

# Need Analysis in Financial Ratio Website Development

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#### Abstract

This study aims to produce a thorough needs analysis for learning media development. The goal of this research is to analyse learning media needs in learning media development in order to meet learning objectives. Because it discusses the outcomes of distributing questionnaires on identifying learning needs, this research qualifies as qualitative. Eighty-five students from the economics faculty enrolled in financial management courses were chosen randomly as respondents for this study. The findings indicated that curriculum analysis, student needs analysis, and learning identification were the necessary needs analyses. The outcomes of the curriculum analysis demonstrate how the learning media development is appropriate for the Faculty of Economics' curriculum at UIN Maulana Malik Ibrahim Malang. The findings of the requirements analysis indicate that students require software-based learning materials that are engaging, case-based, and constantly updated to reflect the real world of practice. Software is required since learning using it is simpler, quicker, and more effective. The findings of the identification process demonstrate that software development may be done in classes that call for critical thinking from the students, like financial management.

Keywords: Needs Analysis; Curriculum Analysis; Learning Identification; Learning Media Development

## Introduction

Generation Z, which is presently enrolled in higher education, is known as a native of the digital world because of their superior technological aptitude compared to earlier generations. However, this skill must be paired with a solid grasp of digital literacy. In the age of society 5.0, digital literacy—which includes media literacy, information technology literacy, and computer literacy—is a crucial ability (Wati et al., 2023). Due to the structure of the mass media and social media, there will not be enough filtration against sources of biased news distribution without strong reading skills (Hijran et al., 2022). Students



with strong digital literacy can locate and choose pertinent material to comprehend, articulate, and present their views (Wati et al., 2023). A strong educational ecology can aid in developing this skill (Damayanti et al., 2023). Higher education, the most prestigious institution in the field of education, has a challenging duty to ensure that students are not only tech-savvy but also possess critical thinking abilities and a humanist mindset (Arief et al., 2017; Damayanti et al., 2023).

The learning process is no longer monopolized by the presence of teachers in the classroom due to the rapid advancement of science and technology. According to their individual interests and learning preferences, students can learn anywhere, at any time. A teacher must be able to plan lessons that use a variety of media and useful learning materials to ensure that learning happens in an enjoyable, successful, and quick way. Research on learning and technological advancements is conducted to add innovation and make learning easier for pupils to understand. Classroom learning with verbal communication by the teacher through words is learning that has been put to use (Kudiasanti & Sukirno, 2017). According to Salsabila et al., (2020), every learner always needs an entertaining learning model or method.

Kudiasanti & Sukirno (2017) found that the learning methods used are limited to textbooks and practice questions, accounting learning media are less diverse and innovative, and the learning process tends to be monotonous and one-way, leading to boredom quickly. They also found that students need help understanding the material and consider learning accounting to be something complicated, difficult, and boring (Astuti et al., n.d.; Kholilah et al., 2021). The gap between instructors and students can be filled more easily with the help of information technology (Warsita, 2017). Sulistiani et al., (2023) state that the material provided to students can be quickly understood with the application of technology. This result is because the training is feedback, meaning that if students experience technical problems and need more understanding of the material related to the training provided, students get a tutorial directly on how to solve a problem. According to Warsita (2017), there are three general approaches to the utilization of information technology for education and learning. First, computer-based learning and the internet are learning objects. Second, information technology facilitates learning under curriculum implementation. Third, integrating technology-based skills development by using applications in the curriculum.

Higher education answers this significant challenge by fully fostering technological advancement. The use of software (Ihsan & Yuniati, 2021; Ulfa & Laily, 2023) blended learning approaches (Herliani & Sibarani, 2017; Murniati & Hermawan, 2018), and bolstering various IT support devices (Rahmawati & Sudarman, 2021; Salshabella et al., 2022) are all examples of how technology can help learning. According to Herliani & Sibaran (2017) and Murniati & Hermawan (2017) blended approaches can enhance student learning independence, critical thinking, and learning achievement. Student learning independence has risen with the use of software-based learning resources and the improvement of IT support tools in e-learning that enable lecturer-student interaction patterns (Rahmawati & Sudarman, 2021; Salshabella et al., 2022). It is necessary to analyze the requirement for suitable learning media development given the sophistication of the technology being attempted to be implemented in education to fulfil the goals of using technology.

Needs analysis is always considered to be one of the crucial steps to go through in learning media development (Ahlam & Fahmi, 2022; Tiwow et al., 2023; Ulfa & Laily, 2023; Yuliyanto et al., 2022). However, more research needs to be done on the questions utilized, the outcomes of student responses, and the needs analysis's follow-up. This study aims to close the knowledge gap about needs analysis in creating educational media so that future researchers can build on it to create instruments and perform thorough analyses of the requirements analysis findings. This study was carried out at UIN Maulana Malik Ibrahim to support the institution's goal of becoming a top-tier university with a solid international reputation.



## Methods

To help students learn more actively and independently, this study analyses students' learning demands using descriptive qualitative research. This result needs analysis to examine the curriculum, the needs of the students, and the learning objectives (Susanti & Sagoro, 2018). Purposive sampling methods were used to choose the study's participants, including students, lecturers teaching Financial Management courses, and students using technology-based learning resources while in class. The distribution of questionnaires, interviews, observations, and secondary data analysis were the data collection methods used in this study. Eighty-five students responded to a questionnaire that asked them to answer eight questions about the current and anticipated future use of the learning model. Interviews with instructors of financial management courses who employ web-based learning tools were performed. To observe how the learning process is carried out, observations were made by observing learning practices in the classroom. The compatibility of curriculum development with course learning outcomes (CLO) was examined using secondary data analysis. The tools used to obtain the data are displayed in Table 1.

Data Collection	Collection Method	Objective
Method	Instrument	
Questioner	Questioner	Identify user traits, benefits and drawbacks of modern learning techniques, and user impressions of software use.
Interview	Interview Guidelines	identifying challenges for both lecturers who teach and those who learn, as well as learning models and methodologies and lecturers' reactions to the growth of the software as learning material
Observation	<b>Observation Guidelines</b>	examining students' educational methods
Secondary Data	Education Guidelines and CLO Analysis	Examine whether the curriculum, media, and learning objectives are appropriate.

# **Result & Discussion**

In order to assist financial managers or investors in making decisions, the financial statement analysis course teaches students how to apply financial data analysis methodologies (Mahendra et al., 2021; Utari, 2018). Financial statement analysis can be utilized as a screening, forecasting, and evaluation tool, among other things (Saputra & Pasha, 2021). A tool for problem-solving from financial statement analysis is the calculation approach. Due to pupils' inability to comprehend the issue clearly, the calculation method becomes a new issue (Warsitasari & Rofiki, 2022). Additionally, students have yet to be able to use formulas or formulas to solve difficulties. Students sometimes need help to solve difficulties involving financial calculations, particularly when putting a solution plan into action because of complicated formulas and lengthy calculations (Warsitasari & Rofiki, 2022).

Utilizing digital content or apps on cell phones is an integral part of modern living. This advancement is based on the application of learning software for business feasibility assessment by Astuti et al., n.d. A website is an online platform anyone may use to publish information. Web browsers are a group of applications needed to view the information on this website (Fikriya, 2021). A web-based financial information system can be used to conduct or manage financial reports, including systematic and integrated spending and income of money by all users concerned and have access to the application in order to make it more transparent and lower human error, according to (Mantovani & Gustina, 2020). The



process of developing this software-based learning media requires a needs analysis which includes curriculum analysis, student needs analysis and learning identification (Salshabella et al., 2022; Ulfa & Laily, 2023).

Curriculum analysis is the first analysis. Examining the semester learning plans for financial management courses across all study programs at FE UIN Maulana Malik Ibrahim Malang enables curriculum analysis. The CLO of the three study programs varies. However, three CLOs are nearly identical, namely: a) understanding and being able to explain the meaning of financial statements, including the position, profit/loss statement, retained earnings statement, cash flow statement, financial structure, and capital structure; b) understanding strategic and tactical planning, financial planning, and calculating sales for various purposes. The findings of this need analysis demonstrate how well-suited a financial statement analysis website is for usage in classes since it offers financial statement analysis to evaluate an entity's commercial viability.

The second analysis is learning needs analysis. The second analysis stage was done by sending questionnaires to third-semester students taking Financial Management courses. The questionnaire was sent to all students in the three study programs by sending a Google form to the Force group of the three study programs. The results of filling out the questionnaire are presented in several tables below according to the questions given in the questionnaire. Respondents who filled out the questionnaire totalled 85 students, consisting of 34 men and 49 women. Table two comes from the question about the choice of student gender.

Gender	Amount	Percentage
Male	36	42,4 %
Female	49	57,6 %

Table 2. Respondent

The student's class is the second inquiry on the form. This inquiry was made in order to assess the validity of the questionnaire's intended audience, namely college students enrolled in Financial Management courses. Because the students in question were third-semester students taking Financial Management courses based on the curriculum distribution, the Class of 2022 accounted for 76.5% of the respondents. Up to 20 members, or 23.5%, of the Class of 2021 make up the remainder. Students in their fifth semester who are repeating the Financial Management course or who are simply taking it because they cannot enrol in other courses are the ones who are in question. The respondent's generation is displayed in Table 3.

Table 3.	Respondent	Class
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Class	Amount	Percentage
2021	20	23,5 %
2022	65	76,5 %

The third survey question asks participants about their experiences finding learning financial report analysis challenging. According to the survey results in Table 4, up to 80% of students need help understanding Financial Statement Analysis. Students' struggles stem from various issues, such as a need to grasp the theory, calculation methods, and the fundamentals of calculating financial ratios. However, 20% of students claimed they had no learning challenges.



Having trouble un	derstanding Financial Staten	nent Analysis
Yes	68	80%
No	17	20%

 Table 4. Financial Analysis Challenging

The fourth questionnaire question was about students' opinions about whether or not they liked the learning methods used. The questionnaire results showed that 89.4% of students liked the learning methods used by lecturers. In contrast, the remaining 10.6% of students disliked the method. This result is in line with the research of Feizi & Rahmani, (2023); Nasrulloh & Ismail, (2017); Yulientinah et al., (2020), the method used in delivering material can be developed to make it easier to understand. The results of filling out the fourth question are presented in Table 5.

Table 5. Opinions on the Methods' Favorability

I liked the method use	d by lecturers in learning Financi	ial Statement Analysis
Yes	76	89,4%
No	9	10,6%

The use of cases in learning is covered in the sixth questionnaire question. Since students have varied qualities, Byron Massialas and Benjamin Cox noted in Khoerunnisa & Aqwal (2020) that building a learning model must also consider them. According to Table 6, 91.8% of students anticipate learning through practice in actual cases, whereas the remaining students anticipate traditional learning through practice questions. Social problem-solving, particularly through social discovery and logical reasoning, is an example of a case that can be given (Khoerunnisa & Aqwal, 2020).

#### Table 6. Case in Learning Process

Learning Financial Statemen	t Analysis requires hands-on exp	perience with actual examples
Yes	78	91,8%
No	7	8,2%

The employment of learning strategies by lecturers is the subject of the sixth query. According to the responses to the questionnaire for this subject, 84.7% of students said that the lecturers' assignments might help students get more familiar with the actual world because the instances were appropriate for the context of the classroom. Students are kept up to date on situations that are occurring in the neighbourhood thanks to the suitability of this case (Khoerunnisa & Aqwal, 2020; Nasrulloh & Ismail, 2017). 15.3% of students still ask about other options in any case. Table 7 displays the results of completing the questionnaire.

Techniques that lecturer	s have used to teach Financ	ial Statement analysis
Yes	72	84,7%
No	13	15,3%



The seventh question asked students about other possible learning approaches they may anticipate. According to the survey results, 89.4% of students appreciated the lecturer's style since it was engaging and simple to understand. However, they expressed a desire for fresh innovations in teaching techniques in the future. This finding is consistent with studies by Latifah et al., (2021) and Nasrulloh & Ismail, (2017), which found that learning requires the capacity to create and assess goods. However, 10.6% of students believe there is no need for alternative teaching methods. The results of the questionnaire's completion are shown in Table 8.

Expect or desire to stu	udy financial statement an	alysis more effectively
Yes	76	89,4%
No	9	10,6%

Table 8. An Improved Approach To Learning Analysis Of Financial Statements

Students' expectations about the software-based learning methods they would like to use are the final questions in the learning requirements analysis. According to Khoerunnisa & Aqwal (2020), a learning model is a strategy or pattern that may be included in a curriculum (lesson plan) to improve teaching and learning activities. According to Table 9, 7.1% of people anticipate not using software since it will continue to evolve in response to changes. Software used in learning media must continuously be updated to meet the needs of the learning process (Latifah et al., 2021). In contrast to these findings, 92.9% of students said they wish to learn financial statement analysis using software since it will make the process simpler, quicker, and more efficient. This finding is consistent with studies by Nasrulloh & Ismail, (2017) and Sung et al., (2016) and others that claim that learning media appeals to students. Table 9 displays the results of completing the questionnaire.

Table 9. Software Expectations for Learning
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Expect to learn Financial Statement Analysis Learning Method		
Yes	79	92,9%
No	6	7,1%

The third analysis in the needs analysis is learning identification. This analysis was carried out by conducting interviews with lecturers teaching Financial Management courses. The interview results show that lecturers need help to deliver financial ratio calculation material to students. Some of the reasons mentioned by lecturers are the need for a basic understanding of financial statements and students' partial understanding of the relationship of numbers in financial statements. The results of this interview provide a conclusion about the need for lecturers to develop learning media that students can access from anywhere and anytime through student cell phones. Therefore, website-based media development is very important so that students can learn much more easily and interestingly (Fikriya, 2021).

# Conclusion

To fulfil the goals of creating learning media, conducting a needs analysis before beginning any work is crucial. Three ways of needs analysis that can be employed include learning identification through selecting appropriate learning media, CLO analysis of the suitability of learning media, and questionnaires with questions directing students about methods they have used and expect. Learning materials that must be created using website-based software must be visually appealing and current with cases—using web-based software for financial statement analysis since it is simple, quick, and efficient.



The research's weakness is the absence of questions examining the demands of the questionnaire. To collect more data for the questionnaire, future studies can utilize more diverse, open-ended questions.

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