



Bridging Education and Industry Gaps through IQF-Based Financial Management Occupation Mapping

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ABSTRACT This study aims to bridge the gap between education and industry in financial management by developing a comprehensive occupational map within the Indonesian Qualification Framework (IQF). Employing the methodologies of the Mapping Study (Petersen et al., 2008) and Rapid Assessment Process (RAP) (Beebe, 2005), the research identifies and categorizes essential competencies required for various financial management roles across different qualification levels. The study ensures the validity and traceability of standards by adhering to the principles of the Regional Model Competency Standards (RMCS). Key findings include the identification of critical competencies for each IQF level, which inform curriculum development and support policy-making to align vocational education with industry needs. The results highlight the importance of developing tailored educational programs to enhance employability and career prospects for graduates, contributing to a competitive workforce in Indonesia. This research provides insights and recommendations for future studies, curriculum development, and policy-making in vocational education and training.

Keywords: occupational mapping, financial management, indonesian qualification framework, competency, education.

INTRODUCTION

Financial management is a critical component in both public and private sector organizations, encompassing the planning, directing, monitoring, organizing, and controlling of monetary resources. Effective financial management is essential for the sustainability and growth of organizations, as it ensures optimal use of resources, compliance with financial regulations, and achievement of strategic objectives. Given its importance, there is a high demand for professionals with specialized competencies in financial management. Tapsoba et al., (2024) shows that higher PFM quality correlates with better health outcomes, demonstrating the necessity of robust financial management practices in the public sector. Similarly, Meilisa Amalia, (2023) indicates that effective financial management practices, including proper accounting and auditing procedures, are necessary for optimal resource utilization and achieving strategic goals. Quinn & Scur, (2021) highlights the importance of structured management practices in enhancing organizational performance, while Una et al., (2023) stresses that robust financial practices are crucial for resource optimization and regulatory compliance. Hepworth, (2024) further argues that well-managed financial systems are essential for the

sustainability and growth of organizations, ensuring resources are used efficiently and regulatory compliance is maintained.

Occupational Mapping ensures that educational curricula are aligned with the actual demands of the job market, thereby improving the relevance of training programs. Aljohani et al., (2022) highlights that curriculum alignment helps bridge the gap between learned and required skills, ensuring that students acquire competencies directly relevant to the job market. Similarly, Mercado, (2023) emphasizes the importance of aligning technical-vocational-livelihood (TVL) courses with the specializations of teachers to ensure students receive relevant, industry-aligned training. Jean et al., (2022) argues that occupational mapping provides valuable insights into the competencies required in various professions, which can then be incorporated into educational programs. Additionally, Wijngaards-de Meij & Merx, (2018) identifies that making the curriculum transparent and aligning it with job market demands improves the relevance and effectiveness of training programs, better preparing students for the workforce. Calero López & Rodríguez-López, (2020) underscores that aligning educational programs with occupational requirements enhances the relevance of training, ensuring students acquire both the technical and soft skills needed by employers.

Financial Management facilitates performance measurement and evaluation, enabling organizations to achieve their financial goals effectively. Guthrie et al., (2024) highlights that effective financial management practices, including PMM systems, help universities monitor their financial health, comply with regulations, and achieve strategic objectives by providing a structured approach to measure and evaluate performance. Similarly, Otoo, (2024) underscores how these practices influence financial outcomes and overall performance, supporting the achievement of financial goals and sustainability. Holopainen et al., (2023) emphasizes the importance of performance measurement systems in monitoring financial performance and making informed strategic decisions. Effective financial management practices ensure that resources are used optimally, compliance with financial regulations is maintained, and strategic objectives are met, thereby supporting the organization's overall financial goals. El Fallahi et al., (2023) discusses how financial management practices are essential for assessing organizational effectiveness, efficiency, and achieving strategic objectives. Additionally, Kumar et al., (2023) emphasizes that financial management through tools like the BSC enables organizations to monitor their performance comprehensively, ensuring they achieve their financial goals efficiently.

The Indonesian Qualification Framework promotes lifelong learning by providing a structured pathway for individuals to progress through different qualification levels. Stanistreet, (2020) emphasizes the importance of structured learning pathways like the Indonesian Qualification Framework (IQF), which facilitate continuous learning and development. Jinhee Choi (2023) underscores that the qualification framework helps individuals systematically build on their

qualifications and competencies, promoting continuous learning and professional growth. Thwe & Kálmán, (2024) illustrates how the Qualification Framework offers a clear progression route for learners, from basic education to higher education and professional qualifications. Additionally, Mada Aditia Wardhana et al., (2023) demonstrates how the qualification framework aligns educational curricula with industry requirements, ensuring that learners can continuously upgrade their skills and qualifications.

Competency in Education ensures that graduates are job-ready, possessing the practical skills and knowledge required by employers. Shore & Dinning, (2023) emphasizes the importance of action, reflection, social interaction, and contextual learning in ensuring that students gain the practical skills and competencies required by employers. Similarly, Presti et al., (2022) underscores the need for aligning educational programs with industry requirements to ensure that graduates are well-equipped for their careers. Weber et al., (2024) highlights that accreditation and competency-based education frameworks are essential in developing curricula that provide students with the practical skills and knowledge needed for their evolving roles. Rajendran & Chauhan, (2023) suggests that continuous learning and skill development are crucial for maintaining job readiness and meeting the evolving demands of the education sector. Additionally, Potgieter et al., (2023) highlights the necessity for educational institutions to integrate digital literacy and practical skill development into their curricula to prepare students for future employment.

However, the dynamic nature of the financial environment, characterized by rapid technological advancements, evolving regulations, and globalization, poses significant challenges for the workforce. These changes necessitate continuous upskilling and reskilling of financial management professionals to keep pace with industry standards and expectations.

Challenges in Developing Occupational Maps

Developing a comprehensive national occupational map for financial management within the Indonesian Qualification Framework (IQF) faces several challenges:

1. **Industry-Education Gap:** There is a persistent gap between the competencies required by the industry and those imparted by educational institutions. This gap leads to a mismatch between the skills of graduates and the needs of employers, resulting in reduced employability and productivity.
2. **Dynamic Industry Requirements:** The financial industry is subject to frequent changes due to new regulations, technological advancements, and market conditions. This dynamism requires that occupational maps and competency standards be regularly updated to reflect current industry needs.
3. **Lack of Standardization:** There is a lack of standardized competency frameworks that can be universally applied across different educational institutions and training programs. This lack of standardization hampers the ability to uniformly assess and certify the competencies of financial management professionals.

4. **Diverse Competency Requirements:** Financial management roles vary significantly across different organizations and sectors. Mapping these diverse requirements into a unified framework that addresses the needs of all stakeholders is a complex task.

Significance of the Study

This study aims to address the aforementioned challenges by developing a detailed occupational map for financial management within the IQF. The significance of this study can be outlined as follows:

1. **Aligning Education with Industry Needs:** By identifying and mapping the competencies required at each qualification level, this study will help align educational curricula with industry needs. This alignment will ensure that graduates possess the skills and knowledge required by employers, thereby enhancing their employability and career prospects.
2. **Informing Curriculum Development:** The occupational map will serve as a valuable resource for educational institutions and training providers in designing and updating their curricula. This will help ensure that training programs are relevant, up-to-date, and aligned with industry standards.
3. **Supporting Policy Making:** The findings of this study will provide insights for policymakers in developing and implementing competency standards and certification schemes. This will help create a standardized framework for assessing and certifying the competencies of financial management professionals.
4. **Enhancing Workforce Competitiveness:** By providing a clear framework for the development and assessment of competencies, the occupational map will contribute to the overall competitiveness of the workforce. This will help ensure that Indonesia can meet the demands of the global financial industry and maintain its competitive edge.

METHOD

This research aims to develop an effective and efficient competency framework in education by combining the Mapping Study (Petersen et al., 2008) for financial management occupations and the Rapid Assessment Process (RAP) (Beebe, 2005). This approach ensures understanding of complex dynamics in education and training while maintaining validity and traceability to international standards through RMCS (Regional Model Competency Standards).

Methodology

The methodology of this research is structured to systematically develop a competency framework for financial management education. The process begins by defining the research objectives and key questions, which focus on identifying financial management occupations and their categorization within the Indonesian Qualification Framework (IQF). The next step involves collecting secondary data from various sources, including national employment databases, industry reports,

academic publications, and government documents, to gather relevant information on financial management occupations and their qualifications.

Following data collection, a rigorous selection process is employed, wherein relevant data is included based on its pertinence to financial management occupations, while irrelevant or outdated information is excluded. The selected data is then analyzed using IQF descriptors, and key information such as job descriptions, required qualifications, expected competencies, and qualification framework levels is extracted and categorized accordingly by job type, qualification level, or industry sector.

To gain deeper insights, the Rapid Assessment Process (RAP) is utilized, involving qualitative data collection through interviews and focus group discussions with key stakeholders, including educators, industry experts, and policymakers. The qualitative data is quickly analyzed to develop an initial understanding from an insider's perspective, and the findings are used to validate and refine the occupational mapping and competency framework.

The methodology also incorporates the principles of the Regional Model Competency Standards (RMCS) to ensure that the competency framework aligns with international standards. This includes developing standardized competencies and ensuring traceability of these competencies to RMCS guidelines, thereby maintaining validity and adherence to international benchmarks.

Expected Outcomes

1. Comprehensive map of financial management occupations within the IQF.
2. Detailed description of competencies required at each qualification level.
3. Recommendations for aligning education curricula with industry needs.
4. Validated and internationally traceable competency framework.

RESULTS AND DISCUSSION

The mapping results are detailed in the following tables, which categorize financial management occupations by IQF levels. Each table includes a brief description of the occupations and the key competencies required for effective performance. These results serve as a foundation for aligning education curricula with industry standards, ultimately aiming to enhance the employability and career prospects of graduates in the financial management sector.

Tabel 1. Map of Occupation in Financial Management within Indonesian Qualification Framework

IQF Level	Main Occupations
Level 9	Chief Financial Officer (CFO), Finance Director, Financial Consultant/Advisor, Corporate Treasurer
Level 8	Senior Financial Manager, Financial Controller, Director of Corporate Finance, Head of Treasury
Level 7	Financial Manager, Senior Financial Analyst, Senior Auditor, Tax Manager, Accountant,
Level 6	Financial Analyst, Budget Analyst, Internal Auditor.

IQF Level	Main Occupations
Level 5	Junior Financial Analyst, Accounts Payable/Receivable Specialist, Payroll Specialist, Bookkeeper
Level 4	Accounts Clerk, Billing Clerk, Payroll Clerk, Junior Bookkeeper
Level 3	Junior Accountant, Assistant Financial Analyst, Payroll Assistant, Billing Assistant
Level 2	Accounting Clerk, Bookkeeping Assistant, Finance Assistant, Bank Teller Assistant

Each IQF level and its corresponding occupations have been meticulously analyzed to ensure the relevance of the identified competencies to industry needs. The detailed occupation maps and their competencies are presented in the subsequent tables and discussions, providing a clear and structured overview of the required qualifications for each role. The following sections will delve deeper into these findings, exploring their implications for education and offering recommendations for future curriculum development and policy-making.

Table 2. Occupation Map and its Competence in Finance Management within IQF level 9

IQF level	Occupation and its Definition	Competence
9	Finance Director , Is the senior executive responsible for overseeing the financial operations and strategy of an organization.	<ul style="list-style-type: none"> • Develop financial strategies to achieve the organization's long-term goals. • Implement financial strategies to achieve the organization's long-term goals. • Oversee all financial operations, including budgeting, forecasting, and financial reporting. • Identify and mitigate financial risks to protect the organization's assets and ensure regulatory compliance. • Monitor financial performance and provide insights to senior management to support decision-making. • Lead and manage the finance team, ensuring effective collaboration and professional development.
	Chief Financial Officer (CFO) , Is the executive responsible for managing the financial actions of a company, including financial planning, risk management, and financial reporting.	<ul style="list-style-type: none"> • Formulate long-term financial plans to support organizational goals. • Manage budgeting, forecasting, and financial analysis. • Identify and mitigate financial risks. • Guarantee accuracy and timeliness of financial reports. • Oversee investment portfolio to maximize returns. • Handle debt issuance and equity financing. • Report financial performance to the board and investors. • Maintain adherence to financial regulations and policies. • Monitor and manage cash flow for liquidity.

IQF level	Occupation and its Definition	Competence
	<p>Financial Consultant/ Advisor, Is a professional who provides expert advice on financial planning, investments, and risk management to individuals and organizations.</p>	<ul style="list-style-type: none"> • Direct and develop the finance team. • Meet with clients to understand their financial goals and provide tailored advice. • Develop comprehensive financial plans covering investments, retirement, tax strategies, and risk management. • Provide recommendations on investment opportunities based on market analysis and clients' risk tolerance. • Ensure that all financial advice complies with relevant regulations and ethical standards. • Monitor and review clients' investment portfolios, making adjustments as needed to align with their financial objectives.
	<p>Head of Financial Planning and Analysis, Is responsible for leading the financial planning and analysis function, including budgeting, forecasting, and performance reporting.</p>	<ul style="list-style-type: none"> • Lead the development of financial plans, including budgeting and forecasting processes. • Analyze financial data to provide actionable insights and recommendations for strategic decision-making. • Prepare and present regular financial reports to senior management, highlighting key metrics and trends. • Support business units with financial analysis to guide strategic initiatives and investment decisions. • Manage the financial planning and analysis team, ensuring high performance and professional growth. • Mentor the financial planning and analysis team, ensuring high performance and professional growth.
	<p>Corporate Treasurer, Is responsible for managing an organization's liquidity, investments, and financial risk.</p>	<ul style="list-style-type: none"> • Oversee the organization's liquidity to ensure it has sufficient cash flow to meet its obligations. • Manage the organization's investment portfolio to maximize returns while managing risks. • Identify financial risks related to currency, interest rates, and credit. • Assess financial risks related to currency, interest rates, and credit. • Mitigate financial risks related to currency, interest rates, and credit. • Develop strategies for funding and capital management, including debt issuance and capital allocation. • Ensure compliance with financial regulations and reporting requirements, maintaining accurate financial records.

Table 3. Occupation Map and its Competence in Finance Management within IQF level 8

IQF level	Occupation and its Definition	Competence
8	Senior Financial Manager, Is responsible for developing and implementing financial strategies, overseeing financial operations, and managing risks.	<ul style="list-style-type: none"> • Develop financial strategies to achieve organizational goals. • Implement financial strategies to achieve organizational goals. • Oversee the preparation and management of budgets, ensuring alignment with financial plans. • Conduct financial analysis to provide insights and recommendations for business decisions. • Identify financial risks and develop strategies to mitigate them. • Manage the finance team, fostering a high-performance culture. • Mentor the finance team, fostering a high-performance culture.
	Financial Controller, Is responsible for overseeing financial reporting, internal controls, and compliance with accounting standards.	<ul style="list-style-type: none"> • Oversee the preparation of accurate financial statements and reports. • Implement and maintain internal controls to safeguard company assets. • Ensure compliance with accounting standards, regulations, and company policies. • Manage the budgeting process, including forecasting and variance analysis. • Coordinate internal and external audits, providing necessary documentation and support.
	Director of Corporate Finance, Is responsible for overseeing corporate finance activities, including capital raising, mergers, and acquisitions.	<ul style="list-style-type: none"> • Oversee capital structure and manage capital raising activities such as debt and equity financing. • Lead M&A activities, including due diligence, valuation, and integration. • Develop financial strategies to support business growth and objectives. • Execute financial strategies to support business growth and objectives. • Evaluate and manage investment opportunities to maximize returns. • Maintain relationships with investors, banks, and other financial stakeholders.
	Head of Treasury, Is responsible for managing the organization's treasury functions, including cash management and financial risk management.	<ul style="list-style-type: none"> • Oversee cash flow management to ensure sufficient liquidity for operations. • Develop and implement investment strategies to optimize returns on excess cash. • Identify and mitigate financial risks, including currency, interest rate, and credit risks. • Manage funding strategies, including short-term and long-term financing options. • Ensure compliance with financial regulations and reporting requirements.

Table 4. Occupation Map and its Competence in Finance Management within IQF Level 7

IQF level	Occupation and its Definition	Competence
7	Financial Manager, Is responsible for managing financial operations, including planning, analysis, and reporting.	<ul style="list-style-type: none"> • Develop financial plans and budgets to support organizational goals. • Oversee financial plans and budgets to support organizational goals. • Prepare financial reports, ensuring accuracy and compliance with regulations. • Analyze financial reports, ensuring accuracy and compliance with regulations. • Identify and mitigate financial risks to protect the organization’s assets. • Monitor financial performance and implement corrective actions as needed. • Lead and manage the finance team, ensuring effective collaboration and performance.
	Senior Financial Analyst, Is responsible for conducting advanced financial analysis and modeling to support decision-making.	<ul style="list-style-type: none"> • Conduct complex financial analysis and modeling to support business decisions. • Prepare detailed financial reports and presentations for senior management. • Develop financial forecasts to guide strategic planning. • Update financial forecasts to guide strategic planning. • Evaluate investment opportunities and provide recommendations. • Mentor junior analysts, providing guidance and support for their professional development.
	Accountant, Is responsible for maintaining financial records, preparing financial statements, and ensuring compliance with accounting standards.	<ul style="list-style-type: none"> • Maintain accurate financial records, including ledgers, journals, and financial statements. • Reconcile bank statements and other financial accounts to ensure accuracy. • Ensure compliance with accounting standards and regulations. • Prepare financial reports, including balance sheets, income statements, and cash flow statements. • Provide support during internal and external audits, supplying necessary documentation and information.
	Senior Auditor, Is responsible for conducting thorough audits to assess the effectiveness of internal controls and compliance.	<ul style="list-style-type: none"> • Develop and execute audit plans to assess the effectiveness of internal controls. • Identify and evaluate areas of financial risk within the organization. • Ensure compliance with accounting standards, regulatory requirements, and company policies. • Prepare audit reports and present findings to senior management. • Provide recommendations for improving internal controls and operational efficiency.

IQF level	Occupation and its Definition	Competence
	Tax Manager, Is responsible for managing tax compliance, planning, and reporting activities.	<ul style="list-style-type: none"> • Develop tax strategies to minimize tax liabilities. • Implement tax strategies to minimize tax liabilities. • Ensure compliance with local, state, and federal tax regulations. • Prepare and review tax returns and reports, ensuring accuracy and timeliness. • Provide tax advice to management and other departments on tax-related issues. • Identify and mitigate tax risks, including audits and investigations.

Table 5. Occupation Map and its Competence In Finance Management Within IQF Level 6

IQF level	Occupation/ Job Title	Competence
6	Junior Financial Analyst, Is responsible for gathering financial data, assisting in financial modeling, and preparing reports.	<ul style="list-style-type: none"> • Gather and organize financial data from various sources for analysis. • Assist in creating financial models to predict future financial performance. • Prepare reports and presentations based on financial data analysis. • Analyze variances between actual and forecasted financial results. • Provide support to senior financial analysts in various analytical tasks.
	Budget Analyst, Is responsible for developing and managing budgets, preparing forecasts, and monitoring budget variances.	<ul style="list-style-type: none"> • Assist in the development of organizational budgets, including gathering and analyzing data. • Prepare financial forecasts and projections to support budget planning. • Monitor and report on budget variances, identifying areas of concern. • Conduct cost-benefit analyses to support decision-making. • Prepare budget reports and presentations for management review.
	Internal Auditor, Is responsible for conducting internal audits to assess the effectiveness of internal controls and risk management.	<ul style="list-style-type: none"> • Develop audit plans and schedules to assess internal controls and processes. • Identify areas of financial and operational risk within the organization. • Evaluate the effectiveness of internal controls and recommend improvements. • Conduct audits, including testing of financial transactions and reviewing documentation. • Prepare audit reports detailing findings, conclusions, and recommendations for improvement.

**Table 6. Occupation Map and its Competence In Finance Management
Within IQF Level 5**

IQF level	Occupation and its Definition	Competence
5	Junior Financial Analyst , Is responsible for supporting financial analysis tasks, including data collection and financial modeling.	<ul style="list-style-type: none"> • Gather financial data from various sources for analysis. • Assist in building and maintaining financial models to predict future financial performance. • Create and update financial reports and presentations. • Analyze discrepancies between actual and forecasted financial results. • Provide assistance to senior analysts in their analytical tasks and projects.
	Accounts Payable/Receivable Specialist , Is responsible for managing invoicing, payments, and collections, and maintaining accurate financial records.	<ul style="list-style-type: none"> • Manage the processing of invoices, ensuring accuracy and compliance with company policies. • Handle payments to vendors and suppliers, ensuring timely and accurate transactions. • Monitor accounts receivable and follow up on overdue payments. • Reconcile accounts payable and receivable balances with general ledger accounts. • Maintain accurate and up-to-date financial records for accounts payable and receivable.
	Payroll Specialist , Is responsible for processing payroll, maintaining payroll records, and ensuring compliance with tax regulations.	<ul style="list-style-type: none"> • Process payroll for employees, ensuring accuracy and compliance with tax laws and regulations. • Maintain and update payroll records, including timesheets, deductions, and benefits. • Prepare and file payroll tax reports, ensuring compliance with relevant regulations. • Address employee inquiries regarding payroll, benefits, and deductions. • Ensure all payroll activities comply with company policies and government regulations.
	Bookkeeper , Is responsible for maintaining financial records, including ledgers and invoices, and preparing financial reports.	<ul style="list-style-type: none"> • Maintain accurate financial records, including ledgers, invoices, and receipts. • Record financial transactions in accounting software and reconcile accounts. • Prepare financial reports, such as income statements and balance sheets. • Reconcile bank statements with company records to ensure accuracy. • Track and categorize expenses to assist in budget management and financial analysis.

Table 7. Occupation Map and its Competence In Finance Management Within IQF Level 4

IQF level	Occupation and its Definition	Competence
4	Accounts Clerk, Is responsible for data entry, maintaining financial records, and providing administrative support.	<ul style="list-style-type: none"> • Input financial data into accounting software and maintain accurate records. • Maintain ledgers, invoices, and other financial documents. • Assist in reconciling accounts and verifying the accuracy of financial transactions. • Provide general administrative support to the finance department. • Organize and file financial documents for easy retrieval and compliance purposes.
	Billing Clerk, Is responsible for preparing and issuing invoices, tracking payments, and handling customer inquiries.	<ul style="list-style-type: none"> • Prepare and issue invoices to customers. • Monitor and track payments received, updating records accordingly. • Reconcile billing records with accounts receivable. • Handle customer inquiries related to billing and resolve discrepancies. • Generate billing reports and summaries for management review.
	Payroll Clerk, Is responsible for assisting in processing payroll, maintaining records, and addressing employee inquiries.	<ul style="list-style-type: none"> • Assist in the processing of employee payroll, ensuring accuracy and timeliness. • Maintain payroll records, including timesheets, deductions, and benefits. • Ensure payroll activities comply with company policies and government regulations. • Address employee inquiries regarding payroll, benefits, and deductions. • Prepare payroll reports for management and regulatory bodies.
	Junior Bookkeeper, Is responsible for recording financial transactions, maintaining ledgers, and assisting in financial reporting.	<ul style="list-style-type: none"> • Record financial transactions in accounting software. • Maintain accurate and up-to-date ledgers and financial records. • Reconcile bank statements with company records. • Assist in preparing financial reports, such as income statements and balance sheets. • Track and categorize expenses, ensuring accurate financial records.

**Table 8. Occupation Map and its Competence in Finance Management
Within IQF Level 3**

IQF level	Occupation and its Definition	Competence
3	Junior Accountant , Is responsible for recording financial transactions, reconciling accounts, and assisting in preparing financial reports.	<ul style="list-style-type: none"> Record financial transactions in accounting systems. Reconcile accounts to ensure accuracy and completeness. Assist in preparing basic financial reports, including balance sheets and income statements. Input financial data accurately into accounting software. Provide assistance to senior accountants in various accounting tasks.
	Assistant Financial Analyst , Is responsible for gathering financial data, performing basic analysis, and preparing reports.	<ul style="list-style-type: none"> Gather financial data from various sources for analysis. Perform basic financial analysis and modeling under supervision. Assist in preparing financial reports and presentations. Conduct market research to support financial analysis. Provide support to senior financial analysts in their analytical tasks.
	Payroll Assistant , Is responsible for assisting in processing payroll, maintaining records, and addressing payroll-related queries.	<ul style="list-style-type: none"> Assist in processing payroll for employees, ensuring accuracy and timeliness. Maintain payroll records, including timesheets and deductions. Address basic employee inquiries regarding payroll and benefits. Ensure payroll activities comply with company policies and regulations. Enter payroll data into payroll systems accurately.
	Billing Assistant , Is responsible for assisting in preparing and issuing invoices, tracking payments, and handling customer inquiries.	<ul style="list-style-type: none"> Assist in preparing and issuing invoices to customers. Monitor and track payments, updating records accordingly. Handle customer inquiries related to billing and resolve discrepancies. Maintain accurate billing records. Provide support to the billing department in various administrative tasks.

**Table 9. Occupation Map and its Competence In Finance Management
Within IQF Level 2**

IQF level	Occupation and its Definition	Competence
2	Accounting Clerk , Is responsible for data entry, maintaining	<ul style="list-style-type: none"> Input financial transactions into accounting systems.

IQF level	Occupation and its Definition	Competence
	financial records, and assisting in reconciling accounts.	<ul style="list-style-type: none"> • Maintain accurate and up-to-date financial records. • Organize and file financial documents such as invoices, receipts, and statements. • Assist in reconciling accounts and preparing basic financial reports. • Provide administrative support to senior accountants.
	Bookkeeping Assistant, Is responsible for recording financial transactions, maintaining ledgers, and assisting in account reconciliation.	<ul style="list-style-type: none"> • Record daily financial transactions accurately. • Maintain ledgers and ensure that entries are accurate and complete. • Assist in reconciling bank statements and other accounts. • Track and categorize expenses for accurate financial reporting. • Provide support to bookkeepers in maintaining financial records.
	Finance Assistant, Is responsible for providing administrative support to the finance department, including data entry and document preparation.	<ul style="list-style-type: none"> • Provide general administrative support to the finance department. • Input financial data into spreadsheets and accounting software. • Prepare financial documents and reports for review by senior staff. • Maintain organized financial records and files. • Assist with various financial tasks such as invoicing, budgeting, and reporting.
	Bank Teller Assistant, Is responsible for assisting with basic banking transactions, customer service, and cash handling.	<ul style="list-style-type: none"> • Assist customers with basic banking transactions and inquiries. • Help process deposits, withdrawals, and payments. • Assist in managing and balancing cash drawers. • Maintain accurate records of transactions and customer interactions. • Provide support to bank tellers in handling day-to-day banking operations.

Discussion

The detailed mapping of financial management occupations within the IQF highlights the critical competencies required at various levels, ensuring that the education system can effectively prepare graduates to meet industry demands. This alignment is crucial for several reasons:

1. **Closing the Skills Gap:** By identifying the specific competencies required for each role, educational institutions can tailor their curricula to ensure that graduates are well-equipped with the skills needed by employers. This reduces the gap between education and industry requirements, enhancing the employability of graduates. Rikala et al., (2024) highlights the critical role of identifying specific skills required for Industry 4.0. Morin & Willox, (2022)

emphasizes the need for graduates to be equipped with both technical and soft skills, improving their readiness for the job market. Sakamoto, (2019) suggests that by identifying these competencies, educational institutions can better prepare students for the workforce, thus enhancing their employability and reducing the education-industry gap. Shah, (2023) argues that focusing on the specific skills needed in the job market enables educational institutions to enhance the employability of their graduates, bridging the gap between education and industry requirements. Similarly, Council, (2020) underscores the importance of ensuring that graduates are job-ready and possess the skills demanded by the job market, thereby enhancing their employability. Collectively, these perspectives demonstrate the crucial role of competency identification and curriculum tailoring in closing the skills gap and ensuring that graduates are well-prepared for the workforce.

2. **Informing Curriculum Development:** The occupational map provides valuable insights for educational institutions and training providers. It guides the design and updating of curricula to ensure that training programs are relevant, up-to-date, and aligned with industry standards. Hamed et al., (2023) highlights how identifying and incorporating specific competencies into the curriculum can ensure that educational programs are aligned with industry standards. Similarly, Melillán et al., (2023) found that this alignment is crucial for creating profiles and competencies suitable for professional development, thereby effectively informing curriculum development. Damodar et al., (2024) emphasizes that by identifying specific competencies required for various roles, educational institutions can design and update their curricula to ensure they are relevant and up-to-date with industry standards. Furthermore, Smith & Chittams, (2024) demonstrates that curriculum mapping provides a detailed overview of educational content, helping to align the curriculum with industry standards and ensuring comprehensive and relevant training programs. Al-Eyd et al., (2018) adds that the process of mapping helps identify content gaps and redundancies, ensuring content integration and alignment of learning outcomes across all educational levels. As a whole, these perspectives show how occupational mapping informs curriculum development, ensuring that educational programs meet industry standards and effectively prepare students for the workforce.
3. **Supporting Policy Making:** The findings offer critical insights for policymakers in developing and implementing competency standards and certification schemes. This helps create a standardized framework for assessing and certifying the competencies of financial management professionals. Gershuni et al., (2023) highlights that by directly involving stakeholders in the research process, the program has been able to influence policy changes and develop standards that are relevant and effective. Similarly, McMullen & Travers, (2023) emphasizes that identifying the specific competencies required

for certified nursing assistants (CNAs) allows policymakers to develop and implement competency standards that enhance the quality of care and professional development. Jellema et al., (2022) underscores the need for standardized competency frameworks to ensure consistency and reliability in certification processes. Wit et al., (2023) found that comparing competency frameworks across different countries provides valuable insights that can guide the development of standardized competency standards. Additionally, Erismann et al., (2021) highlights strategies for engaging stakeholders and policymakers from the beginning of the research process to ensure the uptake of research findings into policy-making. Overall, these perspectives demonstrate the importance of involving stakeholders and using research findings to inform the development of effective and standardized competency frameworks for financial management professionals.

4. **Enhancing Workforce Competitiveness:** By providing a clear framework for the development and assessment of competencies, the occupational map contributes to the overall competitiveness of the workforce. This ensures that Indonesia can meet the demands of the global financial industry and maintain its competitive edge. Jadotte et al., (2023) highlights that creating a clear framework for competency development enhances workforce competitiveness. Akter et al., (2023) illustrates how adopting digital technologies strengthens workforce management, ensuring that organizations can meet the demands of the global financial industry and maintain their competitive edge. Fisher et al., (2023) identifies that providing a clear framework for developing and assessing competencies related to AI significantly contributes to workforce competitiveness. Rejeb et al., (2023) argues that adopting comprehensive mapping techniques allows organizations to better align their workforce's skills with industry demands, leading to increased operational efficiency and competitive advantage. Kalejaiye, (2023) emphasizes that identifying and developing specific competencies required in the workforce enables training programs to be tailored to meet these needs. Collectively, these perspectives demonstrate that a clear framework for competency development and assessment, as provided by occupational mapping, is essential for enhancing the competitiveness of the workforce and ensuring that Indonesia meets the demands of the global financial industry.

CONCLUSION

The financial management occupation mapping within the Indonesian Qualification Framework (IQF) has identified and categorized the key competencies required for various roles in the financial management sector. By employing a combination of the Mapping Study methodology and the Rapid Assessment Process (RAP), this research provides a comprehensive understanding of the dynamic requirements in vocational education and training.

This study highlights several critical outcomes:

1. **Alignment of Education with Industry Needs:** The detailed mapping ensures that educational curricula are closely aligned with the actual demands of the job market. This alignment reduces the skills gap between graduates and industry requirements, thereby enhancing employability.
2. **Informed Curriculum Development:** The occupational map serves as a valuable resource for educational institutions and training providers. It guides the design and updating of curricula to ensure that training programs are relevant, up-to-date, and aligned with industry standards.
3. **Support for Policy Making:** The findings offer critical insights for policymakers in developing and implementing competency standards and certification schemes. This helps create a standardized framework for assessing and certifying the competencies of financial management professionals.
4. **Enhancement of Workforce Competitiveness:** By providing a clear framework for the development and assessment of competencies, the occupational map contributes to the overall competitiveness of the workforce. This ensures that Indonesia can meet the demands of the global financial industry and maintain its competitive edge.

In summary, the financial management occupation mapping within the IQF serves as a pivotal tool in bridging the gap between education and industry. It ensures that vocational education programs are effectively aligned with market demands, thereby enhancing the career prospects of graduates and contributing to the development of a competent and competitive workforce. The detailed findings and recommendations presented in this study provide a solid foundation for future research and curriculum development in vocational education and training.

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