talk with those who have come before you
• **Benefits:**
  – More complete list of risks
  – Engages more of the team
Risk Identification

Proposal Review

- Obtain All Proposal Addenda and Contract (terms, SOW, costs, etc.)
- Review and Prepare for Proposal Debrief
- Conduct Proposal Debrief

- Review Scope, Contract, SOW, Assumptions, etc.
- Craft and Lay in High-Level WBS, Target Dates, on WBS Element(s)
- Review WBS and Draft Project Schedule with Team
- Update WBS/D
- Conduct 1:1 Planning Sessions

Project Planning

- Prep Draft Risk Log
- Prepare Schedule for each WBS Element
- Integrate Fragments into Draft Schedule
- Review Schedule: WBS/D, Risk Log with Team

Brainstorming, Mind Map

- Mind Map Template

Others:
- Delphi Technique
- Outside Experts
- History Review

Ishikawa/Fishbone Diagram
The Risk Breakdown Structure (RBS) lists categories and sub-categories for project risk. The actual categories will vary across different types of projects.
Risk Descriptions Yield Useful Information

• **Why Important:** Clarity; capable of developing adequate response

• **Low Maturity:** Very superficial e.g. “not enough resources”

• **High Maturity:** Follows standard for clarity

• **Actions/Steps:**
  – Adopt a standard for describing risks; require all risk owners to adhere to this

• **Benefits:**
  – Clarity and understanding what risk is about
• Risk descriptions abide by a standard
• Risk owners (assigned and accountable)
• Risk impacts developed and assessed
• Risks’ synergy (identified and evaluated)
• Risk likelihood (probability and impact)
• Risk prioritization (R, Y, G)
• "Goodness" of risk estimates
• Schedule and cost data is of sufficient quality
• Economic performance modeled (contingency)
• Risks’ mitigation identified and selected intelligently
Risk Impacts are Thoroughly Assessed

• **Why Important:** Understand what is the effect of the risks on time, cost, quality

• **Low Maturity:** Limited development of impacts

• **High Maturity:** Rigorous and complete; calculations provided; impact linked to project goals; time phased

• **Actions/Steps:**
  – Choose risk and objectives linkage
  – Determine best measures to use to assess impact; test

• **Benefits:**
  – Better able to defend decisions about responding to risks
  – Sets stage for cost and schedule contingency calculation
Risks are Prioritized

• **Why Important:** Keeps focus on most important risks and areas of the project

• **Low Maturity:** Laundry list of risks and issues

• **High Maturity:** Risk are grouped and prioritized based on management’s needs

• **Actions/Steps:**
  – Agree on prioritization scheme (e.g. 5 x 5 matrix)
  – Leverage RBS and combine to create useful information
  – Test and decide what needs changing

• **Benefits:**
  – Focuses leadership and team on most important risks
  – Leverages the results of the process and shows value of the process
- Risk (proximity) triggers
- ROI/CBA used (to select “best” risk response)
- Risk response plan qualities (standard, used, kept up to date)
- Risk response monitoring (how’s it going)
- Risk mitigation implementation (adjusting project plans to “reality”)
- Pre and post risk mitigation comparisons (budget and schedule contingency support)

Plan Risk Response
Monitor Implementation of Risk Responses

• **Why Important:** Execution of risk response yields benefits of all prior efforts

• **Low Maturity:** Haphazard or inconsistent; self monitoring

• **High Maturity:** Part of risk reviews and integral to project management oversight

• **Actions/Steps:**
  – Schedule risk reviews and conduct to a standard agenda
  – Emphasize staying on most important risks
  – Retire risks as/when needed

• **Benefits:**
  – Assures that risk management is being carried out
  – Enables escalation and action if needed
  – Formalizes ongoing process of identifying new risks
- Risk management “sized” with project importance, complexity, size
- RM responsibilities are executed per standard
- Looking at risks beyond project delivery
- RM and PM plans are aligned and integrated
- Risk information and reporting; risk reviews and escalations
- Project cost and schedule forecasting (risk modeling in schedules)
- Archiving risk information and assessing RM (continuous improvement)

**Use PM Systems and Tools**
Integrating Risk with Project Management

• **Why Important:** Improves likelihood of project success – meeting objectives
• **Low Maturity:** Limited integration of RM with project goals; RM may be done once and dropped; surprises and frustration
• **High Maturity:** Risk management is integrally tied to managing towards project goals
• **Actions/Steps:**
  – Formalized making risk management plans part of project management plans
  – Connect risk reviews with project reviews
  – Update risk information at key milestones and major project changes
• **Benefits:**
  – Ensures all who are part of project success have better insight to the challenges and options to bring about this success
• People are free to identify and propose risks; trust RM process
• Team and stakeholders trust each other
• Risk management plans available and used
• RM used early in overall decision making and PM process
• Good RM practice recognized and rewarded
Risk Owners Identified & Held Accountable

• **Why Important:** Makes organizations commitment to risk management explicit

• **Low Maturity:** Ad-hoc or not assigned

• **High Maturity:** May be a formal role; all project team members are expected to be active in identifying and managing risks; training provided

• **Actions/Steps:**
  – Prepare outline of required knowledge and skills
  – Brownbag sessions initially, followed with more formal training
  – Acknowledge role and/or skills sets
  – For individual risk owners – PM/RM oversees their efforts and results

• **Benefits:**
  – Sets the stage for changing the organization/project culture (along with all of the other areas covered)
How Do You Get Better?

Improvement Approach
• Assess the gap
• Identify needed improvements
• Design plan to bridge gap
• Get buy-in
• Execute and monitor progress
• Educate and integrate

Benefits
• Fewer surprises
• Better awareness and understanding
• Improved sponsor, customer, team, supplier collaboration
• Better business and project performance
• Capacity to take on more challenging opportunities
Wrap Up

- Risk Maturity Questionnaire
- Copy of the slides
- PDU’s for the webinar: tensix.com/webinar
Questions?

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