



8.5 – Deliverable: Integrated Control of Risk

Bicycle Project

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PMGT-614

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Training Wheel Technical Interface Risk

RBS LEVEL 0	RBS LEVEL 1	RBS LEVEL 2
ALL SOURCES OF PROJECT RISK	1. TECHNICAL RISK	1.1 Scope definition
		1.2 Requirements definition
		1.3 Estimates, assumptions, and constraints
		1.4 Technical processes
		1.5 Technology
		1.6 Technical interfaces
		Etc.
	2. MANAGEMENT RISK	2.1 Project management
		2.2 Program/portfolio management
		2.3 Operations management
		2.4 Organization
		2.5 Resourcing
		2.6 Communication
		Etc.
	3. COMMERCIAL RISK	3.1 Contractual terms and conditions
		3.2 Internal procurement
		3.3 Suppliers and vendors
		3.4 Subcontracts
		3.5 Client/customer stability
		3.6 Partnerships and joint ventures
		Etc.
	4. EXTERNAL RISK	4.1 Legislation
		4.2 Exchange rates
		4.3 Site/facilities
4.4 Environmental/weather		
4.5 Competition		
4.6 Regulatory		
Etc.		

Risk Identification

Due to the change request to add training wheels to the existing bicycle project, the project management team has begun a new risk assessment process to determine impact to the existing project scope and detail.

The risk assessment process will utilize the Risk Breakdown Structure (Figure D7 in Appendix D) from the Project Management Institute (PMI) Practice Standard for Project Risk Management



Training Wheel Technical Interface Risk

The current change request to add training wheels to the bicycle project has revealed industry customer complaints regarding the use of the training wheels on mountain bikes.

An investigation has revealed a mechanical interference issue between the training wheel set and the current rear wheel derailleur system.



Training Wheel Technical Interface Risk

The component testing team has noted an interference between the new training wheel set and the derailer when any gear above 5th gear is utilized. Physical contact between the derailer and training wheel set have been noted.



The risk level was determined using the probability and impact definitions on the following slide.

Probability/Impact Definitions

Probability

Level	Probability of Occurrence	Cost	Budget or unit cost production increase <1% of budget	Budget or unit cost production increase 1%-2% of budget	Budget or unit cost production increase 3%-10% of budget	Budget or unit cost production increase 11%-20% of budget	Budget or unit cost production increase >20% of budget
5	61% - 99%	Schedule	Schedule Impact <1%	Schedule impact 1% - 5%	Schedule impact 5% - 10%	Schedule impact 10% - 20%	Schedule impact >20%
4	41% - 60%						
3	21% - 40%	Technical	Scope decrease barely noticeable	Minor affect on scope	Major areas of scope affected	Scope reduction unacceptable to sponsor	Project end item is useless
2	11% - 20%						
1	1 - 10%	Level	1	2	3	4	5

Impact

Risk Title

Risk ID#	1.7.4.1 A1
Risk Owner	Project Manager
Date Submitted	18 June 2017
Date Last Updated	25 June 2017

Probability	5	Yellow	Yellow	Red	Red with X	Red
	4	Green	Yellow	Yellow	Red	Red
	3	Green	Green	Yellow	Yellow	Red
	2	Green	Green	Green	Yellow	Yellow
	1	Green	Green	Green	Green	Yellow
		1	2	3	4	5
	Impact					

Risk Statement
 Because of the **IMPROPER SELECTION AND SOURCING OF THE TRAINING WHEEL SET**, interference between the derailer system and training wheel mount frame might occur, which would lead to the bicycle not capable of more than 5th gear, lead to premature wear of the derailer, and possibly make the bicycle unsafe for operation.

Probability Justification
 Selection of the existing training wheel set is acceptable for bicycles without a derailer system. Failure to communicate and identify the proper training wheel set will lead to premature component failure and incompatibility.

Impact Justification (Category: Cost/Schedule/Budget)
 If the component (Training Wheels) are incompatible, then the impact rating is a five. The training wheels received can be mounted but interfere above 5th gear. There is no current reason to expect this to change, earning a probability of 4 on the scale.

Risk Response Plans and Status

<u>Risk Response Plan 1</u> Contact vendor for a training wheel set compatible with derailer systems to meet delivery schedule.	<u>Status</u> Procurement research vendors for product availability.
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<u>Risk Response Plan 2</u> Remove training wheel set from final deliverable to restore operation, until a set can be procured.	<u>Status</u> Change request submitted to remove training wheels. Once wheels become available, Technical support will deliver and install on customer bicycle.
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