



Subject: Electric Vehicle Design Validation via a Project Centre

Theme(s):

Design of an Electric GP Motor Bike for NADL, FMAE 2020

1. The relative need for a Project Centre

Given that students in “engineering curriculums or in this case automotive engineering” will team up to plan for, design, develop and operate different projects, where expert faculty or field level guidance will be offered to teams and their representatives.

Each project has a need for time, resources, funds and team effort. Each of these projects may become a trend setting solution or new sense of “design, implementation or even teaming for re-engineering”.

The incorporation of a Project Centre for each project can help add alignment for mission critical focus and for what the industry needs today well-formulated quality and management.

It could help end to end management of the investment of time, resources, funds and team effort for projects.

The Project Centre could help students teaming up understand the need for project specific data, configuration data, logs, infrastructure, systems, processes, resources and auditable SMARTER experience.

SMART stands for Specific, Measurable, Achievable, Realistic and Time or Trends oriented planning, implementation and management.

The Project Centre could help add critical path management that is important for endeavours where a new “sense of perspective or problem resolution” needs a well developed project lifecycle and the management of project indicators that drive acceptance at the academic & industrial level.

The Project Centre could ensure that students not only think about ideas in engineering or problem solving but also acknowledge the need for Effective or SMART project management.

2. Why has this come up?

2.1. Students may start teaming with personal preference or may be virtually teaming up with other considerations.

2.2. Students may not have methods to record or refer to configuration data or logs to thereon design or model their projects.

2.3. Students may not have a return of investment model that can help them gain recognition, get funding or assistance.

2.4. Students may need impersonal project management or real world specific administrative strategies

2.5. Students may need to manage change in existing design, strategy, modelling or may even need to reengineer, where **fundamentals for change management** are important in the industry.

2.6. Students may need to focus on sustainable factors such as Point Slope Interception systems that can be implemented in the project to help make project and development lifecycles safe, sustainable and futuristically acceptable.

Project Consultants have debated on the subject of Sustainable Project Management and use gap analysis for what can make projects sustainable and futuristically acceptable.



3. Applicability of the idea

Scope for teaming for: Designing, modeling, building or developing of electric vehicles (as made in curriculum solutions)

Status as on date

Electric GP Motorbike for FMAE 2020 with a timeline of October 2020 to January 2021.

4. A simple glimpse into how the Project Centre can make investment and involvement more effective

For later competitions or any need to demonstrate and justify the project, the recommendation is to record data via formats that help generate trends and reports for past, current and further involvement.

Form 1. Project Proforma

Form 2. Design, Modelling and/or Field Work Proforma

Form 3. Manufacturing Site Proforma

Form 4. Kinematics Proforma

Form 5. Automotive Mechanics Proforma

Form 6. Auxiliary Equipment Proforma

Form 7. Accessories Proforma

Form 8. Energy (Battery/Fuel/Hybrid) Requirement Proforma

Form 9. Performance Tuning Proforma

Form 10. Safety Proforma

Form 11. Maintenance, Repair and Tuning “Activity & Tools” Proforma

Form 12. Driving Rules Proforma

Form 13. e-Functioning Test Proforma

Form 14. Test Site Proforma

Form 15. Crash Test Site Proforma

Form 16. Course Site and Functioning Proforma

Form 17. Failure Cause and Effect Analysis Proforma

Form 18. Financial Accounting Proforma

Form 19. Guidance Proforma

Form 20. Distributed Activity Proforma

What is a Proforma?

A Proforma is a formatted form that helps record and manage a project initiative or implementation.

Via the Proforma, the Project Centre can become a channel and central reference for decision-makers like investors, examiners and other project teams.

NOTHING IS
IMPOSSIBLE,
THE WORD
ITSELF SAYS
“I’M POSSIBLE”!
- AUDREY HEPBURN

A healthy personal motto for any participant could be: To be part of the team, help and skill up to win a “best or vitally required” project award