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Guidelines for Techno-Economic Analysis

for

Mechanical Project 478

Mechatronic Project 478

Postgraduate Students

The techno-economic analysis of your project should discuss the technical and economic impact of your project. Factors that should be considered in this regard are as follows:

1. Budget

The comparison between the proposed and actual budget should be discussed, motivating why additional expense was incurred if necessary and indicating where savings were possible if applicable.

2. Planning (time management)

The comparison between the proposed and actual work hours should be mentioned here, with particular emphasis on how this affected the budget. Reasons for taking more or less time, for restructuring of the planned activities (adding, removing, postponing, extending etc.) should be motivated in terms of the value that this added to the project, technically, and how that was then justified as a financial input (in terms of work hours or added activity etc.).

3. Technical impact

The overall technical impact of the research/prototype/experiments on the field of study should be indicated. Some discussion of whether this research is worthwhile to society or industry, and whether the technical value of the project warranted the financial input, should be included.

4. Return on investment

Running an R&D or design project is basically an investment in a potential outcome. Some discussion of the investment and what the short- and long-term value, from a technical as well as an economic perspective, should be conducted. Motivation for continuing research in this field, or for further development of a concept or prototype, can be given here. This



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should be accompanied with predictions for how much furthering the research would cost and what the predicted benefit would be.

5. Potential for commercialization

If there is potential to commercialize the product, which could be a physical prototype, software or expert knowledge/expertise, this should be noted and a comment on the value of commercializing the product should be given.

The techno-economic analysis can be part of your report only if this was a significant aspect of your project. Otherwise it must be included as an appendix to which you refer from your conclusions.