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AN AUTOMATIC FINANCIAL CALCULATION PLATFORM FOR BUSINESS

NURUL FAZILAH BINTI AHMAD FAUZI



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INDUSTRY
UNIVERSITI PENDIDIKAN SULTAN IDRIS**

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AN AUTOMATIC FINANCIAL CALCULATION PLATFORM FOR BUSINESS

NURUL FAZILAH BINTI AHMAD FAUZI

A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF THE BACHELOR OF SOFTWARE ENGINEERING
(EDUCATIONAL SOFTWARE) WITH HONOURS

FACULTY OF ART, COMPUTING, AND CREATIVE INDUSTRY
UNIVERSITI PENDIDIKAN SULTAN IDRIS

2023



**FACULTY OF ART, COMPUTING AND
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I confirm that all materials in this final year project report are the result of my efforts. If any work of another person or party whether published or not (such as books, articles, papers, or materials in other forms such as audio and video recordings, electronic publications, or the Internet) has been used, I have already recorded acknowledgment of their contributions through appropriate academic conventions. I also acknowledge that the material contained in this final year project report has not yet been published or submitted for other programs or diplomas/degrees at any university.

20/2/2023

Date

Student Signature

Supervisor's Clarification:

I acknowledge that I have read this paper and in my opinion, this paper is adequate in terms of scope and quality to award the Bachelor of Education (Information Technology / Multimedia / Computerized Design) with Honors.

26/2/2023

Date

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(Dr. Muhamad Hariz bin Muhamad Adnan)

APPRECIATION

First and foremost, I owe a debt of appreciation and gratitude to the Almighty God because with the abundance of His grace, I am allowed to finish my project even though it has many challenges but I manage to make this project succeed. I may not be able to complete this project without the help of my supervisor, Dr. Muhamad Hariz bin Muhamad Adnan. He gave me a lot of opinions, comments, and guidance in our discussion from the beginning of this project until this project's end. My special appreciation would like to convey to my mother who provided many words of encouragement and advice throughout my study. Not to be forgotten are the lecturers and friends of Sultan Idris Education University who gave me a lot of motivation and help me in going through the learning process of my degree. Last but not least, I would like to express my gratitude to everyone who contribute directly or indirectly to the development of An Automatic Financial Calculation Platform for Business.

ABSTRAK

Apabila menjalankan sesebuah perniagaan, pengiraan kewangan adalah sangat penting dalam mencapai sasaran keuntungan dan pertumbuhan perniagaan. Malangnya, sesetengah pemilik perniagaan atau usahawan mempunyai pengetahuan pengurusan kewangan yang lemah atau tidak mencukupi. Tujuan penyelidikan ini adalah untuk mewujudkan satu platform yang boleh membantu pemilik perniagaan dalam memahami pengiraan kewangan, terutamanya yang berkaitan dengan keuntungan perniagaan. Seperti yang diketahui umum, orang ramai terus menggunakan sistem laman web sebagai platform pada masa kini. Teknologi laman web ini boleh mengembangkan penggunaan komputer untuk pengiraan dan pemahaman kewangan perniagaan. Dengan menggunakan pendekatan prototaip evolusi, yang terdiri daripada empat (4) fasa, juga akan membantu dalam memberikan tumpuan kepada kepuasan pengguna dan kualiti projek memandangkan proses penciptaan dan penilaian prototaip akan menghasilkan kitaran sehingga ia memenuhi jangkaan pengguna. Dapatan kajian daripada ujian penerimaan pengguna menunjukkan bahawa pengguna sangat berpuas hati dengan fungsi dan kebolegunaan sistem laman web yang telah dibangunkan. Walau bagaimanapun, beberapa penambahbaikan perlu ditangani untuk pembangunan masa depan berkaitan antara muka sistem, modul, kandungan dan multimedia. Hasil projek ini akan dapat meningkatkan pendapatan syarikat, dan ia mungkin berkembang dengan bantuan pengiraan dan penciptaan laporan ringkas sebagai pelan pengurusan keuntungan untuk masa hadapan.

AN AUTOMATIC FINANCIAL CALCULATION PLATFORM FOR BUSINESS

ABSTRACT

When running a business, financial calculations are very important in achieving profit and business growth targets. Unfortunately, some business owners or entrepreneurs have poor or insufficient financial management knowledge. The purpose of this research is to create a platform that can help business owners in understanding financial calculations, especially those related to business profitability. As is well known, people continue to use website systems as platforms nowadays. This website technology can expand the use of computers for calculating and understanding business finances. Using the evolutionary prototyping approach, which consists of four (4) phases, will also help in focusing on user satisfaction and project quality since the process of creating and evaluating the prototype will produce cycles until it meets the user's expectations. Research findings from user acceptance tests show that users are very satisfied with the functionality and usability of the website system that has been developed. However, some improvements need to be addressed for future development related to system interfaces, modules, content, and multimedia. The results of this project will be able to increase the company's income, and it may grow with the help of calculations and the creation of simple reports as a profit management plan for the future.

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LIST OF ABBREVIATIONS

UPSI	Sultan Idris Education University
RAD	Rapid Application Development
SRS	Software Requirement Specification
ADDIE	Analysis, Design, Development, Implementation, Evaluation
5W1H	What, Who, Where, When, Why, How
i-PROCOM	Idea Product Commercial

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CHAPTER 1

INTRODUCTION



Many facilities have been built in this technologically advanced age to make human life easier, whether it be for work or school. Additionally, one of the preferred activities for generating income in life is business, but not every company has a profit that allows it to expand. As a result of this study, I will suggest a website-based platform for automatic financial calculation in business as a way to address this issue. Therefore, all entrepreneurs can boost their business's profits thanks to the existence of this digital platform that can serve as a guide for them to manage a business. This chapter gives the introduction of the project research that will include the research background, problem statement, objectives of the research, scope, and also the significance of the study.





1.2 Research Background

Operating a business is among the most alluring occupations in the world. It will engage prospective entrepreneurs who are drawn to running sales. The company's financial side is one of the crucial aspects of the business (Omondi & Jagongo, 2018). Numerous financial calculations kinds incorporate different financial management techniques, but one that stands out is its profitability. The business profit will become one of the markers of whether a business can grow up in the business sector or have a problem that will result in bankruptcy.

This website platform's primary focus is on financial calculations that consider how to generate revenue from a business that will mostly serve Malaysian entrepreneurs as its target users. This approach is involving a website platform because of the entrepreneurs' habit to use a laptop that can make their work easier rather than mobile phones. The entrepreneurs will be able to learn finances with the aid of this platform even though there are no formal training courses.

1.3 Problem Statement

Nowadays, people are seen to be increasingly planning to run a business that is seen to be a source of their income. According to the analysis of a study by Omondi & Jagongo (2018), an entrepreneur usually used their saving or borrow their family and relatives' saving to establish a firm. However, prospective business owners frequently require





more than just financial resources. For the business to succeed, it will also need to have financial expertise.

Sometimes, business owners lack fundamental knowledge and have poor financial management abilities. If they are reckless, the company's profits will fail to cover their loan. In addition to the costs, it will result in fines and other penalties. The fact that not everyone who runs a firm has a business degree is one of the key elements in this aspect. Failures will therefore probably occur.

Some business owners choose not to take part in financial training courses because they take more time, believe it to be prohibitively expensive, or find it impossible to get the information they need. The entrepreneurs who chose not to take part in these training courses did so because they believed that they already possessed the necessary abilities or could find them through other means that maybe not be suitable for them. Additionally, as we are all aware, the covid-19 virus has impacted our social lives and caused social estrangement. Therefore, it is essential to have a program or set of detailed instructions online for the financial calculations that can entice business owners to utilize it and advance their knowledge, particularly for the firm profit.





1.4 Research Objectives

There are three (3) main objectives for this study, which are:

- a) To identify the main problem related to the financial calculation of the business.
- b) To develop a prototype (website platform) that will calculate the financials automatically based on the problem discovered in (a).
- c) To test and evaluate the functionalities and usability of the prototype developed in (b).

1.5 Project Scope



The scope of the function related to this project is a financial calculation that will help users calculate their finances automatically and generate a simple report by developing a prototype that can capture user feedback through its functionalities. So, the content is all about financial calculation, especially for finance profitability management which will involve three (3) criteria which are profit and loss, margin, and break-even. This project's target users and geographical area are new and existing entrepreneurs from Malaysia.





1.6 Significance of Study

The main focus of the study on this website platform is targeting to help new entrepreneurs to plan their finances in starting their business with easier financial calculation aid. It will help them to learn how to gain profit and grow up their business. Rather than that, this project also will help existing entrepreneurs in Malaysia to improve their finances, especially in finance profitability management plans to avoid a huge amount of debt and bankruptcy which will become a business risk.

1.7 Conclusion

The first chapter summarises the entire preliminary investigation into the topic of automatic financial calculation in business. It focuses on the primary research issue and how to tackle it, which sets up the literature review in the following chapter. The ongoing study will be thoroughly examined in that chapter.

