

## QUANTITATIVE RISK ASSESSMENT

### Probability of Failure

- Maturity (Moderate) = .50
- Complexity (Minor) = .30
- Dependency (Moderate) = .50

### Consequences of Failure

- Cost (Significant) = .70
- Schedule (Moderate) = .50
- Reliability (Minor) = .30
- Performance (Moderate) = .50

$P_m$	$P_c$	$P_d$		$P_f$
.50	.30	.50		.43
$C_c$	$C_s$	$C_r$	$C_p$	$C_f$
.70	.50	.30	.50	.50
Risk Factor = (.43) + (.50) - (.43)(.50) = .715 (High Risk)				

### Risk Mitigation Strategies

High Risk	Mitigation Strategy
1. Plant reorganization takes longer than anticipated.	1. Develop a comprehensive project tracking program to maintain schedule.
2. Marketing does not approve the prototype cups produced.	2. Maintain close ties to sales department—keep them in the loop throughout project development and quality control cycles.
Moderate Risk	
3. New process designs are found to not be technically feasible.	3. Assign sufficient time for quality assessment during prototype stage.
4. A key project team member could be reassigned or no longer able to work on the project.	4. Develop a strategy for cross-training personnel on elements of one another's job or identify suitable replacement resources within the organization.
Low Risk	
5. The project budget could be cut.	5. Maintain close contact with top management regarding project status, including earned value and other control documentation.
6. Factory does not pass OSHA inspections.	6. Schedule preliminary inspection midway through project to defuse any concerns.
7. Suppliers are unable to fulfill contracts.	7. Qualify multiple suppliers at prototyping stage.
8. New products do not pass QA assessment testing.	8. Assign team member to work with QA department on interim inspection schedule.
9. Vendors discover our intentions and cut deliveries.	9. Maintain secrecy surrounding project development.