



IE 477 – IE 478 Production Systems Design

Suggested Contents for the Booklet Report

Last Revised on March 31, 2022

The Booklet Report (BR) is an overview of the project you have been tackling since the beginning of the Fall semester. This report will be published as a part of the Projects Booklet and be available online to anybody. Although the audience of this book will be the people interested in topics related to Industrial Engineering and Operations Research, you should make sure that the steps taken towards defining the problem and the outcomes along with the benefits to the company are explained considering a broader range of audience who has no prior information about the problem.



*As the booklet will be available online to anybody, **under no circumstances should any confidential and proprietary information ever be disclosed in these reports!** You must consult your IA for any piece of sensitive information you are planning to have in your report!*



We need a written official consent of the IA before we can publish it in the project book – an e-mail from IA directed to TAs will be sufficient. Make sure that your IA is aware of the publicly open report and let her/him take their time to edit the parts which are likely to be confidential.

Contents of the Report

Please note that there is no single outline that we want you to adopt. The following is only a suggestion; you may have some of the below bullets in one section, or you might have more sections devoted to what you want to cover in one of the bullets. As this is the case, we expect you to change/customize the titles given in bold letters in each bullet.¹

- **Cover page:** The cover page will include the abstract in Turkish, as well as key words in Turkish. The cover page cannot exceed one-page. English abstract and keywords will be in the beginning of the main text of the report on the second page.
- **Company description and identification/definition of an engineering problem:** Provide a very short description and some general information about the company and its service/manufacturing system. Include “System Analysis” which summarizes the current operations, some statistical or numerical analysis which resulted in the identification of the problem. State the problem definition, performance measures and deliverables.
- **Model development and details of your proposed system:** Make sure that you give proper references to motivate and/or to explain your approach. Give information on platforms needed for the solution of the stated problem(s).
- **Validation of your approach:** State clearly how you measured and compared the results of your approach with the current operations with the discussion of the generality of your comparisons.
- **Integration and Implementation:** Integration of your approach to company’s existing system and work on implementation together with a possible complementary discussion.
- **Benefits to the company:** Project’s possible contribution to the company, preferably stated as % improvement in some previously mentioned performance measures as well as return on investment type analyses if there are proposals requiring investments. Of course, complemented with discussion.

¹ If you need a more detailed suggestion for the contents of this report, you may consult to the document titled *Suggested Contents for the Final Report*.

- **Conclusions:** Statement(s) regarding the satisfaction of the organization's expectations from this project, followed by future work suggestions. Of course, complemented with further discussion in case needed.

References and Appendix (or Appendixes): You are expected to refer references you have used throughout the text. Please, use proper citation and list of references using the latex commands. Make sure that you do not miss any, so that you will not be suspected of academic dishonesty. Please make sure that each appendix clearly describes the information you place and is not a "garbage can".

Other Information

- The main text of the report including the cover page should be at least 6 pages and at most 10 pages. Additional to the main text, you can have at most 4 pages of Appendix (or Appendixes). Make sure that you satisfy all the requirements, as these are strict for the publication of the booklet.



A \LaTeX template specifically customized for this report is available on the course web page. So, make sure you use the correct template for this report.

- The print will be in color. Hence, you can make use of colored graphics.
- Make sure that the titles you will use for your advisors (academic and industrial) are correct and up to date. Please, ask all parties regarding this issue.
- Make sure that you prepare the draft with full concentration, as if it will be the final version.
- Make sure that you have coherence and consistency in your text, as if it something written by a single author. This is needed as this text will be publicly available.
- You can find copies of the booklet prepared in the previous years available online.