

## 1<sup>st</sup> INTERNATIONAL BOOK CHAPTER

### INNOVATIVE DESIGN OF MANUFACTURING AND SERVICES PROCESS

Department of  
Industrial Engineering  
and Chemical Engineering

This Book Chapter is a resume of research results between lecturers and students in the Faculty of Industrial Technology in the even semester of 2020-2021. This book further strengthens the theory taught in lectures because, in addition to carrying out literacy on several theories that are already robust, direct observations are also carried out on research objects, data collection, testing and comprehensive measurements. Validation of results through appropriate method approaches for further as the basis for analysis of the expected results makes a proper contribution to the managerial implications. From the various findings in this study, various innovation concepts in the manufacturing and service processes increase productivity through increased effectiveness and efficiency in the company. This book is also expected to contribute to readers related to process technology through several discoveries to inspire the emergence of new opinions and theories.

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Faculty of Industrial Engineering  
Institut Teknologi Adhi Tama Surabaya (ITATS)

# **INNOVATIVE DESIGN OF MANUFACTURING AND SERVICES PROCESS**

**Oleh :**

**Gatot Basuki HM**

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# Preface

Praise be to the presence of Allah SWT for with all His grace of the publication of the Book Chapter of the Innovative Design of Manufacturing and Services Process.

Increasingly fierce business competition in the manufacturing and service industries requires innovation, creativity, and stricter steps towards product and service development to meet increasing consumer demands. Product development is closely related to process innovation. This book chapter provides essential information related to processing innovation in the creation of new products.

This book chapter presents a lot of information related to knowledge based on research conducted by academics, both lecturers and students, in collaboration with companies so that the research results can be used or utilized by companies that are used as research objects.

This book chapter contains various methods of solving problems in companies by using different types of reliable data (data mining). The results obtained through analysis and comprehensive discussion are carried out through verification and validation of the effects of parties with competence in their respective fields.

In this Book Chapter, there are still many shortcomings and limitations. Therefore the writer team conveyed many apologies, and we still need various inputs from various parties to refine this Book Chapter further. Thank you for your willingness to read this Book Chapter, and I hope it will bring benefits to all of us.

May 2021

Author