

Title of Paper with Capitalize Each Word (16pt)

Author^{1*)}, Author²⁾ Author³⁾ (12pt)

1Department, affiliation, Address, City and Postcode, Country (12pt)

2Department, affiliation, Address, City and Postcode, Country (12pt)

3Department, affiliation, Address, City and Postcode, Country (12pt)

e-mail: author@affiliation.xx.xx¹⁾, author@affiliation.xx.xx²⁾

ABSTRACT

The abstract is a summary of the article. It is consist of aim/goal/problem of research, methodology/approach, findings, and research limitation/implication. The abstract must be written in 150 - 300 words. The abstract must not contain lengthy background information and have no reference to figure, table, equation, any bibliographical reference either coming within or other article. The language of abstract must be clear and concise. It is a stand-alone summary in one paragraph.

Keywords: Keyword_1, Keyword_2, Keyword_3, Keyword_4, Keyword_5 (max).

A. INTRODUCTION (Font size: 12, Times New Roman, bold)

Submission of a manuscript implies: that the work described has not been published before; that it is not under consideration for publication anywhere else; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities – tacitly or explicitly – at the institute where the work has been carried out. The manuscript is written in English with a total of **10 to 12 pages** including pictures and tables. The manuscript must be written according to this article template in Camera ready form. The article must be written with an A4 paper size (210 x 297 mm). The introduction show what is already known from the previous studies, defines the importance of the study and state the research question. In order to understand what is already known from the previous study, the introduction must consist of discussing the relevant journal article (with citation) and summarizing the current understanding of the problem encounter, for example :

Nowadays, all people want to be fast in all activities. One activity that requires speed and time savings is queuing. Increasing public demand for fulfilling daily needs has caused competition in the business world to become increasingly high. This company aims to be able to sell furniture products in the form of tables to various regions throughout Indonesia and even abroad. Therefore, choosing the right strategy in providing service to customers is a top priority. Queues can occur in several places, especially when purchasing tables which are much needed by the general public, one of which is at the PT X Workshop. PT X Workshop is a company that sells various types of furniture, one of the products is tables. PT X Workshop The problem that occurred at the PT X Workshop was the simulation of a table production system that was not optimal.

This research uses a simulation method. The simulation method is a decision-making method for creating an imitation of a real system into an artificial system without having to experience the actual situation through a computer program. Thus, this research needs to be carried out to overcome problems in the queue for purchasing tables at the PT X Workshop using Arena and ProModel software. The aim that the author wants to achieve in this research is to find out the efforts made by the company to minimize queue times in the production process and maximize the products produced by the PT X Workshop.

Simulation activities are a powerful form of enactive experience (direct purposeful, contrived experience or dramatic participation), and are usually followed by debriefing to facilitate reflection, learning, abstraction, conceptualization, and connection to real-world events [1]. Simulation provides key skills and knowledge for students enrolled in undergraduate health education. When simulation is integrated with clinical placements, students practice key clinical behaviors and concepts in a safe environment, which promotes transferability of learning to facilitated actual care situations in clinical practice [2]. Simulation is the activity of reproducing system behavior, using a model that describes or represents the process of the real system in question [3]. Simulation is the process of designing a model of a real system and carrying out experiments using this model with the aim of understanding the behavior of the system or developing strategies related to the operating system [4]. Discrete simulation is an operational research technique used to assess, predict, and optimize the efficiency of proposed or existing systems [5]. Discrete simulation is a method for replicating or simulating real-world system operations through computer models that allows users to get results before implementing them in the real world [6]. Discrete event systems refer to systems in which the state of the physical system changes discretely at some random point in time [7].

So far, the general approach taken is based on a discrete value that occurs at a certain time, but at other times we cannot always determine the concept that we take when using this discrete system [8]. Used discrete event simulation to optimize resources. Using discrete event simulation to assist supply chain managers in making decisions in the analysis of inventory order history information for three different time periods [9]. Queuing theory is one statistical method that can be used to overcome these problems. Queuing theory is used to determine characteristics, models and performance measures [10]. Queuing theory is expressed relatively related to waiting lines as a mathematical analysis. Queuing theory is the numerical investigation of waiting lines or queues [11].

Arena simulation software is Discrete Event Simulation (DES) software created by Rockwell Automation. It is compatible with most Microsoft Windows operating systems and is fully compatible with Microsoft software such as Excel and Access [12]. Arena is a simulation software based on the SIMAN language which comes from two words "SIMulation and ANalysis" [13]. . The results of these experiments can help organizations analyze the possibility of implementing the system in the real world [14]. Arena is used to understand the stand layout and optimize the utilization of each station [15]. ProModel (Production Modeler) is a tool used for the simulation process of creating models of various manufacturing and service company systems [16]. The process of creating a simulation model begins by translating the real system into a conceptual model, the conceptual model is then translated into a simulation model [17].

The manufacturing process is a method or process applied to change the shape of an object. Manufacturing is very closely related to engineering or engineering [18]. The definition of manufacturing is not much different from the definition of production above, the second difference is that production is emphasized on the processing process from raw goods to finished goods. Meanwhile, manufacturing is emphasized on the group of companies that process raw materials into finished goods [19]. Queue size plays an important role in queuing

analysis, where the size can be finite, as in the buffer area between two consecutive machines in an assembly line, or infinite, as in a mail delivery facility [20].

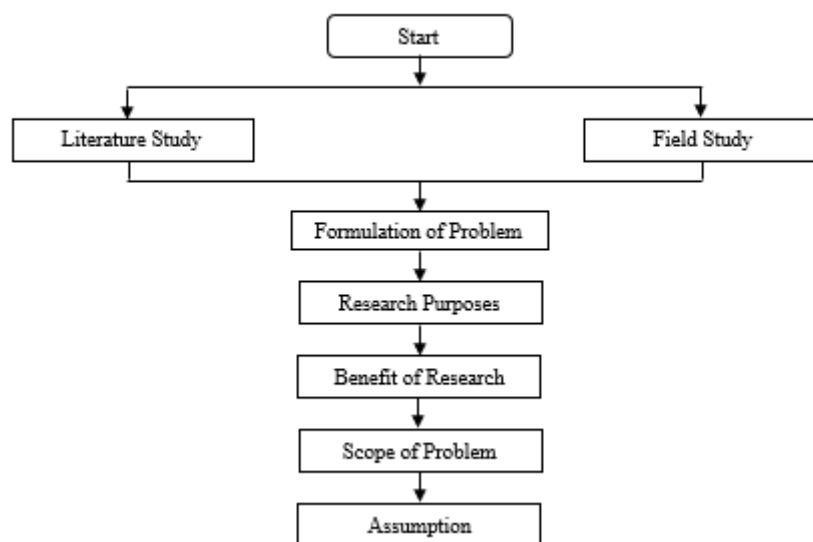
B. LITERATURE (Font size: 12, Times New Roman, bold)

Literature review section is a comprehensive overview of all the knowledge available on a specific topic till date. Literature review is one of the pillars on which your research idea stands since it provides context, relevance, and background to the research problem you are exploring. The reference must consist of 95% from relevant and recent primary sources (such as article of international journal or conference from last 5 years).

C. RESEARCH METHOD (Font size: 12, Times New Roman, bold)

The research methods explain clearly how the author carried out the research. The method must describe the research design clearly, the replicable research procedures, describe how to summarize and analyze the data. The significant contribution to the body of knowledge should be clearly stated.

Positioning Figures and Tables: Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation “Table 1,” even at the beginning of a sentence. The table must not print screen, specific numerical values, compare and contrast values, and minimum of 2 row and column. The figures must clear (provide original file as supplementary file in article submission), highlight trends, pattern, and relationship. The result section must present how the author ensure the data validity and reliability. Figure should be preferably black and white or in grey scale. Only photographs are allowed in colour. Avoid effects such as shading, outline letters, and so forth.



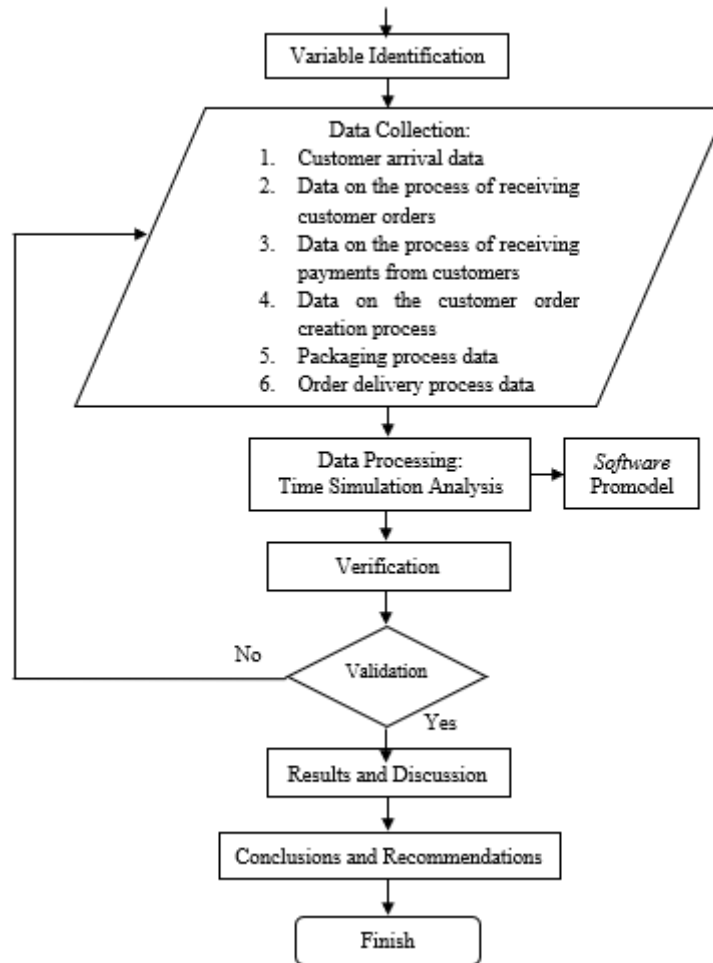


Figure 1. Flowchart
Source : Data Processing

TABLE I
ARENA VALIDATION

No. Replication	Total Time	
	Hours	Minutes
1	1,9471485	116,82891
2	1,936747	116,82423
3	1,9470705	113,336184
4	1,8889364	113,343024
5	1,8890504	116,043648
6	1,9340608	112,936128
7	1,8822688	118,293942
8	1,9715657	118,293942
9	1,8688198	112,129188
10	1,9288109	115,728654
Average	1,91944788	115,375785
Deviation	0,034395587	2,275370816
Variance	0,001183056	5,177312348

Source : Data Processing

D. RESULT AND DISCUSSION (Font size: 12, Times New Roman, bold)

D.1. Result

The result section show objectively the presentation of the research key results without any interpretation using text, tables and figures. The result section begins with text, presenting the key finding, and referring to the tables and figures. The discussion section show how the author interpret the results in light of what was already known, and to explain the new understanding of the problem after taking your results into consideration. The discussion must connect with the INTRODUCTION so it tells how your study contribute to the body of knowledge and society. Results and findings must be able to answer the research questions or hypotheses in the introduction.

D.2. Model

Introduction should contain (in sequence) general background, previous literature review (state of the art) as the basis for the scientific novelty statement of the article, scientific novelty statements, and research problems or hypotheses. At the end of the introduction, the research objectives of the article should be written. In the format of a scientific article, a literature review is not allowed as in research reports, but it is manifested in the form of a previous literature review (state of the art) to demonstrate the scientific novelty of the article.

D.3. Discussion

E. CONCLUSION

The conclusion indicates the answers to the hypothesis and/or research objectives or scientific findings obtained. The conclusion does not consist of a repetition of the results and discussion but rather focuses on summarizing the findings as expected in the objectives or hypotheses. If necessary, at the end of the conclusion, things related to further ideas from the research can also be written.

The conclusions section show the answer or clarification of the research questions and opportunities for future research.

Bibliography

All references cited in the text of the article must be listed in the Bibliography section. The Bibliography section should include reference sources from primary sources (scientific journals, comprising a minimum of 80% of the entire reference list) published within the last 10 years. Each article should have at least 15 reference list entries. The reference system in the article text and the writing of the Bibliography section should preferably utilize reference management software applications such as Mendeley, EndNote, or Zotero, among others. An example of writing a Bibliography list can be seen in the Bibliography section. Writing bibliography using font size 10 and Times New Roman.

The template will number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3]—do not use “Ref. [3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] was the first ...” Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the abstract or reference list. Use letters for table footnotes.

Unless there are six authors or more give all authors’ names; do not use “et al.”. Papers that have not been published, even if they have been submitted for publication, should be cited as “unpublished” [4]. Papers that have been accepted for publication should be cited

as “in press” [5]. Capitalize only the first word in a paper title, except for proper nouns and element symbols. For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation [6].

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