



## Student-Entrepreneurs' Level of Proficiency in Using Microsoft Excel on Business Data Organization and Cash Flow Management

*Jacey DC. Nicholas., Erika Ann M. Dela Cruz, Jeiel B. Fino, Nadine Shyna S. Mañanol, Jean Shary S. Vergara*

*National University – Baliwag*

### ABSTRACT

The fact that there is a growing number of student entrepreneurs in the Philippines proves that not only literacy on writing, but also essential business skills are needed, such as competence in Microsoft Excel for data organization and cash flow management. This study explores the relationship between student entrepreneurs at National University – Baliwag's proficiency in Excel and the productivity of data organization and cash flow management. This study will determine which areas may be improved by enhancing Excel skills, as well as if they are significantly beneficial for better financial decision making. A quantitative research method focused on data collection from student entrepreneurs was used with the help of purposive sampling techniques. Likert-scale survey collected data to evaluate skills in Excel on business data organization and cash flow management. Pearson's correlation was used to test the significance of the students in terms of proficiency in Microsoft Excel towards business data and cash flow management, and descriptive statistics (mean, standard deviation) to measure proficiency levels.

It has been found that respondents are 'Extremely Literate' (EL) for fundamental and intermediate Excel functions (Mean = 3.38) but need improvement in advanced financial applications. Business data organization was rated "Moderate Familiarity" (Mean = 3.10), suggesting a need for better financial structuring. Cash flow management knowledge was "Good" (Mean = 3.14), while proficiency in financial transactions was "Extremely Familiar" (Mean = 3.38). Correlation analysis showed a strong relationship between Excel proficiency and business data organization ( $r = 0.634$ ,  $p = 0.002$ ) but a moderate relationship with cash flow management ( $r = 0.517$ ,  $p = 0.016$ ). The study shows that student entrepreneurs possess a strong foundational understanding of Microsoft Excel; however, they lack proficiency in the more complicated and advanced functions, financial modeling, and cash management systems that are intended to optimize business functionality.

*Keywords: Business Data Organization, Cash Flow Management, Microsoft Excel Proficiency, Purposive Sampling, Quantitative Research, Student Entrepreneurs*

### Introduction

According to the Global Entrepreneurship Monitor, there are 594 million entrepreneurs around the globe, accounting for 7.5% of the total population and roughly 10% of adults. While there is no set age limit for starting a business, many believe that students and other young people are in the ideal position to start their own paths and set themselves up for future success (Palanca & Valencia, 2024). In relation to this data, there is an increasing number of student entrepreneurs in the Philippines, where many young people dream of becoming their own boss. In March 2023, analytics company OCTA Research surveyed 78% of adult Filipinos and found that, given the chance, they would want to be their own boss.

Student entrepreneurs are those who are currently enrolled in university and are also involved in entrepreneurial endeavors (Schimperna et al., 2021). The findings of Kabonga and Zvokuomba (2021) shows that student entrepreneurs have difficulties maintaining a proper balance between their academic endeavors and the operation of their businesses. Additionally, according to Kurdyś-Kujawska and Wojtkowska (2023), the student entrepreneurs had difficulties in understanding their data's because of a lack in both skills, knowledge and understanding of financial management (Alegario et al., 2021).

As the business world continues to grow along with technology, there is a high demand for computer skills and knowledge. Microsoft Excel is an application inside the Microsoft Office suite that was created specifically for professional or business use (Jusoh & Ahmad, 2019). Being proficient at something frequently used in the business world is always a valuable skill to possess. Excel is widely known, so having really advanced skills in this application will enable the student-entrepreneurs to stand out.

Excel is a spreadsheet application that people use to quickly and easily conduct a wide variety of mathematical, financial, logical, data-related tasks, including data manipulation, analysis, and visualization (Zanna, 2021c). Microsoft Excel is a complicated software which involves several user interface

elements, the majority of which are used by just a small amount of users. Excel is an application that most students are familiar with and have used for schoolwork or projects, but just a few really know how to use it efficiently (Abd Hadi et al., 2021).

This study aims to find out if there is a significant difference in the relationship between the level of proficiency in Microsoft excel, business data organization, and cash flow management in the context of student entrepreneurs in National University – Baliwag. Additionally, this study has the ability to provide insights into students' level of proficiency for managing business finances and identify areas where they can benefit from further guidance or instruction. This research intends to add to our knowledge of how Excel skills affect the overall findings of student-run businesses by investigating all of these factors.

### ***Theoretical Framework***

This study is anchored on the Human Capital Theory by Theodore Schultz (1961) and Gary Becker (1964, 1975), wherein human capital is the economic value of a worker or an expert's experience and skills. Such examples are education, intelligence, skills, expertise, and an individual's ability to do valuable actions in a business. This theory highlights that greater human capital leads to better productivity and higher-quality results. Becker (1964) explained how skills and knowledge are related to other forms of capital, declaring that it can be acquired by formal education and on-the-job training. This theory claims that people with higher intellect and mastery of skills are valuable in their fields and have higher success rates.

The Human Capital Theory by Theodore Schultz (1961) and Gary Becker (1964, 1975) will assess its relevance in data organization and cash flow. Becker explained that skills are a form of capital, this study widens this concept by examining whether Excel proficiency as a specific skill, Microsoft Excel, contributes to improved business practices, specifically in data organization and cash flow management. The connection between a particular set of skills and business success is the main focus of the study, directly testing the principles of Human Capital Theory with student entrepreneurship. Also discovering if investment in Human Capital is a must for student entrepreneurs.

### ***Conceptual Framework***

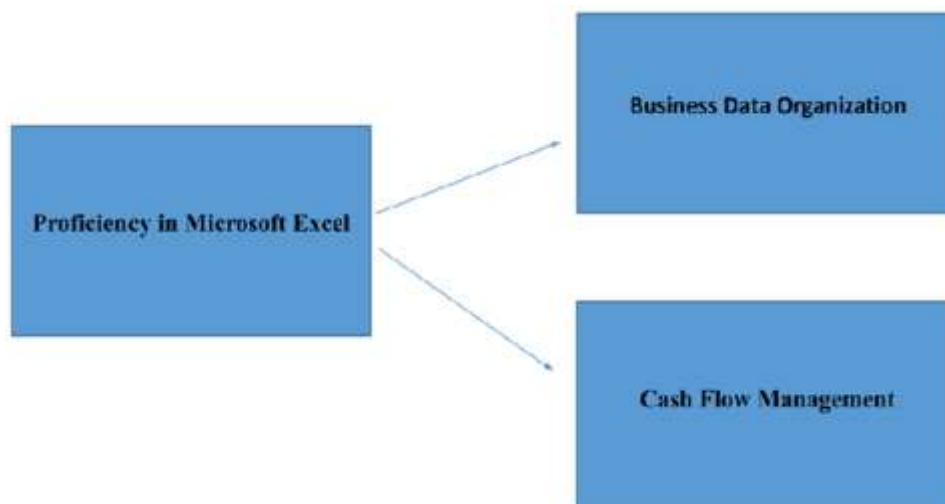


Figure 1. Conceptual Framework

Figure 1 presents the conceptual framework of the study. It consists of three variables: proficiency in Microsoft Excel, business data organization, and cash flow management. The independent variable is the level of proficiency in Microsoft Excel, which refers to the student-entrepreneurs' ability to effectively use Excel for tasks such as data entry, analysis, and financial tracking. This study aims to learn more about two dependent variables: cash flow management and business data organization.

One of the dependent variables is business data organization, which is the practice of utilizing Excel to organize and manage business-related data in a systematic and easily accessible way. This research aims to determine if business data organization will improve or worsen proficiency in using Microsoft Excel as their primary tool for managing data.

The second dependent variable, cash flow management, refers to the student-entrepreneurs' ability to monitor, assess, and control the inflow and outflow of cash in their business operations. This will contribute to whether cash flow management will be boosted by enhancing the proficient usage of Microsoft Excel.

This conceptual framework highlights how higher or lower proficiency in Microsoft Excel can positively or negatively influence: business data organization and cash flow management among student entrepreneurs.

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## Research Questions

This study aims to determine the relationship between student entrepreneurs' level of proficiency in Microsoft Excel and the effectiveness of business data organization and cash flow management. Specifically, it answers the following questions:

1. How may level of proficiency in using Microsoft Excel be described in terms of:
  - 1.1 Spreadsheet Functionality Proficiency
  - 1.2 Excel Task Competency
  - 1.3 Excel Operational Proficiency
2. How may business data organization be described in terms of:
  - 2.1 Accounting Task Proficiency in Excel"
3. How may cash flow management be described in terms of:
  - 3.1 Cash Flow Management Knowledge
  - 3.2 Cash Flow Management Proficiency
4. Does level of proficiency in Microsoft Excel significantly influence the business data organization of student entrepreneurs?
5. Does level of proficiency in Microsoft Excel significantly influence cash flow management of student entrepreneurs?

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## Significance of the Study

This study aims to assess how Microsoft Excel was utilized by young and aspiring entrepreneurs, the result of this study can give significant results that will determine whether there's a need for development of technical skills in Microsoft Excel.

To the young and aspiring entrepreneurs this study can greatly impact how they view Microsoft Excel to execute their operations that can significantly influence their Cash Flow Management and Business Data Organization as this software proves useful in organizing business data and managing cash flows.

In addition, the result of this conducted study can be a useful reference for future researcher/s, and can serve as a guide to evaluate the Microsoft Excel proficiency of young entrepreneurs in National University of Baliwag.

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## Scope and Delimitations

### *Scope*

This Quantitative study focuses on assessing the Microsoft Excel proficiency level in Business Data Organization and Cash Flow Management of Entrepreneurs in National University of Baliwag, it aims to measure the knowledge and familiarity of participants in terms of performing basic and relevant functions using Microsoft Excel regarding Cash Flow Management and Business Data Organization, a research that can guide and help us further understand how young entrepreneurs utilize Microsoft Excel and determine if there's a further need in development of technical skills in Microsoft Excel.

The research utilize purposive sampling method; the participants will only consist of entrepreneur-students of National University of Baliwag. Furthermore we picked Likert Scale questionnaire as it provides the utmost suitable medium for conducting interviews. The Study will be conducted in 4 months' time frame, in the premise of National University of Baliwag.

### *Limitations*

The Research Revolves around exclusively in Microsoft Excel and does not Include other software's such as Google Spreadsheets, in addition the measurement of proficiency level will not also include VBA programming and Automation in Microsoft Excel, lastly although our study aims young entrepreneurs, the study will only conduct the entrepreneurs students of National University of Baliwag.

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## Methods

### Research Design

This study uses a quantitative descriptive correlational research approach, it aims to assess the skill of entrepreneurs in using Microsoft Excel and how it may affect business data organization and cash flow management. The correlation technique expresses the relationship between Excel proficiency toward business data organization and cash flow management, while a descriptive approach is used for quantifying skill level of entrepreneurs. This approach supports the conceptual framework of the study and assesses variables objectively and statistically analyzed.

## ***Respondents***

This study focuses on student entrepreneurs currently enrolled at National University – Baliwag who are actively managing their own businesses. They are selected because they balance both academic responsibilities and business operations, making them ideal respondents. The sample size will be determined based on the number of eligible student entrepreneurs to ensure a fair representation.

To select participants, the study will use purposive sampling, meaning only students who meet specific criteria will be included. These criteria include being enrolled at National University – Baliwag, actively running a business, and using or planning to use Microsoft Excel for business-related tasks like data organization and financial management.

Recruitment will involve coordination with university administrators and business-related student organizations to identify potential participants. An initial screening questionnaire will help determine eligibility, followed by direct invitations through online and face-to-face interactions. Participation is voluntary, and informed consent will be obtained before data collection. This method ensures that the study gathers meaningful insights on how Excel proficiency impacts business data organization and cash flow management among student entrepreneurs.

## ***Instrument***

This study utilized multiple adapted survey questionnaires to assess the proficiency level in using Microsoft Excel on business data organization and cash flow management.

### ***Proficiency in Excel***

The Data on level of proficiency in Microsoft Excel will be collected using three adapted Likert surveys, first developed and used by Gabejan et al (2021) entitled “Excel Students’ Computer Literacy and Academic Performance”. Second is used by Doe et al (2016) entitled “Lack of Competence in Using Microsoft Excel by Accounting Students” and lastly used by Carpenter et al. (2013) entitled “A longitudinal study assessing the Microsoft Office Skills course. Information Systems Education Journal”. The survey questionnaire is divided in three categories which is Spreadsheet functionality proficiency, Excel task competency, and Excel operational proficiency. The reliability of the scale was measured through Cronbach’s alpha. The overall Cronbach’s alpha of the scale was 0.968, which indicates very reliable of the scale. The level of proficiency in Microsoft Excel survey questionnaire used a four-point Likert scale consisting of 47 items and can be answered by the respondent including the following:

Range	Verbal Description	Indication
3.25 - 4.00	4 - Extremely Literate (EL)	Very high
2.50 - 3.24	3 - Highly Literate (HL)	High
1.75 - 2.49	2 - Slightly Literate (SL)	Low
1.00 - 1.74	1 - Not Literate (NL)	Very low

### ***Business data organization***

The second survey questionnaire data on business data organization will be collected using adapted Likert surveys developed and used by Doe et al (2016) entitled “Lack of Competence in Using Microsoft Excel by Accounting Students”. The survey questionnaire has one category which is data collection and storage. The reliability of the scale was measured through Cronbach’s alpha. The overall Cronbach’s alpha of the scale was 0.936, which indicates very reliable of the scale. The business data organization survey questionnaire used a four-point Likert scale consisting of 12 items and can be answered by the respondent including the following:

Range	Verbal Description	Indication
3.25 - 4.00	4 - Extremely Familiarity	Very high
2.50 - 3.24	3 – Moderate Familiarity	High
1.75 - 2.49	2 - Slightly Familiarity	Low
1.00 - 1.74	1 - Not at all Familiarity	Very low

### ***Cash flow management***

Lastly the data on cash flow management will be collected using two adapted Likert surveys, first developed and used by Wadesango et al (2019) entitled “The impact of cash flow management on the profitability and sustainability of small to medium sized enterprises. International Journal of Entrepreneurship” and by Aren et al (2014) entitled “Cash flow management practices: An empirical study of small businesses operating in the South African retail sector. Risk Governance and Control Financial Markets & Institutions”. The survey questionnaire will answer the cash flow management of the respondents. The reliability of the scale was measured through Cronbach’s alpha. The overall Cronbach’s alpha of the scale was 0.955, which indicates very reliable of the scale. The cash flow management survey questionnaire used two types four-point Likert scale consisting of 12 items and can be answered by the respondent including the following:

Range	Verbal Description	Indication
3.25 - 4.00	4 - Very good	Very high
2.50 - 3.24	3 – Good	High
1.75 - 2.49	2 - Poor	Low
1.00 - 1.74	1 - Very Poor	Very low

#### **Data Gathering Procedure**

The researcher provided a letter containing the permission for data gathering. Upon approval of the letter from the School's Academic Office, the researcher may conduct the data-gathering procedure with their respondents. Face to face survey will be conducted on the student entrepreneurs in National University Baliwag. A consent and assent letter were used and a clear instruction was indicated before the actual instrument. The respondents will be advised that their involvement in the study was voluntary and they had the freedom to withdraw from participation anytime. Extra measures will be taken to protect each respondent's privacy. Also, only the researcher will have access to the collected data and used solely for research purposes. Lastly, the data gathered will be disposed properly at the end of the study.

#### **Data Analysis**

The data gathered will be organized and analyzed in Jamovi, a statistical software. Both Descriptive statistics and Inferential statistics will be utilized to analyze the data. Descriptive statistics was utilized in analyzing the data gathered including the mean and standard deviation. The mean and standard deviation will be used to describe the level of proficiency in Microsoft Excel, business data organization and cash flow management. In addition, Inferential statistics, specifically Pearson R, will be used to determine if the student entrepreneurs' level of proficiency in Microsoft Excel has a significant relationship in the business data organization and cash flow management.

#### **Ethical Considerations**

The researchers made sure this study followed ethical guidelines throughout the study. Students from National University – Baliwag from all year levels and departments were the research respondents. Therefore, a letter regarding data collection was submitted to the university's administration for approval. The researcher also had to explain to the respondents what the goals of the study were in order to get their consent. Respondents were provided with a consent form that included relevant information and were required to sign it in order show that they agreed to participate in the study. Signing the form was required from the respondents as an indication that they had read the guidelines and had made the decision to take part in the research. Only the researchers and advisory panel have access to the data in line with RA 10173, often known as the Data Privacy Act of 2012, in order to maintain the anonymity and confidentiality of the respondents.

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## **Results and Discussions**

### *Level of Proficiency in Using Microsoft Excel*

**Table 1*****Descriptive Measures of the Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Spreadsheet Functionality Proficiency***

	Mean	SD	VI
To create a spreadsheet	3.43	0.746	EL
To know the elements of the Excel screen	3.14	0.727	HL
To work with text in Excel spreadsheets	3.38	0.669	EL
Work with objects in an Excel spreadsheet	3.33	0.658	EL
To change font elements in an Excel spreadsheet	3.62	0.498	EL
To work with comments in an Excel spreadsheet	3.05	0.590	HL
To work with pictures in Excel	3.29	0.717	EL
To change page elements such as orientation and margins in Excel	3.33	0.483	EL
To print Excel spreadsheets	3.10	0.831	HL
To insert tables and charts into Excel spreadsheets	3.52	0.602	EL
To apply different number formats in Excel	3.48	0.602	EL
To create an IF function and a SUM function in Excel	3.15	0.813	HL
To merge cells in Excel	3.52	0.512	EL
To rename worksheets in Excel	3.71	0.463	EL
To freeze and unfreeze columns and rows in Excel	3.52	0.602	EL
To check spelling and edit cell contents in Excel	3.48	0.602	EL
To use the Fill Handle in Excel	3.24	0.768	HL
Insert and delete rows and columns in an Excel spreadsheet	3.62	0.498	EL
To track changes in an Excel spreadsheet	3.19	0.680	HL
To copy and paste formulas in Excel	3.48	0.602	EL

Range	Verbal Description	Indication
3.25 - 4.00	4 - Extremely Literate (EL)	Very high
2.50 - 3.24	3 - Highly Literate (HL)	High
1.75 - 2.49	2 - Slightly Literate (SL)	Low
1.00 - 1.74	1 - Not Literate (NL)	Very low

This table shows the descriptive analysis of Excel literacy among shows that the highest mean was "To rename worksheets in Excel," with a mean score of 3.71 and a standard deviation of 0.463. Based on the Likert scale, this falls under "Extremely Literate (EL)", indicating that respondents have a very high proficiency in renaming worksheets.

On the other hand, the lowest mean was "To work with comments in an Excel spreadsheet" with a mean of 3.05 and a standard deviation of 0.590 which means, these tasks are categorized as "Highly Literate (HL)," indicating a high but relatively lower proficiency compared to other tasks.

Lastly, the Overall mean score across all Excel-related tasks is approximately 3.38, classifying the respondents as Extremely Literate in using Excel. This indicates a strong level of proficiency among the students' entrepreneurs, particularly in fundamental spreadsheet operations and formatting. The standard deviation values across tasks suggest some variability in familiarity with advanced features, such as working with comments and printing spreadsheets.

**Table 2**

*Descriptive Measures of the Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Excel Task Competency*

	Mean	SD	VI
Copy and paste, special paste commands	3.43	0.676	EL
Move and copy worksheets to other worksheet	3.43	0.598	EL
Algebraic commands	2.81	0.602	HL
If function	3.05	0.669	HL
Graphics	3.19	0.602	HL
Import data	3.38	0.590	EL
Export data	3.48	0.602	EL
Merging spreadsheet files	3.19	0.680	HL
Macro	2.95	0.740	HL
HLOOK-UP	3.05	0.740	HL
VLOOK-UP	3.05	0.740	HL
Pivot tables	3.24	0.700	HL
Sorting and filtering data	3.62	0.498	EL

Range	Verbal Description	Indication
3.25 - 4.00	4 - Extremely Literate (EL)	Very high
2.50 - 3.24	3 - Highly Literate (HL)	High
1.75 - 2.49	2 - Slightly Literate (SL)	Low
1.00 - 1.74	1 - Not Literate (NL)	Very low

This table shows the student-entrepreneurs' proficiency in using Microsoft Excel for advanced data management functions. The highest mean of 3.62 and a standard deviation of 0.498, which is "Sorting and filtering data,". Based on the Likert scale, this is Extremely Literate indicating that respondents have a very high proficiency in sorting and filtering data.

On the other hand, the lowest mean was "Algebraic commands," with a mean score of 2.81 and a standard deviation of 0.602, classifying this under Highly Literate. This shows that respondents demonstrate moderate proficiency, and their mastery of algebraic commands is relatively lower compared to other Excel tasks.

Lastly, the overall mean score across all Excel-related tasks is 3.22, categorizing the respondents as Highly Literate in using Excel. This suggests that while they have a strong grasp of essential Excel functions, there is still room for improvement in advanced data management tasks. The standard deviation values indicate some variability in familiarity with complex functions.

**Table 3**

*Descriptive Measures of the Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Excel Operational Proficiency*

	Mean	SD	VI
Find a particular cell and type into it.	3.43	0.598	EL
Create correct equations, e.g., =A2*(B2+C2)	3.29	0.644	EL
Insert, delete, move rows or columns.	3.57	0.507	EL
Use fill handle to copy equations.	3.29	0.845	EL
Use fill handle to create a sequence.	3.10	0.768	HL
Use the AutoSum Function.	3.43	0.598	EL
Use ranges in equations, e.g., (A1:A20).	3.52	0.512	EL
Use summary functions, e.g., Min, Max, Avg.	3.48	0.602	EL
Create a simple bar or column chart.	3.52	0.602	EL
Use powers, such as square root.	3.10	0.768	HL
Use absolute & relative referencing.	2.90	0.944	HL
Use predefined functions, e.g., FV or PMT.	2.86	0.793	HL
Create a correct IF statement.	3.05	0.740	HL
Create advanced graphs and charts.	3.10	0.625	HL

Range	Verbal Description	Indication
3.25 - 4.00	4 - Extremely Literate (EL)	Very high
2.50 - 3.24	3 - Highly Literate (HL)	High
1.75 - 2.49	2 - Slightly Literate (SL)	Low
1.00 - 1.74	1 - Not Literate (NL)	Very low

This table shows the student-entrepreneurs' proficiency in using Microsoft Excel for Excel Operational Proficiency. The highest mean score was in "Insert, delete, move rows or columns," with a mean of 3.57 and a standard deviation of 0.507, which is Extremely Literate, indicating that respondents have a very high proficiency in modifying spreadsheet structures, a fundamental skill for organizing business data.

While the lowest mean was "Use predefined functions (e.g., FV or PMT)," with a mean score of 2.86 and a standard deviation of 0.793, which is Highly Literate. This suggests that while respondents demonstrate good proficiency, their mastery of predefined functions is relatively lower compared to other Excel tasks.

Lastly, the overall mean score across all Excel-related tasks is approximately 3.26, classifying the respondents as Highly Literate in using Excel. This suggests that while they have a strong knowledge of essential functions, there is still room for improvement in advanced computational and data manipulation skills.

*Business data organization*



**Table 4**

*Descriptive Measures of the Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Business Data Organization*

	Mea n	SD	VI
Operating budgets	3.14	0.478	MF
Managing reports	3.10	0.625	MF
Modelling	2.95	0.498	MF
Basic record keeping	3.38	0.590	EF
Variance analysis	3.10	0.700	MF
Capital budgets	3.14	0.573	MF
Financial accounts	3.19	0.602	MF
Drawing financial ratios	3.00	0.632	MF
Tax calculations	2.86	0.727	MF
Depreciation schedules	2.86	0.793	MF
CVP	3.05	0.740	MF
Payroll calculations	3.14	0.655	MF

Range	Verbal Description	Indication
3.25 - 4.00	4 - Extremely Familiarity	Very high
2.50 - 3.24	3 - Moderate Familiarity	High
1.75 - 2.49	2 - Slightly Familiarity	Low
1.00 - 1.74	1 - Not at all Familiarity	Very low

This table presents the business data organization of student-entrepreneurs. The highest mean score was recorded in "Basic record keeping," with a mean of 3.38 and a standard deviation of 0.590. Based on the Likert scale, this falls under "Extremely Familiar," indicating that respondents have a strong ability to maintain structured business records, which is essential for tracking transactions and financial performance.

While the lowest mean was "Tax calculations" and "Depreciation schedules," both with a mean of 2.86 and standard deviations of 0.727 and 0.793, respectively. Means Moderate Familiarity, suggesting they have limited exposure to tax computations and asset depreciation tracking, which are critical for financial reporting.

In conclusion, the overall mean of business data organization tasks is 3.10, which is Moderate Familiarity. This shows that while they have a knowledge of basic financial management, improvement is needed in advanced financial computations.

*Cash Flow Management*

**Table 5**

*Descriptive Measures of the Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Cash Flow Management Knowledge*

	Mean	SD	VI
Cash Management Practices Knowledge	3.05	0.498	G
Formal Record Keeping	3.24	0.539	G
Preparation of Cash Budgets	3.14	0.573	G

Range	Verbal Description	Indication
3.25 - 4.00	4 - Very Good	Very high
2.50 - 3.24	3 - Good	High
1.75 - 2.49	2 - Poor	Low
1.00 - 1.74	1 - Very Poor	Very low

The table shows the cash flow management of the student entrepreneurs. The Formal Record Keeping had the highest mean (3.24, SD = 0.539), indicating very good financial tracking skills. While, the lowest mean was observed in "Cash Management Practices Knowledge" (Mean = 3.05, SD = 0.498), still categorized under Good. This indicates a need for further enhancement in understanding effective cash flow management strategies.

Lastly, the overall mean score for cash flow management is 3.14, classifying respondents as having a high proficiency level. While they exhibit strong foundational skills, varying standard deviation values indicate differences in individual capabilities.

**Table 6**

*Descriptive Measures of the Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Cash Flow Management Proficiency*

	Mean	SD	VI
Accounts receivable	3.48	0.602	EF
Accounts payable	3.52	0.602	EF
Cash Budgets	3.33	0.577	EF
Cash float	3.10	0.625	MF
Credit sales	3.48	0.602	EF
Cash flow cycle	3.43	0.598	EF
Stock/Inventory management	3.38	0.590	EF
Cash culture	3.19	0.680	MF
Process for recording cash	3.48	0.602	EF

Range	Verbal Description	Indication
3.25 - 4.00	4 - Very Good	Very high
2.50 - 3.24	3 - Good	High

1.75 - 2.49	2 - Poor	Low
1.00 - 1.74	1 - Very Poor	Very low

This table presents the student-entrepreneurs' Cash Flow Management Proficiency. The highest mean score was "Accounts payable" (Mean = 3.52, SD = 0.602), classified as Extremely Familiar based on the Likert scale. This indicates strong proficiency in tracking and managing outgoing payments.

While, the lowest mean scores were "Cash float" (Mean = 3.10, SD = 0.625) and "Cash culture" (Mean = 3.19, SD = 0.680), both classified under "Moderate Familiarity." While student-entrepreneurs' s has a solid understanding of managing cash reserves, further learning may help optimize liquidity for business operations.

Lastly, the overall mean score for cash flow management tasks is 3.38, categorized as "Extremely Familiar." This indicates strong competence in managing receivables, payables, and cash budgets.

**Table 7**

*Correlational Analysis Between Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Business Data Organization*

		Spreadsheet Functionality Proficiency	Excel Task Competency	Excel Proficiency	Operational Proficiency
Business Data Organization	Pearson's r	0.548	0.634		0.529
	df	19	19		19
	p-value	0.010	0.002		0.014

Interval coefficient	Relationship level
0.80-1.000	Very strong
0.60-0.799	Strong
0.40-0.599	Moderate
0.20-0.399	Weak
0.00-0.199	Very weak

This table presents the correlation between student-entrepreneurs' Excel proficiency and Business Data Organization. Results show that all three Excel proficiency sub variable which is Spreadsheet Functionality, Task Competency and Operational Proficiency, positively correlate with Business Data Organization. The strongest correlation was between Task Competency and BDO ( $r = 0.634$ ,  $p = 0.002$ ), indicating that proficiency in data entry, formatting, and basic formulas significantly enhances business data organization. The Spreadsheet Functionality showed a moderate correlation ( $r = 0.548$ ,  $p = 0.010$ ), while Operational Proficiency had a slightly weaker but still significant relationship ( $r = 0.529$ ,  $p = 0.014$ ). Overall, the findings emphasize that strong Excel skills, particularly in task execution, enhance business data management.

**Table 8**

*Correlational Analysis Between Student Entrepreneurs' Level of Proficiency in Using Microsoft Excel in terms of Cash Flow Management*

		Spreadsheet Functionality Proficiency	Excel Task Competency	Excel Operational Proficiency	Cash Flow Management Knowledge
Cash Flow Management	Pearson's r	0.517	0.406	0.248	0.634
	df	19	19	19	19
	p-value	0.016	0.068	0.278	0.002

Interval coefficient	Relationship level
0.80-1.000	Very strong
0.60-0.799	Strong
0.40-0.599	Moderate
0.20-0.399	Weak
0.00-0.199	Very weak

This table shows the relationship between Excel proficiency and Cash Flow Management. The strongest correlation was observed between Spreadsheet Functionality Proficiency and Cash Flow Management ( $r = 0.517$ ,  $p = 0.016$ ), indicating a moderate positive relationship. This suggests that students with higher proficiency in basic spreadsheet functions, such as organizing data and structuring financial records, tend to manage cash flow more effectively. Meanwhile, Excel Task Competency showed a moderate correlation with Cash Flow Management ( $r = 0.406$ ,  $p = 0.068$ ), but it was not statistically significant. This implies that skills like data entry and formatting may contribute to cash flow management but do not strongly determine it. Excel Operational Proficiency had the weakest correlation ( $r = 0.248$ ,  $p = 0.278$ ), suggesting that advanced Excel functions, such as automation and formula creation, have minimal direct influence on cash flow management.

Overall, Microsoft Excel proficiency has a moderate but not entirely significant influence on cash flow management among student-entrepreneurs. While basic spreadsheet functionality shows a statistically significant relationship, other sub variables of Excel proficiency do not establish a strong enough statistical link to confirm a direct impact.

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### Summary of Findings

The study assessed Excel proficiency, business data organization and cash flow management skill of the student entrepreneurs. For "Spreadsheet Functionality Proficiency" the overall mean is 3.38, this is classified as "Extremely Literate (EL)" which highlights respondents' strong fundamental knowledge on basic Excel function. The "Excel Task Competency" categorized as "Highly Literate (HL)" with overall mean of 3.38. This mean that the respondents are Extremely Literate and can easily adopt to advance functions of Excel. Also, for "Excel Operational Proficiency" with overall mean of 3.26 which falls under "Highly Literate (HL)" regarding to this student entrepreneur perform well in both fundamental and intermediate function while need an advance training for advance functions.

In "Business Data Organization" with "Moderate Familiarity" and mean score of 3.10 shows the need for improvement in terms of advance financial management. In "Cash Flow Management Knowledge" show that respondents have a "Good" level of knowledge in cash flow management. Lastly, for "Cash Flow Management Proficiency" respondents are classified as "Extremely Familiar (EL)" to financial transactions, however, there are still areas for improvement in cash management strategies.

Overall, finding shows that the student entrepreneurs exhibit a strong level of skill in Excel and financial management. Performing effectively in basic spreadsheet, data organization and financial tracking. On the other hand, in term of advance Excel functions, algebraic calculation, financial analysis and cash flow management strategies respondent still need to improve their skill to strengthen their business skills.

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### Conclusion

The findings of the research show that student-entrepreneurs are proficient in basic knowledge in business like financial management and Microsoft Excel. The students have been classified as "Extremely Literate" in terms of spreadsheet proficiency, and their results reveal strong foundations in Excel operations. This suggests the student-entrepreneurs can do basic and intermediate Excel operations, but advanced functions require extra learning. The findings indicate that the respondents are willing to use advanced Excel tools upon additional guidance. Their proficiency of simple operations emphasizes how crucial further learning is to fully recognize their skills. Additional knowledge is clearly needed, nevertheless, to raise students-entrepreneurs' abilities in advanced Excel techniques so they may effectively use the application for ever more complex tasks and analyses.

In terms of business data organization, the perceived moderate familiarity indicates a need for improvement, especially in advanced financial management techniques. Although the respondents show an advanced level of cash flow management knowledge, their proficiency points to areas for development of cash management techniques. The moderate level of knowledge in business data organization suggests that there is a need for improvements in advanced financial management techniques. Improving this area will enhance students-entrepreneurs' ability to organize and evaluate business data. Also, respondents may still benefit from using advanced cash flow management strategies, even if their current skill is excellent. They have to keep improving their strategic cash management techniques if they are to become more overall financial competent.

This study is based on Schultz and Becker's Human Capital Theory, which highlights that forms of capital that increase both performance and growth include knowledge and skills. This study investigates how well student entrepreneurs manage business data organization and cash flow management depending on Excel competency as a specific ability. The findings confirm the theory by showing that while the respondents have solid basis, further training in higher-level operations is necessary to fully develop their full capabilities.

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## Recommendation

The findings of our research shows different result on each variables, the proficiency level in basic knowledge in business like financial management and Microsoft Excel was Extremely Literate however there's area like business data organization that indicate moderate familiarity results shows that there's a need for improvement in the particular area, overall the results suggest that there's a high level of basic proficiency, this suggest that there's a need improvement to fully utilize the Microsoft Excel of young entrepreneurs, a study by Hady ElHady in 2024 shows significant importance of fully utilizing Microsoft Excel in all areas relevant to business data organization and cashflow management, moreover further development in this area that had proven to be important to entrepreneurs can lead them to have objective understanding and collectively improve their decision making and organization can significantly be beneficial to aspiring and young entrepreneurs, moreover, further research should explore the effects and correlational influence of Microsoft Excel effects in overall business performance to further validate its importance. Note that these recommendations are based on research that showcase importance of Microsoft Excel proficiency on business data organization and cash flow management in young entrepreneurs and is based on specific demographics and area, further research should and may require to have adjustments.

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