



EZ-FSA: A SMART SYSTEM FOR FINANCIAL ANALYSIS AND DECISION-MAKING

Wan Noor Asmuni Wan Fauzi^{1,*}, Muhaniza Zainal Ariffin², Wan Noraswaniaty Wan Ahmad³

^{1,2,3} *Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan*

**Corresponding author: asmuni@uitm.edu.my*

ABSTRACT

The ability to interpret financial statements remains a significant challenge among students, who are often trained to perform calculations but lack deeper analytical understanding. This limitation reduces their ability to apply financial knowledge effectively in real-world contexts. EZ-FSA is an interactive Financial Statement Analysis tool which is designed to simplify the interpretation of financial data. The tool is for students and small business users. It integrates ratio analysis and visual dashboards into one platform. The platform is user friendly. Its purpose is to connect theoretical financial knowledge with practical use. It provides automated calculations and clear AI style explanations. Users can input financial statement data. They instantly receive insights on profitability, liquidity, efficiency and solvency. These insights come with visual indicators like charts and performance signal. The system focuses on learning through interpretation not just computation. It is suitable for outcome-based education. EZ-FSA help users improve decision making skills. It allows users to identify trends and evaluate financial performance. The tool is designed to be accessible and affordable. It supports both academic and practical use. Overall, EX-FSA promotes financial literacy and improve analytical skills.it encourage active learning through an intuitive and engaging interface.

KEYWORDS: Accounting Education; Decision-Making; Digital Learning; Financial Statement Analysis; Financial Ratios

PROBLEM AND OBJECTIVE

Many students find it hard to interpret financial statements. They often learn how to do calculations but do not develop deep analytical skills. This makes it hard for them to use financial knowledge in real life. In the past, financial reporting was done manually on paper. This process took a long time and had many errors causing problems with accuracy and reliability (Brown & Wilson, 2023). In 2020, only 85% of manual financial statements were correct. This left room for mistakes and misreporting. Digital tool has made reporting faster but many are still complex, expensive or not made for learning.

Similarly, small and medium-sized enterprises (SMEs) face difficulties in analyzing their financial performance due to limited access to affordable and user-friendly analytical tools. As business environments become more complex and globally competitive, the need for simple, accurate, and efficient financial analysis tools has become increasingly critical (Martinez et al., 2023).

In response to these challenges, EZ-FSA is developed with the following objectives: to simplify financial statement analysis, enhance users' interpretation skills beyond calculations, provide an



interactive and visual learning experience, and support students as well as SMEs in making informed financial decisions.

DESIGN DESCRIPTION

EZ-FSA is a digital dashboard tool which combines different financial analysis methods in one platform. The tool uses visual dashboards with graphs and performance indicators. This helps make complex information easier to understand as visualization improves decision making (Yigitbasioglu & Velcu, 2020). Users enter financial data like income statements and balance sheets. The system then calculates important financial ratios automatically.

The key features of EZ-FSA include automated ratio calculations covering liquidity, profitability, efficiency, and solvency, enabling users to obtain accurate financial metrics instantly without manual computation. It also integrates DuPont analysis to provide deeper insights into a company's financial performance by breaking down return on equity into its core components. The tool is supported by visual dashboards that present data through graphs and performance indicators, making complex information easier to understand. In addition, EZ-FSA offers AI-style explanations that translate numerical results into simple interpretations, aligning with studies highlighting the role of AI in improving learning outcomes (Luckin et al., 2022). To further enhance learning and usability, the system provides interactive feedback that guides users in understanding their financial position and making informed decisions.

The tool is made for accounting students, teachers and small business owners. Its unique feature is combining calculation, visualization and interpretation in one affordable solution.

VISUALS

The design of EZ-FSA features a comprehensive dashboard interface that displays key financial ratios in a clear and organized manner, allowing users to quickly assess financial performance, consistent with the use of dashboards as effective analytical tools in accounting (Prokofieva, 2021). It incorporates graphs and charts to illustrate trends and comparisons over time, making it easier to identify patterns and changes, as data visualization has been shown to enhance understanding and decision-making in financial contexts (Du et al., 2025).

The tool also has DuPont analysis diagrams. These diagrams show return on assets broken down into main parts for better understanding. It uses visual indicators like color coded signals to show strengths and weaknesses quickly. These visual features help users understand financial data more easily and they support faster and better decision making (Vidi Corp, 2026).

NOVELTY AND UNIQUENESS

EZ-FSA goes beyond traditional financial tools by focusing on interpretation rather than just computation. Unlike standard spreadsheet analysis, it integrates automated explanations, visual insights, and DuPont analysis in one system. The tool is designed specifically for learning and decision-making, making it both educational and practical. Its simplicity, affordability, and interactive design distinguish it from more complex financial software.

BENEFITS TO MANKIND

EZ-FSA enhances financial literacy by transforming complex financial data into clear, understandable insights. It helps students develop critical thinking, analytical, and decision-making skills by focusing on interpretation rather than computation. For small business owners, the tool provides a practical and affordable way to evaluate financial performance and identify areas for improvement. By enhancing



understanding and accessibility, EZ-FSA supports better resource management, risk control, and sustainable business practices (Molosiwa & Holland, 2025).

COMMERCIAL POTENTIAL

EZ-FSA demonstrates strong commercial potential within the education and SME sectors due to its practical and user-friendly design. It can be marketed as a low-cost educational tool, offered through a subscription-based model, or embedded within academic curricula to support teaching and learning. Its key competitive advantages include simplicity, affordability, and its dual functionality for both learning and real-world business analysis. Furthermore, its scalable framework enables expansion into broader markets and integration with digital and cloud-based platforms, increasing its long-term commercial viability.

CONCLUSION

EZ-FSA presents an innovative solution to financial statement analysis by integrating automated calculations, visual dashboards, and simplified interpretations within a single platform. It effectively addresses common learning challenges by shifting the focus from computation to understanding, thereby enhancing users' analytical and decision-making skills. The tool is valuable for both students and practitioners, offering practical insights in an accessible format. In the future, EZ-FSA could add advanced AI analytics, cloud access and mobile app. These improvements would make the tool easier to use and reach more people. They would also help EZ-FSA improve financial education and real-world financial analysis.

REFERENCES

- Brown, D., & Wilson, P. (2023). Investor perceptions of AI-generated financial statements. *Journal of Financial Trust*, 41(2), 211-230.
- Du, M., Amor, R., Ma, K. L., & Wünsche, B. C. (2025). Data visualization for improving financial literacy: a systematic review. *Visual Informatics*, 100272.
- Luckin, R., George, K., & Cukurova, M. (2022). *AI for school teachers*. CRC Press.
- Martinez, C., & Lopez, R. (2023). AI-enhanced forecasting in financial reporting. *European Journal of Business Analytics*, 27(2), 145-163.
- Molosiwa, T., & Molosiwa, J. (2025). The impact of financial literacy on the performance of Small and Medium-sized Enterprises (SMEs): A review of literature. *International Journal of Research in Business and Social Science*, 14(3), 320-332.
- Prokofieva, M. (2021). Using dashboards and data visualizations in teaching accounting. *Education and Information Technologies*, 26(5), 5667-5683.
- Vidi Corp. (2026). Data visualization dashboard examples and best practices. Retrieved from <https://vidi-corp.com/data-visualization-dashboard-examples/>
- Yurtay, Y., & Ayanoğlu, M. (2021). Dashboard application model in supplier evaluation by using artificial immune system and data mining methods. *Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi*, 27(2), 162-172.