



**START OFF ON YOUR BEST FOOT!**  
**A Module of Financial Literacy Initiative**  
**for Young Adult**

**Authors:**  
**Masnita Misiran . Nazihah Ahmad**

## CONTENTS

List of Contributors.....	3
PREFACE.....	4
Introduction.....	5
EXDIDD Framework.....	6
<b>ACTIVITY 1 : Project Managing Personal Wealth by Excel Budgeting .....</b>	<b>7</b>
<b>ACTIVITY 2 : Plan Your Financial Future! .....</b>	<b>19</b>
<b>ACTIVITY 3 : Proposed Saving vs. Real-Time Saving.....</b>	<b>28</b>
<b>ACTIVITY 4 : Come On Young Entrepreneur. Let Success! .....</b>	<b>37</b>
<b>ACTIVITY 5 : Invest Earlier Avoid Regrets .....</b>	<b>42</b>
<b>ACTIVITY 6 : Invest Now, Prosper Later .....</b>	<b>48</b>
<b>ACTIVITY 7 : Financial Literacy for College Students.....</b>	<b>63</b>
Additional.....	69
References.....	70
Editors Biodata .....	72

### List of Contributors

1. ALIFAH ILYANA BINTI MAZELAN
2. ALMASWANI SYAZWANI BINTI MUSTAFA
3. AMELYA NURMYSHA BINTI NOR ADZMI
4. AUGUSTUS SAW PHENG HONG
5. CHONG LI EN
6. CHOW KAH KAH
7. DIVIYAH KUMARA RAJAH
8. GAN SHEUE WEN
9. LAM SU MING
10. LIM ZHONG YEAN
11. MUHAMMAD DANIAL BIN MOHD NOOR
12. MUHAMMAD HADHRI BIN MOHAMMAD ZAIMI
13. MUHAMMAD IDHAM HANIFF BIN BAZRI
14. NISA KAMILIA BINTI KHAIRUDDIN
15. NOR ASLINA BINTI MOHAMAD
16. NOR SAFFIA BINTI MOHAMAD IDROS
17. NUR AINA BINTI MOHD SUPARDI
18. NUR AZUIN BINTI MOHD SUBRI
19. NUR HAZWANI BINTI HASSAN
20. NUR JAMILA BINTI ADNAN
21. NUR RABIATUL FATINI BINTI RUSLI
22. NUR SYAZANA BINTI AHMAD DARUS
23. NURUL' AIN AQILAH BINTI ABD MAJID
24. NURUL NAJIHAH BINTI KAMARULZAMAN
25. NURUL NAZURAH BINTI MOHD NAZLI
26. RICKY NOVALDI WILLYANTO
27. SARIZA HUSNA BINTI ZAMRI
28. TAN SHI ER

## PREFACE

*"We don't have much left two weeks before our next salary", "My car broke down this morning, and I don't have enough money to call for a mechanic", "My mother is diagnosed with cancer, I am very worried how to help her with hospital bills as we live in a day-to-day basis".*

These are legit concerns that are commonly heard in middle-income to lower-income households. Though life is hard for these groups, we believe that there are ways to reduce the financial stress among these groups, given that the level of personal financial literacy is improved over time. The best-targeted group should be focusing on those at a young age, in particular knowledge practiced at home from parents to kids. However, we understand that in most households, this situation is not ideal, since the adults in the households are mostly financially illiterate.

Thus, this module is dedicated to young adults, those in their prime years that are ready to enter the job market. We hope that this module can be used extensively, either by young adults themselves to educate themselves or by other educators who are passionate to conduct programs to improve personal financial literacy among Malaysians.

We believe that each individual can make a difference, and be accountable for the improvement of our better future.

This module would have not been possible without strong support from Universiti Utara Malaysia which provided a conducive platform and freedom for us to create and materialize our dreams for a better future. We are also fortunate to get involved with the Malaysia Sustainable University Campus Network (MYSUN) consortium, Sustainable Development Solutions Network (SDSN), and MYSTEM Ambassador to widen our views and provide a platform of engagement with global experts on sustainability so that the alignment of what we do today coincides according to the UN Sustainable Development Goals (SDG) 2030 initiatives.

## Introduction

This book is presented based on the program service-learning. The main purpose of the program is to contribute knowledge and skills to the community through service-learning. Seven activities related to financial literacy for young adults.

Activity 1 discussed project of managing personal wealth by Excel budgeting. This activity aims to introduce recognizable debt among young adults, guidance on how to build a table using Excel for budgeting, and decision-making.

Activity 2 explained the importance of planning financially for the future. The activity demonstrated a scenario of long-term financial planning and provided a platform to earn, save, and spend in real situations in order to build the skills among young adults in facing the real world.

Activity 3 illustrated the comparison of proposed savings versus real-time savings. The purpose of the activity is to develop awareness and alertness among young adults to hit specific targets or desires in their lives. In addition, a table for the targeted amount of savings along with age is provided as a reference.

Activity 4 encouraged young adults to be successful young entrepreneurs. The activity managed to provide several templates regarding how to track sales, profit, and saving using Excel for young entrepreneurs to simplify their businesses.

Activity 5 advised young adults about investing earlier to avoid regrets. This is to introduce the concept and principle of investing and help young adults recognize the types of investments.

Activity 6 encouraged young adults to invest now and prosper later. The activity presented deeper than Activity 5 by explaining the terms of investing instruments. Then, some calculations of investment are provided.

Finally, financial literacy for college students is concluded in Activity 7 by highlighting the do's and don'ts in financial decisions.

## EXDIDD Framework

The knowledge of science, technology, engineering, and mathematics, which can be recognized as STEM, is the key driver for the future economic development of the country. STEM activities can make the participants experience and appreciate the applicability of related subjects that revolve around them. In order to design STEM community outreach program, ExDiD (Explore, Discover, and Develop) framework (Ibrahim et al., 2019; Ibrahim et al., 2024) will be adopted by embedding another phase, “Deliver”. Then, the modified framework, “Explore, Discover, Develop, and Deliver” (ExDiDD) will be used for developing community projects. The main objective of ExDiDD framework is to aid the designer in building successful and effective community outreach program. There are four phases in ExDiDD framework. In “Explore” phase, the designer needs to know the community environment such as school, exposure, family, and friends (SELF) to provide a glimpse of the audience for the project. These categories will be used in “Discover” phase to give direction to construct any program’s objective(s). Based on the objective(s), activities will be developed or in “Develop” phase to match the target participants for the program. Finally, “Deliver” phase, is to run the activities to the communities. This ExDiDD framework for community service programs is a chain of practical procedures to be employed in designing community programs. In conclusion, ExDiDD framework is a systematic process to present and guide education institutes or non-profit organizations to plan and create a meaningful and applicable community outreach programs for the society that integrate elements of creativity, connectivity, and collaboration.

Activity 1:  
Project Managing Personal Wealth  
by Excel Budgeting

### Introduction

Beginning in the middle of March (18 March 2020), a nationwide lockdown which is known as Movement Control Order (MCO), was implemented by the federal government with the intention of controlling the spread of coronavirus ("Covid-19 Pandemic - Wikipedia," 2020). In terms of MCO, the spread of COVID-19 has been controlled effectively. However, each thing has two sides. At the same time, this MCO negatively impacted the economy since it restricted the movement and confined the majority of the business operation especially the Small and Medium Enterprises (SMEs) (Shah et al., 2020). The restriction resulted in millions of job losses (Ozili & Arun, 2020).

From the perspective of MCO, the entire society, including employers, employees, fresh graduates, and pre-graduate university students, has been affected. Since fresh graduates and pre-graduate students are more perplexed than the veteran, the concern of this service-learning will be conducted to the citizens aged 20 to 25.

Regarding university students, it can be asserted that the majority of them already possess a basic knowledge of finance, including their consumption behaviour, saving awareness, and investment desirable. However, this knowledge will not satisfy their needs when they move on after they graduate and start their career. As a result, this activity tends to bring them deeply in terms of personal finance. Remember that personal finance is finance but only concerns oneself. This is to alert the people that there is no one can be relied on after we enter the community.

Besides, in the context of personal finance, the budget is the most important part. This is granted by people who always need to consider their salaries before making any additional consumption after reducing their expenses on basic needs. Hence, in the ground of budget, the items below are most of the students will need to consider.

#### **1. *Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)***

As a general condition, a significant number of university students applied for PTPTN loan to pay their education fees with the purpose of continuing their education. This loan gave

an opportunity to all students to enjoy their university life without worrying about their financial problems. Therefore, after graduation, they are required to pay back the particular loan, either in lump sums or instalments. This decision is made after considering the interest rate of the loan, their first working salary and the total number of periods to settle the loan (Wei et al., 2018).

## **2. Credit Card**

We always heard rumours about credit cards, saying that users always get into trouble when he or she cannot manage it effectively and use it wisely. Hence, many personal-finance experts put much effort into preventing their clients from using credit cards. No matter how an application for a credit card is more likely to essential nowadays with the intention of long-term saving money. This can be proved easily as financial institutions that offer credit cards always provide a bunch of promotions such as bonuses, cashback, rewards points, and others. For fresh graduate students, this region is almost like a new world in which it is pervaded by numerous institutions, offers, and promotions. In this case, the decision can only be made after taking into account the initial requirement (salary), interest rate, benefits from institution, instalment, and more. A sample of credit cards offered has been listed in Appendix A.

## **3. Car Loan**

After successfully applying for a career job, many people tended to purchase a car to transport them to work. The actual data for car loans has listed in Appendix A. Similar to the two aspects above, the items that need to be considered include the salary, interest charged, type of interest charge (fixed or variable), principal amount, and others.

## **4. House Loan**

After experiencing a fixed period of career, housing is a luxury commodity that most people desire for their future life, including matrimony, posterity, and retirement. In such cases, most of them will start concerning house purchasing, house refinancing, real estate investing, and others. Through this, the decision-making is almost similar to the loan stated before, which includes the instalment, salary, interest rate, and other benefits. The only difference is the number of periods is basically much longer. A sample of house loans has been illustrated in Appendix A.

In conclusion, all the decisions are the same. We need to consider the interest rate offered by the bank, the instalment period (for example: it took how many years to pay back the instalment), and the flexibility to change within the instalment period (for example: if I want to



clear the debt early). These will affect the budget and cash flow of a student. Students need to compare current income (salary level) when making these loan expenses. So, managing personal finance is important to prevent being unable to repay loans.

#### Program Objectives

The objectives of the program are listed below:

- Participants are able to build a table which relates to their budgets.
- Participants are able to understand how their budget affects their decision-making in terms of paying the loan and purchasing luxury commodities.
- Participants are able to compute their maximum spending through Excel and build up an amortization table.
- Participants are able to use the template to adjust the value to fulfil their needs.
- Participants are able to make a wise decision after the computation result.

#### Component of Program

Background of participants and program duration are stated in Table 1.1.

**TABLE 1.1 COMPONENT OF PROGRAM**

<b>Title</b>	<b>Explanation</b>
Theme	Budgeting
Participants	Age: 20 -25 years old Pre-university students, university student or fresh graduate Accept any background of study / field of work For those who interested to know / learn more about personal finance management
Durations	1.5 hours
Materials Needed	Handouts (refer appendix), laptop
Number of Facilitator	4

**Framework of Program**

**Explore**

**TABLE 1.2 CLASSIFICATION FOR EXPLORE PHASE**

<b>5W1H</b>	<b>Explanation</b>	<b>Remarks</b>
Why	COVID-19 caused an economic downturn where resulted many people experiencing the financial issue.	Introduction, Objective
What	Conducted personal finance management class and helped them to manage their wealth and prioritise their needs.	Topic: Budgeting, Time Value of Money
Where	Due to COVID-19, this program will be implemented personally by facilitators which located in different region.	Facilitator's respective hometown
When	The proposed date is on November weekends. However, with the government's restrictions, the actual date will need to be adjusted according to participants' working and lecture period.	10, 13, 14, 17, 20, 21 Nov
Who	University students, college students, and fresh graduates are the potential participants.	Program details - participants
How	Cash flow games and Excel workshops are conducted in the program.	Appendix B

## Discover

TABLE 1.3 EXPLANATION OF DISCOVER PHASE

Title	Explanation
Available Program	Online workshops / trainings / seminars / talks are currently used by government or NGOs to spread awareness on financial management.
Resource	The available sources are social media and online platforms, such as Facebook, Google, Blogger, YouTube, and many more. This is the fastest way to share knowledge without attending physically and at low cost (or no cost).
Limitation	<p>Several time constraints need to be considered, such as both trainer's and participant's available time. This can be solved by making an appointment or having pre-registration before the workshop to gather the approximate number of participants who are interested in attending the workshop.</p> <p>Conducting online workshop does not effective as face-to-face workshops. This is because of lack of interaction between both parties. The planned content may not be fully delivered in the workshop since the intention is to ensure the participants obtained 100% understanding rather than a bunch of knowledge.</p>
Measurement	<p>There are two ways to measure the success of the workshop</p> <ol style="list-style-type: none"><li>1. Exercises / practices during the workshop</li><li>2. Survey form feedback from the participants</li></ol>
Participants	Selected participants aged 20-25, mostly pre-university students, undergraduates, and fresh graduates, this is because this age of people are suitable to start planning their wealth to prevent financial problems in the future.
Effective Programs	Participants will gain knowledge on how to manage their cash flow and understand several financial instruments available to manage their wealth.

## Develop

Because of Covid-19 constraints, conducting a workshop on an online platform is suitable to prevent crowd of people in a confined space. Several platforms that can be used are Cisco Webex, Zoom, and Google Meet, as these platforms are cost-free.

Using online platform, conducting financial modelling Excel class is suitable as it can share financial knowledge and make personal budget sheets. In addition, the participants are also exposed to several Excel functions like amortization tables.

#### Deliver

The way to deliver the program are mainly these two ways:

1. Communication: Interaction between facilitators and participants to explain the concepts using online platform.
2. Visual aids: Visual aids act as medium to assist facilitators in explaining concepts. In addition, the participants can do hands-on practice exercises using Excel.

## Procedure

STEP	EXPLANATION
1	Each facilitator will approach 2-3 participants in this workshop. The workshop will be done either face-to-face or using an online platform (such as Zoom or Cisco Webex).
2	In the first part, participants will be asked to list their income and expenses. Then, respective pie charts will be generated to display their expenditure behaviour using Excel. In this section, they will customize their expenses with 50/30/20 rule of thumb to get an idea of how to manage their cash flow to prevent a deficit in their cash flow.
3	In the second part, participants will be exposed to several financial modelling functions. Participants will be calculated interest, future value, and present value manually using Excel built-in function. Then, an amortisation table is constructed using the values that have been calculated. This section aims to let participants know how the instrument works and also learn about Excel functions.
4	Participants will be given some exercises to test their understanding. The questions and answers section will be conducted in the following section.
5	Finally, feedback on the workshop will be given by participants.

## Reflection

Generally, reflection is to determine the learning outcomes from the facilitators' team and the participants regarding the service-learning. However, the executor side has been highlighted due to experiences in working any program in the future. Initially, this service-learning provides a feeling of vacuity and hard to implement to all the executors. In the meantime, the only perception is stressed since this program needed to be conducted in a pandemic situation where physical contact is avoided. However, during the ongoing process, such as discussing the available program, finding the information, and constructing teaching material, the facilitators have slowly generated some ideas and gained confidence to run the program. Therefore, this service-learning is an opportunity for the facilitators to learn how to conduct a program since most facilitators are first-timers in conducting a program.

In terms of participants, below are sets of questions in order to verify their reflection.

### Questions asked before the activity:

1. Do you think budgeting is important? Why?
2. What is your plan after graduation? (different content, different question)

- How to pay back PTPTN?
  - Any credit card application?
  - Any desire to purchase a car?
  - Any desire to purchase a house?
3. Do you understand your needs and the solution to solve it?

**Feedback Questions:**

1. Do you think this workshop is useful?
2. Will you suggest to your friends on this workshop?
3. Kindly state which part of the workshop can be improved.

In a nutshell, it gave an opportunity to look forward to the outcome that can be obtained during and after the program. Apart from that, objectives of the workshop have been achieved, and the participants understand, implement, and share the knowledge from the workshop.

## Appendix A

### List of Credit Card Offers in 2020 (Best Credit Cards in Malaysia, 2020)

CitiBank - Citi Cash Back Mastercard	Free gift: Lenovo M7 Tablet, Sony Speaker, Xiaomi Band 5 (8 times spend required) Minimum income: RM 3000 No annual fees (3 years) Interest rate 15% Cashback up to 10%
Standard Chartered - Standard Chartered JustOne Platinum MasterCard	Tefal Cooker, Xiaomi Band 5 Minimum income: RM 3000 No annual fees (1 year) Interest rate 15% Cashback up to 15%
HSBC - HSBC Amanah MPower Platinum Credit Card-i	RM250 Lazada e-Voucher Minimum income: RM 3000 Annual fees RM240 primary card Interest rate 15% Cashback up to 8%
UOB - UOB YOLO Visa	RM50 Lazada e-Voucher Minimum income: RM 3000 Annual fees (1 year - primary, 2 year - supplement) Interest rate 15% Cashback up to 5%
RHB - RHB Rewards Motion Code Credit Card	RM600 Lazada e-Voucher (only first 50) Minimum income: RM 2000 Annual fees RM200 primary card Interest rate 15% Rewards

**List of Car Loans** (*Best Car Loans in Malaysia, 2020*)

Hong Leong Bank Car Loan	3.24%, RM598
CIMB Bank Car Loan	2.85%, RM582
Bank Muamalat Car Loan	2.95%, RM586
Bank Islam Car Loan	3.00%, RM588
Am Bank Car Loan	3.05%, RM590

**List of House Loans** (*Best Housing Loans, 2020*)

Bank of China Housing Loan	2.85%
HSBC HomeSmart	4.5%
Maybank HouzKEY	4.25%
Ambank Home Link	3.25%
Ambank Home Loan	3.25%



## Appendix B

### Handout Template

#### ***Part 1: 'Understanding Cash Flow'***

The purpose of this section is to identify participant's income and expenditure behaviour. At the beginning, the participant is required to list down their income sources and expenses. Next, a pie chart will be generated to determine the rule of thumb as suggested by (Warren & Tyagi, 2005). The participant will then create a budget to manage their cash flow to make sure they have savings.

#### ***Part 2: 'Understanding Time Value of Money'***

##### a. Interest

The purpose of this section is to introduce the power of compound interest in saving and investment. This section will introduce the manual calculation and using Excel function.

Principle	
Interest Rate	

	Simple		Compound	
Year	Principle	Interest	Principle	Interest
0				
1				
2				
3				

##### b. Future Value (FV), Present Value (PV)

The purpose of this section is to introduce the concept of time value of money. This section will introduce the manual calculation and Excel function.

The following table shows how manual calculation works.

rate	
n	
fv	
pv	

The following table shows how the Excel function works.

fv	=-FV()
pv	=-PV()

### c. Amortisation table

The purpose of this section is to introduce how the bank determines the monthly instalment. This section will introduce the amortisation table for PTPTN, credit card, car, and housing loan.

Amount	
Rate	
Year	
pmt	

Year	pmt	interest	Principal pmt	Principal balance
0				
1				
2				
3				

## Activity 2: Plan Your Financial Future!

### Introduction

Service-learning is a teaching approach where students apply their academic knowledge and skills to communities in order to meet specific learning goals tied to the community's real-life needs (*Goals and Benefits*, 2015). Students can achieve their academic and citizenship goals besides developing leadership and interpersonal skills through participation in service-learning projects. Instead, the community can take advantage of the university's presence and establishment in their locality. In our case, this service-learning aims to provide a platform for local community engagement and self-excellence development for students who are taking SQQM3024 Mathematics Modelling. The key concern of this service-learning program will be focused on awareness in the context of financial literacy.

Individuals today are very much responsible for their personal finances. With life expectancies rising, pension and social welfare systems strained, the decision-making of financial products such as mortgages, credit cards, mutual funds, and annuities significantly impacted individual well-being. This decision-making, in turn, is affected by the extent of an individual's knowledge of finance, or in other words, financial literacy. The level of financial literacy is highlighted as a concern among Malaysians based on a survey by Bank Negara Malaysia's Financial Capability and Inclusion Demand Side Survey 2018 (FCI Survey 2018) ("Malaysia National Strategy for Financial Literacy 2019-2023," 2019). Another survey from the same source found that financial education is essential in improving financial behaviour. Therefore, financial literacy is defined not only as the knowledge and understanding of financial concepts and risks but also as the skills, motivation, and confidence to apply such knowledge and understanding in order to make effective financial decisions (Lusardi, 2019).

With Malaysians now facing considerable financial challenges due to the COVID-19 pandemic, it is an opportunity to equip individuals to make informed financial decisions with the right tools and knowledge through financial literacy education. According to the FCI Survey 2018, 1 in 3 Malaysians have low confidence in their financial knowledge and planning, 52% have difficulty raising sufficient emergency funds to cope with unexpected events, and almost half of Malaysians are not confident in having enough savings for retirement. Therefore, this service-learning project was implemented through virtual discussion and a role-playing game to carry out the financial literacy education.

## Program Objectives

The objectives of the program are listed below:

- To inculcate practical financial knowledge and skills as a foundation for financially (or soon-to-be) responsible participants.
- To provide timely and relevant financial education information and tools to participants through different delivery channels and touchpoints.
- To educate participants on long-term financial planning, such as loan commitments.

## Component of Program

### Participants Background

This project is suitable for participants, promptly fresh graduates from secondary school, whether they are going to further their studies or straight into the working world, university students, or even adults who will be financially committed. This is because the programs are designed to suit long-term planning with certain financial terms and techniques implemented that require cognitive skills.

Nevertheless, the targeted participants are among University Utara Malaysia (UUM) students, especially those in their third or final years of study. This is because the students will manage their money by themselves when they start to work at an entry-level. Therefore, it is necessary to introduce the topic of financial literacy, such as understanding the value of good budgeting and a well-organized future financial plan.

### Program Duration

The program took us around one and a half hours where 40 minutes allocated for Activity 1: Budgeting Learning with 20 minutes for each session. Then, 30 minutes were assigned for Activity 2: The Uber Game, and the remaining of the time was taken for the introduction, wrap up session, as well as questions and answers session.

## Framework of Program

### Explore

The explore section is similar to a brainstorming activity. This exploration step using 5W1H analysis.

### **Why?**

Students believe that life after completing higher education is enjoyable and stress-free since they are no longer bound by heavy loads of homework, assignments, and examinations. They

know nothing that their newfound independence is actually a thin layer of haze trying to conceal one of life's greatest responsibilities, namely financial management.

In addition, there are various financial issues that usually hear about in the context of fresh graduates nowadays. The five common problems faced by the students are buying their first home, first car, PTPTN repayments, credit card misuse, and debt repayment management (5 *Financial Problems Young Working Adults Face in Malaysia, 2019*).

In the long-term, having strong personal financial control and appropriate debt settlement allocations will go a long way. Therefore, it is necessary to have future financial planning as well as cultivate good habits and practices so things may not be too bad after all.

### **What?**

Many free tools are available online to assist in the youth's personal budgeting. For example, Excel templates on personal finance statement, loan amortization tables, simple loan calculators, and so on. In addition, many other financial-themed games such as "Shady Sam", "Spent", "The Uber Game", and "Magic Money" have been developed to increase youth awareness in money management and financial decision-making.

### **Where?**

Due to the COVID-19 outbreak in Malaysia, taking the place online rather than in a physical location will be the most suitable and safest for both program organizers and participants. As for the platform, a few popular online communication tools such as Zoom, Google Meet, and Cisco Webex are in the list of consideration.

## **When?**

The possible date to implement the programs is as below:

- 21/11/2020, 22/11/2020, 28/11/2020, or 29/11/2020. These listed dates are weekends of November, which could be convenient for the targeted audiences to participate themselves in the program.
- Any weekdays in between of 30/11/2020 to 5/12/2020 since this period is the mid-semester break of most of the Malaysian universities.

## **Who?**

Graduates are defined as individuals aged 15 years and above with the highest certificate obtained from either universities, colleges, polytechnics, recognized organization or equivalent, where duration of the study is at least two years. Graduates are classified into two categories, namely diploma and degree graduates (Razak, 2021).

Hence, the potential participants will be graduates in different range of age. For example, aged 15 to 20 are polytechnics graduates, aged 20 to 25 are college or universities bachelor's degree graduates, and aged 25 to 35 are Master's or PhD graduates which considered as young adults, informed young adults, and informed adults, respectively.

## **How?**

Due to the limitation of costs, free online resources are chosen as program's materials. Besides, modified templates are applied to the targeted participants' needs. Moreover, related financial-themed online game is determined to be played together during the program to bring some fun to the participants.

### *Discover*

Financial literacy is very broad where it can be categorized into spending and saving, credit and debt, employment, investing, risk management, and decision-making. Each category has its own knowledge and skills. Our program "Plan Your Financial Future!" is under the spending and saving category but covers spending mainly. This is the limitation of the project. Saving is common sense that everyone knows, yet the main problem is the unintentional overspending that leads to no surplus money for saving. Hence, the activities implemented in this project are sufficient to educate people to spend brilliantly in future, although it consists of two activities due to time constraints.

## Develop

The service-learning activities are developed by applying remote learning using Microsoft Excel and online games. The program is separated into two sessions. The first session of this program, Activity 1: Budgeting with Excel. There are three sheets created in Excel where the first sheet is PTPTN repayment, followed by the vehicle's hire-purchase loan, and lastly the home mortgage. The templates are provided to the participants.

Furthermore, Activity 2: "The Uber Game" is conducted in the second session of the program. All participants have to involve in this game by acting as an Uber drivers to make high earnings and right decisions in financing. Participants are able to explore money management through this game. Description and instruction are given before the game start.

Proper guidance are given throughout the activities and the instruction is as below.

### Instruction of Activity

#### **Activity 1: Budgeting Learning (Session 1)**

**Step 1:** Participants are required to download the template of Excel from the google drive link given.

**Step 2:** The participants are guided to create an amortization table in Excel to calculate the payments that they need to pay back to PTPTN monthly according to the period that they wish to pay off or depend on their monthly salary coverage.

#### **Activity 2: The Uber Game**

**Step 1:** The participants are being informed that they are played as a full-time Uber drivers in the game with two kids and trying to pay the mortgage and earn as much as possible.

**Step 2:** The participants are distributed into three breakout sessions. Each facilitator is handled three participants in a group in order to play the game together.

### **Activity 1: Budgeting Learning (Session 2)**

**Step 1:** The participants are taught to calculate the monthly instalments for the car that they wish to buy after they paid for the initial payment. After obtaining the value of the monthly instalments, they are able to make a great choice with a better budget.

**Step 2:** This step is almost similar to step 2 in session 1 where the amortization table is also applied, but it is created for calculating the monthly payments to pay off for the house loan based on the price of the house and their financial ability. The amortization table can assist the participants in deciding whether they are affordable for the house they prefer otherwise, they can find another house with a lower price and recalculate the monthly payments and the period to offset and make the right decision.

#### **Deliver**

The program is implemented involving all of the facilitators. The understanding of participants will be measured by the facilitators themselves using devised rubrics. In addition, the engagement and successfulness of the program will be measured by obtaining feedback from participants. A Google form will be created to receive feedback and its link will be given to the participants at the end of the program.

#### **1. Microsoft Excel**

Microsoft Excel is chosen because of almost everyone have it, and abled to create a budget without purchasing other budgeting software. Besides, Excel gives flexibility to keep track on the information as we desire. Excel can be used to:

- Show the calculation of PTPTN repayments,
- Illustrate the calculation of vehicle's hire-purchase loan such as down payment, total loan and interest, and monthly instalments amount,
- Display the formulation of amortization table for home mortgage.



The template of each section are shown as follow:

i. PTPTN repayments

<u>PTPTN repayments</u>				
Loan amount :				
Interest rate :				
Payment per year :				
Tenure: _____ years				
Payment	Periodic Paymen	Payment On	Principal Repaid	Outstanding Principal
0	0	0	0	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
Year 1				
13				
14				

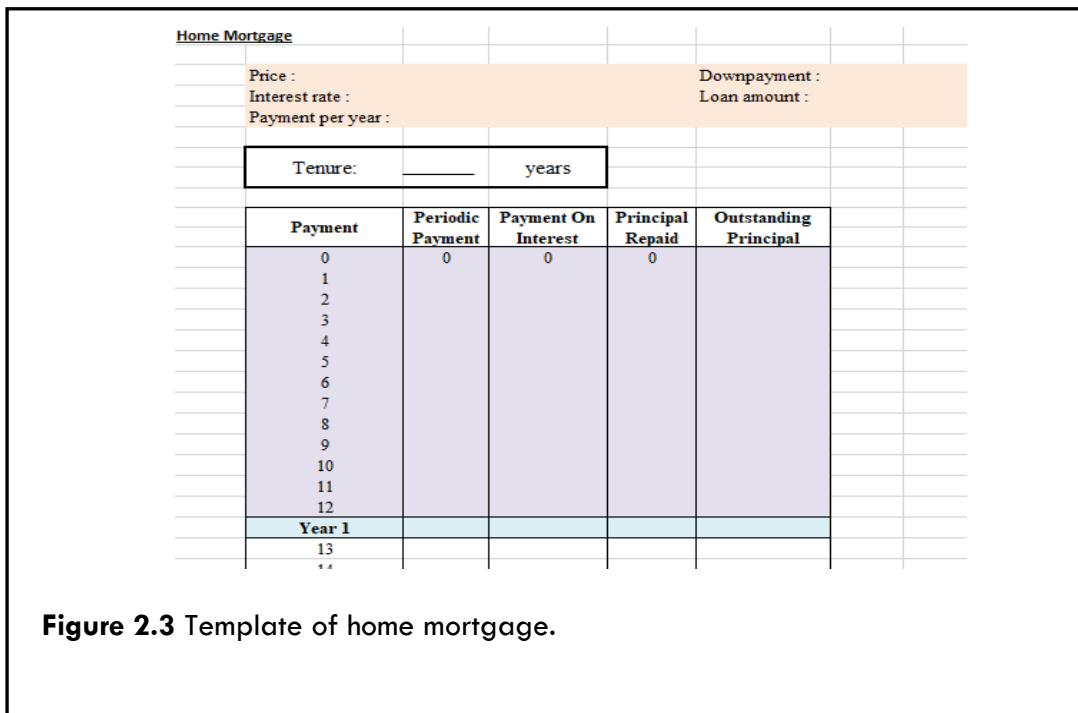
**Figure 2.1** Template of PTPTN repayments.

ii. Vehicle's hire purchase loan

<u>Vehicle's hire-purchase loan</u>		
Price :	Financing :	Temure
Interest rate :	Downpayment :	(years) :
Downpayment Amount :		
Loan Amount :		
Total Interest :		
Monthly Interest :		
Monthly Installment :		

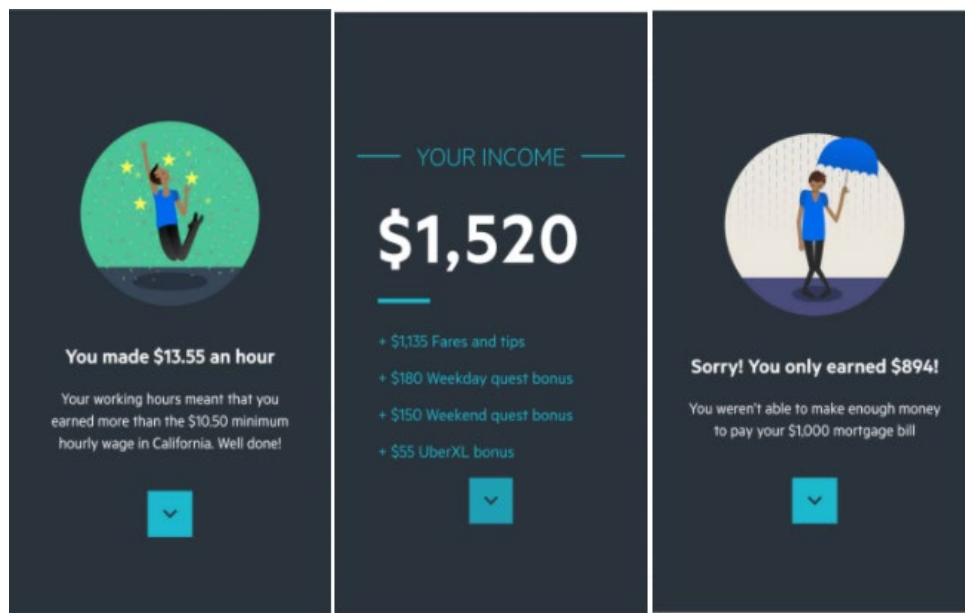
**Figure 2.2** Template of vehicle's hire purchase loan.

iii. Home mortgage



2. The Uber Game

This is an online interactive game created by the Financial Times, referred to the website <https://ig.ft.com/uber-game/>. This game challenges users to face those in the gig economy by playing the role as a full-time Uber driver in the game, with two kids, who is trying to pay the mortgage. Some of the analysis or outcomes of the game is shown as Figure 2.4.



**Figure 2.4** Example of Uber Game.

### Reflection

The program was successfully organized and ran smoothly according to the tentative program. It is a good practice and habit to plan for the future, especially about money. Financial planning is capable of securing your mental issue if you have adequate savings for your future. On the contrary, without financial planning or saving perhaps can be caused difficulty and insecure when facing any emergency problems. Therefore, in order to avoid undesired things happening and fulfil the needs, a right long-term planning is required by participating in this program.

### Activity 3:

#### Proposed Saving vs. Real-Time Saving

##### Introduction

One of the most important things that can do to live a safe, prosperous, and secure life is to have necessary personal financial skills. Life goals can be achieved by handling and managing resources and finances. According to Investopedia by Kenton (2022), personal finance is a concept that includes handling finances as well as saving and spending. This includes budgeting, banking, taxes, loans, investments, retirement scheduling, and tax and estate planning. Therefore, once we grasp the meaning of the fundamentals of personal economics and personal finance, we can build the basis for wealth.

Personal finance offers aspirations or dreams with guidance. Personal finance allows us to understand better our ambitions in terms of whether we need these goals to be reached and how they affect other facets of our lives and finances. Besides, we are motivated by personal finance to handle inflation. We are mindful of the expense of different products and events. We will prepare the budget differently. Next, we're disciplined against money by personal finance. We should not unnecessarily invest. On our savings and spending, we keep a balance. Last, we prepare for the future by controlling our investments. We are willing to gain insight into the future of our finances. A reasonable estimate, maybe ten years down the road, about how much money we will have. To accomplish our goals, we will be conscious of the returns.

It's a vital part of personal finance to have investments as a financial shield for ourselves. Before moving through other more difficult personal finance elements, such as borrowing, property management, and building our own company, it is the first and simplest step to building our capital. Nowadays, university students are unsure about where to start in terms of saving money. Thus, it's essential to determine the amount of money we should save by the age of 30s.

This does not speak for everyone, but in terms of making choices from the viewpoint of our job, finances, partnerships, and even life, we can typically be more reasonable and firmer by this age of 30s. Therefore, at this age, setting a target (financially) will help us clarify the action plans that we need to make to reach it by our 30s. Although the amount of savings a person can have by the age of 30 due to varying beginning incomes and years of service is difficult to calculate. Therefore, come up with a calculation that will help measure the savings we need to have every month to be financially bulletproof.

Every unexpected occurrence may arise, which will cause a financial shock that will enable us to save enough money. When the old one is spoiled, these accidents could involve a medical condition, a vehicle breakdown, retrenchment, or a new door for our home. Because of the fearlessness against ambiguity and the repercussions that arise with it, Malaysians appear to take this matter lightly. Last year, as the economy experienced a dip in Ringgit and oil prices, we saw several retrenchment announcements made by several firms.

In its Financial Capability and Inclusion Study 2015, Bank Negara Malaysia (BNM) found that only 6% of salaried Malaysians can support themselves for more than six months if their primary source of income is lost (Sipalan, 2015). Although getting a six-month investment cushion might be challenging, we'll have to start somewhere. The unpredictable future and the worst that comes with it must be prepared for us.

It is never too late to start investing money on our own. Instead of depending on only one source of money, we should try to find a part-time or self-employed career to earn extra cash whilst we're at it. We do not forget the loans we're going to spend on our savings, no matter how much we save at the end of the day.

#### Program Objectives

The objectives of the program are listed below:

- To compare the purposed saving with the real-time saving of university students at their respective ages.
- To predict an expected monthly salary for university students to hit their target savings at age 30.
- To create awareness about the importance of savings at a young age by guiding them the way of saving.

#### Component of Program

##### Participants Background

To carry out the activity, the facilitators would need a few randomly picked participants to participate in the service-learning activity. As been stated in the objective of the activity is to create awareness among university students about the importance of savings. Thus, the age range of the targeted group of participants would be from 18 to 25 years old.

Besides, the scope of participants that has been focused on precisely are comes from different fields of study. Those selected students would be part of the group member's relations, friends, or family members. To balance the workload among the group members, the members would

have to pick three participants each, which makes 12 participants in total for the interview session. Besides, we will balance the number of female and male participants, and measure the different perspectives of both genders towards future savings issue.

Choosing university students instead of high school students is because the facilitators believe that university students are at their stable and suitable level in acknowledging the reality part of life. University students tend to have a maturity mentality on how significant future savings is, and are capable of starting to save up slowly little by little compared to high school students who might not understand enough the importance of savings.

**Program Duration**

The entire interview session is estimated to run in about 60 to 100 minutes. Below are the drafted tentative of our activity:

Estimation of Time	Slot	Activity
First 15 minutes of the session (5 minutes per participant)	Ice Breaking Session	<ul style="list-style-type: none"> <li>• Introduction of the activity’s title and concept.</li> <li>• Introduce the objectives of the activity.</li> <li>• Participants would have to introduce themselves, field of study, and their perception towards “personal savings”.</li> </ul>

<p>The following 10 minutes of the session (2-3 minutes per participant)</p>	<p>Discussion about Participants Financial Status &amp; Expected Savings</p>	<ul style="list-style-type: none"> <li>• The facilitators will conduct a short discussion session with the participants.</li> <li>• The discussion is about their current financial status.</li> <li>• Participants need to share their expected amount of savings when they are in their 30s.</li> </ul>
<p>The following 45 minutes of the session (15 minutes per participant)</p>	<p>Savings Estimation via Excel Worksheet</p>	<ul style="list-style-type: none"> <li>• Facilitators will expose to the participants on how to estimate an expected salary and through that how to sort their salary accordingly for the savings.</li> <li>• The activity will be conducted using Excel as it will be easier to show how the calculations and the proportion of salary being distributed evenly.</li> </ul>
<p>The following 20 minutes of the session</p>	<p>Implementing Awareness to Participants on the Importance of Savings</p>	<ul style="list-style-type: none"> <li>• Based on the calculation made earlier on their expected salary and distribution of savings, participants will have an idea of how necessary it is to start having savings at a young age.</li> <li>• Participants will have an idea of how to fix an expected salary for their future job.</li> </ul>
<p>The remaining 10 minutes of the session (2-3 minutes per participant)</p>	<p>Reflection on the Activity by Participants</p>	<ul style="list-style-type: none"> <li>• Each participant will be provided with a feedback form prepared by the facilitators.</li> <li>• Participants are allowed to give all positive and negative feedback on how they felt throughout the entire activity period.</li> <li>• This reflection session would measure the effectiveness of the activity.</li> </ul>
<p><b>Total Estimation Time: 100 minutes</b></p>		

## Framework of Program

### Explore

In the first stage of the activity, the facilitators explored the respondents to participate in this activity. The pre-requirement of the participants is the participants currently should be university students. The targeted number of participants will be 12 persons. Besides, the number of female and male participants will be balanced. The activity is conducted through interview. The facilitators make an appointment with the participants through an online platform which is the Google Meet. Then, participants are separated into four groups where each of us has 3 participants together in the same interview session. At the beginning of the interview, the icebreaking session is conducted first in order to help the participants and the organizer get to know each other. In addition, the facilitators briefly introduce the title, “Purposed Saving vs Real-Time Saving”, and three objectives to the participants to give them an idea about this activity.

### Discover

During the interview, the financial status of the participants are discovered. The financial status such as current savings, income, and loans of the participants are been asked during the interview. Besides, the first objective of this activity is achieved, and compared the actual real-time saving of the participants with the minimum saving proposed by Employee Provident Fund (EPF), as shown in the Figure 3.1. Besides, the targeted savings for the participants when they have reached their aged of 30 can be discovered and referring to the proposed minimum saving at age 30.



<b>BASIC SAVING AT AGE 55 – RM240,000</b>			
<b>AGE</b>	<b>BASIC SAVINGS (RM)</b>	<b>AGE</b>	<b>BASIC SAVINGS (RM)</b>
18	2,000	37	68,000
19	4,000	38	74,000
20	6,000	39	80,000
21	8,000	40	86,000
22	10,000	41	93,000
23	13,000	42	101,000
24	15,000	43	108,000
25	18,000	44	116,000
26	21,000	45	125,000
27	24,000	46	134,000
28	27,000	47	144,000
29	31,000	48	154,000
30	35,000	49	164,000
31	39,000	50	175,000
32	43,000	51	187,000
33	47,000	52	199,000
34	52,000	53	212,000
35	57,000	54	226,000
36	62,000	55	240,000

**Figure 3.1** Source: EPF.

### Develop

After discovering the financial status and target savings of the participants, the facilitators developed an Excel worksheet which helped the participants to calculate the savings needed every month in order to hit the target saving when they have reached their age of 30, yet depending on their current financial situation status. However, the minimum saving proposed by EPF only considers the minimum required amount of money to retire. In Excel worksheet, the amount of cash needed for emergencies and specific purposes such as travelling, paying for the property, a car down payment, or funding for the wedding are also considered. Furthermore, the developed Excel worksheet will help to calculate the expected monthly salary for the participants depending on the savings needed for every month. This will lead to the achievement of the second objective of the activity which is to predict an expected salary for a university student to hit their target saving at age 30. The formula used to calculate the expected monthly salary is shown below.

<b>Formula of Savings = [23% (Retirement) + 10% (Emergency) + 10% (Specific Purposes)] X Monthly Gross Income (Before Deduction of EPF)</b>
---

### Deliver

At the final stage of the activity, several ways for saving their money are delivered, such as allocating this amount of money in a unit trust or fixed deposit to generate some interest over time. By providing this information to the participants, the last objective of this activity is to create awareness about the importance of savings at a young age by guiding them the way of saving is achieved. Last but not least, a Google Form link for the participants to fill out their feedback about this activity. The feedback of the 12 participants will be gathered and concluded as a reflection on this activity.

### Activity Materials

The materials needed are:

- Laptop
- Microsoft Excel
- Google Meet
- Google Form

## Reflection

Service-learning is ones that combine learning goals and community services in ways that can enhance both student growth and the common good. Service-learning will ask students to apply course content to community-based activities. This gives students experiential opportunities to learn in real-world contexts and develop skills of community engagement. Service-learning will prove that all of the theories that students learned in classes are useful to others as not all people have the same knowledge. From sharing sessions with the community, students will also strengthen their understanding of their knowledge because they will study and understand the topic well before sharing it with the community.

From this service-learning, we also know that not many of us put aside money for savings. The majority of us, when we can get our salary, will pay all the bills, loans, and other expenses without putting aside some of our salary for savings. Besides, they are not prepared for any emergency cases as they do not focus on long-term goals. The majority of us are just thinking of surviving the day and not making any emergency funds. On another side, we know that participants' knowledge about saving has increased and more or less, they are more aware of the importance of savings and will start to plan their expenses wisely.

At the end of the sharing session, we will also share the Google form with our participants to fill in their feedback or any improvement about this service-learning program.

Appendix A

SERVICE LEARNING ACTIVITY					
PROPOSED SAVING VS. REAL-TIME SAVING					
	Poor				Excellent
	1	2	3	4	5
1) How would you rate your knowledge about saving before this session?					
2) How would you rate your knowledge about saving after this session?					
4) The session was structured and well organised.					
5) The facilitator has guide me a lot during the session.					
6) The sharing session was clear and understandable.					
7) Overall, how entertaining was this event?					
8) After the event, how inspired do you feel?					
9) Would you recommend this sharing session to your friend?					
10) Suggestions on improving service learning activity:					

## Activity 4:

### Come On Young Entrepreneur. Let Success!

#### Introduction

The key aim of this service-learning is to provide a forum for local community engagement for students in the Mathematics Modelling class. Accordingly, self-excellence seeks to broaden their attempts to build student awareness and allows students who are willing to attain multiple milestones in different ways.

Financial education is essential to our life, especially for young adults, because it can provide basic tools for budgeting and saving so that expenses and debt can be controlled in the future. Furthermore, financial literacy is also to know how we do money works; it is also vital to grasp the common financial literacy principles: financial goals, budgeting, and investments. In addition, financial literacy has shown that almost all individuals, especially entrepreneurs, mostly do not understand the concept of compound interest, and sometimes a few consumers do not actively search to find financial information before making financial decisions.

From this service-learning activity, we decided to do financial literacy related to people doing small business or joining a business. For the first activity is about how an entrepreneur tracks their sales to get their target profit. Next, in the second activity, concentrate on how they can save money from their income. Finally, for the last activity, to see the best investment they can invest their money in other than saving it into savings accounts only. It is never too late to start investing money on our own. Instead of depending on one source of money, we should try to find a part-time or self-employed career to earn extra cash whilst we're at it. We do not forget the loans we're going to spend on our savings, no matter how much we save at the end of the day. For this service-learning, Microsoft Excel is the tool to be used.

#### Program Objectives

The objectives of the program are listed below:

- The participants are able to use Microsoft Excel in order to track their business sales.
- The participants are able to save their income from their sale of property using Microsoft Excel.
- The participants are able to determine the best and more profitable platform to invest in order to save their income using Microsoft Excel.

## Component of Program

### Participants Background

Two sections are created, which is Section A and Section B. In Section A, there are 3 participants. While in Section B, there are 9 participants. Therefore, all the participants that join this program are 12 participants. Most of them are aged from 19-22 years old. All of the participants have their own experience in business, agent, and dropship.

### Program Duration

The program was conducted in Dec 5<sup>th</sup>, 2020. The time slot session is divided into two, which are in the morning and evening. All the activities programs are divided into three: know how to track sales, save money, and fixed deposits from Bank Rakyat vs Amanah Saham Bumiputera (ASB). Each activity is conducted about 15 minutes per sharing session. The scheduled activities are about one-hour sharing session using Zoom web meeting.

## Framework of Program

### Explore

Before developing activities for the program, most participants are struggling with their finances and making an initiative to get stable financial support by doing a business. However, most participants do not track their sales and how many profits they make in a month. In addition, they even do not know how to do budgeting and make proper savings, and definitely do not have any knowledge about investments. Thus, the facilitators have decided to do some searching to help them track their sales, make a budget, and have proper savings. The facilitators also saw the potential of investing instead of saving, which benefited the participants. Alternatively, before investing in investment, several types of investments from banks and other investment institutions such as difference of fixed deposit and ASB must be explored. Since the facilitators have to explored the background of our targeted participants before participating in the program. The most important about the participants is that they must have a business, either become a dropship/agent or own a business before joining the program.

Then, the suggested dates for this program, such as 3-12-2020, 4-12-2020, 5-12-2020, and 6-12-2020 using Zoom Cloud meeting. At first, the facilitators decided to separate all 12 participants into 4 groups of one facilitator, but due to time constraints and most of the participants and facilitators having other commitments, the facilitators decided to do it in 2 meetings but on the same date, 5-12-2020. The first session was conducted from 10:00 a.m. to 11:00 a.m. with 3 participants and one facilitator. Then, for the second session, from 9:00 p.m. to 10:00 p.m. representing 9 participants and 3 facilitators.

### Discover

After doing some research, the facilitators found that tracking sales is very important. They benefited the business people or the participants to track their stocks' sold, the costs, and the profit gained. The participants also acknowledge whether their sales are rising or not by comparing them with the previous month. Nevertheless, the facilitators also discovered that most participants do not know their priority in using their money or before spending their money, so they can save from the excess income. The priority depended on their fixed expenses, emergency funds, repay debt, and variable expenses. After participants recognize their expenses, it is easy for them to create budgeting from the income they have. This is to ensure that they spend the money wisely without exceeding the limit. Moreover, the facilitators noticed that most participants did not know that fixed deposit investment worked, yet most knew about the progression of investment in ASB. As mentioned in objective 3, the facilitators want participants to generate higher income by comparing fixed deposits and ASB investments. One of them could give higher profit instead of putting money in the savings account.

### Develop

#### **Activity 1: How to track your sales?**

Firstly, participants were provided with Activity 1 template in Microsoft Excel right before the program began.

In Activity 1, the facilitators give a briefing regarding the items that should have been included in tracking sales, such as item costs, item price, total costs, total price, etc., to get the profit at the end. The briefing was conducted by showing a PowerPoint to the participants. After Activity 1 was briefly explained to the participants, facilitators were moved to the Activity 1 template in Microsoft Excel by explaining the formula and the calculation to track sales while showing the steps. From that, participants could find the profit from their sales and how many they had already sold their products.

#### **Activity 2: Save your money**

For Activity 2, participants were also provided with the template of Activity 2, which is Personal Cash Flow Statement in Microsoft Excel as well to make things easier for participants.

The facilitators explained the difference between needs and want using PowerPoint, and then moved on to describe income, expenses, assets, and liabilities to the participants. In the following slide, facilitators clarified to the participants the immediate prior expenses in order to get the excess savings in the pyramid diagram.

Next, facilitators explained the Personal Cash Flow Statement in Microsoft Excel by describing the items involved (e.g. *cash inflows*) and showing steps to get net cash flows.

### **Activity 3: Fixed Deposits (Bank Rakyat) vs Amanah Saham Bumiputera (ASB)**

The participants are provided with Bank Rakyat fixed deposits template and ASB template in Microsoft Excel.

Right after Activity 2 was briefly explained to the participants, facilitators showed features, eligibility, and minimum initial investments for each Bank Rakyat Term Deposits Account-I and ASB through PowerPoint. Therefore, it enables participants to understand and capture how both investments worked.

Then, the facilitators clarified the Bank Rakyat Term Deposits Account-I calculation worked in Microsoft Excel, which gives the number of investments after maturity according to deposit period, initial investment amount, and interest rate.

Afterwards, facilitators continued explaining and showing steps in the calculation process of ASB, which is more complicated than fixed deposits. Anyhow, ASB consists of dividends and bonuses instead of interest rates as in fixed deposits. Obviously, participants are able to choose which investments would give them higher profit from the investments.

#### **Deliver**

Finally, after the facilitators managed to develop the structure of the activities for the program, the facilitators were ready to deliver to the participants. Since this program was held through Zoom online meeting, two different sources are applied, which are PowerPoint and Microsoft Excel. During the day of the program, facilitators started the presentation with an introduction to financial literacy, and then presented each activity to give out information to the participants. This is to build their awareness and gain new knowledge from joining the program in order to manage their money and sales.

Based on Activity 1, the facilitators showed examples of tracking sales. Therefore, the participants can track their sales by knowing how many stocks they already sold, and at the end of the month, they can also see how much profit they obtained from their selling. For Activity 2, facilitators give examples and guide the participants to create a budget in Personal Cash Flow Statement to track their expenses and save the excess money. For Activity 3, where facilitators conducted this activity by showing the initial amount of investments for a year for each fixed deposit and ASB. Then, participants can compare which investments would give a higher profit to them.



Last but not least, a Google Form link for the participants to fill out the form, so the facilitators would know their feedback about the activity. The feedback from 12 participants is gathered and concluded in a reflection of this activity.

### **Materials for Activities**

This program was conducted using a few materials: laptop or/and mobile phone, good internet access, Zoom online meeting application, Microsoft PowerPoint, Microsoft Excel, and Google Form. For Microsoft PowerPoint, the facilitators used as our guideline in presenting the activity, while in Microsoft Excel, facilitators created two different files where one file represents a blank template without calculation for participants, and another one is for a guideline with full calculation and example. Lastly, Google Form is used to distribute to the participants after the program was finished up in order to get feedback from them.

### **Reflection**

The program was successfully organized and achieved all the objectives. As a consequence, to be a successful young entrepreneur needs some practice, strategic, and planning in financial management. This is to avoid misuse of the profit, unplanned purchase of mega assets, and lack of emergency funds in the future. For example, most entrepreneurs are facing difficulty during the Covid-19 pandemic. Therefore, it is always a good exposure and knowledge for young entrepreneurs to understand and apply tools such as tracking sales, making budget, and having proper saving using Excel.

## Activity 5: Invest Earlier Avoid Regrets

### Introduction

20 to 25 years old is the age when some of us are still finishing our diploma or degree. However, some of us are fresh graduates who are seeking a job or have just started working. Therefore, with the average starting wage ranging from RM2, 300 to RM2, 500 for fresh graduates in Malaysia, along with the increasing cost of living, it is no surprise that there is a massive percentage of Gen Y who are now stuck in a rat race. Yet this does not mean that millennials will be condemned to live indefinitely under challenging conditions. Many of them are aware of the need to invest in order to grow their net worth. However, few realise that they are held back from investment by their lack of budgeting and saving plans.

Investments are a great option to consider if you want to maximise your hard-earned income. It cannot be achieved without a proper budget analysis to ensure that a reasonable amount of cash is allocated for investment. There are a few things you need to do first before you start investing. Firstly, keeping a budget is important to avoid falling into a financial pit hole. Next, you have to initiate automated savings on a monthly basis. Then, you will be able to monitor your cash flow and determine the amount of money you need to start your investment after ensuring you have a detailed budget and sufficient savings.

Correspondingly, there are two types of investment modes: active mode and passive mode. Active mode is an investment that requires regular monitoring and reviewing, such as stock market. Stock market is one of the valuable investment vehicles because stocks offer a substantially better return. However, a higher return comes with higher risk. Hence, specific individuals, especially Gen Y, might be hesitant to invest in the stock market because of the fear of possible significant losses due to the stock market's uncertainty and riskiness.

Passive mode investment is an investment that does not require regular monitoring, such as a fixed deposit, because what Gen Y have as an advantage is time. Hence, fixed deposit is suitable for them because compounding interest will only favour them if they invest early. However, several passive mode investment vehicles in the market are suitable for Gen Y, especially the students or fresh graduates who are risk-averse. Therefore, we wanted to show how fixed deposit can affect your account's end balance at a different starting age.

A fixed deposit in Malaysia, generally referred to as FD, is a bank financial instrument where you deposit money for a fixed period. Unlike investing in stock markets or the commodity

market, a fixed deposit guarantees money back at the end of the tenure. The money you have invested can only be withdrawn upon maturity, which suggests that you are not advised to withdraw your investment until the set duration has ended without being penalised with a fee. All you have to do is wait until your returns hit maturity. Next, to compare with other investment vehicles such as stocks and unit trusts, which may require a few days to cash out, an FD can be cashed out anytime upon you presenting yourself to the bank with valid documentation. To reap the best returns, wait for your invested money to mature.

Hence, if you let the interest accumulate throughout the duration instead of withdrawing it every month, you get a higher amount in the end. Nowadays, opening a fixed deposit account is so convenient that most online banking portals now provide this facility that you can easily take advantage of.

### Program Objectives

After completing this program, participants should be able to:

- Understand the concept and types of investments.
- Understand what fixed deposits in general are.
- Know how to calculate the future value of the investment on fixed deposits.
- Develop awareness that investing at an early age will benefit you more in the future.

### Component of Program

#### Participants Background

A total of 12 participants and 4 facilitators will be involved in this program. The facilitators chose the participants aged around 20 to 25 years old as this is an ideal age for an individual to start preparing for the financial planning. This age duration is the category between young adults and informed young adults. They are the ones who has access to personal finances knowledge and access to mentorship. Besides, they are aware of opportunities versus threats and smart money management. So, the participants consist of students and fresh graduates who just started working. Hence, they may ask, “why do I have to go through all this trouble to manage personal finances as compared to my peers that seem to be doing the exact opposite such as café-hopping, buying branded clothes, and travelling all over the world?”.

Therefore, facilitators are going to guide them that compound interest grows and collects interests from the initial capital over time. This means if they start early as students or fresh graduates, it will provide a huge advantage and opportunities for compound interest to grow their personal finance quickly. However, it is not compulsory for them to have a basic

knowledge in financial literacy and investments, as long as they are willing to learn from the program.

#### Program Duration

This program is held in the middle of November and takes one day only. The facilitators assumed that the whole activities that were conducted were going to take at least one hour and thirty minutes to finish.

#### Framework of Program

##### Explore

Facilitators decided to hold a program that mainly focuses on investment because they want to encourage the participants to start investing early. In addition, they also wanted to create awareness among the participants that investing early will give more benefits than investing at a later age.

Firstly, facilitators are using “Cisco Webex” to gather all the participants. The, facilitators started with ice-breaking session and a short Q&A to test their understanding of investment. After that, facilitators introduced them to the concept of investment because young Malaysians nowadays are not exposed to investment. This is because most of young Malaysians are not investing due to few reasons such as lack of knowledge in financial literacy, lack of funds, and fear of risk. Furthermore, a general lack of knowledge is one of the first challenges why many of the participants are not investing. Basically, no one told them about investing or personal finance in high school or even in college. Next, a shortage of financial resources is the second challenge many younger Malaysians have to face. They strive to do a lot of things, like saving for weddings, owning houses, and paying off student loans. Therefore, these will take up a lot of extra cash flow that would go towards investment goals. Lastly, most young Malaysians are a risk-averse. They also tend to be more cautious and cynical about investing, especially in the stock market.

Hence, in this section, we will focus on explaining our first objective, which is to understand the concept of investments.

##### Discover

In this section, facilitators are going to continue explaining the first objective, which is to understand the type of investment. Later, facilitators used Microsoft PowerPoint to explain each type of investment in Malaysia. Then, facilitators introduced the type of investment in Malaysia that includes active and passive investment. Facilitators also showed a few YouTube videos about investments to add their knowledge. During this section, facilitators also make a

Q&A session so that the participants can ask if they are having a problem understanding each type of investment.

After finishing watching the YouTube and Q&A session, facilitators utilized “Kahoot” to make a quiz for the participants. This “Kahoot” quiz will help the participants test their understanding of the investment concept discussed in the explore section and the type of investment.

At the end of this section, first objective is achieved, and the participants capable to decide which investment is suitable for them with their financial conditions.

### Develop

Based on the reasons why young Malaysians are not investing that have been discussed in the explore section. Facilitators introduced the participants with one of the suitable investment vehicles for them. Therefore, they will not have any reason anymore not to start investing.

In this section, Microsoft PowerPoint is used to explain to the participants about one of the investment vehicles in the market that is suitable for those with limited capital, such as the students and fresh graduates. They can invest with an initial amount as low as RM1000 in the investment vehicle which is the fixed deposit.

Out of all the investment options, fixed deposits are stable with a relatively lower risk. However, the returns are low, especially for shorter durations. Returns are typically better with larger amounts and longer durations hence the reasons why they need to start early and let the money grow over time. Due to its stability, students and fresh graduates are highly recommended to start with a fixed deposit and explore other higher-risk options once they are comfortable investing.

Therefore, facilitators are going to explain in general about the fixed deposit. This includes several questions such as, “How does a fixed deposit account work?”, “How to get higher interest from your FD?”, “What happens if you terminate your FD before the maturity date?”, and “Are your FD deposits safe?”. The facilitators also explained in general about fixed deposit that each bank offered so that they know that different banks have different interest rates before showing them how to calculate the fixed deposit of banks that choose in the deliver section. At the end of this section, second objective is achieved.

### Deliver

This section explained in detail about fixed deposits. The facilitators give the participants an exposure of different situations and calculate the return they will get when they deposit an amount of money into the account. Facilitators choose three banks that provide fixed deposit services: Maybank Berhad, CIMB Bank, and Bank Islam Berhad. The reason why the facilitators

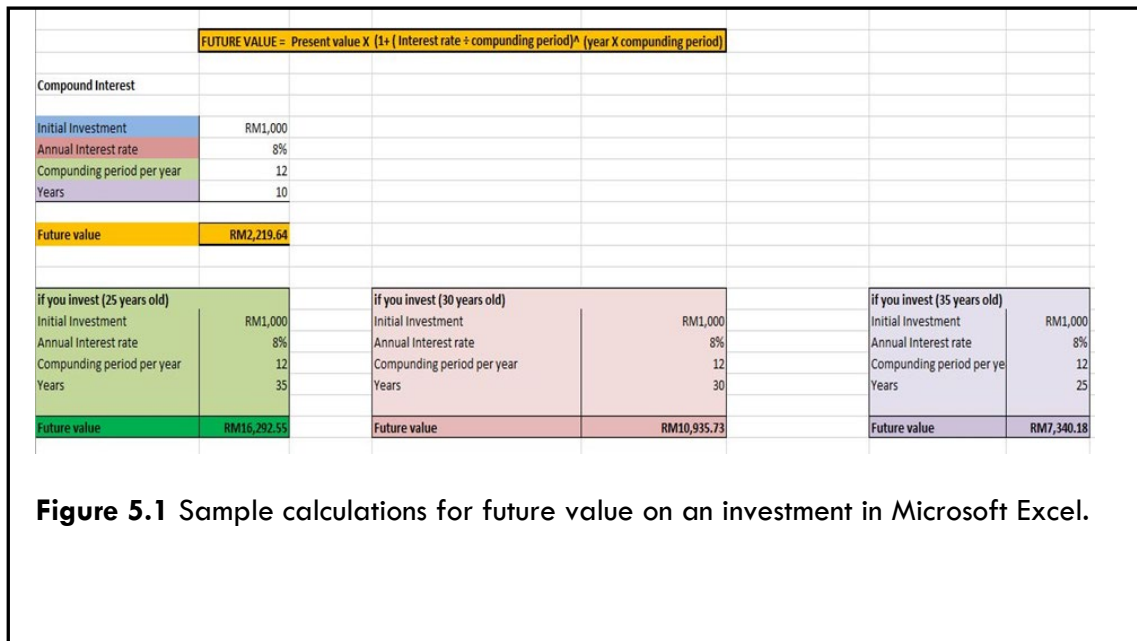
choose these banks is because there are very common to everyone in Malaysia. In this section, also introduced the three products of the banks given. The product detail is shown in Table 5.1. Furthermore, the participants learned the differences when they invest at an early age and older age later. The facilitators also showed them how that early investment can gain more return to them in the future.

All participants are taught in generally how to calculate their return when they invest a certain amount of money using Excel application. The picture of an example of calculation in Excel is in shown as Figure 5.1. In Excel application, facilitators showed the different return they get when they invest at a certain age with certain amount of money. In addition, they also can differ on which bank with higher or lower interest rate gives them a higher income return. This will lead them to choose which product they most prefer to invest their money in and which one is the most value for their money.

Next, the facilitators are going to break the participants into four breakout sessions. Each facilitator will be assigned to one breakout session that consist of three participants. The session is effective in approaching each of the participants personally. In these sessions, facilitators tested each participant’s understanding by giving them a situation in calculate the return. There are three sets of questions that each session will perform the calculation based on the situation given. Lastly, the original platform for a sharing session to share their experience and some question and answer.

**TABLE 5.1 FIXED DEPOSIT PRODUCT WITH INTEREST RATES FOR THREE DIFFERENT BANKS**

<b>Bank</b>	<b>Fixed Deposit Product</b>	<b>Interest Rate Up to 12 Months</b>
Maybank Berhad	Fixed Deposit Account	1.85%
CIMB Bank	Fixed Return Income Account-I (Maturity Returns)	2.45%
Bank Islam Berhad	Term Deposit-I Tawarruq	1.85%



**Figure 5.1** Sample calculations for future value on an investment in Microsoft Excel.

### Material for Activity

To join this program, each person will need a laptop and a smartphone. Facilitators used “Cisco Webex” to hold the program, and it is more convenient to use a laptop to join the meeting. Besides, the laptop is needed for Microsoft Excel to achieve objectives three and four. Next, the smartphone is used for “Kahoot” in achieving objectives one and two. Last but not least, a good and stable internet connection is needed to ensure the activity runs smoothly.

### Reflection

It is important to have an “emergency fund” as we might not know what will happen in future. This fund can act as our immediate money when there comes a time that we need to use the money for an unexpected incident. Thus, it is important to at least consider knowledge in financial literacy as it will help us to have good preparations in our financial planning. In this program, we exposed them to the basics of investment because we first need to ensure that the people know general information on investments. Facilitators also introduce fixed deposits as an example to guide the participants how to calculate the future value of its investment. Besides, the facilitators wanted to show the comparison when started investing at two different ages. The earlier you start to invest, the higher the ending balance of your account will be. Thus, facilitators wanted to create awareness about investments and encourage people to invest early to avoid regrets in the future. As conclusion, all objectives will be achieved at the end of the program.

## Activity 6: Invest Now, Prosper Later

### Introduction

People strongly believe in the stigma of saving to become rich. But the truth is, investing can make you rich. Therefore, young people should invest. The knowledge of understanding investment in different markets should be learnt from a young age. Stable jobs are essential, but knowledge of understanding investments is even more critical. The simple fundamental principle of investing is buying at a low price but selling it at a higher price. However, some constraints should be taken into consideration when we invest, such as volatility and economic downturn. Moreover, investments will definitely come along with the willingness to take the risk.

With the coronavirus epidemic intensifying, the markets have entered a period of extraordinary volatility. Stock-market futures plunged so dramatically that the exchanges shut down, as did equity exchanges. COVID-19, the disease caused by the coronavirus, is killing thousands of people and infecting what might end up being millions. Businesses are shuttering and failing; quarantines and travel bans are coming into place; companies are slashing earnings estimates and economists are slashing growth forecasts; millions of workers see their wages evaporate; governments are bungling their economic and public-health responses to the illness. The markets reflect that. The market might crash harder as the mortality count worsens and governments enact strict measures to contain the virus. However, the best advice to overcome these limitations is not to flee to safety. It is not to sell stocks and buy bonds, move into cash and gold, or think about alternatives such as cryptocurrencies. It makes intuitive sense to sell when stocks are dropping and buy when things turn around. When times as such occurs, it's best to stay quiet and do nothing.

Investing on a longer time horizon means not worrying about buying low and selling high. The studies demonstrate that buying and holding assets for the long term is an excellent strategy for average folks saving for retirement, even though for everybody: rich, poor, old, young, risk-averse, and risk-hungry.

Service-learning is an educational approach that combines learning objective with community service. Through this platform, the participants will be able to understand common financial literacy, such as financial goals and investments. Participants of young working adults aged 25 to 35 will be preferred in this conduct because they have a vivid cash flow to be monitored and invested. This is where their personal finance management skills would be applied. It is



best to keep track of one's monthly budget to contribute to investment religiously. Besides, compounding returns also help in reaching financial goals. Next, choosing the right stock plays a crucial role when investing. One of the golden rules of investing is to have a well and properly diversified portfolio. To do that, choosing the correct stock for an individual is the most crucial step, which can help strengthen overall portfolio and reduce overall risk. One of the ways in choosing the right stock is by calculating the intrinsic value of the stock. Lastly, we believe the participants have some exposure to the importance of investing, choosing company stocks by calculating their intrinsic value, and calculating compounding returns of companies.

### Program Objectives

The objectives of the program are listed below:

- Participants will be exposed to basic financial knowledge on managing an investment at a young age.
- Participants will be guided on how to conduct compound returns using Microsoft Excel.
- Participants will be keeping a record of their cash flow budgeting.
- Participants will be able to compute the company's intrinsic value of stock when investing.
- Participants will be able to practise decision-making in buying a stock after the computation of the result.

### Component of Program

#### Discussion

1. Before starting to invest, facilitators should ensure that the participants have enough cash for investments. In order to put aside some savings from income, participants should be exposed to Warren and Tyagi (2005) popularized the so-called "50/20/30 budget rule" (sometimes labelled "50-30-20") in her book, *All Your Worth: The Ultimate Lifetime Money Plan*.

- 50 percent of the earnings after tax should be used towards necessities.
- 30 percent of the money should be spent on luxuries or wants / desires.
- 20 percent money should be saved and invested towards your financial goals.

The 50/30/20 is a broad guideline and needed to be supplemented by a good financial plan customised to the income levels and goals of an individual investor. The 50-20-30 (or 50-30-20) budget rule is an intuitive and simple plan to help people reach their financial goals.

Hence, a cash flow statement is created to enable participants to manage their finance smartly. The list of income and expenses of participants are listed down in a table, then a graph is generated to enable participants to see a clearer picture of their financial management.

Example:

Revenue	RM	RM
Salary	4000	
Part time business	1200	
		4200
(Expenses)		
Electricity	180	
Water bill	50	
		230
Savings/ Investments		3970

2. Financial analysts build models to estimate what they consider to be the intrinsic value\* of a company's stock outside its perceived market price. The difference between market price and an analyst's estimated intrinsic value becomes a measure of investing opportunity.

**Why Intrinsic Value Matters?**

If intrinsic value of a security is higher or lower than its current market price, allowing them to categorize it as "overvalued" or "undervalued." Typically, when calculating a stock's intrinsic value, investors can determine an appropriate margin of safety\*, where the market price is below the estimated intrinsic value.

Example 1: Suppose in one year you find a company that you believe has strong fundamentals coupled with excellent cash flow opportunities. That year it trades at \$10 per share, and after figuring out its DCF, you realize that its intrinsic value is closer to \$15 per share: a bargain of \$5. Assuming you have a margin of safety of about, you would purchase this stock at the \$10 value. If its intrinsic value drops by \$3 a year later, you are still saving at least \$2 from your initial DCF value and have ample room to sell if the share price drops with it.

Example 2: If an investor calculates an intrinsic value of \$300 for a stock, and it is trading on the market for \$250, it will be perceived as a bargain price and a good investment.

They identify under-priced stocks. It does provide a clearer indication of a company's [financial health](#), which is vital when picking stocks, you intend on holding for the long-term. Moreover, picking stocks with market prices below their intrinsic value (overvalued) can also help in saving money when building a portfolio. One of the two methods of calculate intrinsic value of a stock is [The Dividend Discount Model](#)\* and [The Discounted Cash flow Model](#)\*. Participants are able to calculate value of stock from Top Glove Corporation (MYX: 7113), a company listed on [Bursa Malaysia](#)\*.

### **Compounding Returns**

3. Investing early gives you the most time possible to let your money grow through the process of [compounding returns](#). This is why it is so important to start investing early. The compounded returns provide enormous value the longer you invest. Participants will be able to calculating basic compounding interest to generate increase their savings.

#### [Framework of Program](#)

##### [Explore](#)

This program guides and explains how to manage investment and exposes participants to how investment is important for young people in their future. Participants will know how to make the right decision to act on the investment. For the first stage of the activity, facilitators need to explore the spending behaviour of respondents participating in this activity. This program is conducted personally by facilitators through online platform to adhere to the Standard Operating Procedure (SOP) due to pandemic Covid-19. The targeted participants would be young working adults from the range of age 25 to 35. The program is conducted using cash flow statements and Excel workshop throughout the time.

##### [Discover](#)

This program is resourced based on YouTube, Google, and past subject papers. The program has a limited number of participants, 12 people, divided into a group of 3. This is because each facilitator has a personal touch with participants and able to give them 10% attention during the program. In order to evaluate the effectiveness of the program, participants are given an activity to do on their own and compare the result with facilitators' example. At the end of the program, participants will be able to gain more knowledge on how to manage an investment by calculating before making the right decision to invest in a stock.

##### [Develop](#)

Due to the pandemic, the best way to conduct this service-learning is through free online platform. Face-to-face can be conducted as well based on facilitators' and participants'

convenience. However, its best encouraged to have this program conducted physically to be effectively presented.

#### Deliver

This program will be delivered to participants by discussion via online platform. Interaction between facilitators and the participants is either physical or online, as mentioned earlier. Besides, free software will also be implemented. Microsoft Excel is used to help and assist facilitators for a better and clearer explanation to participants. Participants will also understand better when it's come to hands-on.

**Program Outline**

SERVICE LEARNING MATHS MODELLING

**START**

12 participants will be divided into a group of 3 and is asked if they have basic foundation of investment

YES	NO
Proceed to ask about what type of investment they ventured in and personal finance management	Briefing will be given to participant about what investment,

Participant will list out their monthly income and expenses & display their expenditure behaviour by generating line chart. A method is applied to allocate savings from their income.

Several financial modelling will be shown and taught on how to calculate for the prediction of the price of company's stock. participant also will be guided to calculate the compound interest using Excel.

Participants will do this task by their own to test their understanding and practice some excel function that had been shown. All the question and answer for the task will provided.

**END OF TASK**

**INVEST NOW, PROSPER LATER**

**CASHFLOW BUDGETING & INVESTMENT ANALYSIS**

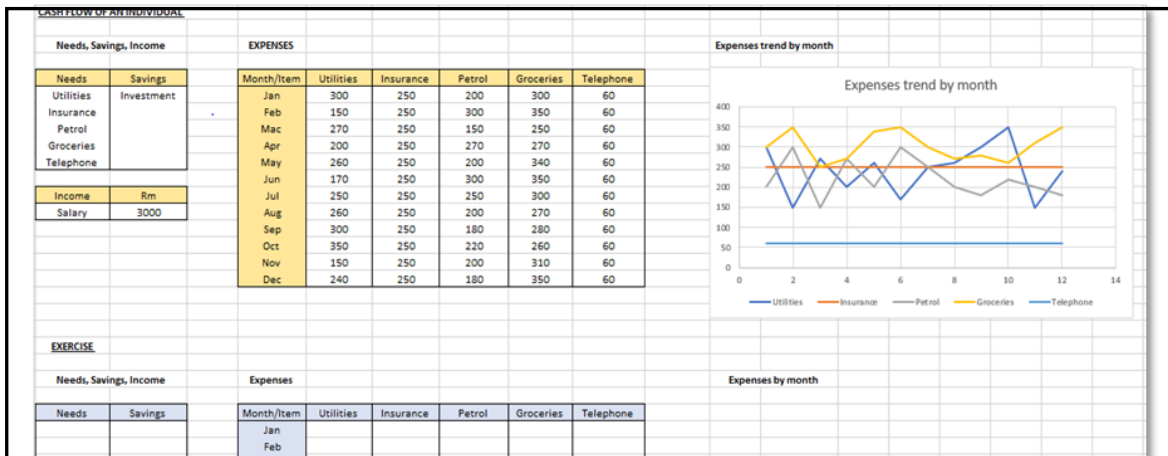
1. Participants of age 25-35 are welcomed (preferably) and interested learners
2. Programme lasts for 2 hours
3. Material needed : a laptop, financial literacy aids (exhibit B), FTSE data ( exhibit A)
4. 4 facilitators assigned

**| 12 PM - 2 PM | ONLINE / PHYSICAL**

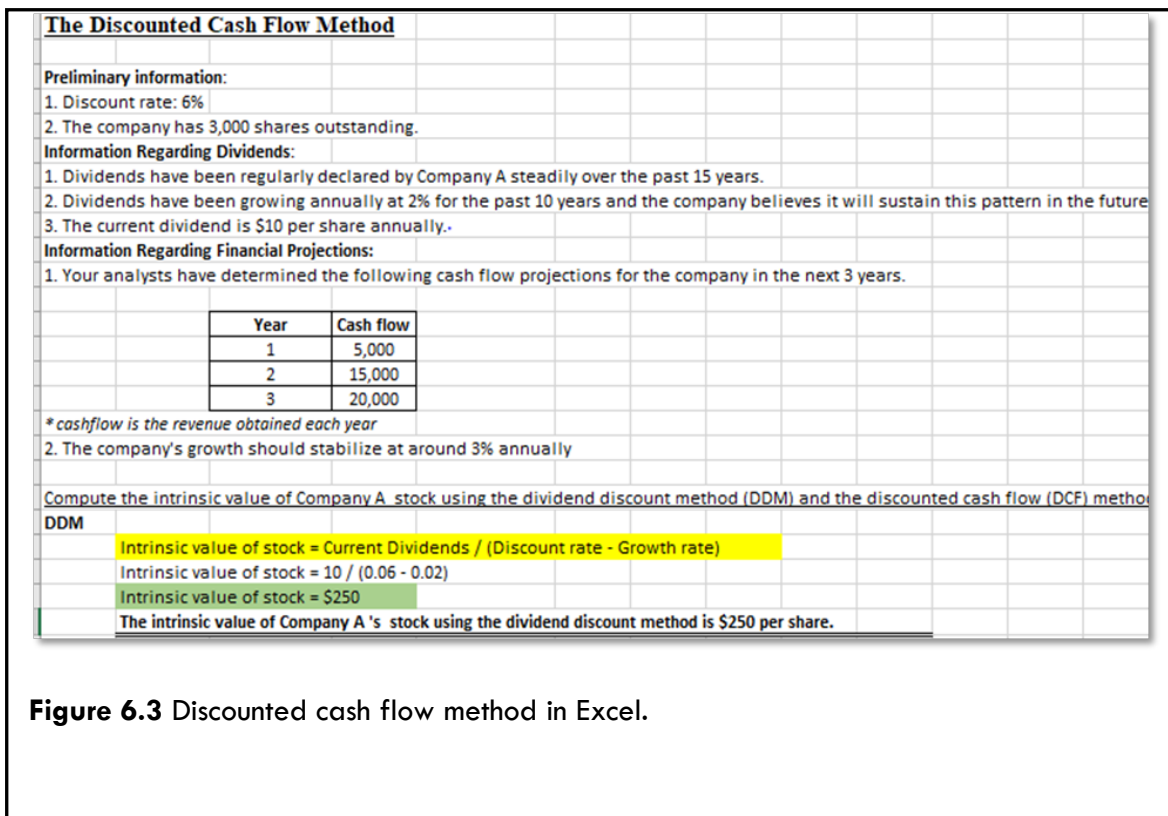
SERVICE LEARNING MATHS MODELLING

**Figure 6.1** Example slides of the program.

## Excel worksheet



**Figure 6.2** Cash flow statement in Excel.



**Figure 6.3** Discounted cash flow method in Excel.

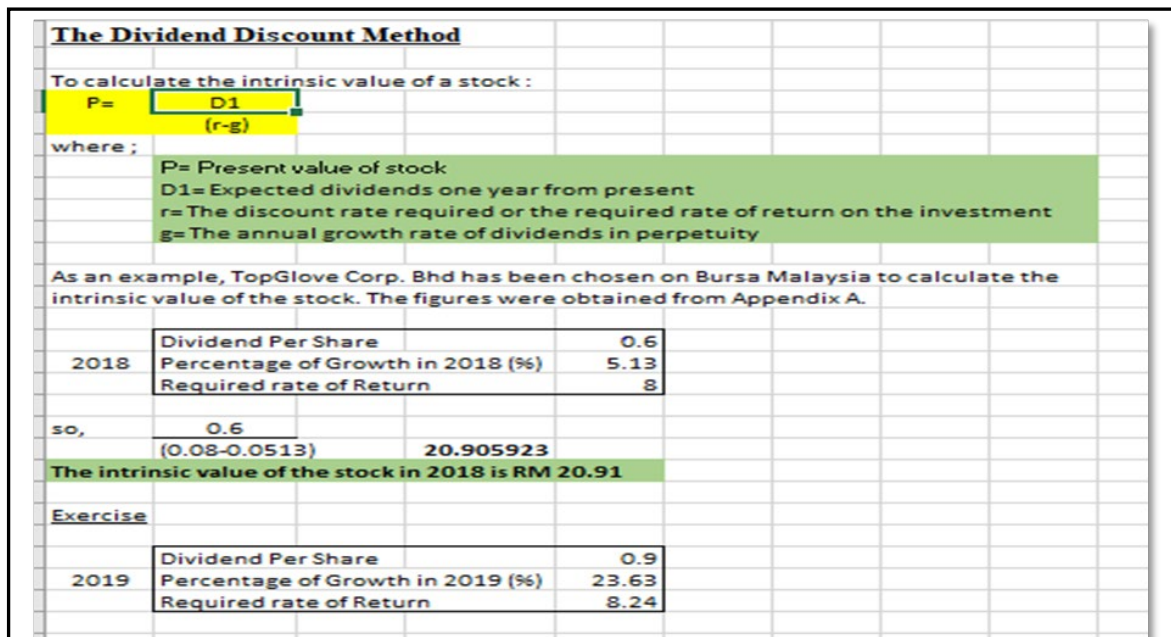


Figure 6.4 Dividend discount method in Excel.

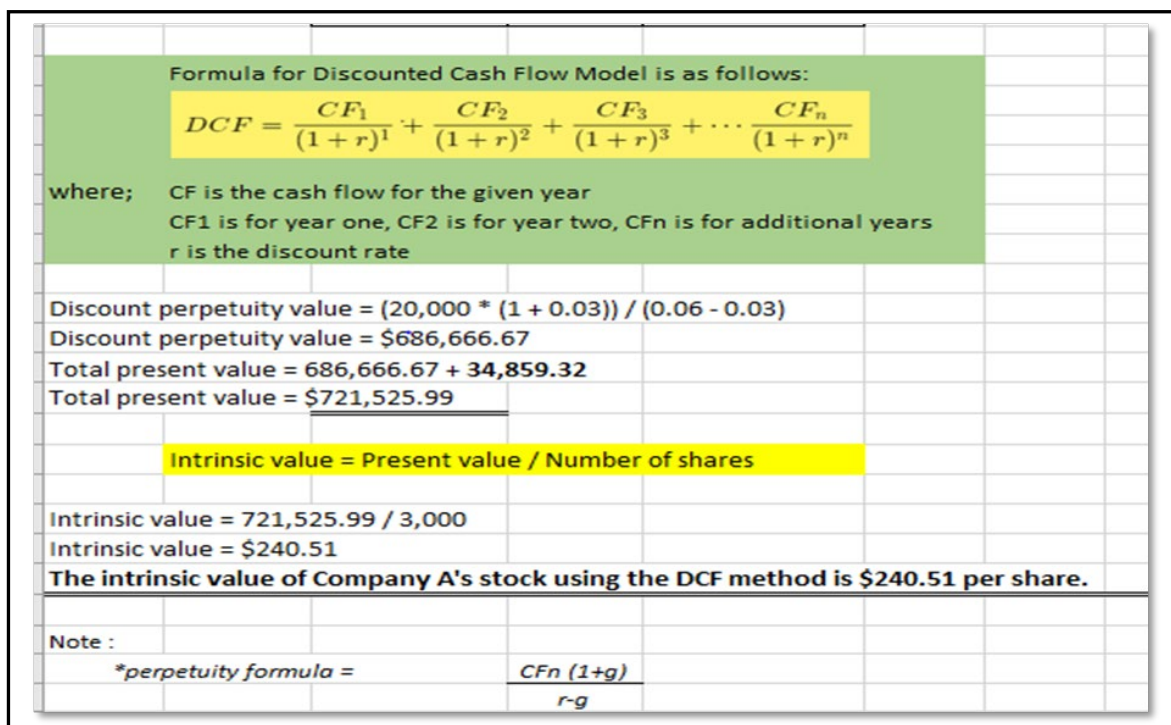
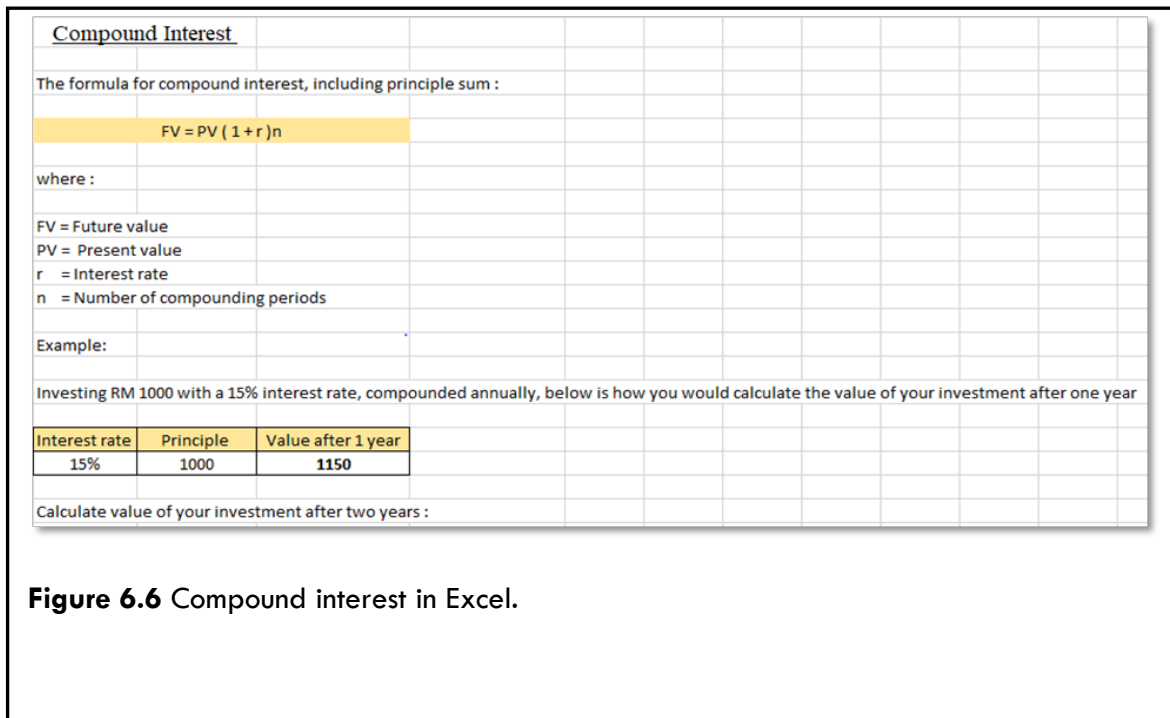


Figure 6.5 Dividend discount method in Excel.



**Figure 6.6** Compound interest in Excel.

**Reflection**

Service-learning is one of the best alternatives for a student to explore the concept and theories that have learnt by applying it with real problem situations. However, many obstructions and confusion had arisen in coming up with an easy way to teach a constructive idea. Investment is a large network, but it all starts somewhere small. It is a good way for a student to understand money management and practice a good spending habits. Also, students are able to share their knowledge with the community. Besides, service-learning also helps students to improve their soft skills. By conducting this project and practising what the facilitators have studied in this service-learning, facilitators hope to make some changes in people’s life by investing the money into good use. Lastly, facilitators also hope that participants will be able to use Microsoft Excel as it’s an essential skill in the job industry.



Here are a few basic inquiries made before the conduct of this workshop:

- a. Are you interested in investing?

**If yes**, have you tried investing or have you used digital investing options?

Why are you investing?

First, decide why you are investing.

What is your goal?

How much do you need to invest to reach that goal?

- b. What type of returns are you looking for?

Next, decide what type of returns you need to meet your goal.

Are those returns realistic?

Or do you need to invest more to reach your goal?

- c. How much risk are you willing to take?

Finally, figure out your risk tolerance.

How willing are you to accept big losses temporarily to get better gains over the long term?

If you would end up selling your investments when they decrease drastically, you have a lower risk tolerance than someone that wouldn't.

## INVEST NOW, PROSPER LATER



Service-learning is an educational approach that combines learning objective with community service. Through this platform, our participants will be able to understand common financial literacy such as financial goals and investments.

Young working adults? Then this is for you!! Grab your chance to become rich wisely using no shortcuts or scams. This is where their personal finance management skills would be applied.

### WHAT WILL YOU LEARN?

1. Cash flow budgeting.

Keep track of your expenses so that you'll be able to live a healthy financial lifestyle. I'm sure you don't want to be declared bankrupt one day!

2. Invest into a trusted stock exchange.

Nothing comes easy in life, but learning helps to improve life! Learn to calculate the intrinsic value of a stock by not becoming a financial expert. 2 easy ways to help you so don't worry we got you 😊 Remember, overvalued is always better than undervalued.

3. Compounding returns

Want to see your money growing with a minimum saving? Come and learn what we have in store for you!

### WHAT ARE YOU WAITING FOR? JOIN NOW!

Facilitators: Diviyah, Nisa, Idham, Danial

## **Glossary**

### **Definition of financial terms**

#### **Intrinsic value**

Refers to some fundamental, objective value contained in an object, asset, or financial contract. If the market price is below that value it may be a good buy, and if above a good sale. When evaluating stocks, there are several methods for arriving at a fair assessment of a share's intrinsic value.

#### **Margin of safety**

A principle of investing in which an investor only purchases securities when their market price is significantly below their intrinsic value. In other words, when the market price of a security is significantly below your estimation of its intrinsic value, the difference is the margin of safety.

#### **Perpetuity**

A type of annuity that lasts forever. The stream of cash flows continues for an infinite amount of time with no fixed maturity date.

#### **The dividend discount method**

The purpose of DCF analysis is to estimate the money an investor would receive from an investment, adjusted for the time value of money a DCF analysis is appropriate in any situation where a person is paying money in the present with expectations of receiving more money in the future

#### **The discounted cash flow method**

DCF analysis finds the present value of expected future cash flows using a discount rate. Investors can use the concept of the present value of money to determine whether future cash flows of an investment or project are equal to or greater than the value of the initial investment. If the value calculated through DCF is higher than the current cost of the investment, the opportunity should be considered.

In order to conduct a DCF analysis, an investor must make estimates about future cash flow, appropriate discount rate for the DCF model, which will vary depending on the project or investment under consideration, such as the company or investor's risk profile and the conditions of the capital markets.

## **Bursa Malaysia**

Stock exchange of Malaysia.

Exhibit A

The financial statement of Top Glove Corporation Bhd.

Year	2020	2021	2022
Estimated Sales	=3, 247.45× (1+14.04%) =RM3, 703.39	=3, 247.59× (1+14.04%) =RM3, 703.55	=3, 703.69× (1+14.04%) =RM4, 223.69
Estimated Profit	=RM3, 703.39 x 10.65% =RM394.41	= RM3, 703.55x 10.65% =RM394.43	= RM4, 223.69x 10.65% =RM449.82
Estimated EPS	$\frac{RM394.41}{238}$ = 1.6572	$\frac{RM394.43}{238} = 1.6573$	$\frac{RM449.82}{238} = 1.8900$
Estimated P/E Ratio (constant)	13.24		
Estimated Dividend Per Share	0.16 × 30.34% = 0.0485	0.20 × 30.34% = 0.0607	0.20 × 30.34% = 0.0607
Estimated Stock Price	1.6572 × 13.24 = 21.941	1.6573 × 13.24 = 21.943	1.8900 × 13.24 = 25.023

Exhibit B

FTSE Top Glove Corp. Bhd.

	Current Quarter Ended	Corresponding Quarter Ended	Current Year To Date	Corresponding Year To Date
	31/Aug/2020	31/Aug/2019	31/Aug/2020	31/Aug/2019
	RM'000	RM'000	RM'000	RM'000
Revenue	3,109,116	1,188,974	7,236,317	4,801,139
Operating expenses	(1,500,112)	(1,100,017)	(4,932,440)	(4,339,573)
Other operating income	18,634	7,635	52,009	44,297
<b>Profit from operations</b>	<b>1,627,638</b>	<b>96,592</b>	<b>2,355,886</b>	<b>505,863</b>
Finance costs	(2,990)	(21,041)	(53,058)	(79,601)
Share of result of associate	(1,094)	(1,551)	(1,428)	(2,674)
<b>Profit before tax</b>	<b>1,623,554</b>	<b>74,000</b>	<b>2,301,400</b>	<b>423,588</b>
Taxation	(297,541)	10	(397,585)	(56,042)
<b>Profit net of tax</b>	<b>1,326,013</b>	<b>74,010</b>	<b>1,903,815</b>	<b>367,546</b>
<b>Profit attributable to:</b>				
Owners of the parent	1,291,995	74,166	1,866,999	364,678
Holders of Perpetual Sukuk	25,605	0	25,605	0
Non controlling interests	8,413	(156)	11,211	2,868
	<b>1,326,013</b>	<b>74,010</b>	<b>1,903,815</b>	<b>367,546</b>
<b>Earnings per share attributable to owners of the parent, sen:</b>				
Basic	15.95	0.97*	23.31	4.76*
Diluted	15.82	0.95*	23.18	4.74*

### Investment Highlights

We maintain our **BUY** call on Top Glove with a higher **fair value of RM11.85** vs. RM10.42 previously. We have increased Top Glove's FY18F, FY19F and FY20F earnings by 2%, 5% and 8% respectively to account for higher earnings growth resulting from the group's expansion plans. Our fair value for Top Glove is based on DCF, which has a discount rate of 6.4% and a terminal growth rate of 2.5%. At our fair value of RM11.85/share, the implied CY19F P/E is 26x.

### Key Statistics

<b>P/E Ratio</b>	35.69	<b>1 Year Return</b>	449.83%
<b>PEGY Ratio</b>	--	<b>30 Day Avg Volume</b>	42,523,990
<b>Shares Outstanding</b>	8.14B	<b>EPS</b>	0.24
<b>Price to Book Ratio</b>	10.0972	<b>Dividend</b>	1.40%
<b>Price to Sales Ratio</b>	8.4746	<b>Last Dividend Reported</b>	0.085

Earnings Announcement for Period Ending Q1/2020: 12/17/2020

## Activity 7: Financial Literacy for College Students

### Introduction

The current economic predicament has debunked the adequacy of financial literacy in Malaysia. The lack of personal financial education has led to a rise in consumer credit debt, especially among university students who tend to have a significant credit card debt. One way to tackle this issue is through financial literacy education.

According to Investopedia by Kenton (2022), financial literacy is the ability to understand and apply various financial skills effectively, including personal financial management, budgeting, and investment. Besides, financial literacy also involves an understanding of savings accounts, credit cards, and how to avoid getting into debt. In short, financial literacy will solve the problems faced by ordinary people when managing expenses, owning a home, financing children's education, and earning a retirement income. The lack of these skills is considered financial illiteracy.

Lastly, financial literacy is crucial in allowing individuals to have adequate income after retirement while preventing debt that can lead to bankruptcy. Current patterns find it essential for people to understand primitive finance better as they make more financial decisions in their retirement accounts. Any rise in financial literacy would profoundly affect individuals and their desire to have money for their future.

### Program Objectives

The objectives of the program are listed below:

- To tackle the inadequacy of financial literacy among university students in Malaysia.
- To highlight the do's and don'ts in making financial decisions.
- To highlight possible plans for the students to go through in the future.
- Channel knowledge about financial literacy into interactive games.
- Help participants calculate loans with specific variables and improve participants' skills in Excel.

### Component of Program

#### Participants Background

In Malaysia, topics on personal finance are still considered minimal. If there are programs or activities on it, they were never addressed directly to young consumers, specifically those in

between aged 21 to 24 years: the need to improve financial literacy of individuals, specifically students at university level, so they can have positive cash management attitudes before they enter the job market. This positive attitude will help them practice proper personal financial management as working adults. The program participants are university students as the program focuses on handling the issue of bad financial habits while in university so it does not happen in the future.

#### Program Duration

The seminar is last for an hour, where 45 minutes talk given by professionals and 15 minutes Q&A sessions. Second session, participants are learned how to do an amortizations table on Google Sheets. This session is about 30 minutes. Then, third session is tested participants in managing money using two different games, which is Plato app and an online game named 'playspent'. In Plato apps, there is a game called 'bank roll' and participants will play the game together and learn how to manage money. While 'playspent' is a simulation of everyday financial decision-making. This session is last for 30 minutes.

#### Framework of Program

##### Explore

Firstly, the participants are explored the easiest way to manage money by listening to a talk given by Miss Nurbani Binti Md. Hassan. The talk is given through Cisco Webex.

##### Discover

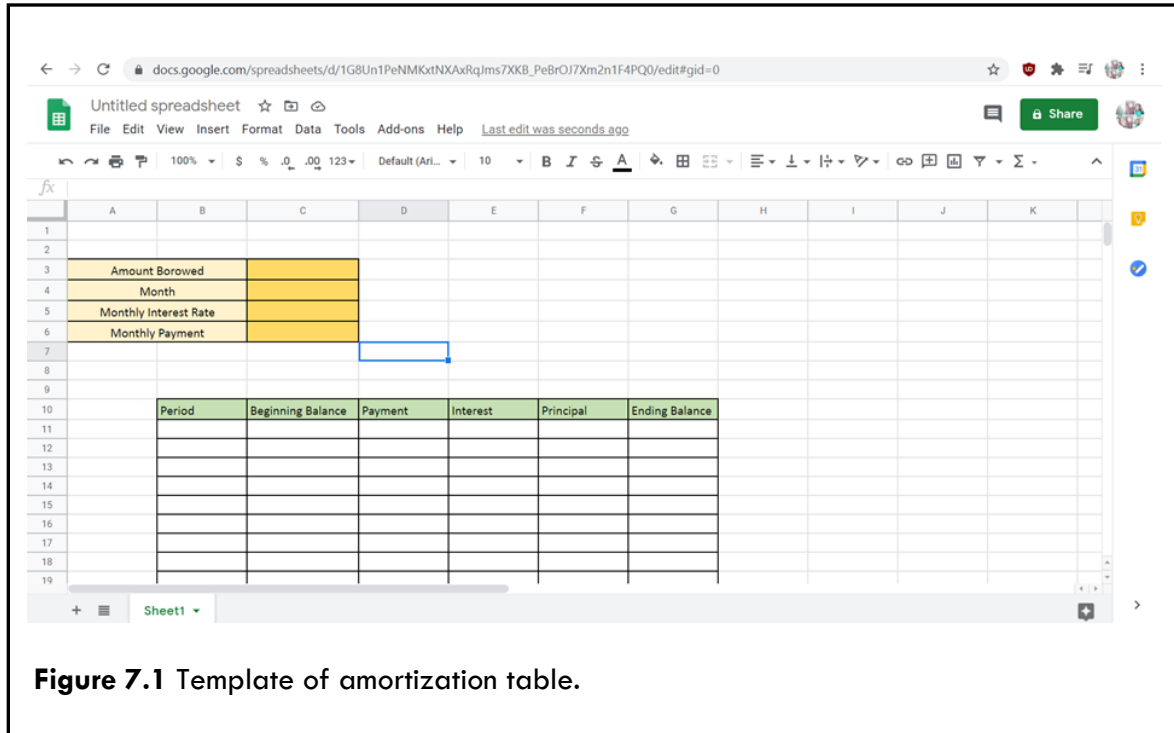
Secondly, the participants are learned how to calculate loans using amortization table in Excel. They are discovered how many participants are spending on interest payments, and from that, participant can use this platform to track their loan payment and the loan period.

**Mr. Halim is a fresh graduate and currently working as Junior Executive in the company. His starting salary is RM2500.00. He wants to buy Perodua Bezza. The car price is RM48,356.00 with zero down payment. The hire purchase interest rate is 3.35% annually, and the loan period is 9 years. How much does he need to pay monthly?**

##### Develop

Participants need to develop amortization table. Firstly, the facilitators opened the Google Sheets, and amortization template that is given to participants. Then, participants need to add the formula by themselves. There will be a breakout session, and each facilitator is taking about 2-3 participants and starting to guide the participants.





**Figure 7.1** Template of amortization table.

**Formula in Google Sheet:**

- Month:  $n \times 12$
- Monthly Interest Rate:  $\% / 12$
- Monthly Payment:  $PMT(\text{rate}, \text{period}, \text{pv})$

Next, for the game conducted in the Plato apps, participants are divided into 4 groups. Each group will play the games, and each person in the games needs to earn \$3000 net worth to win. Each participant is getting 50 rounds.

When the games are done, one of the members must give the evidence to the organizer in form of screenshot for the winner as shown in Figure 7.2.

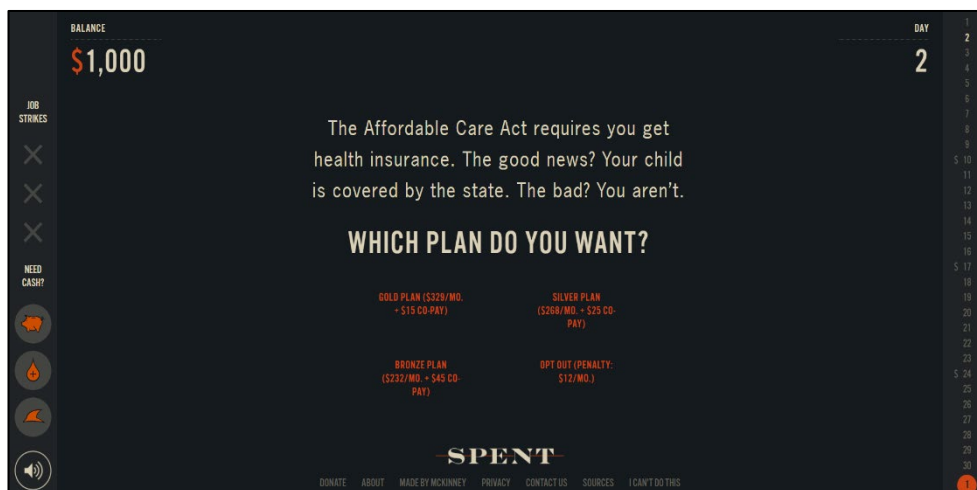
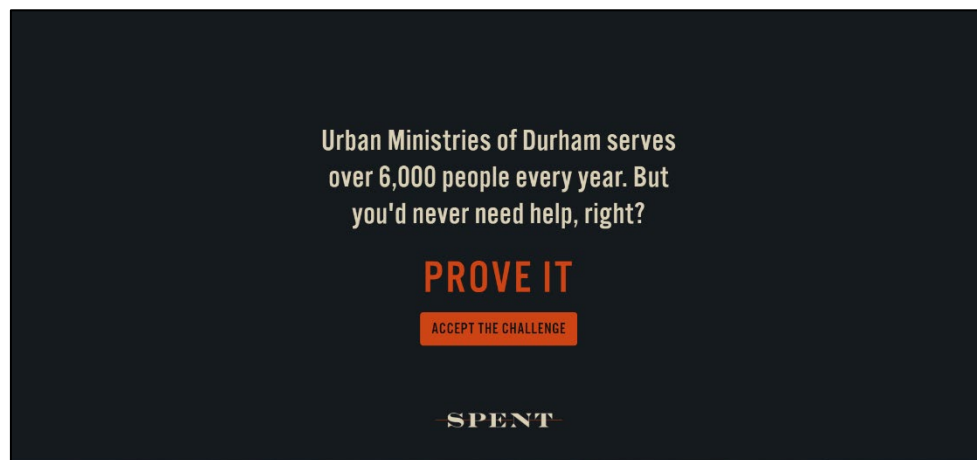


**Figure 7.2** Snapshot of the bank roll game from Plato Apps.

#### Deliver

After attending the seminar and gaining all the knowledge about financial literacy on how to handle finance right after graduating, the participants need to deliver their knowledge and channel it when playing 'spentplay' game. Spentplay challenges players to survive the struggle of low-income living. Developed by McKinney to raise money for Urban Ministries of Durham, the game has become a hit in financial literacy classrooms. "Spent allows students to truly

understand some of the incredibly hard decisions families, living paycheck to paycheck, have to make on a daily basis,” says Courtney Poquette, a business educator from Winooski, Vermont.



**Figure 7.3** Snapshot of the Spentplay game from <http://playspent.org/html/>

### Materials for Activity

A talk given by a professional and a carry out activity such as game will be held. Materials needed:

- Laptop
- Google Sheets
- Phone with the Plato apps
- Stable Internet Connection
- Cisco Webex Education Connector

## Reflection

Service-learning is a method of teaching and learning that utilizes experience in providing services to the community. It is an approach that combines academic learning objectives, soft skills, and student community service by making meaningful contributions to society. Service-learning also combines community service with the purpose of particular course. At the beginning of the term, students will be informed from the course syllabus that community service will be part of their tasks and that service-learning is one of the learning approaches they will experience. The aim of this learning can be useful by the end of the semester/course, and community service is a good opportunity for the students.

Furthermore, after learning service on a topic, society will have a sense of self-confidence, have spiritual improvement, and higher moral development. Later, the community will also have better interpersonal, especially the ability to work well with others as well as build leadership and communication skills.

In nutshell, based on our service-learning, which is about financial literacy, the community will gain knowledge about saving and investing. Then, they also know how to manage their money or debt for their future.

## Additional

### FEEDBACK FORM

Scope	Statement	Not Applicable 1	Poor 2	Fair 3	Very Good 4	Outstanding 5
<b>Content</b>	Program objectives were stated clearly and met.					
	Scope and coverage of topic/s is interesting.					
	Depth of discussion is helpful and appropriate.					
	Relevance or applicability of content is valid.					
<b>Program Scheduling</b>	The tentative of the program is fulfilled.					
	Time duration for each topic is allocated adequately.					
<b>Learning Aids</b>	Sequence of the activity is well organized.					
	Handouts given are relevant and adequate.					
<b>Structure</b>	The visual aids of the activities are interactive.					
	The focus of program is well-delivered.					
<b>Presentation</b>	The workshop meets your expectation and is useful.					
	The activities delivered manage to capture your attention throughout the program.					
	The language used in the program is comprehensive and understandable.					
<b>Overall</b>	You are able to participate and interact encouragingly.					
	You are satisfied with the program carried out.					
	The workshop carried out is able to make you learn something new.					
	The activities managed to give an impact to you such as rethinking for your future and how you should allocate your budgets.					

Do you intend to make changes or apply what you learned to your practice as a result of this activity?

- Yes, I plan to make changes.  
 I'm not sure but I'm considering making changes.  
 No, I already do most of these things.  
 No, this information doesn't apply to may work.

Suggestion for improvement:

---



---

## References

- 5 financial problems young working adults face in Malaysia. (2019). Loanstreet.
- Best car loans in Malaysia. (2020). RinggitPlus. <https://ringgitplus.com/en/car-loan/>
- Best credit cards in Malaysia. (2020). RinggitPlus. <https://ringgitplus.com/en/fixed-deposit/islamic/>
- Best housing loans. (2020). RinggitPlus. <https://ringgitplus.com/en/home-loan/>
- Covid-19 pandemic - Wikipedia. (2020). In *Wikipedia*. [https://en.wikipedia.org/wiki/COVID-19\\_pandemic](https://en.wikipedia.org/wiki/COVID-19_pandemic)
- Goals and benefits. (2015). California Lutheran University.
- Ibrahim, H., Misiran, M., Yusof, Z.M. & Zain, Z. (2019). ExDiD Framework the State-of-the-Art in Teaching and Learning. LY2019007876
- Ibrahim, H., Yusof, Z.M., Misiran, M. & Yusof, N. (2024). Explore, Discover, Develop (ExDiD): Trendy Teaching Method to WoW Your Students in Learning Mathematics, Innovative Teaching Practices in Learning STEM, UUM Press
- Kenton, W. (2022). *Personal finance definition*. Investopedia. <https://www.investopedia.com/terms/p/personalfinance.asp>
- Lusardi, A. (2019). Financial literacy and the need for financial education: Evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1), 1–8. <https://doi.org/10.1186/s41937-019-0027-5>
- Malaysia national strategy for financial literacy 2019-2023. (2019). In *Financial Education Network*. <https://fenetwork.my/v2/wp-content/uploads/2020/07/National-Strategy-ENG-F.pdf>
- Ozili, P. K., & Arun, T. (2020). Spillover of covid-19: Impact on the global economy. *Munich Personal RePEc Archive*, 1–27. <https://doi.org/10.2139/ssrn.3562570>
- Razak, M. Y. A. (2021). Department of statistics Malaysia press release graduates statistics 2020. In *Graduates Statistics* (Vol. 2020, Issue July). <https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=b3ROY1djSVROS2ZhclZaUWhLUVp5QT09>
- Shah, A. U. M., Safri, S. N. A., Thevadas, R., Noordin, N. K., Rahman, A. A., Sekawi, Z., Ideris, A., & Sultan, M. T. H. (2020). COVID-19 outbreak in Malaysia: Actions taken by the

Malaysian government. *International Journal of Infectious Diseases*, 97, 108–116.  
<https://doi.org/10.1016/j.ijid.2020.05.093>

Sipalan, J. (2015). *Only 6pc working Malaysians can survive beyond six months without income.* Malay Mail Online. <http://www.themalaymailonline.com/malaysia/article/only-6pc-working-malaysians-can-survive-beyond-six-months-without-income-bn>

Warren, E., & Tyagi, A. W. (2005). All your worth: The ultimate lifetime money plan. In *Simon & Schuster*.

Wei, C. Y., Mohammad Ismail, N. H., Md. Yunus, Z., Kuah, Y. C., & Mior Ahmed Shahimi, W. R. (2018). Parental saving : Does SSPN matter to my childrens education? *Journal of Global Business and Social Entrepreneurship (GBSE)*, 4(13), 16–29.



### **Masnita Misiran**

Masnita Misiran is the Director of the Center for Testing, Measurement & Appraisal (CeTMA) at Universiti Utara Malaysia (UUM) and an Associate Professor in the Department of Mathematics and Statistics. She has championed campus sustainability, spearheading the UUM Living Campus Blueprint and annual Sustainability Report. With a PhD in Financial Mathematics from Curtin University, Dr. Misiran holds over two decades of research experience in financial risk management, approximation theory, business analytics, and more. She is widely recognized for promoting financial, digital, and STEM literacy, especially to foster community empowerment. Her dedication garnered the 2019 Minister of Education Malaysia Special Award in Curriculum Design and Innovative Delivery. Currently, she coordinates the MySTEM Ambassador program under the Ministry of Higher Education and serves as UUM's Focal Point for the United Nations Sustainable Development Solutions Network. She has authored more than 130 academic works and developed 17 intellectual properties focusing on inclusive education and sustainability.



### **Nazihah Ahmad**

Nazihah Ahmad is an Associate Professor at UUM's School of Quantitative Sciences. She holds a BSc in Mathematics (2001), MSc in Mathematics (2002), and a PhD in Mathematics (2009). Her research interests include fuzzy mathematics, topology, and mathematical modeling in healthcare, finance, and psychology. Nazihah has been awarded several research grants and has published extensively in journals, books, and conference proceedings. With over 20 years of experience teaching mathematics at undergraduate and postgraduate levels, she has also supervised numerous master's and PhD students. Her expertise is recognized nationally through her involvement in revising the mathematics syllabus for schools and organizing STEM service-learning activities to inspire young people toward STEM education.