



DEVELOPMENT MANAGEMENT AND CONSULTING

PROGRAM RISK MANAGEMENT

For Integrated Resorts

Program Risk Management

***“Risk is exposure to the consequences of uncertainty.
We propose to make your success more certain.”***

The success of major projects requires sophisticated approaches to managing complexity, uncertainty and risk, in addition to opening on time, and on budget. Today, shareholders and investors demand a deeper scrutiny of major project investments. Major project failures are major management failures with expensive consequences. We help you avoid those consequences.

Program Risk Management professionals work in parallel as a team with Project Management to enable them to focus on schedule, and budget, and completion. The program risk manager’s independent role is critical, especially if project management is a risk to the major project’s success.

Many major gaming and resort projects fail without adequate risk management. We note some recent case studies:

- The \$3.5 Billion *Baha Mar Resort* in the Bahamas is in bankruptcy just short of being opened.
- In Las Vegas, the \$2.9 Billion *Fontainebleau’s* cost overruns, forced it into bankruptcy. It was later bought for \$150 Million.
- The \$4 Billion *Echelon Place* was abandoned in 2008 and sold in 2013 to Genting Group for \$350 Million.
- The \$3.9 Billion *Cosmopolitan* filed for bankruptcy. The property was sold by the Deutsche Bank for \$1.73 Billion in 2014.
- The \$5 Billion *Las Vegas Plaza* development was put on hold in 2008 and cancelled in 2011 for a land cost loss of \$1.2 Billion.
- The \$9 Billion *CityCenter*, opened in 2009, and finished \$4 Billion over original budget, with a \$350 Million Contractor lawsuit. The net result: MGM was almost placed into bankruptcy.
- The \$4 Billion *Grand Ho Tram* in Vietnam lost its operator, MGM after cost over runs, delays, a ban on local residents entering casinos, and a lack of infrastructure serving the property.
- The \$5.7 Billion *Marina Bay Sands*, in Singapore opened 5 months late in 2010 and \$2 Billion over budget.
- The \$2 Billion *Manila Bay Resort* is projected to have a two year delay, and is distracted by disputes, lawsuits and investigations.

The disaster examples are numerous. The risk is not learning from the mistakes and not knowing how to prevent the failures.

Major project cost overruns and delays are always serious issues. Our analysis of industry research shows that major projects often exceed their budgets by 50% or more. The risks for major projects are; however, more than cost overruns and delays.

All major projects have their distinct risk characteristics, geographies, participants, and conditions. We recommend our clients invest upfront in planning, organization design, systems and processes, custom contracts, rigorous budgets, and schedules, combined with robust program risk management practices.

We address the following high level, Program Risk Divisions:

- **Macro Risk Management**
 - Economic
 - Political
 - Cultural
 - Force Majeure
- **Program Management**
 - Strategy
 - People
 - Process
 - Technology
- **Project Management**
 - Design and Engineering
 - Budget
 - Schedule (Programme)
 - Construction
- **Compliance Management**
 - Contracts & Insurance
 - Building Codes
 - Industry Requirements
 - Federal & International Laws

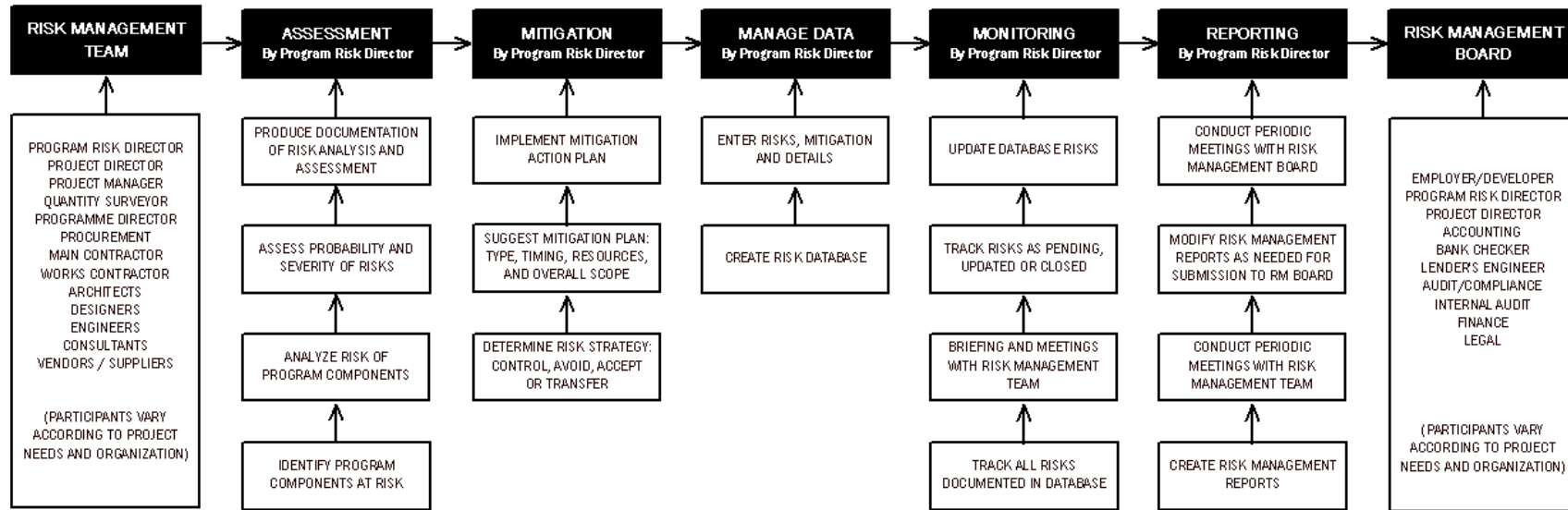
The Benefits of Success Risk: Your major project is completed on time, on budget, cost and risk avoided, and generating revenue.

Program Risk Management

Twenty-One Reasons Why Major Gaming and Resort Projects Fail

1. Inadequate or missing risk management, planning, assessment, mitigation, reporting and resolution.
2. Lack of change management. High speed, large volume change is common to major projects. Not managing change results in chaos.
3. Insufficient resources: professional project management, design, engineering expertise, cash flow, labor, materials, and equipment.
4. Change(s) in scope mid-project and late in the project that disrupts construction efficiency, productivity and sequencing.
5. Poorly defined program/project goals and objectives, flow into poor programing, planning, design and construction documents.
6. Lack of executive sponsorship, commitment, and investment in the project/program, or misrepresentation of its scope.
7. Poor cost budgeting discipline, cost estimates and missed deadlines indicate poor skillsets, design, or scheduling management.
8. Project management team that is inadequately trained, lacks the required expertise, or exhibits unjustified arrogance.
9. Starting construction before design and other project criteria are fully defined and construction drawing are finalized.
10. An early indicator of project trouble is a lack of indicators. There may be no indicators of failure because project management does not have an understanding of where the project really stands, or understand the project's true status.
11. Schedule mismanagement. Projects frequently encounter problems because the schedule is not managed.
12. Ambiguity in contracts. Unclear scope, terms and conditions and dispute resolution can derail projects.
13. Major projects are particularly vulnerable to "scope creep." Changes, variations, and time impacts multiply complexity.
14. Optimism bias. Underestimating the complexity of the project and assume all will proceed smoothly. In their zeal to get approval and funding for projects, overconfident project managers fail to address potential risks early enough in the process.
15. Slow decision making. An executive, operator, or design professional may fail to sign off on routine decisions, a project can languish. If timely design decisions are not made by the owner's team, a contractor may move ahead without them and replace work, doubling cost, and time and disrupting the construction sequence.
16. Communications problems are often at the root of troubled major projects. There may be lack of communications between the top executives and the project management team. The project manager may warn that a project is running over budget and behind schedule, but the message may not reach the C-suite and board before problems get out of hand.
17. Project management teams may have a reluctance to report project troubles which reflect poorly. Bad news is not easily communicated.
18. International projects can be fraught with complications of cultures, language, means and methods, economy, legal customs complications which may be beyond project management's abilities to manage and add to complexity.
19. The project manager or contractor usually makes the call on a troubled project, but occasionally external factors such as regulatory forces, financial markets, or the economics of the major project change, causing red flags for a major project.
20. Owners fail to establish the proper project management structure, project controls, monitoring procedures, and processes. As a result, they do not anticipate unforeseen events and do not build in the necessary contingency plans. Because of shortcomings in project controls, they often don't realize the severity of delays and cost overruns until well after a major project is in trouble.
21. A lack of Program Risk Management resources and processes.

The Program Risk Management Flow Diagram



The Risk Management Team

Annually, the risk management team will plan, establish requirements, responsibilities, definitions, and procedures. A key first step in the process is to work with the client's management team to define risk, where risk is and to understand how it is shared. We define the risk assessment as the identification, analysis and reporting of risk events across the Project/Program. Equally important is defining the risk of success and opportunities. We then finalize with the Client, agreed upon procedures.

Assessment

BMDG's risk assessment process involves the following (4) key steps:

1. We will mobilize our team and in conjunction with the Client, develop an interview/workshop program for select CM, GC, Client management, Internal Audit and other key project personnel, to understand key strategies for the Project/Program. Leveraging their collective experience, the team then identifies risks that could impact the project, either positively or negatively.
2. Identify and minimize known, and unknown, risk factors associated with the construction of the Project/Program into a Risk Breakdown Structure (RBS). Risk identification also estimates the timing of the risks in the project cycle, or phase. This is important for being proactive in mitigating identified risk. Risks are classified by their impacts (Cost and Schedule) on various phases of the project.
3. Next, based upon the interviews, a working knowledge of the Project, a contracts review, and an engineering and construction package review, we will develop a Risk Breakdown Structure framework of key drivers and processes that impact the strategies for the timely design, construction, and operation of the Project/Program. We will analyze all available financial information and work with management to validate key observations.
4. We document our findings, develop action plans and risk mitigation strategies to respond to the significant risks discovered, while documenting, monitoring and re-assessing risk on a periodic basis.

A Summary of Risk Events (SRE) will be developed in conjunction with the Client to categorize and prioritize assessed risks in terms of magnitude (High, Moderate, and Low) and ranking them accordingly. This step requires risk valuation/modeling to develop cost and or schedule impacts. Upon completion of each key step, we will report the results of the Risk Assessment to Client for comment, revisions, and final approvals before moving to the next stages.

Mitigation

The uncertainties of risk probability and potential impact should be reduced by selecting the appropriate risk mitigation strategy. Selected mitigation strategies are classified into four groups:

1. **Avoid: Avoidance** – when a risk is not accepted and other lower risk choices are available from several alternatives.
2. **Retain: Retention/Acceptance** – a conscious decision is made to accept the consequences should the event occur.
3. **Control: Control/Reduction** – the process of continually monitoring, auditing and correcting the condition on the project is used. This process involves the development of an audit plan and then tracking the plan. This mitigation strategy is the most common risk management and handling technique.
4. **Trans: Transfer/Deflect** – the risk is shared with others. Forms of sharing the risk with others include contractual shifting, performance incentives, insurance, warranties, bonds, etc.

Develop Mitigation Plan

Risks to the Project/Program present themselves at different times and with differing impacts. The strategies available to deal with these risks and to mitigate them if possible are also varied. It is likely that there is more than one avenue available for mitigation of the risks encountered. Detailed, causation, prioritization and mitigation actions for each identified risk will be established with Client input and integrated into the Five-Year Evaluation Plan.

1. The Mitigation Plan will outline each proposed evaluation by; type, timing (start and duration), required resources, estimated budget, and audit scope. The Evaluation Plan and any adjustments will be updated on an annual basis and approved by the Client.
2. The Mitigation Plan will have built-in flexibility to allow for change and adjustments in priority over the course of the Project/Program's progress.
3. The Mitigation Plan will include monitoring of on-going results, recommendations and reassessments of actions taken by the Client subsequent to each final report submitted.
4. The Mitigation Plan will provide for the inclusion of Client personnel (as required) to provide knowledge sharing for Client staff, to provide fact based intelligence reporting in dispute resolution events, and to provide an archived reporting mechanism for future research of the Project/Program.
5. Risk events are classified as to the possible timing of the occurrence of the risk event. Timing at this stage of the Project is classified into the following groups:
 - **External** – risks that exist throughout the life of the project. Risks that are in the background and generally outside of direct work of the project.
 - **Project Risks** – risks that exist throughout the life of the Contract.
 - **Early Risks** – risks that could currently impact the project but will dissipate as the project progresses.
 - **Construction Risks** – risks during the active construction phase of the project.
 - **Start-up and Commissioning Risks** – risks associated with testing and acceptance of the project and close-out of the Contract.

Implement Plan

Upon the review and approval of the initial Mitigation Plan by the Client, the Client-BMDG Team will implement the Mitigation Plan to address each area of risk concern and allow for on-going inquiries that develop, and are approved by the Client.

Manage Data

The accuracy of the information in the database is very important. Therefore, in order to effectively manage risk, current best practices mandate the use of a secure electronic database. The project/program will use a Risk Database as the basis for all risk mitigation, monitoring and reporting functions.

Detailed procedures for entering risks are given in a training syllabus provided by the Risk Management Coordinator (RMC). All personnel assigned to the program will attend Risk Management Training to learn and how to work with the Risk Management database.

Risk Monitoring and Reporting

Risk monitoring is an integral part of routine Program Risk Management and not a separate discipline. Risk monitoring is accomplished at the monthly meetings of the Risk Management Board (RMB). The RMB reviews, approves, and continually reassess all aspects of program risks to include risk levels, risk assessments, risk mitigation options and risk mitigation plans. In addition, the Risk Management Coordinator will develop and maintain a watch List and brief the Risk Management Team.

Accepted risks will enter into a process of action and committing the necessary resources to handle and monitor them. Since dealing with risk will by its nature demand trade-offs, it is important to have a disciplined and systematic process to prioritize management actions.

Likewise, it is important to have a risk monitoring process that systematically tracks and evaluates the performance of risk-mitigation actions. Risk monitoring will consist of regular briefings and presentations to the appropriate management level, as well as automated notifications from the Risk Database. During these briefings and presentations, predicted results of planned actions will be compared with the results actually achieved to determine status and the need for any change in risk-mitigation actions.

Initial Screening and Notification

For all newly identified risks, the RMC will perform an initial screening and check for duplication, accuracy, reasonableness, and related risks, then take one of the following actions:

Accept as Pending: Track and refer to the RRB for adjudication. Add the new risk to the Risk Watch List.

Update: More information is required if the risk entry raises questions. The RMC coordinates with the originator to find the information necessary to either accept or reject the risk.

Close Out: Risk is low, non-existent, or duplicated and does not require tracking; or no uncertainty exists; or there is insufficient time to handle as a risk. If appropriate, handle as an action item and refer to the appropriate manager.

Risk Management Board

The RMC will convene monthly Project Level RMB meetings to review new risks and to review and approve current risks and action item status. Through the initial screening process, the RMC incorporates new risks into the Risk database. Depending on the urgency and severity, significant new risks may be briefed and discussed before the next scheduled RMB meeting. In preparation for the RRB, the RMC shall:

- Coordinate with all risk owners and action assignees to update the status of existing risks and risk actions
- Prepare new risks for review
- Prepare a list of risks that can be closed out
- Prepare and publish an agenda for the meeting

The Project Level RMB and or the Program Manager/Developer RMB shall review all program risks and make the following decisions:

- ***Accept:*** Accept status and recommendations, and formally track and assign action if required. Assign risk owner. Notify senior management if applicable.
- ***Update:*** Status of one or more elements of the risk need updating or are in question. Refer back to risk owner.
- ***Close Out:*** Risk is low or non-existent and does not require tracking, or no uncertainty exists or there is insufficient time to handle as a risk. If appropriate, handle as an action item. When a risk is closed out it is retained in the Risk database but is no longer tracked.