

EMPOWERING E-LEARNING: MONEYWISE PERSONAL CASH FLOW SIMULATION MODULE

Suhaily Maizan Abdul Manaf, Zaimi Mohamed, Fathiyah Ismail, Siti Fatimah Mardiah Hamzah, Sholehah Abdullah, Nur Azwani Mohamad Azmin, Salwani Affandi and Nik Noor Afizah Azlan

Faculty of Business and Management, Universiti Teknologi MARA, Terengganu, MALAYSIA

E-mail: suhailymaizan@uitm.edu.my

ABSTRACT

MoneyWise Personal Cash-Flow Simulation Module has been developed to facilitate students in understanding the elements of personal financial management. The simulation enables the students to experience the essentials of budgeting, record-keeping, and other related activities in money management. The module also provides useful tools and tips for the students to plan and manage their cash flows and financial requirements. In the simulation, the students have assumed the role of individuals with a monthly salary for their chosen career and family scenarios. Based on certain assumptions and events, the students have been required to prepare their family budgets and record daily cash flows for a specified given period. During the simulation, the students have been able to analyse the status of their financial position in various reports, such as the budget template and cash-flow statement. In the meantime, MoneyWise has also featured other tools, such as one-million planner and references on money management. The newly upgraded version is available with additional financial ratios report, namely liquidity ratio, debt-to-asset ratio, solvency ratio, current ratio, and debt-service ratio. These ratio reports enable users to understand and aware of their current financial standing, which are useful for helping consumers to plan their financial matters based on their financial-level information more effectively. Besides, the module is expected to enhance students' potentials to obtain excellent grades in personal financial planning course as well as elevating their skills and readiness to face real-life situations in the future. The system not only functions as an e-learning material and tool but is also useful for individuals to record and manage their daily transactions. MoneyWise is a great e-learning innovation and relevant financial tool in an effort to elevate the level of financial literacy of society, which is in line with the National Strategy for Financial Literacy 2019-2023.

Keywords: e-learning, module, literacy, financial, simulation

1. INTRODUCTION

Among the factors that contribute to the high level of indebtedness and bankruptcy among youths are low financial-literacy rate, failure to manage finances well, and debt burdens borne immediately after graduation (Nuraulini, Noor Aimi, Wan Shahdila, Fadilah, & Wan Shazlinda, 2015). Based on a report released by the Malaysian Department of Insolvency, since 2013 to 2017, a total of 100,610 people has been declared bankrupt and 60 per cent of them have been aged between 18 and 44 years old. It is very astonishing when some people have even been declared a bankrupt as early as 18 years old. Current literature regarding the work subject should be examined and the differences of the said work from the past, similar works should be presented clearly in the introduction section. Certainly, this issue is alarming because it could impose a negative impact not only on sociocultural aspects but also potentially inhibit macroeconomic growth in the long run.

2. MATERIAL AND METHOD

This study aims to enhance students' know-hows and skills on personal financial-management elements, for instance, preparing budgets, recording financial transactions, generating reports, and monitoring their personal financials systematically. The scope is focuses on students taking Personal Financial Planning course in UiTM Terengganu, which they have some difficulties to understand certain topics in the syllabus. A preliminary analysis on the achievements of the students taking this course has shown that there is still room for improvement which is feasible in order to boost the students' performances to the maximum level. Hence, this study has selected the MoneyWise project as an effort to facilitate lecturers to design assignment materials and course evaluation, increase the variety of T&L materials, and improve student mastery and performance for this course by utilising the concept of blended learning, e-learning, and simulation methods as a medium used in the T&L process where students have a window of opportunities to apply financial-management theories to the real world (as if they are in a real situation) by doing activities related to particular topics as appeared in the course syllabus.

The MoneyWise project has been implemented in stages according to the proposed action plan as shown in Figure 1. In the interim, the system development has been carried out in accordance with the phase methodology of the information-technology system development, which is the Waterfall System Development Life Cycle (SDLC) certified by many researchers and system developers (Mohamed, 2012).

| What Needs to Be Done? | How? |
|--|---|
| Setting the system-development phase | <ul style="list-style-type: none"> ○ Phase 1 - Excel-based ○ Phase 2 - Web-based ○ Phase 3 - Mobile-app |
| Determining the specifications and contents of the system/module | <ul style="list-style-type: none"> ○ Getting feedback/suggestions from students ○ Getting feedback/suggestions from lecturers ○ Getting expert views (ASNB, AKPK) |
| Designing the system/module | <ul style="list-style-type: none"> ○ Obtaining the equipment and software ○ Designing the system framework, logo/texts/images ○ Setting the layout and contents ○ Building the database |
| Test-running | <ul style="list-style-type: none"> ○ Preparing the test materials and date-setting ○ Getting user feedback for improvement |
| Documentation | <ul style="list-style-type: none"> ○ Workflow and Process ○ User Manual ○ Videos (tutorials and promotions) ○ Resource Person |
| Standardisation | <ul style="list-style-type: none"> ○ Approval from the Deputy Academic Rector of UiTMCT ○ Approval from the Dean of the Faculty of Business and Management, UiTM ○ Briefing and Promotion |

Figure 1. Proposed Action Plan

In order to guarantee the effectiveness of MoneyWise, continuous system improvements have also been made in line with the needs of the users. For this purpose, a new element, which is the Financial-Ratio Report, has been included in this simulation module. This report has allowed the users to understand and identify the status of their financial positions and in turn help in the process of personal financial management more effectively.

3. RESULTS

The final-examination analysis has shown that the average loan score of Part A has increased from 69.7 per cent to 75.9 per cent. Being inspired by the result, we have expected a continuous increase up to 80 per cent in the next semester (Figure 2). The existence of the MoneyWise system benefits many and has a high impact, which is in line with university aspirations and national agenda (Figure 3). For students, this system could increase their potentials to obtain better grades for the course taken and be very relevant for their future use. For lecturers, the existence of MoneyWise provides an alternative for them to use the interactive, interesting, and easy-to-understand teaching aid. The system developed is very user-friendly, easily intelligible, and in line with the needs of the syllabus in providing effective delivery to students to grasp the ideas of related topics. MoneyWise, which had initially served as a T&L material, could now be used by the public (individuals) to record their financial transactions. Individuals or communities could utilise the system to formulate financial plannings, including monthly and annual incomes, as well as daily, monthly, and annual expenses, in an effort to provide an effective means for them to plan any forms of investment that suit their financial objectives and goals.

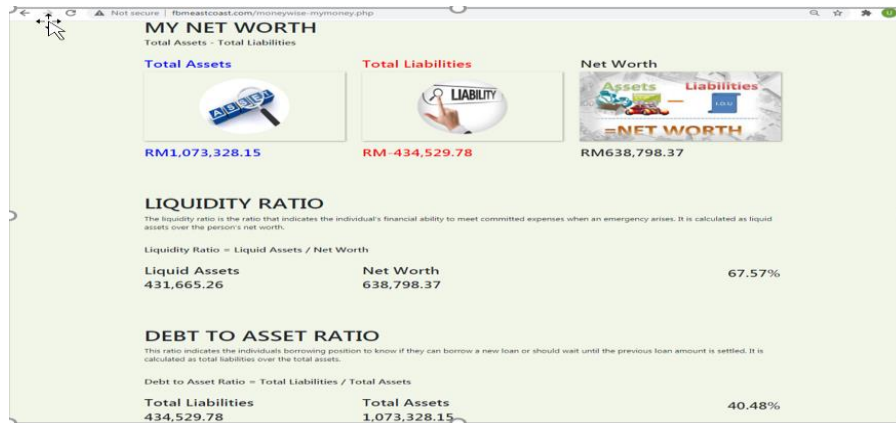


Figure 2. Financial-Ratio Report

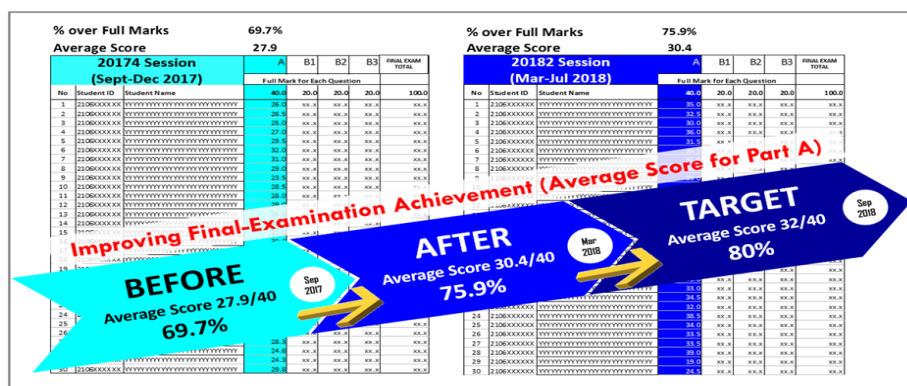


Figure 3. Project Successful Attainment

4. CONCLUSION

Managing money wisely is one of important skills that must be possessed by every individual to ensure that his or her financial affairs can be managed well and systematically. In order to support university policies that encourage the use of blended learning and the utilisation of the latest teaching aids, which are in accordance with the needs of students, the MoneyWise simulation module has been successfully produced. MoneyWise not only could be used by the students of public and private higher-learning institutions, home and abroad, but is also very suitable for real-world use by the public. In addition to serving as an e-learning material, it could also be employed to record transactions and manage individuals' actual daily financial matters and has a potential to be developed and configured for the use of selected clubs and enterprises. The MoneyWise simulation module is an e-learning innovation which is in tandem with the desired T&L approach in Education 5.0@UiTM. Besides, it is also a very relevant financial aid in an effort to amplify the level of financial literacy among the community, which is in line with the implementation of the National Strategy for Financial Literacy 2019-2023. To refine and boost this system to its limit in the future, we have been working in the process of upgrading the system to mobile-app so that it could be used more widely and more practically. Precise planning has been being designed to cover various aspects, such as more comprehensive financial techniques, appropriate forms of investment, household-debt-reduction tips, more interesting and interactive menus and displays, and other features that are appropriate. Mobile-app has been chosen as the next project because using mobile devices offers much easier and faster accessibility.

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Kelulusan daripada pihak YBhg. Profesor dalam perkara ini amat dihargai.

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