Risk Management Plan from PMGT613

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Z-LAM ENTERPRISE NEW OPERATING MODEL

RISK MANAGEMENT PLAN

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Embry-Riddle Aeronautical University Worldwide Online Campus RISK MANAGEMENT PLAN

3

2.3 RISK IDENTIFICATION

Methods for Risk identification is the process of determining either current or potential hazards that could jeopardize the project and documenting their characteristics. This is the first and most important step in the process which helps an organization implement controls in order to mitigate those risks.

All project team members are responsible for risk identifications. Sources shall include pertinent stakeholders, subject matter experts as well as other project team members and project managers are all valuable sources that can be used help determine risks to the project.

Additionally, the risk management team can be a valuable resource and should be utilized if possible.

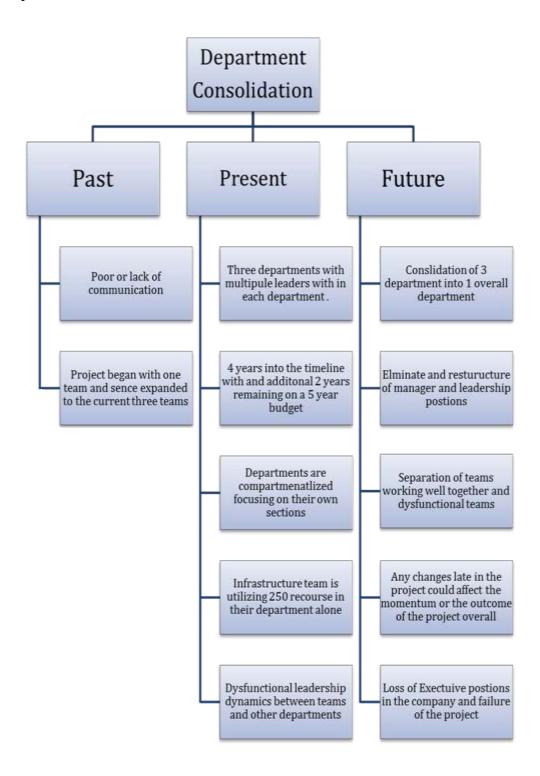
2.3.1 Risk Identification Method: There are three perspectives of risk

Past: Historical Review

Present: Current Review

Future: Creative Techniques (See fig 2.1 on next page)

Figure 2.1. Perspectives of Risk



2.3.2 Risk Register: The risk register outlines and identifies the risk process; is a working document that is updated as needed

Figure 2.2 Risk Register example

Risk Identification			Qualitativ	ve analysis			Risk Response			
#	Risk Category	Risk Description	Impact	Date Identified	Risk Score	Risk Priority Ranking	Risk Response	Trigger/ Status as of: 05/14/2016	Owner	
1	Schedule	Ineffective IT teams, lack of support from business managers,	Delays budget overrun	04/15/2016	.14/ Moderate	3	Mitigate; Meet with IT and business managers to rally support address concerns	After meeting, IT and Business Manager On board	Executive Sponsors	
2	Stakeholders	Project team structure is not effective, personality conflicts exist	Budget overrun	04/15/2016	.12/ Moderate	4	Mitigate; Restructure teams organize loose matrix structure	Team adapting to a loose matrix organizational structure	Project Manager	
3	Resources	Project is lacking support from business units	Delays, Budget overrun, project failure	04/15/2016	.56 Very high	1	Accept: Inform executive sponsors of possible termination if Project fails.	Business leadership and team adapting to new structure.	Business Unit Senior leadership.	
4	Management	Too many decision makers involved in decisions and no "steering committee" to help guide the group	Delayed project, Scope Drift	04/15/2016	.10 Moderate	5	Transfer; Business Management will develop steering team with assistance from Project team and Assign current Workflow team lead to oversee	Steering committee formed and beginning to function	Business Lead/ IPT	
5	Management	Business lead against agile project method possibly creating issues for project teams using that method	Project fail to meet required deadline	04/15/2016	.28 High	2	Mitigate; educate on Agile benefit, and Remind consequence of project failure how they may affect their future	The Business Lead is still opposed to the agile method, but has given the team leeway to proceed,	BSME	

Note: See Appendix B for working Register

Risk Category Description: Describes risk based on their area of impact in the project.

Table 2.3.
Risk Categories

Risk Category Name	Risk Category Description
Schedule	Risks associated with the delay in the estimates of specific tasks which directly impact the delivery of a milestone or the project.
Management	Risks associated with the managers involved with the project or can affect the project by making decisions
Resources	Risks associated with human, technology, material or other resources necessary for the successful development of the project/product. The delay or replacement of any of these resources will impact the schedule, quality, or cost of the project.
Stakeholders	Risk occurring as a result of changes made or changes being requested that can affect schedule, scope and cost.

2.4 RISK ANALYSIS

Inputs from the Risk Register must be assessed in order to determine their risk values.

2.4.1 Qualitative Risk Analysis – Probability and Impact Matrix

Qualitative Risk Analysis will prioritize risks based on assessing and combining the probability of occurrence and impact to the project using the Probability and Impact Matrix shown in Figure 2.4 (PMBOK, 2013). The results of the analysis are shown in Figure 2.4a.

Figure 2.4 Risk Probability and Impact Matrix

Probability		Threats					Opportunities			
0.90	0.05	0.09	0.18	0.36	0.72	0.72	0.36	0.18	0.09	0.05
0.70	0.04	0.07	0.14	0.28	0.56	0.56	0.28	0.14	0.07	0.04
0.50	0.03	0.05	0.10	0.20	0.40	0.40	0.20	0.10	0.05	0.03
0.30	0.02	0.03	0.06	0.12	0.24	0.24	0.12	0.06	0.03	0.02
0.10	0.01	0.01	0.02	0.04	0.08	0.08	0.04	0.02	0.01	0.01
	0.05/ Very Low	0.10/ Low	0.20/ Moderate	0.40/ High	0.80/ Very High	0.80/ Very High	0.40/ High	0.20/ Moderate	0.10/ Low	0.05/ Very Low
		Impact (numerical scale) on project								

Figure 2.4a Qualitative Risk Analysis

Risk Description	Assessed Likelihood of Occurrence	Assessed Impact to Project	Qualitative Risk Score
Ineffective teams that area costing more than the budget allows	0.70	0.20/Moderate	0.14/Moderate
Project management structure is not effective	0.30	0.40/High	0.12/Moderate
Project is lacking support from business units	0.70	0.80/Very High	0.56/Very High
Too many decision makers involved in decisions and no "steering committee" to help guide the group	0.50	0.20/Moderate	0.10/Moderate
Business lead agaisnt agil project method possibly creating issues for project teams using that method	0.70	0.40/High	0.28/High

2.4.2 Quantitative Risk Analysis – Excel QM. All figures were compiled using

Microsoft QM- Excel except for the information given in the order of precedence table and costs for crashing table.

Table 2.4.2 Data time and predecessors input table

Activity	Time	Pred 1	Pred 2	Pred 3
A	4			
В	6			
C	7	A	В	
D	8	В		
E	5	В		
F	5	C		
G	7	D		

Н	8	D	E	
Ţ	4	F	G	Н

Data provided as part of the course materials.

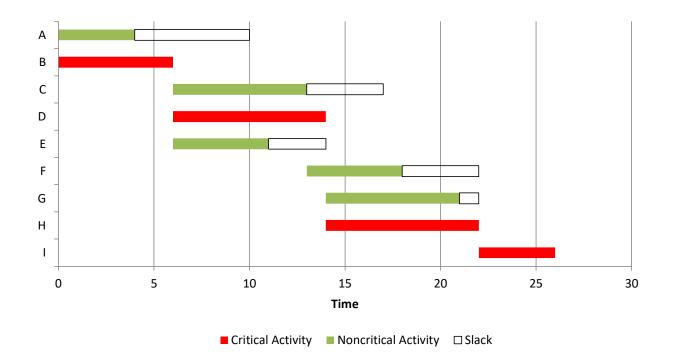
Table 2.4.2a Data Input, Early Start- Late Finish

Activity	Early Start	Early Finish	Late Start	Late Finish	Slack
A	0	4	6	10	6
В	0	6	0	6	0
C	6	13	10	17	4
D	6	14	6	14	0
E	6	11	9	14	3
F	13	18	17	22	4
G	14	21	15	22	1
Н	14	22	14	22	0
Ι	22	26	22	26	0

Project 26

Data provided as part of the course materials.

Figure 2.4.2 Gantt chart



Crashing costs. As requested the following is the cost of crashing the project to a 14 day schedule is (see Figure 2.4.2a for cost data):

Project Goal 14 days
Normal time 26
Minimum Time 12

Minimum crash cost to meet Project Goal \$25,997.67

Figure 2.4.2a Data Input for Crashing Cost

					Immediat	e Predeces	ssors (1 per	column)		Intermedia	ate Compu	tations
					Immedia							
	Normal	Crash		Total Cost	te							
	Time	Time	Normal	with	Predeces				Crash	Crash	Crash	
Activity	(weeks)	(weeks)	Cost	Crashing	sor(s)	Pred 2	Pred 3	Pred 4	days	cost/day	limit	
Α	4	1	\$8,000	\$9,500)				3	500	3	
В	6	5 2	\$12,000	\$15,000	1				4	750	4	
С	7	'	\$14,000	\$20,000	Α	В			4	1500	4	
D	8	}	\$19,000	\$31,000	В				4	3000	4	
E	5	; 2	\$13,000	\$15,000	В				3	666.6667	3	
F	5	; ;	\$9,000	\$10,500	С				2	750	2	
G	7	2	\$16,500	\$20,500	D				5	800	5	
Н	8	}	\$ 22,000	\$ 34,000	D	E			4	3000	4	
I	4	1 2	\$ 5,500	\$ 6,500	F	G	Н		2	500	2	

2.5 PLAN RISK RESPONSE

Table 2.5 outlines the identified risks, listed by severity, and an individual response plan. The team will chose one, or a mix of, the following risk response techniques to ensure the impacts are kept to a minimum. A response tracking portions is also included to aid in keeping the Risk Register up to date.

Avoid- The project team acts to eliminate a threat or to protect the project from its impacts.

Transfer- The project team shifts the impact of the risk to another party.

Mitigate- The project team acts to reduce the likelihood of occurrence or the potential impacts of a risk.

Accept- The project team identifies a risk and takes no action unless the risk actually occurs.

Table 2.5 Risk Response

ID #	Risk Category	Risk Description	Risk Impact	Risk Response	Response Tracking
1	Schedule	Ineffective IT teams are running over budget	Delay's Budget over-run	Mitigate	Use Earned Value Management to track budgetary spending
2	Stakeholders	Project team structure is ineffective, personality conflicts	Delay's Budget over-run	Mitigate	Use project schedule to maintain visibility of improvement progress
3	Resource	Project lacks proper support from business units	The new structure will not be accepted/adopted by the whole company failure of project	Transfer	05/15/16 Meet with Unit management and Senior leadership scheduled; confirmed by all invitees.
4	Management	Lack of steering team	Ineffective project work and a lack of team focus	Transfer	Assign project group to develop a steering team
5	Management	Business lead is against the project method	The project can be stalled or abandoned because of lack of support from direct management	Mitigate	05/10/15 Meeting with the direct business lead to discuss project methods

2.6 RISK METRICS

"A risk metric...is the attribute of risk that is being measured" (Holton, 2012). The Risk metric is listed in Table 2.6.

Table 2.6 Risk Metric

Risk Category	Key Questions	Metrics
Financial	How effectively is the budget	Earned Value
	being managed?	Estimate to/at Completion
	Are there new monthly increases	Change Control process
	to the budget?	Weekly/Monthly budget reports
Management	How can the organizational	Lean Six Sigma team
	structure be made more effective?	recommendations
	How can other project methods be introduced?	Change Control process
Resources	What can be done to gain support	Lean Six Sigma team
	from the Business unit?	recommendations
Stakeholders	What can be done to streamline	Tiger Team/outside analysis's
	the decision making of the group?	recommendation

References:

- Holton, G. A. (2012). Risk Measure vs. Risk Metric. Retrieved May 13, 2016, from http://www.value-at-risk.net/risk-measures/
- Project Management Institute (PMI). (2013) A guide to the project management bock of knowledge (PMBOK guide. Newton Square, PA: Project Management Institute