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Design Analysis to Enhance Financial Education for Student Entrepreneurs in University

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Telkom University organizes entrepreneurship program that serves entire students who want to start a business with a selection method to be incubated for one semester or more. Doing business for Student Entrepreneurship (SE) requires Design analysis to enhance financial financial management expertise because it is very important to ensure that products are of in line with expectations and efficient use of resources to maximize business profits. Financial skills are also important in running businesses. From that, the university holds learning finance management in the https://doi.org/10.32535/apjme.v7i2.2988 process of business incubation, but SE feels learning financial management is not interesting. Therefore, this research aims to discuss the needs of financial management for SE, lecturers, and universities with a qualitative approach through focus group discussion. The study's key findings are that SE needs to learn about financial statements. They also expect this to be done automatically on a digital basis that is easy to use, so entrepreneurial students can take advantage of the automatically generated data for proper decision-making and can focus on the creative and innovative aspects of the product. Financial apps for financial statements could potentially be made by digital software developers.

> Keywords: Entrepreneurship; Financial Apps; Financial Management; Financial Education; Student Entrepreneurs

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INTRODUCTION

Entrepreneurship education on campus is not just a field of study that students choose but also creates a thriving interdisciplinary environment that makes students more connected and improves their way of thinking. Growing the desire to start a business is largely dependent on how successful entrepreneurship education is. Therefore, the universities must be able to provide experience for their students in entrepreneurial activities such as experience in creating ideas, analyzing problems, and finding solutions to create successful businesses (Ardyan et al., 2021), and a culture of student entrepreneurship (SE) that must be developed attitudes, such as motivation, creativity, leadership, decision making, and critical thinking; in addition, conceptual ones, such as business operational knowledge, understanding human talent management, marketing, and finance knowledge (Yacine, 2021).

One of the campuses in Indonesia that provides entrepreneurship learning is Telkom University (Telu) in Bandung-Indonesia with the WRAP entrepreneurship program which allows students from various majors, both social and technical fields to meet in an atmosphere of creativity to directly carry out entrepreneurship activities guided by tutors and also the lecturers. This is also part of the independent implementation of independent campus learning. SE is divided into several small groups. Each group consisting of engineering and social study program students, includes one person who understands finance. This is done with the aim that the team is more capable and competent in front of investors by presenting quality financial planning (Seebeck & Wolter, 2022) so that even though students are still in the learning stage, in several places they have produced financial reports that perform well (Holik & Erpurini, 2019)

Even though they can prepare good financial reports, SE must prepare for financial needs at a later stage, such as business expansion and growth activities (Mhlongo & Daya, 2023) that challenge entrepreneurial mindsets and skills, such as financial literacy (FL) (Colombelli et al., 2021). The FL level of SE at WRAP is classified as well literate. This entails being knowledgeable about financial institutions, feeling secure about them, and being adept at using financial services and goods. Financial education (FE) can also increase student confidence in using digital financial and financial services, and can indirectly increase FL through trust in using digital financial services (Silinskas et al., 2023)

Significant positive correlation between FL and entrepreneurship (Sarsale, 2021) enabling other educational institutions to adopt similar learning to what already exists at Telu by adding input from previous researchers so that their level of FL increases. Learning FL in SE is one of financial learning to instill a financial mentality (Thomas & Subhashree, 2020). SE have a financial mentality that guides their approach to managing money in order to develop sound financial habits, a positive financial attitude, and high financial self-efficacy (Radianto et al., 2022). No wonder FL is a topic that is experiencing sustainable growth in the entrepreneurial field and is a matter of global impact (Abad-Segura & González-Zamar, 2019).

Telu has already provided FE for SE but the level of FL SE is still not the best. This research will advise the organizers about the FE design by SE to be able to improve FL. This study can also be adopted by other universities that want to improve FL students through FE that collaborated with the activities of entrepreneurship. Student entrepreneurs are expected to possess good academic ability, demonstrate healthy financial behavior, and exhibit creativity in their business endeavors.

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LITERATURE REVIEW

The Importance of Financial Education for Student Entrepreneurs

Entrepreneurship education does not only teach SE to start a business but also to understand that problems can be seen as opportunities. In carrying out their business, SE must study entrepreneurial finance because modern corporate finance theory is not fully by the business conditions of SE (Sahela et al., 2021). Therefore, managers of higher education should provide FE that is approached the needs of SE which not only teaches how to start a business but also teaches finance. FE has an important role in business by making economic concepts easier to understand and helping in making responsible financial decisions. It will be essential to provide FE and an entrepreneurial attitude to teach concepts like budget management, spending, taxes, savings, payment methods, bank operations, smart consumption, loans, and financing (Abad-Segura & González-Zamar, 2019).

Factors that can affect FE consist of learning materials, conditions of participants (SE) and instructors (lectures), promising learning approaches, and learning techniques This emphasis on FE stems from two key needs: (1) addressing the existing financial knowledge gap among student entrepreneurs and (2) providing a more comprehensive educational approach through training seminars and well-designed modules (Fauziyah & Sulastri, 2022). Effective FE empowers student entrepreneurs to manage cash flow effectively, mitigate risks, and achieve sound financial management practices. This not only benefits their businesses but also equips them with personal FL skills, such as budgeting and profitability analysis, which are crucial for long-term financial success (Ribaj, 2020).

FE is learning in higher education that should be studied in at least one semester to make responsible financial decisions, manage incoming and outgoing cash flows, and manage the budget. For SE, learning materials can be adapted to the conditions of the participants because financial decision-making at an advanced company level will be different from small businesses carried out by new businesses with a practice-based learning approach in providing financial reports and working papers while still teaching theory, related to budgets, taxes, savings, payment methods, bank operations, loans, and financing.

The Existing Approaches in Financial Education

FE in Indonesia begins at the early childhood education level, with guidelines provided by the Ministry of Education and Culture. These guidelines cover discussion topics like funding, savings, investments, financing loans, taxes, insurance, banking, targeting, fraud, theft identification, and so on. At the university level, Telu incorporates financial topics into its curriculum. A group of financial studies experts collaborate with lecturers and students to support research, teaching, and community service in this area. FE is integrated into the curriculum of every faculty. For non-finance majors, such as engineering and arts students, a course titled "FINON" (Finance for Non-Finance) is offered. In the social faculty, the existing business incubation program provides an FE learning plan that is currently being adapted to better meet the needs of startups and support their business development. However, there is still room for improvement, particularly in terms of aligning the FE curriculum with the specific business learning needs of startups. The WRAP program's FE component is a new initiative and is still under development.

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RESEARCH METHOD

This research employs a qualitative approach. In qualitative research, researchers study things in their natural settings, aiming to understand and interpret phenomena that reflect real-world conditions. Data collection methods in qualitative research can include various case studies, personal experiences, introspection, life stories, interviews, observational texts, historical accounts, interactional data, and visuals depicting challenging moments in individuals' lives (Rahadi, 2020).

This research utilizes data triangulation techniques. Triangulation involves collecting and using data from multiple sources and comparing the information obtained from each source to assess its trustworthiness (Manggabarani & Astuti, 2023). For data validation, cross-checks were conducted between FGD participants from different stakeholder groups: program organizers, student entrepreneurs (SEs), lecturers, and startups.

FGD participants were invited to the location where the research was being conducted. All invitees were directly involved in WRAP activities at Telu. The researchers collaborated with the program manager to identify appropriate participants who had firsthand experience with the WRAP program. These participants included SEs and lecturers who could provide insights into the program's experience. Organizers and established startups, composed primarily of teams that graduated from Telu's program, were also invited to offer perspectives on the program's implementation.

RESULTS

The demographic data of FGD participants is presented in Table 1.

Table 1. Demographic Data of Participant

Name	Gender		۸۵۵	Work
	Man	Woman	Age	VVOIK
Adila		V	25	StartUp
Arfie	V		20	Student
Khania		V	26	StartUp
Haddad	V		24	StartUp
Vira		V	24	Organizer
Yuli		٧	40	Organizer
Fauzi	V		21	Student
Muhammad	V		41	Lecturer
Ria		V	42	Lecturer
Hana		V	22	Student

Source: Processed by Researchers, 2023

Table 1 presents the demographic data of the FGD participants consisting of 40% male and 60% female, more female participants attended than male participants. But in this study's discussion, the researchers do not differentiate between genders. The participants consist of 20% organizers, 20% lecturers, 30% startups, and 30% students. The organizers present were employees who handled directly the implementation of WRAP, while the lecturers who attended were lecturers of finance courses at WRAP and lecturers who made lesson plans for finance courses at WRAP. SEs who attend themselves are prospective SEs who will take WRAP studies, SEs who are currently taking finance courses at WRAP, and students who have passed the WRAP program. There is a uniqueness when the alumni of SE at that time did not have a finance course. The FGD also presented startups fostered by Telu. Even though they were startups

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fostered, they also did not receive finance courses when they were coached, and have been directly involved in managing financial management.

Starting the discussion, the moderator presented the WRAP finance study plan in Table 2 as follows.

Table 2. WRAP Entrepreneurship Finance Study Plan

I GIOLO III VVI V II	Entropronouromp i manos otady i lan
Week	Lesson plan
1	Scope of Financial Management and Financial Reports
2	Analysis of financial statements
3	Cash Flow and Financial Planning
4	Cash Planning: Cash Budgeting
5	Time Value of Money
6	Capital Budgeting and Cash Flow
7	Capital Budgeting analysis tool
8	Business Valuation Simulation
9	Preparation of Sales Budget
10	Revenue Budget Preparation Simulation
11	Preparation of Operational Cost Budget
12	Operational Cost Budgeting Simulation
13	Cost of Production and Sales Budget
14	Profit Budgeting
15	Profit Budget Preparation Simulation
16	Budget Preparation Simulation and Comprehensive Evaluation

Source: Financial Management Study Plan, 2022

Table 2 presents the plans, for learning finance at WRAP, which is designed for sixteen meetings, and 30% of them are in the form of simulations of the theory being taught. The lecturer said that the finance learning plan was adapted to the conditions of SE, equivalent to four credits in each meeting, and aimed for SE to be able to understand financial reports and make financial report projections from businesses that are being developed along with their valuations. This learning plan is very different from the financial class in Telu social study program. This curriculum has not paid attention to the events that occur after COVID-19 where many students feel stress and low self-esteem with anxiety (Ng et al., 2023). Disaster events like this have an impact on various aspects such as the learning process, study specialization, student acceptance, student attendance, retention, and graduation in higher education, as a result of infrastructure and psychological impacts (Wang, 2024), also pay attention to academic ethics (Bennett & Abusalem, 2024; Morris, 2024; Norris et al., 2024; Openo, 2024; Prihatiningtias & Rahmat, 2023).

Things like this also actually need to be considered by university future suggestions for program managers in designing the curriculum, which must take into account the things that exist in SE so that learning can be digested well and implemented effectively for the sustainability of the startup. In the financial study plan, firstly, SE learns the scope of financial management and financial reports. This is the basis for learning finance because their educational backgrounds are different and not everyone has ever been familiar with finance. At this meeting, they are given a perception of finance that is appropriate to the world of entrepreneurship and understand the importance of financial reports. Next, they are taught how to analyze the financial report. Then the organizers added that the financial management curriculum was relatively new and had only been held this semester, As a form of support that must be done by the university (Kee et al., 2023) facilitates from the previous batch of SE who felt the need to learn finance

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because, at the time of the product presentation, it was not only related to the product that had to be developed.

SE should study cash flows, a comprehensive measure of corporate financial health that reflects money movements in and out, which are divided into three categories: (1) operations, in the form of daily cash transactions, (2) investments, including capital expenditure, acquisitions, and disbursements, and (3) financing, explaining the choice of financing methods such as debt, equity, dividends, or a combination of these. Next, make a cash flow report using either direct or indirect methods, depending on the costs and data the startup has, making it easy for the internals to track each income and expenditure. Through this, can easily for financial analysis whether increases or does not decrease. These cash flows can also predict the amount of cash that will be earned in the future and how much it needs. So, this cash flow material is important to learn at an early meeting because it is very much related to startup activities. The next important thing is related to planning, which in financial terms is known as a budget. Since the business is at the start-up level and the focus is on cash flow, the curriculum focuses on the cash budget.

Startup cash flow managed through cash budgeting, is a critical factor in determining whether a startup has sufficient internal resources to fund innovation initiatives. Student entrepreneurs learn how to project cash flow to assess if internally generated funds can support operations and attract investment. Based on this projection, they can decide whether to overcome a potential deficit through external funding or by reducing investment requirements (Dong et al., 2024). FE is intrinsically related to the concept of the time value of money. This central concept recognizes that the amount of money today is more valuable than the same amount in the future. This principle arises from the ability of money to generate returns through interest or investment, in line with this SE associates it with the capital budget material in order to be able to select the most attractive investment project and help develop a scenario that is pessimistic (in the worst case), most likely (waiting), and optimistic (in the best case) for project evaluation (Mardianti, 2024).

SE also studies business valuation using case studies of established companies, because calculating business valuations requires historical financial data from year to year in the last few years, after this, students learn to make sales budgets, which involves choosing a budget period of either annual, quarterly, monthly, etc. Next production costs are another key topic, SE explores the role of direct materials, direct labor, and overhead manufacturing in cost calculations, ultimately focusing on profit budgeting, which is an important financial planning tool that predicts future revenue and expenditure.

Strategies for Creating Design Financial Education for Student Entrepreneurship Based on this learning sequence, a group discussion led by a moderator explored strategies for creating an effective financial learning design for entrepreneurship students. A summary of the FGD findings follows.

SE in startup teams often struggle to present their budget plans and track expenditures effectively. This challenge is particularly prevalent among WRAP members, especially those from engineering majors, whose curriculum lacks finance courses. FL is crucial for entrepreneurs, as it goes beyond product development, and empowers them to create financial reports and plan effectively. A case in point is SE joining WRAP as assigned the Chief Financial Officer (CFO) and the background in social studies or management, where financial courses are offered in semester three. However, this student expressed feeling unprepared for the practical realities of startup finance, as their prior coursework focused on finance in big companies based on theory and case studies. This experience

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as a startup highlights the need for specialized finance that equips SE with the practical skills to manage startup finances as a small business.

Some SEs have studied finance, but they still feel the need for assistance and support from the WRAP organizers. It is important to implement FE to support SE doing the startup, The SE who has already completed the program is somewhat disappointed with the loan period because there is no FE provided and the student must study independently. SE from engineering backgrounds, who are more focused on product development, make up the majority of those who have not taken finance at WRAP. While the organizers offer FE opportunities, successful startups often hire financial experts to handle client administration and tax reporting. This is being done because there is a project with external business organizations that requires the existence of tax payment schedules and the tax office requires the existence of business financial statements.

SE may struggle to connect classroom learning to real-world applications due to the perceived disconnect between theoretical concepts and practical finance, however, numerous online financial applications like kledo.com and educational resources like journals are available to bridge this gap. Despite these challenges, SE programs foster creativity, problem-solving skills, and self-efficacy. Project-based learning, as implemented in WRAP, demonstrably improves entrepreneurial skills. Based on feedback from graduates and current WRAP participants as SE, the lecturer emphasized the importance of practical financial reporting skills. Even if providing financial reports can be done via digital applications, SE needs to apply theory to better understand the business and be able to analyze the available data to produce business decisions.

Digital Applications for Financial Education

The present finance lecturers give the SE worksheets to use as an actual case simulation with Microsoft Excel templates, in an attempt to help the SE process cases and apply financial knowledge to its startups. However, the current templates are hard to change for automated financial calculations, so the SE only uses them when they are manually preparing financial reports for the real. Today's financial report are for the process of business evaluation, which is presented to business mentors on a periodic basis. If only there was a tool that SE could use to quickly and affordably automate financial reporting, students' exposure to finance would grow as a result of their increased ability to analyze financial data, then increase the FL.

The financial lecturer also highlighted the potential benefits of a software application that automates financial reporting. Such an application could significantly increase FE for startups, enhance classroom learning, and even be commercialized for use in other universities. This commercialization opportunity arises because several universities have replicated the WRAP program. West Java's Merdeka Learning Campus program, encompassing around 700 institutions, aims to produce graduates with entrepreneurial skills. There aren't any applications that automatically sync financial data specifically for SE as of yet, but given the large number of users, it can be assumed that if these apps work as intended, the level of FL will rise significantly.

SE at WRAP program strongly advocates for the continuation of FE, even SE with FE acknowledges the value of learning and applying automatic financial reporting apps. These can enhance their FL and make the learning process more engaging. This benefit extends to SEs with no prior finance background, such as those from engineering programs. Integrating FE into the curriculum, through both theoretical and practical learning opportunities, can foster interest in entrepreneurship. This approach, when combined with entrepreneurial skill development, can significantly improve

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entrepreneurial knowledge, motivation, and business acumen (Wardhani & Nastiti, 2023).

Seeing SE complete projects even with the challenge of creating financial reports, highlights the value of practical experience. Fostered startups, comprised of Telu graduates, also encounter challenges when creating budgeting worksheets in Microsoft Excel. While anyone can create a worksheet, ensuring accuracy requires meticulous formatting and formula application. Errors in formatting or formulas can lead to mismatched numbers and wasted time spent correcting them. The availability of a free application provided by the program organizer could free up valuable time currently spent on creating worksheets. This time could be better utilized for other critical tasks. Currently, startups rely solely on Microsoft Excel for budgeting, financial reporting, and data analysis.

While Excel offers functionalities like pie charts, bar charts, histograms, and financial modeling (Mustafy & Rahman, 2024), The program currently lacks financial software applications for learning financial simulations taught in class. Although lecturers creatively utilize Microsoft Excel, the availability of dedicated software could potentially enhance SE competence in two ways. Firstly, it would equip them with industry-standard financial tools, making them more proficient entrepreneurs. Secondly, it would allow them to generate investor-ready financial presentations that comply with regulations and are easy to understand. Currently, SE may lack enthusiasm for FE. However, other subjects like entrepreneurship require them to complete a business feasibility study within their business plans.

This study helps determine the financial viability of their product and estimate the required capital, facilitating future investor pitches. Research by Jaya et al. (2024) at the Faculty of Economics, UIN Maulana Malik Ibrahim, aligns with these observations. Their findings suggest that financial management students benefit from software-based learning with engaging case studies and real-world updates. Advancements in technology and developing a financial application specifically for educational purposes and future business needs seem feasible. Collaboration with financial experts would be crucial to ensure the application incorporates sound financial principles and adheres to regulations.

In today's digital landscape, a financial application could enhance Telu competitive edge, even though numerous paid financial software options exist. Students are more likely to adopt a free application. However, for successful implementation, the application must prioritize information quality and user-friendliness (Yun, 2024). Therefore, as discussed in the FGD forum, the WRAP program should consider developing a dedicated financial application. While the current curriculum may not encompass all relevant financial topics, certain areas can be addressed later. For instance, students can delve into historical data analysis during the commercialization phase, and application design can be explored during the technology development phase. For now, the current curriculum provides a solid foundation for building FL among SE.

DISCUSSION

Discussions were conducted with the aim of enhancing FE for SEs. A key finding emerged: financial reporting was identified as the most critical financial topic for startups. This is unsurprising, as financial reports are not only a constant feature of mentor evaluations but also serve as the foundation for tax reporting, a crucial aspect of any business. However, other topics included in the discussion plan seemed to misalign with

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the SEs' current needs. They expressed a sense that some aspects of the plan were not directly relevant at that stage in their entrepreneurial journey.

This highlights a crucial gap – the study plan may not be effectively tailored to the immediate and practical needs of SEs. To address this, the research suggests a two-pronged approach: (1) Developing a study plan with a strong focus on the theory and practice of financial report creation. This would equip SEs with the essential skills to construct accurate and informative financial reports for mentors, investors, and tax authorities; and (2) Creating user-friendly, automated application tools to support financial reporting. These tools could streamline data entry, automate calculations, and generate standardized reports, alleviating some of the burden associated with financial reporting and allowing SEs to focus on core business activities.

By offering learning opportunities that directly address their needs and providing practical tools to simplify financial tasks, SEs are more likely to become engaged and enthusiastic about financial literacy. After all, a strong foundation in Financial Literacy (FL) has been demonstrably linked to improved startup performance (Culebro-Martínez et al., 2024). Equipping SEs with the knowledge and tools to navigate financial reporting effectively can empower them to make informed decisions, secure funding, and ultimately achieve sustainable business growth.

Beyond financial reporting, the researcher's analysis of secondary data revealed another critical topic for Student Entrepreneurs (SEs): budgeting. In the financial world, a well-defined budget serves as the cornerstone of any business, especially for startups. It acts as a clear roadmap, guiding SEs towards achieving their core objectives. Effective budgeting offers a multitude of benefits for startups. It empowers SEs to optimize their operations by allocating resources strategically and minimizing waste. Furthermore, budgeting allows them to manage cash flow effectively by providing a clear picture of expected income and expenses, thereby avoiding potential shortfalls. Ultimately, a well-constructed budget can help identify areas for cost savings, potentially increasing profitability (Majeed et al., 2023).

The importance of budgeting for startup performance is further emphasized by research. Majeed et al. (2023) highlight the direct link between budgeting and a startup's success, underscoring its crucial role in managing, planning, and handling business finances effectively. Similarly, Pavlatos and Kostakis (2021) confirm a positive relationship between strong business performance and budgeting practices. This positive association stems from budgeting's two key functions: (1) Operational planning (ex-ante): Budgeting acts as a planning tool, helping SEs define financial goals, project future income and expenses, and allocate resources strategically; and (2) Monitoring/control/dialogue (expost): Once implemented, budgets become a benchmark for monitoring performance. SEs can track their actual financial activities against the planned budget, identify deviations, and make adjustments as needed. This ongoing dialogue with financial data enables them to stay on track and adapt their strategies for optimal results. By incorporating budgeting literacy into the curriculum for SEs, they gain a valuable skill that can significantly impact their venture's success.

Effective budgeting plays a critical role in propelling startups toward greater viability, sustainability, profitability, and cost-effectiveness. It empowers SEs to make informed decisions regarding resource allocation and project selection through the application of key investment appraisal techniques. These techniques, such as Net Present Value (NPV), Internal Rate of Return (IRR), Modified IRR, Profitability Index (PI), Payback Period (PB), and Discounted Payback Period (DPB), allow SEs to assess the financial

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viability of potential projects and prioritize those with the greatest potential for positive return.

Beyond project selection, budgeting equips SEs with the skills necessary to prepare crucial financial reports. These reports include sales budgets, purchase budgets, and cash flow budgets, which form the foundation for creating comprehensive financial statements. Financial statements, prepared in accordance with Generally Accepted Accounting Principles (GAAP), summarize a company's financial performance over a specific period. The three core financial statements are the balance sheet, income statement (also known as the profit and loss statement), and cash flow statement. These reports serve as vital tools for decision-making and financial analysis.

Financial analysis can encompass various techniques, such as common-size analysis of both the income statement and balance sheet. This analysis expresses each line item as a percentage of a key metric (like revenue for the income statement or total assets for the balance sheet), allowing for easier comparison across companies or time periods. Additionally, financial analysis may involve a breakdown of various cost elements (employee costs, other expenses, depreciation, interest expense, taxes), analysis of net profit, net worth, and various types of liabilities and assets (secured loans, unsecured loans, stockholders' equity, investments, loans, and advances) (Haralayya, 2021).

To streamline the budgeting and financial analysis process for SEs, a dedicated financial application can be developed. This application would ideally focus solely on data input, minimizing complexity and maximizing user-friendliness. Existing financial applications may have limitations in catering to the specific needs of SEs. A custom-built application can address these limitations and empower SEs to not only manage their finances effectively but also gain valuable insights to plan for future growth. By enhancing their FL, SEs are better equipped to navigate the financial complexities of running a business and ultimately increase their chances of success.

CONCLUSION

This research has analyzed the challenges faced by student entrepreneurs (SEs) regarding financial literacy and proposes a two-part solution to boost their interest and capabilities in financial learning.

For universities with entrepreneurship programs, the research recommends developing a dedicated study plan focused on the fundamentals and practical applications of financial statement creation. This plan could be supplemented by a user-friendly digital application specifically designed to support SEs in this task. Ideally, the application should cover the three core financial statements (balance sheet, income statement, and cash flow statement) and incorporate essential budgeting concepts like NPV, IRR, PI, PB, and DPB. Furthermore, the application could guide SEs in creating sales budgets, purchase budgets, and cash flow budgets, ensuring adherence to GAAP standards.

The research also highlights the need for enhanced financial literacy training within startup incubation programs. Mentors often evaluate SEs based on their financial statements; however, the lack of knowledge and skills in creating these statements hinders many SEs. To address this gap, the research suggests incorporating training on both financial theory and practical applications into the incubation program curriculum. Ideally, financial lecturers could provide guidance on common-size analysis applications and offer automated calculations for various financial metrics, such as cost analysis, net profit calculations, net worth assessment, and different types of liabilities and assets.

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The findings of this study hold significant implications for both universities and application developers. Universities offering entrepreneurship programs can leverage the proposed study plan and the research insights to inform the development of engaging and effective financial learning tools. Application developers can utilize the identified information needs of SEs to create more user-friendly and comprehensive financial applications. Additionally, the research suggests exploring the use of infographics or other visual data formats to enhance the user experience and make financial concepts more accessible for SEs. By implementing these recommendations, universities and application developers can empower SEs with the financial literacy skills crucial for the success of their entrepreneurial ventures.

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DECLARATION OF CONFLICTING INTERESTS

The authors declared no potential conflicts of interest.

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