

Formula Hybrid Project Management Project Plan Scoring

Introduction

The Formula Hybrid Project Management Activity is comprised of three components: (1) Project Plan (2) Interim Progress Report and (3) Final Presentation. These components cover the entire life-cycle of the Formula Hybrid Project from design of the vehicle through fabrication and performance verification, culminating in Formula Hybrid participation at the track. The Project Management activity includes both written reports and an oral presentation, giving team members an opportunity to further enhance their communications skills in the context of an exciting automotive engineering experience.

The same evaluation criteria are used across the three components of Formula Hybrid Project Management, but how the criteria are applied differs, reflecting the phase of the project life-cycle that is being reported. This note introduces the scoring rubric for the Project Management Plan.

Contents of the Project Plan

Each Formula Hybrid team is required to submit a formal project plan that reflects team goals and objectives for the upcoming competition, the management structure and tasks that will be completed to accomplish these objectives, and the time schedule over which these tasks will be performed. The topics covered in the project plan should include:

1. **Scope:** A brief introduction of the project and what will be accomplished, “SMART” goals and objectives, major deliverables and milestones. In total this is known as the Statement of Work.
2. **Structure:** Organization of the project team, Work Breakdown Structure which is a cascading representation of tasks that will be completed, and a project schedule indicating the timeline for completing these tasks. Usually this is depicted in a Gantt Chart that shows the timeline and interdependencies among the tasks.
3. **Expected Results:** Complementing the goals and objectives are “measures of success”, quantifiable attributes that will be used to determine the extent to which the goals and objectives have been achieved at the completion of the project. These “measures” are of value throughout the project for setting priorities and making decisions.
4. **Change Management:** A process designed by the team for administering project change and managing uncertainty. The process includes built-in controls to ensure that change is managed in a disciplined way.

The need for change is a normal occurrence during project execution. Change is good because it refocuses the team when new information is obtained or unexpected challenges are encountered. But if it is not managed correctly change can become a destructive element to the project. Reviewers must determine if the change management process designed will work consistently.

Quality of the Written Document: The Project Plan must consist of at least one page and not exceed three pages of text. Appendices may be attached to the back of the Project Plan and do not count as “pages”, but they must be relevant to the plan.

The plan should look and read like a professional document. The flow of information is expected to be logical; the content should be clear and concise. The reader should be able to understand the plan that will be executed. “Quality of the Written Document” should be considered when scoring the “Structure” component of the Project Plan.

“SMART” Goals

Projects are initiated to achieve predetermined goals. Overall, the requirements of the Project Plan incorporate the basic principles of “SMART” goals. These goals have the following characteristics:

Specific: Sufficient detail is provided to clearly identify the targeted objectives

Measurable: The objectives are quantified so that progress toward the goals can be measured

Assignable: The person or group responsible for achieving the goals is identified

Realistic: The goals can actually be achieved given the resources and time available

Time-Related: Deadlines are set for achieving each goal or milestones are defined as interim measures of progress

The rubric developed for evaluating Formula Hybrid Project Plans includes these characteristics. Points are awarded based on the extent these attributes are covered in each submitted plan.

Applying the Project Plan Rubric

The attached rubric provides guidelines for awarding points in each Project Plan component area. Four performance categories are also specified: Excellent, Good, Marginal, and Deficient. A range of points is suggested for each category to give reviewers flexibility in evaluating the quality and completeness of the submitted plans.

Formula Hybrid Project Management Scoring Rubric Project Plan

	Excellent	Good	Marginal	Deficient	
Project Plan Components	10 - 7 Points Includes	6 - 4 Points Includes	3 - 1 Points Includes	0 Points	Project Plan Score
Scope	Project Introduction Primary, Secondary Goals Major Deliverables Defined Milestones Established over Project Duration	Project Introduction Primary, Secondary Goals Some Milestones Defined	Project Introduction Includes Only General Objectives	Project Introduction and Goals are Missing	____/10 Points
Structure	Team Organization Chart Work Break Structure-Tasks Gantt Chart - Timeline - Task Interdependencies	Team Organization Chart Gantt Chart - Timeline - Task Interdependencies	Team Organization Chart Work Break Structure-Tasks	All Three Structure Components Missing	____/10 Points
Expected Results	Two Attributes are Given for Measuring Project Success These Attributes are Quantified Goals	Two Attributes are Given for Measuring Project Success Attributes Not Quantified	One Attribute is Given for Measuring Project Success This Attribute is a Quantified Goal	"Measures of Success" are Missing	____/10 Points
Change Management	Process Designed for Administering Change Process has Sufficient Controls Reasonable to Expect that the Process will Work	Process Designed for Administering Change Reasonable to Expect that the Process will Work	Process Designed for Administering Change Questionable if the Process will Work	Change Management Process is Missing	____/10 Points

Total: ____/40 Points