# Review

# of Literature

"A study of Financial	Competency	of Selected Brass	<b>Industry of</b>	Jamnagar District."
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#### 2.1 Introduction

When a person wants to undertake research the first thing is to define the broad area in which research will be conducted. That can be a subject or a specialized branch of the subject. Then to narrow it down one should study that what has already been searched in that area. The study of searching the researches, which exist already in the specific area, will make the researcher precise into his area of interest. During this process of reviewing the literature one can come to know that such research has already taken place what he is planning for or he may find that there is some gap exists which can be explored. It will also make the mind of a researcher that how the research will be conducted. What are the points to be considered while research will be undertaken practically?

# 2.2 Meaning

"A literature review is an evaluative report of information found in the literature related to your selected area of study. The review should describe, summaries, evaluate and clarify this literature. It should give a theoretical base for the research and help you (the author) determine the nature of your research." <sup>1</sup> From this meaningful definition it can be concluded that literature review will lead a researcher to certain conclusion like what are the areas in which research can be conducted, what methods and techniques can be used, what will be the scope, importance and limitations of the research to be conducted.

Thus, a literature review is detail of the literature concerned to a particular area under study. It is a pre thesis or a pre research activity which makes the picture of research even more clear.

#### 2.3 Literature Review:

- 1. Ms. M.Sathya Priya (December 2018) A study on financial analysis of selected chemical and fertilizer companies in India: Financial statements play a crucial role in fundamental stock analysis and overall investment research. The primary aim is to improve the ability to assess a company's financial health and future potential by highlighting the advantages of incorporating financial statements into personal investment analysis. This paper focuses on analyzing the financial performance of the "chemical and fertilizer industries." Ratio analysis was employed as a tool to evaluate the financial performance of the chosen industries, with the study relying on secondary data. Among the five industries examined, Gujarat State Fertilizer Company emerged as the leader in overall financial performance.
- 2. **Kajal Chaudhary and Monika** Sharma India's economic reforms, initiated in the early 1990s, have shown their impact more prominently in recent years. Significant transformations in the operations of Indian banks occurred following liberalization, globalization, and privatization. It has become essential to study and compare the services offered by public and private sector banks. Factors such as heightened competition, advancements in information technology leading to reduced processing costs, diminishing product and geographic boundaries, and more relaxed government regulations have compelled public sector banks to compete aggressively with private and foreign banks. This paper seeks to evaluate how effectively public and private sector banks manage non-performing assets (NPA), utilizing statistical tools to project trends.
- 3. **Singla,** the research paper titled "Financial Performance of Banks in India" highlights the pivotal role of financial management in the growth of the banking sector. During 2005-06, a notable expansion in bank credits and steady growth in deposits were observed. Today, Indian banking is regarded as relatively advanced in terms of supply, product variety, and accessibility.

Indian banks are recognized for their robust and transparent position in areas such as quality of supply, asset management, and capital adequacy.

With the Indian economy, particularly the service sector, experiencing consistent growth, the demand for banking services is anticipated to rise significantly. The Indian banking industry is on the brink of a major transformation within the next 3-5 years, with various new developments expected to unfold.

4. Sekhar In his article "Trends in Growth and Development: Nationalized Banks in India," the author highlights the significant growth experienced by Indian banking following the post-nationalization era. Since 1991, the financial sector in India has undergone substantial changes in rules, structure, scope, and activities. The industry has evolved rapidly, transitioning from a regulated to a deregulated market economy, redefining the role of banks. In recent years, globalization and the opening of financial services under the World Trade Organization (WTO) have accelerated this transformation. The study forecasts that the banking sector will witness mergers, acquisitions, globalization of operations, advancements in technology, and universal banking practices.

The author examines the growth and development of nationalized banks in both pre-reform and post-reform periods. A comparative analysis of various bank groups was conducted based on variables such as aggregate deposits and credit of scheduled commercial banks, priority sector lending, credit-deposit ratio, cash-deposit ratio, interest income, interest expenses, and operating costs as a percentage of total assets. Capital as a percentage of total assets was also analyzed.

The study reveals that while the number of scheduled commercial banks increased postnationalization, it has gradually declined due to mergers and acquisitions. In the future, it is
anticipated that a few large-scale banks with a national presence will dominate, offering
diverse financial services and operating segment-wise. The findings also indicate that interest
income has consistently contributed more to total income across bank groups. Additionally,
the share of deposits and credit in GDP for scheduled commercial banks has grown
significantly over time. Looking ahead, Indian banking is expected to become increasingly
technology-driven.

5. **Arora and Kaur The** study reviewed the performance of India's banking sector during the post-reform period, highlighting its transformation due to ongoing economic and financial sector reforms. As a crucial component of the Indian financial system, the banking sector has undergone significant changes aimed at aligning it with international best practices and standards, ensuring long-term impacts on the overall financial framework. These reforms have driven increased competition, convergence, and consolidation within the Indian banking sector.

For the analysis, banks were categorized into four groups: private sector banks, foreign banks, nationalized banks, and SBI along with its associates. The study evaluated their performance using seven key indicators, including return on assets (ROA), capital-to-asset ratio, risk-weighted assets, NPA to net advances, business per employee, net profitability ratio, and off-balance-sheet operations, over a nine-year period from 1996 to 2005. The researchers examined recent trends and developments in the sector, revealing significant progress, particularly among public sector banks (PSBs). However, these banks were found to lag in critical areas such as asset quality, business per employee, capital adequacy, and profitability compared to other sectors.

The study concluded with recommendations for improving the performance of PSBs, including cost optimization, staff cost rationalization, human resource development, NPA reduction, better fund deployment in quality assets, technological advancements, enhanced risk management, market-driven strategies, relationship management, and efficient credit delivery mechanisms. While India's banking sector has made strides, the study emphasizes that significant progress is still needed to match and compete with global counterparts, particularly those in Western markets.

6. Gopal and Dev (2006), The research paper conducted an empirical analysis of the productivity and profitability of selected public and private sector banks in India, focusing on the impact of globalization and liberalization during 1996-97 to 2003-04. The study highlighted that the emergence of new private sector banks and the entry of foreign banks during this period posed significant challenges, intensifying competition among Indian banks. This competitive environment and the increasing focus on profitability have driven public sector banks (PSBs) toward a profit-oriented approach. For the analysis, the researchers selected five major banks from both the public and private sectors based on the highest deposit mobilization during the study period. Banking sector reforms emphasizing transparency and efficiency have compelled Indian banks to adopt strategies centered on productivity and sustainability. The findings indicate that, in most cases, the productivity index exceeded one among the selected banks.

Regarding profitability targets, SBI and PNB outperformed others, followed by HDFC Bank and ICICI Bank, whereas J&K Bank, Canara Bank, and Bank of India lagged in achieving profitability goals. The study identified interest spread as the primary factor influencing profitability across the banks.

7. Financial Competency Assessment Model Ercan Oztemel\* and Semih Ozel Department of Industrial Engineering, Marmara University, Istanbul, Turkey

Financial analysis is a critical evaluative tool for assessing organizational performance and measuring corporate strength. It is widely believed that financial stability can enhance a business's lifecycle, making financial analysis an integral part of assessments and enabling the easy collection of data through measurable parameters. Ratio analysis is the most commonly used method for evaluating the financial performance of organizations. This approach provides valuable insights into key financial aspects, including liquidity, indebtedness, and profitability. For instance, banks use ratio analysis to examine the structural condition of businesses, assess risks, and determine loan eligibility. However, while ratio analysis offers useful insights, it does not always provide definitive evidence of financial competency, necessitating further in-depth evaluations.

In this study, financial competency is conceptualized as part of an enterprise competency assessment model, structured into six layers ranging from basic to advanced competency. Each layer incorporates specific criteria, including commonly used financial ratios. The paper outlines this model, focusing on financial competency assessment procedures and offering strategies for enterprises to enhance their competency to higher levels. Given the numerical nature of financial competency compared to other components of the model, an evaluation framework based on widely recognized financial ratios has been adopted for this aspect.

8. **Financial analysis of a selected company.** The success of a business enterprise is closely tied to the competencies of its management. Businesses can adapt their strategies to navigate complex and evolving market conditions effectively. During challenging times, managers often adjust their management approaches to ensure the long-term stability and sustainability of the enterprise. This includes maintaining strong relationships with customers and suppliers, which can help the business secure a competitive edge over its rivals.

The purpose of this article is to offer fundamental insights into ex-post financial analysis and evaluate the progress of businesses in key areas such as liquidity, profitability, and indebtedness. It aims to identify strengths and opportunities that businesses can leverage for growth while also uncovering weaknesses and threats that may lead to difficulties. Based on the findings, the article proposes measures to enhance the financial and economic analysis systems of enterprises.

9. Marketing and Financial Competencies of Malaysian Malays Micro-Entrepreneurs
This paper examines Malay micro-entrepreneurs in Malaysia who are involved in small-scale
business activities, focusing on the impact of marketing and financial competencies on their
success. The study aims to identify areas that need improvement. Conducted as a quantitative
study, it involves 173 successful Malay micro-entrepreneurs (MEs) and 58 failed microentrepreneurs (FMEs) from various businesses across Perak, Malaysia. The primary goals are

"A study of Financial Competency of Selected Brass Industry of Jamnagar District." to explore the factors that motivate successful Malay entrepreneurs, the skills needed to start and grow a micro-business, and the challenges faced by FMEs.

The findings show that MEs possess stronger motivations, better marketing strategies, and higher financial competence compared to FMEs. In contrast, FMEs struggled mainly due to a lack of sales and marketing skills, inadequate competitive strategies, and poor financial literacy.

10. A study on financial statement analysis of tamilnadu newsprint and paper limited (tnpl) karur district. This paper presents a financial statement analysis that separates leverage arising from financing activities from leverage resulting from operations. The analysis leads to two distinct leveraging equations: one for borrowing to finance operations and another for borrowing as part of operations. These equations illustrate how each type of leverage influences the return on equity. The empirical analysis demonstrates that this financial statement approach explains variations in current and future rates of return, as well as price-to-book ratios, which are based on expected returns on equity. The paper concludes that operating liabilities and financing liabilities are priced differently on the balance sheet. Therefore, distinguishing between these two types of liabilities in financial statement analysis provides insights into future profitability and helps assess appropriate price-to-book ratios.

Ratio analysis is a popular tool for evaluating a company's performance. While ratios are simple to calculate, their interpretation can be challenging when multiple ratios send conflicting signals. Ratio analysis is often criticized for its subjectivity, as analysts must select which ratios to use in order to evaluate the overall performance of a company.

#### 11. A Study On Comparative Financial Statement Analysis With Reference To Das

**Limited.** Comparative analysis involves studying the trends of similar items and computed figures across different financial statements of the same business enterprise at various points in time. Effective financial management is crucial for the success of any enterprise. Financial performance is a dynamic concept, and its focus has evolved rapidly.

Today, greater emphasis is placed on evaluating financial performance. In this context, the researcher attempts to analyze the financial performance of Mahindra Finance Ltd. The analysis concludes that expense ratios and profitability are given significant attention in assessing the company's financial performance.

- Enterprises in Indonesia Many companies utilize the internet to share financial information with investors. This study aimed to evaluate the disclosure of financial statements by state-owned enterprises, particularly in the nature-based sector and manufacturing industries, using the Internet Financial Reporting Index. It also sought to examine whether there is a relationship between various factors, including the content index, timeliness index, technology index, user support index, number of web pages, and the wealth of the company's website. The research analyzed data from 60 companies in the nature-based and processing industries. Analytical methods, such as the Spearman correlation test, Mann-Whitney test, and Kolmogorov-Smirnov test, were used. The results revealed no relationship between the internet financial reporting index (including content, timeliness, technology, and user support indices) and the wealth of the company's website. However, a significant relationship was found between the number of web pages and the wealth of the website. The study also concluded that there were no differences between nature-based and processing sector enterprises in terms of internet financial reporting indices.
- 13. **Tobias Ley & Albert D.** (2003) A formal framework for employee competencies was introduced, based on a psychological model that distinguishes between the observable behavioral level and the underlying competency level. At the competency level, employees leverage their potential actions, which, in specific situations, lead to performance outcomes at the behavioral level. The concept of Skills Management was proposed to ensure that employee competencies align with the future needs of an organization. In this process, the necessary individual competencies are defined in terms of required skills, knowledge, management abilities, and social and personal skills, which are derived from job requirements and shaped by core competencies. This approach results in the creation of various job profiles, often referred to as 'competency models'.

- 14. **Jennifer & et. al.** (2006) The study examined the competencies essential for a project manager to be effective in the workplace. Using the Delphi technique, the authors identified the competencies that experienced project management professionals believe are crucial for success. They organized 117 success factors into nine categories, with eight of these competencies being suitable for development through educational and training programs. Among the most important competencies identified were problem-solving expertise, leadership skills, contextual knowledge, and communication abilities.
- 15. **Talbot** (2007) The authors argued that competencies play a valuable role in curriculum development, the selection of assessment items, and ensuring ongoing quality assurance in health promotion education. They presented a case study demonstrating how these competencies were applied in curriculum development, assessment selection, and quality assurance at an Australian university. Competencies help establish performance expectations for professionals working in the field.
- 16. Divnie Kwaku (2008): The author emphasized that identifying and developing appropriate competency-based measures is widely regarded as the most effective way to validate and promote managerial best practices. This research aimed to proactively identify competency-based measures for Project Managers in the construction industry, particularly within the context of a developing country. The study pointed out that task competencies typically vary across different job roles within the same organization, while contextual competencies are not job-specific and are often applicable to many positions. Task competencies usually account for about 50% of the managerial performance domain, while contextual competencies explain around 30%, with the remaining 20% remaining unexplained. Task competencies are best predicted by factors such as cognitive ability, knowledge, job proficiency, and experience, whereas contextual competencies are most effectively predicted by job dedication and interpersonal facilitation.

- 17. Rao (1993) The study conducted an inter-company financial analysis of the tea industry, focusing on both its past performance and future outlook. The researcher aimed to analyze key variables in the tea industry and project sales and profit trends for the next decade, providing insights to help policymakers make informed decisions. Various financial ratios were calculated to assess the industry's financial health. After comparing these ratios, the researcher concluded that the sales and profit forecasts for tea manufacturing companies indicate a promising future for the Indian tea industry. The study also highlighted that recent changes in Indian economic policies could increase foreign exchange earnings, benefiting companies that export to regions with hard currencies.
- 18. Pai, Vadivel & Kamala (1995) The study examined the relationship between diversification and the financial performance of companies. The researchers selected seven large firms with diverse product portfolios, including both related and unrelated products, operating across various industries. A range of performance measures and ratios were used to assess financial performance, and the study observed significant variations in performance between the firms. The findings revealed that the diversified firms under study demonstrated strong financial performance.
- 19. **Kakani, Saha & Reddy** (2003) The study empirically validated existing theories on the factors influencing firm performance in the Indian context. It analyzed financial statements and capital market data from 566 large Indian firms over an eight-year period, divided into two sub-periods (1992-96 and 1996-2000). The study assessed the firms' financial performance in terms of shareholder value, accounting profitability and its components, growth, and risk. The findings indicated that factors such as firm size, marketing expenditure, and international diversification positively influenced market evaluation. Additionally, the study concluded that the ownership composition, particularly the level of equity ownership by domestic financial institutions and dispersed public shareholders, as well as the firm's leverage, were significant factors affecting financial performance.

- 20. Weill (2004): In his paper, the author examines the relationship between leverage and corporate performance through frontier efficiency analysis, offering new empirical insights into a key corporate governance issue. To analyze this relationship, he applied frontier efficiency techniques to derive performance measures for companies from several countries, including France, Germany, and Italy. The study then conducted regressions of corporate performance against various variables, including leverage. The findings revealed mixed results: while the relationship between leverage and corporate performance was significantly negative in Italy, it was significantly positive in France and Germany.
- 21. Patra (2005): The study investigates the impact of liquidity on profitability using various liquidity ratios, including the current ratio, acid test ratio, current assets to total assets ratio, inventory turnover ratio, working capital ratio, receivable turnover ratio, and cash turnover ratio, focusing on Tata Iron & Steel Company Limited from 1999 to 2005. The analysis employed mean, standard deviation, coefficient of variation, correlation, and correlation coefficients. The study found that four of the liquidity ratios—current ratio, acid test ratio, current assets to total assets ratio, and inventory turnover ratio—had a negative correlation with profitability. In contrast, three ratios—working capital turnover ratio, receivable turnover ratio, and cash turnover ratio—showed a positive association with profitability, all statistically significant at the 5% level. While the correlations between liquidity ratios and profitability showed both positive and negative relationships, none of the correlation coefficients were statistically significant. The results indicated that the negative correlation between the inventory turnover ratio and return on investment (ROI) was not supported by multiple regression analysis, which showed a positive relationship between these two variables. The study concluded that profitability growth is influenced by multiple factors, including liquidity.

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- 22. Sur & Chakraborty (2006) The study examines the financial performance of the Indian pharmaceutical industry by comparing six prominent companies between 1993 and 2002. The authors highlight the significant role of the Indian pharmaceutical industry in improving life expectancy and reducing mortality rates, noting that it ranks as the 5th largest in terms of volume and 14th in value globally. The comparison of financial performance was conducted using the Data Envelopment Analysis (DEA) methodology, which incorporated input ratios such as the total assets to total debt ratio and the total assets to long-term debts ratio, along with output ratios like the current ratio, total assets to net working capital ratio, total assets to net profit ratio, total debt to cash flow, and profit margin ratio. The study found that performance measures based on scale were strongly correlated with a firm's ability to increase production factors and sales, particularly related to physical inputs like fixed assets. Additionally, a significant correlation was observed between efficiency-based ratios and intangible assets, such as production-related engineering skills and the ability to innovate with new products. The authors identified areas where underperforming companies were lagging and suggested improvements to enhance their competitive standing. They recommended policy adjustments for inefficient companies to better manage their financial ratios and suggested the development of a series of DEA models using principal component analysis to analyze the impact of variables like long-term debt to total assets. Overall, the study emphasizes that Data Envelopment Analysis is a robust tool for measuring performance.
- Gaabalwe (2007) The study on "Financial Performance Measurement of South Africa's Top Companies: An Exploratory Investigation" conducted a descriptive analysis using empirical data. The researcher applied accounting tools such as ratios and statistical techniques like mean, standard deviation, and Z-test. The Z-scores of the sampled companies were used to categorize them into three groups: high, medium, and low performance. The results revealed significant differences in the current ratio, liquidity ratio, return on capital employed, and debt-equity ratio. However, there were insignificant differences observed for the inventory ratio, debtors ratio, total assets turnover ratio, current assets turnover ratio, gross profit margin ratio, and net profit ratio. The study provided a critical examination of the financial performance indicators highlighted by the top companies based on their accounting data.

- 24. **Toby (2007)** The research on "Financial Management Modelling of the Performance of Nigerian Quoted Small and Medium-sized Enterprises" concluded that the sustained growth, liquidity, and profitability of SMEs in Nigeria are closely linked to their investment and financing decisions. The study found no significant differences between the current ratio and the gross profit margin ratio, with the working capital gap remaining constant. It also observed that factors such as the SMEs' current assets ratio, liquidity ratio, cash reserve requirement, and loan-deposit ratio were particularly important to commercial banks. Overall, the study concluded that Nigerian SMEs are constrained by liquidity and profitability challenges, inefficiency, fluctuations in the pecking order, strict monetary policies, and a risk-prone banking system.
- 25. Chandrasekaran (1993) The study on the "Determinants of Profitability in the Cement Industry" aimed to examine the factors influencing profitability in the sector. It focused on the impact of policy changes related to price and distribution in the cement industry. The analysis of profitability determinants was conducted using ordinary least squares (OLS) regression. Relevant variables were chosen based on existing theories and econometric research. The study concluded that improving efficiency in inventory management and effectively managing current assets were key factors in enhancing profitability.
- 26. **Vijayakumar & Venkatachalam** (1995) The study on "Working Capital and Profitability An Empirical Analysis" examined the impact of working capital on profitability in the sugar industry of Tamil Nadu. A sample of 13 companies was selected, including 6 from the cooperative sector and 7 from the private sector, covering the period from 1982-83 to 1991-92. Simple correlation and multiple regression analysis were applied to assess the relationship between working capital and profitability ratios. The analysis revealed that liquidity ratio, inventory turnover ratio, receivables turnover ratio, and cash turnover ratio significantly influenced the profitability of the sugar industry in Tamil Nadu.

- 27. Rao & Rao (1999) The study on "Impact of Working Capital on Profitability in the Cement Industry A Correlation Analysis" aimed to examine how profitability affects working capital in cement industrial units in India. The analysis focused on ten working capital ratios potentially linked to profitability, including current ratio, debt-equity ratio, cash position ratio, working capital turnover ratio, inventory turnover ratio, debtor's turnover ratio, cash turnover ratio, current assets turnover ratio, and average collection period. The correlations between these variables were analyzed using Karl Pearson's coefficient of correlation technique, with the results presented in a matrix form. The findings revealed that, out of the 10 variables, 3 showed a significant correlation with PBDIT, while 7 had insignificant relationships. Additionally, 5 variables displayed a negative association, while the remaining showed a positive relationship.
- 28. **Rei & Sur (2001)** The study on the profitability analysis of the Indian food products industry, specifically focusing on Cadbury India Ltd., aimed to assess the profitability situation of the company. The researchers examined the relationship between various profitability ratios and their combined impact using multiple correlation coefficients and multiple regression methods. They explored the interrelations between the selected ratios to evaluate the company's performance and profitability. The analysis revealed both positive and negative associations between the ratios.
- 29. **Vijayakumar** (2002) The study on "Determinants of Profitability—A Firm-Level Study of the Sugar Industry of Tamil Nadu" explored various factors affecting profitability, including sales growth rate, vertical integration, and leverage. For analysis, the study focused on three variables: the current ratio, operating expenses to sales ratio, and inventory turnover ratio. Econometric models were applied to test the hypotheses related to profitability and other variables. The study concluded that efficient management of inventory and current assets is crucial as it directly impacts profitability.

- 30. Vijayakumar & Kadirvel (2003) The study on the determinants of profitability in Indian Public Sector Manufacturing Industries—An Econometric Analysis concluded that the age of the firm was the most significant factor affecting profitability, followed by vertical integration, leverage, size, current ratio, inventory turnover ratio, operating expenses to sales ratio, and growth rate. The selected variables contributed both positively and negatively to variations in profit rates. The study recommended that firms should take all these potential determinants into account when evaluating their profitability, based on the analysis and findings.
- 31. **Bhayani** (2004): The study focused on the relationship between working capital and profitability in the cement industry. Through comparative analysis, it was found that profitability was significantly impacted by working capital. The research concluded that effective management of assets and liabilities is closely linked to profitability in Indian industries.
- 32. **Sukenti The** article "Financial Performance and Financial Distress" provides a research hypothesis exploring the relationship between various financial factors. This literature review, conducted using library research methods and data from academic databases like Google Scholar and Mendeley, highlights several key findings: 1) Liquidity impacts financial performance, 2) Profitability influences financial performance, 3) Liquidity contributes to financial distress, 4) Profitability affects financial distress, and 5) Financial performance influences financial distress. In addition to liquidity and profitability, other external factors such as leverage, solvency, and activity variables also play a role in influencing the endogenous variables of financial performance and distress.

- 33. Ercan Oztemel and Semih Ozel (2018) The study highlights that financial analysis is a crucial tool for evaluating the performance and corporate strength of businesses. It is particularly believed that strong financial performance can extend the lifespan of a business. This underscores the importance of financial analysis in organizational assessments, with an emphasis on collecting relevant, measurable data. Ratio analysis is the most commonly used method for evaluating an organization's financial status, as it provides insights into aspects like liquidity, debt levels, and profitability. For example, banks use ratio analysis to assess the financial health of a business before deciding on loan approvals. While these analyses offer valuable information, they may not fully capture a company's financial competence. Therefore, the study proposes a model for assessing financial competency as part of a broader enterprise competency framework. This model consists of six layers, ranging from basic to advanced competency, with each layer incorporating financial ratios. The paper also outlines procedures for enhancing financial competency and suggests measures for businesses to improve their financial standing.
- 34. Sarath Ananda (2017) The study aimed to uncover the historical and sociological background of the industry, explore the basic and extended networking patterns beneficial for production and marketing, and identify the current trends and challenges faced by the industry. Both primary and secondary data were utilized in both quantitative and qualitative forms. Secondary data helped in understanding the industry's overall outlook, historical context, and socio-cultural shifts. Primary data was collected through questionnaire-based interviews with 40 purposively selected home industries to examine current trends such as production, marketing, stakeholder attitudes, and the challenges they face. The findings revealed that 80% of craftsmen primarily supply to mid-scale market makers, 17.5% have established their own businesses, and only 2.5% produce high-quality items for the export market. Observations on the field indicated that craftsmen who embraced change, introduced innovations, and adopted modern technology and new methods gained economic advantages.

- 35. Rajesh K. Singh, Suresh K. Garg and S.G. Deshmukh (2008) The study highlights how small, medium, and large Indian organizations develop various competencies in response to different pressures and constraints. The adoption of new technologies and the ability to identify market changes have emerged as key competencies, strongly linked to both subjective and objective performance, as well as overall organizational competitiveness. The research found that large organizations focus more on competency development than SMEs. It suggests that SMEs should be just as proactive as larger organizations in areas such as competency development, human resource management, technology upgrading, and market awareness. The study recommends further case studies to validate these findings. This research can assist organizations in formulating competitive strategies to develop competencies in line with market demands.
- 36. Modernization of tradition for endurance: future and challenges of traditional brass industry of pilimatalawa, sri-lanka the traditional brass products of Kiriwawula in Pilimatalawa, a small-scale home industry, have been preserved by a particular community for a long time. These products are well-known both locally and internationally as exquisite handicrafts. Although often considered a Dutch colonial import, Sri Lanka's brassware industry may also have been influenced by the Indian subcontinent or introduced by Arab traders. This research explores the significant socio-economic factors affecting the industry, highlighting issues that need attention for the sector's improvement. The study aims to uncover the historical and sociological background of the industry, its production and market networking patterns, and the current trends and challenges it faces. Both primary and secondary data were gathered using quantitative and qualitative methods. Secondary data helped understand the industry's general outlook, history, and socio-cultural shifts. Primary data, collected through questionnaire-based interviews with 40 home industries, revealed that 80% of craftsmen have become basic suppliers for mid-scale market makers, 17.5% have successfully opened their own shops, and only 2.5% produce high-quality items for export. Observations showed that craftsmen who embraced change, incorporated modern technology, experimented with new materials, and expanded their networks gained economic benefits.

- 37. Competency and performance analysis of Indian SMEs and large organizations K. Singh and Suresh K. Garg. The globalization of markets and rising customer expectations have created a challenging environment for Indian organizations. This paper aims to examine how small, medium, and large-scale Indian organizations develop various competencies in response to these pressures and constraints.
- 38. Turnaround strategy for brass and bell metal industry in assam, india: This study examines micro-level issues related to the decline of the brass and bell metal industry in Assam, India, and recommends revitalization through the adoption of suitable technology, product design, diversification, modern machinery and equipment, as well as proper training for artisans. It suggests a comprehensive and integrated approach for the growth and sustainability of the industry, highlighting the roles of the government, communities, and artisans.
- 39. Enhancement of productivity of traditional brass manufacturing industry using sustainable manufacturing concept. The Sri Lankan brass manufacturing industry has developed over centuries and has traditionally been run as a family business. However, it faces significant challenges compared to modern manufacturing industries, including rising raw material costs, inadequate reverse logistics for collecting scrap brass, and a lack of expertise to adopt new technologies. This research investigates the adoption of appropriate technologies to replace traditional sand casting and manual sheet metal carving processes. Additionally, a methodology is proposed for introducing this technology to marginalized communities through a University-Industry partnership. This is crucial as these communities lack the necessary technical skills to use CAD and CAM. The findings indicate improvements in productivity, including enhanced product quality, better material efficiency, and standardized processes.

- 40. Technological Needs Assessment of Traditional Brass Industry to Enhance the Productivity. Sri Lanka has a long history of metal industries, with evidence showing that such industries have existed for centuries. Currently, the only surviving sector in this category is the traditional brass manufacturing industry. Over time, this industry has endured numerous challenges, with knowledge and skills being passed down through generations within a specific caste. However, with the advent of rapid globalization, the industry now faces several challenges that could lead to its decline. This research aims to identify the technology needs and the challenges within the entire supply chain of the brass industry. A comprehensive Technology Needs Assessment was conducted, covering various aspects of the industry, including business, design, and manufacturing processes. A structured questionnaire was used for the survey, along with insights gathered from detailed discussions and site visits. The analysis identified eleven key issues that need to be addressed.
- 41. Decision support framework for development of traditional brass industry A case study. : Sri Lanka's traditional industries have been a significant source of employment and livelihood for rural communities for centuries. However, the lack of research on this sector raises concerns about its future viability. Additionally, the failure to adopt modern manufacturing technologies and business models exacerbates the challenges faced by these industries. As a result, industrialists struggle with decision-making related to costing, environmental impact, and social issues. Given that Brass Manufacturing is one of Sri Lanka's key traditional industries, this research aims to develop a decision-making framework for costing and environmental management to help sustain the industry. The framework is based on value stream mapping and life cycle principles to create a costing tool and assess environmental impacts. A thorough study was conducted, monitoring material and information flows, as well as decision-making methods, to develop a value stream that reflects the industry's structure. Life cycle costing was used to create the costing tool, and life cycle impact assessment was performed using SimaPro to evaluate environmental effects. The proposed approach can guide decision-making when introducing new designs and products to the market, promoting more sustainable environmental practices.

# 42. Manufacturing Defects of Brass Products and suggested Remedies

Rejecting finished or semi-finished products is always undesirable in any industry. This study investigates the root causes of defects and imperfections in brass products that occur at various stages of production. After identifying these flaws through experiments, potential solutions were developed to reduce their occurrence and impact. A thorough analysis of the manufacturing process was conducted, highlighting bottlenecks and weak points in the system. The outcome of this study not only improved the industry's productivity but also lowered production costs by minimizing waste due to product rejections, thus enhancing overall competitiveness.

43. Rajeev Ranjan Yadav and Dr. R.K. Srivastri (2018) The study examines the challenges faced by the Mirzapur utensils industry, primarily based on field studies and secondary data. Mirzapur, a major center for brassware production in Uttar Pradesh, mainly serves the domestic market, producing utility items such as "Handa, Parat, Gilas, Kalchul, Batua," among others. Local dealers place orders with manufacturing units and buy products when available. Most of the goods produced are transported by rail and road. The soil in Mirzapur is also suitable for molding brassware, which contributes to its reputation for domestic brass articles. However, the Mirzapur brassware industry is on the verge of closure due to several factors. The products and techniques have become outdated, and both the central and state governments have neglected the issue, despite the industry's significance for the livelihoods of many in the district and its contribution to state revenue. Additionally, there is a lack of institutions that ensure the availability of raw materials at reasonable prices. As a result, traders and workers are turning to other economic activities for livelihood, with many workers leaving the industry due to insufficient work and low wages.

44. Present Scenario of the Traditional Brass and Bell Metal Industry of Khagra,

Murshidabad, West Bengal: This empirical study explores the current status of the Brass and Bell industry in Khagra, located in the Berhampore Municipality of Murshidabad, West Bengal. The industry, known for its high-quality products, has been in existence since the pre-colonial era. However, like many other cottage and small-scale industries, it is facing a decline due to globalization, with artisans and workers being particularly impacted. The paper aims to examine the socio-economic differences between the workers and owners in this industry, identify the key factors driving product development, understand the perceptions of both workers and owners regarding various aspects of the industry, and

highlight the challenges faced by the sector.

- 45. **Mridula Sahay(2015)** This study examines micro-level issues contributing to the decline of the brass and bell metal industry in Assam, India, and suggests revitalization strategies. It advocates for the adoption of suitable technology, innovative product designs, diversification, modern machinery and equipment, as well as training programs for artisans. The research proposes a comprehensive and integrated approach for the growth and sustainability of the industry, emphasizing the roles of the government, society, and artisans in ensuring its revival and long-term survival.
- 46. H.M.M.M Jayawickramaa, M. Dharmawardanaa, A.K Kulatungaa, K.G.S.P Karunarathnaa, S.A.U. Osaditha (2016) This research focuses on the adoption of suitable technology to replace the traditional sand-casting and manual sheet metal carving processes. As an additional step, a methodology has been developed to introduce this technology to marginalized communities through a University-Industry partnership. This initiative is crucial, as the community lacks the necessary technical skills to operate CAD and CAM systems. The findings demonstrate significant improvements in productivity, including enhanced product quality, better material efficiency, and standardized processes.

- 47. C.Chanjief, S.A Herath, R. Jayasinghe, J.Gowrynathan, A.K.Kulatunga, M. Dharmawardhana, R.E. Ekanayake(2015) The research aims to identify the technological needs and challenges within the entire supply chain of the industry. A comprehensive technology need assessment was conducted, covering various aspects of the industry, including business, design, and manufacturing processes. A structured questionnaire was developed for a survey, and detailed discussions and site visits were also included in the analysis. Eleven key issues were identified that require attention and resolution.
- 48. **K.G.S.P. Karunarathna, H.M.M.M. Jayawickrama, M. Dharmawardana and A.K. Kulatunga (2016)** This research investigates the Brass Manufacturing industry, a key traditional sector in Sri Lanka, with the aim of developing a decision-making framework for cost management and environmental sustainability. The framework incorporates Value Stream Mapping and Life Cycle Principles to create a manufacturing costing tool and assess environmental impacts. A thorough study was conducted, focusing on material flow, information flow, and decision-making processes to develop a value stream that represents the industry. The Life Cycle Costing method was applied to build the costing tool, while Life Cycle Impact Assessment using SimaPro evaluated the environmental effects of current practices. This framework can guide decisions on introducing new designs and products, as well as promoting environmentally sustainable practices.
- 49. **Ms. M. Sathya Priya** (2018) Analyzing financial statements is crucial for fundamental stock analysis and investment research. The aim is to improve the ability to assess a company's financial health and future potential by understanding the value of financial statements in personal investment research. Finance is essential for business, often described as the science of money. The methods researchers use to describe, explain, and predict phenomena are known as methodology. Companies should not solely operate based on profits; even in times of loss, it's important for investors to stay informed about stock prices and market value. Monitoring share prices daily is essential to understanding the dynamics of different industries.

- 50. **Deblina Ghosal (2018)** The Brass and Bell industry of Khagra, renowned for its high-quality products since the pre-colonial era, is facing decline due to the impacts of globalization, similar to other small-scale and cottage industries. Artisans and workers in this sector are particularly suffering. This study aims to explore the socio-economic differences between the workers and owners involved in this industry, identify key factors influencing product development, assess the perceptions of both workers and owners regarding various aspects of the industry, and highlight the challenges faced by the sector.
- 51. Cassell et al. (2001) The study examined the effectiveness of comparison methods used to enhance SME benchmarking. The key factors for effective comparison were found to be financial indicators, customer satisfaction, and product or service quality. While SMEs were classified based on these factors, the study did not address the credit rating aspect of the comparison system.
- 52. Vanhoof et al. (1995) An agent-based information system was developed to conduct a Strength-Weakness-Opportunity-Threat (SWOT) analysis, a crucial tool in the strategic management of SMEs. The system was applied to ten different SMEs, and its results were compared with those of a SWOT analysis conducted by experts. The comparison revealed only a 10% difference between the strengths and weaknesses identified by the experts and those found by the agent-based system.
- 53. Lin and Tong (2010) A two-step credit rating model were developed using the Cox model and Support Vector Machine (SVM) to classify SMEs in Taiwan. The model showed improved accuracy compared to existing credit rating models. In creating the two-step model, financial, non-financial, and macroeconomic variables were utilized. Initially, SMEs funded by an agency were categorized into three groups—good, bad, and undetermined—using the Cox model. Then, the Support Vector Machine was applied to classify the undetermined SMEs in the second step of the process.

- "A study of Financial Competency of Selected Brass Industry of Jamnagar District."
- 54. Wang (2008) The study explored the impact of external environmental factors on the living conditions of SMEs and proposed an evaluation system. This system focused on six key factors: economic, political, technological, social, human capital, and natural resources. These factors served as first-level indicators, with 25 second-level indicators and 58 third-level indicators used for further analysis. The research employed three methods—Structural Equation Model (SEM), Fuzzy Analytic Hierarchy Process (AHP), and Main Component Analysis (MCA)—based on results from 12,000 surveys. Nonparametric tests were also conducted to compare the methods. The study found that rankings differed between the methods, with SEM emerging as the most effective statistical tool for evaluating the external environment of SMEs.
- 55. Abu Bakar Sedek Abdul Jamak, Mohd Yussoff Ibrahim, Rohani Salleh, and Azelin Mohamed Noor This quantitative study aimed to assess the impact of marketing and financial competencies on the success of Malay micro-entrepreneurs (MEs) and identify areas that need improvement. The research involved 173 successful MEs and 58 failed micro-entrepreneurs (FMEs) from Perak, Malaysia, across various industries. The study's goals were to explore the factors motivating successful Malay entrepreneurs to start their businesses, the essential skills for business growth, and the differences between MEs and FMEs. The findings revealed that successful MEs exhibited stronger motivations, better marketing strategies, and greater financial expertise compared to FMEs. In contrast, FMEs struggled primarily due to inadequate sales and marketing skills, poor competitive abilities, and low financial literacy, leading to their business failures.
- 56. Nuryakin, Rochmi Widayanti, Ratna Damayanti & Susanto This research investigates the impact of market information accessibility and social capital on product innovation capability and how it contributes to improved financial performance, with financial literacy as a control variable. The study focuses on the export-based brass industry cluster in Boyolali, Central Java, with data collected from owners or managers of SMEs in the region. Using purposive sampling, the study surveyed 200 respondents, and structural equation modeling (SEM) with the AMOS program was applied for hypothesis testing.

The findings reveal that both market information accessibility and social capital have a significant positive effect on product innovation capability and financial performance. Additionally, financial literacy was found to enhance superior financial performance as a control factor.

- 57. Paul, Toulfatzis & Peipetis The recent environmental and health regulations have introduced restrictions on hazardous substances, which pose a challenge for manufacturing sectors, particularly in the use of lead (Pb) in brass alloys. Lead has been a critical element for enhancing machinability, quality, and manufacturing efficiency of brass, but its removal is now a necessity. This paper reviews the emerging sustainable material solutions in the manufacturing industry, aligning with environmental regulations and focusing on innovative alloy design practices. It highlights new approaches for material selection and process optimization. The review examines the machining, structure, and processing of leaded brasses, and provides guidelines and research methodologies aimed at overcoming the challenges of developing lead-free brass alloys with improved machinability and mechanical properties. The study also explores alloying strategies and processing techniques, alongside common failure types, based on over 20 years of industrial and technological research.
- 58. **Hiralal Desrani** (2013), Gujarat has a long history of metalworking, dating back to the Stone Age, with evidence of metallurgy techniques from the Indus Valley Civilization. The region is known for its rich tradition of forging, hammering, and casting metals such as copper and bronze, a skill that can be traced back to the Harappa period. The Aryans also likely used a metal known as "ayes," which later came to mean iron, though it may have originally referred to copper or bronze. The craftsmanship of Gujarat is particularly evident in the creation of utensils, with a wide variety of copper, brass, and iron vessels designed for specific uses found in many homes. Metalwork from the region also includes items such as lamps, incense burners, betel leaf and nut boxes, nutcrackers, large dowry containers, and votive figurines. The metal artisans of Gujarat, known as "kansaras," a name derived from the Sanskrit word "Kansu," meaning bronze, were once renowned for making bronze utensils before brass became more common.

In addition, Gujarat is famous for its metal engravings and ornaments, especially from regions like Kutch and Rajkot. Other towns such as Anjar, Sinhor, Surendranagar, Dhrangadhra, and Vadhawan are known for their brass and iron products, including cutlery, knives, scissors, and beautifully crafted arrows, daggers, and sheaths.

59. Saravanan & Maram (2017), The purpose of this study is to explore the connections between executive compensation, corporate governance, and the performance of both Indian family and non-family firms. Additionally, the study examines how the shareholding structure in Indian family firms influences their performance and executive compensation. The authors used panel data from companies listed on the National Stock Exchange of India, covering 284 firms (both family and non-family) over the period 2005–2014. A dynamic panel data model with generalized method of moments (GMM) estimation was employed to formulate the hypotheses, and fixed-effects regression was used to validate the results. The findings support agency theory, stewardship theory, and resource dependence theory. Key variables such as executive compensation, corporate governance factors (like board size, the proportion of independent directors, CEO duality, and outside directorships held by executive directors), firm performance (measured by Tobin's Q), leverage, and the family's shareholding pattern were found to be significant. The study offers practical insights for stakeholders of family and non-family firms, particularly in emerging market economies, and can serve as a reference for customers, educators, tax authorities, government bodies, and society. The research is original, providing valuable insights into Indian family firms, particularly in the area of cross-holding of directorships, a topic often overlooked in previous studies.

60. **Nuryakin:** This paper addresses the research gap in understanding the relationship between entrepreneurial orientation and the export performance of small and medium-sized enterprises (SMEs), focusing on the mediating roles of innovation capability and international networking accessibility, which had not been explored in prior studies. The study also investigates the impact of entrepreneurial orientation on the export performance of SMEs in the global market, with particular emphasis on how innovation capability and international networking accessibility mediate this relationship. The methodology used a quantitative approach, examining 282 owners or managers from the brass industry cluster in Boyolali, Indonesia, through purposive sampling. The findings show that entrepreneurial orientation did not have a direct significant impact on export performance, but it did positively influence innovation capability and international networking accessibility. Further tests revealed that both innovation capability and international networking accessibility significantly affected export performance. The study highlights the critical mediating roles these factors play in linking entrepreneurial orientation to SMEs' export success. The practical implication of this research is that it can help SMEs' managers or owners enhance their innovation and international networking abilities, which can ultimately improve their export performance. The study's originality lies in its contribution to the literature by establishing the mediating role of innovation capability and international networking accessibility in the entrepreneurial orientation-export performance relationship, based on the resource-based view (RBV) theory.

# **References:**

- 1) "A study on financial analysis of selected chemical and fertilizer companies in India",

  International Journal of Emerging Technologies and Innovative Research (www.jetir.org),

  ISSN:2349-5162, Vol.6, Issue 5, page no.23-28, May-2019, Available

  :http://www.jetir.org/papers/JETIR1905C04.pdf
- 2) <u>Kajal Chaudhary and Monika Sharma, "Performance of Indian Public Sector Banks and Private Sector Banks: A Comparative Study," *International Journal of Innovation*, <u>Management and Technology vol. 2, no. 3, pp. 249-256, 2011.</u></u>
- 3) Singh H. Financial Performance of Bank in India, 2008. International Journal of Applied Research 2015; 1(12): 895-901
- 4) Sekhar, D. S. (2007), "Trends in Growth and Development: Nationalized Banks in India", The Indian Banker, Vol.11, No.10, pp.28-32
- 5) <u>Financial performance of indian banking sector in post reforms era</u>, S Arora, S Kaur The Indian Journal of Commerce, 2006
- 6) Santi Gopal Maji & Soma Dey, 2006. "Productivity And Profitability Of Select Public Sector And Private Sector Banks In India: An Empirical Analysis," The IUP Journal of Bank Management, IUP Publications, vol. 0(4), pages 59-67, November.
- 7) Özel, Semih & Oztemel, Ercan. (2018). Financial Competency Assessment Model. Journal of Business & Financial Affairs. 07. 10.4172/2167-0234.1000317.
- 8) Baran Dušan & Pastýr Andrej & Baranová Daniela, 2016. "Financial Analysis of a Selected Company," Research Papers Faculty of Materials Science and Technology Slovak

  University of Technology, Sciendo, vol. 24(37), pages 73-92, June.
- 9) Jamak, Abu & Ibrahim, Mohd & Salleh, Rohani & Mohamed Noor, Azelin. (2014). Marketing and Financial Competencies of Malaysian Malays Micro-Entrepreneurs. International Journal of Trade, Economics and Finance. 5. 218-223. 10.7763/IJTEF.2014.V5.374.
- 10)A, Sassikala. (2018). A Study on Financial Statement Analysis in Tamil Nadu Newsprint and Papers Limited, Kagithapuram, Karur. Journal of Business & Financial Affairs. 07. 10.4172/2167-0234.1000337.

- 11)Dr. S.Poongavanum (2017), A Study on Comparative Financial Statement Analysis with reference tp DAS Ltd., IOSR Journal Of Humanities And Social Science (IOSR-JHSS)

  Volume 22, Issue 10, Ver. III (October. 2017) PP 09-14 e-ISSN: 2279-0837, p-ISSN: 2279-0845. www.iosrjournals.org DOI: 10.9790/0837-2210030914 www.iosrjournals.org 9 | Page
- 12) Purba, Lizzcharly & Medyawati, Henny & Silfianti, Widya & Hermana, Budi. (2013). Internet Financial Reporting Index Analysis: An Overview from the State Owned Enterprises in Indonesia. Journal of Economics, Business and Management. 10.7763/JOEBM.2013.V1.61.
- 13) Ley, Tobias & Albert, Dietrich. (2003). Identifying Employee Competencies in Dynamic Work Domains: Methodological Considerations and a Case Study. J. UCS. 9. 1500-1518.
- 14) Brill, Jennifer & Bishop, MJ & Walker, Andrew. (2006). The Competencies and Characteristics Required of an Effective Project Manager: A Web-Based Delphi Study. ITLS Faculty Publications. 54. 10.1007/s11423-006-8251-y.
- 15) Talbot L, Graham M, James EL. A Role for Workforce Competencies in Evidence-Based Health Promotion Education. Promotion & Education. 2007;14(1):28-33. doi:10.1177/175797590701400104
- 16) Divine Kwaku Ahadzie, David G. Proverbs, Paul O. Olomolaiye & N. Ankrah (2008). Towards developing competency-based measures for project managers in mass house building projects in developing countries, Construction Management and Economics, 27(1), 89-102.
- 17) **Rao** (**1993**): has made a study about inter-company financial analysis of tea industry-retrospect and prospect. <u>Finance India: the quarterly journal of Indian Institute of Finance</u>. Delhi, ISSN 0970-3772, ZDB-ID 11308175. Vol. 7.1993, 3, p. 587-602
- 18) **Pai V.S, Vadivel. V and Kamala K.H.**: (Dec 1995) "Diversified companies and financial performance: A study," Finance India, Vol. IX, No. 4, pp. 977-988
- 19) Kakani, Ram & Saha, Biswatosh & Reddy, V.N.. (2001). Determinants of Financial Performance of Indian Corporate Sector in the Post-Liberalization Era: An Exploratory Study. SSRN Electronic Journal. 10.2139/ssrn.904983.
- 20) Weill, Laurent. (2008). Leverage and Corporate Performance: Does Institutional Environment Matter?. Small Business Economics. 30. 251-265. 10.1007/s11187-006-9045-7.

- 21) Patra Santimoy, (2005), Liquidity Vs Profitability, Indian Journal of Accounting, Vol. XXXV, No. 2, pp. 39-43.
- 22) Debasish Sur and Kaushik Chakraborty,(2006)Trends in financial performance of Indian pharmaceutical industry- A study of Dr. Reddy's
- 23) https://api.core.ac.uk/oai/oai:uir.unisa.ac.za:10500/1264
- 24) Toby, Adolphus J., FINANCIAL MANAGEMENT MODELLING OF THE PERFORMANCE OF NIGERIAN QUOTED SMALL AND MEDIUM-SIZED ENTERPRISES, <u>Journal of Financial Management & Analysis</u>, 2007, Vol 20, Issue 1, p49 ISSN No.0970-4205.
- 25) https://ir.iimcal.ac.in:8443/jspui/handle/123456789/2662
- 26) Vijayakumar and Venkatachalam, "Working capital management: A case study of Tamil Nadu sugar corporation", Finance India, Vol.10, issue 3, 2003, pp 95-100.
- 27) Govind Rao, D. and Rao, P.M. (1999). —Impact of Working Capital on Profitability in Cement Industry—A Correlation Analysis. Working Capital Management. (Deep & Deep Publications Pvt. Ltd., New Delhi), 239–59.
- 28) Debasis Rej and Debasish Sur, "Profitability Analysis of Indian Food Products Industry: A Case Study of Cadbury India Ltd", The Management Accountant, Vol. 36, No.11, Nov 2001, pp. 845-849.
- 29) Vijayakumar, A. (2002). "Determinants of profitability-A firm Level study of the sugar industry of Tamil Nadu", The Management Accountant, pp. 458-465.
- 30) Vijayakumar A. and Kadirvelu S., "Profitability and Size of the Firm in Indian Minerals and Metals Industry", The Management Accountant, Vol.38, No. 11, Nov 2003, pp. 816-821.
- 31) http://hdl.handle.net/10603/290281
- 32)Sukenti, LITERATURE REVIEW OF FINANCIAL PERFORMANCE AND FINANCIAL DISTRESS: LIQUIDITY AND PROFITABILITY ANALYSIS (FINANCIAL MANAGEMENT LITERATURE REVIEW) Vol. 3 No. 6 (2022): Dinasti International Journal of Digital Business Management (October-November 2022)

  https://dinastipub.org/DIJDBM/issue/view/78
- 33)Ercan Oztemel\* and Semih Ozel, Financial Competency Assessment Model, ztemel and Ozel, J Bus Fin Aff 2018, 7:1 DOI: 10.4172/2167-0234.1000317

- 34)Rajesh K. Singh & Suresh K. Garg & S.G. Deshmukh, 2008. "Challenges and strategies for competitiveness of SMEs: a case study in the Indian context," International Journal of Services and Operations Management, Inderscience Enterprises Ltd, vol. 4(2), pages 181-200.
- 35) Arachchige, Sarath. (2018). MODERNIZATION OF TRADITION FOR ENDURANCE: FUTURE AND CHALLENGES OF TRADITIONAL BRASS INDUSTRY OF PILIMATALAWA, SRI LANKA.
- 36)Singh, Rajesh & Garg, Suresh & Deshmukh, S G. (2008). Competency and performance analysis of Indian SMEs and large organizations. Competitiveness Review: An International Business Journal incorporating Journal of Global Competitiveness. 18. 308-321. 10.1108/10595420810920798.
- 37) Sahay, Mridula. (2015). Turn Around Strategy for Brass and Bell Metal Industry in Assam India. International Journal of Innovation and Applied Studies. 11. 191-196.
- 38) Kulatunga, Asela & Jayawickrama, Malan & Dharmawardhana, Mahanama & Karunarathna, K.G.S.P & Osadith, S.A.U.. (2016). Enhancement of Productivity of Traditional Brass Manufacturing Industry Using Sustainable Manufacturing Concept. 10.13140/RG.2.1.4600.0403.
- 39)Herath, S.A. & Jayasinghe, R. & Gowrynathan, J. & Kulatunga, Asela & Dharmawardhana, Mahanama & Ekanayake, R.E. & Chandrakumar, Chanjief. (2015). Technological needs assessment of traditional brass industry to enhance the productivity. IEOM 2015 5th International Conference on Industrial Engineering and Operations Management, Proceeding. 10.1109/IEOM.2015.7093898.
- 40) Karunarathna, K & Jayawickrama, Malan & Dharmawardhana, Mahanama & Kulatunga, Asela. (2016). Decision support framework for development of traditional brass industry -A case study.
- 41)IJISET International Journal of Innovative Science, Engineering & Technology, Vol. 2
  Issue 9, September 2015 ISSN 2348 7968 Manufacturing Defects of Brass Products and suggested Remedies N.Z.Khan<sup>1</sup>, A. Khan<sup>2</sup>, A.Shakoor<sup>3</sup> and K.Azam

- 42) Yadav, Rajeev & Srivastri, R. (2018). Brassware Industry inMirzapurDistrict:U.P. Major Issues.
- 43)Mondal, Basundhara & Sarkar, Dhiraj & Ray, Supriya & Adhyha, Shilpi. (2023). Correlation Between the Changing Scenario of Brass and Bell Metal Work & Effects on Different Environmental Issues: A Case Study of Brass and Bell Metal Industry in Khagra, Berhampore Municipality, Murshidabad District, West Bengal.
- 44)Herath, S.A. & Jayasinghe, R. & Gowrynathan, J. & Kulatunga, Asela & Dharmawardhana, Mahanama & Ekanayake, R.E. & Chandrakumar, Chanjief. (2015). Technological needs assessment of traditional brass industry to enhance the productivity. IEOM 2015 5th International Conference on Industrial Engineering and Operations Management, Proceeding. 10.1109/IEOM.2015.7093898.
- 45)Deblina Ghosal, Present Scenario of the Traditional Brass and Bell Metal Industry of Khagra, Murshidabad, West Bengal, [VOLUME 5IISSUE 3 I JULY– SEPT 2018]E ISSN 2348–1269, PRINT ISSN 2349-5138
- 46)Cassell, Catherine & Nadin, Sara & Gray, Melanie. (2001). The use and effectiveness of benchmarking in SMEs. Benchmarking: An International Journal. 8. 212-222. 10.1108/EUM000000005624.
- 47) Vanhoof, K., Houben, G., Lenie, K. (1995). A qualitative analysis of small and medium-sized enterprises, In: Pro-ceedings of the 11th Conference on Artificial Intelligence for Applications, Los Angeles, USA, 286-291.
- 48)Lin, L.C., Tong, L.I. (2010). Constructing two-stage credit scoring model using Cox model and SVM: The case of SMEs in Taiwan, The Journal of American Academy of Business, Vol. 15, No. 2, 300-306.
- 49) Ms. M. SathyaPriya (2018). A Study on financial analysis of selected chemical & fertilizer companies in India, The research journal of social sciences December 2018 volume 9 number 12, ISSN 0025-1348 (P), 2456-1356 (O)

- 50) Wang, Z. (2008). Comparative research on the evaluation method of external environment of small and mediumsized enterprises, In: Proceedings of 4th International Conference on Wireless Communications, Networking, and Mobile Computing, WICOM'08, Dalian, China, 1-4, doi: 10.1109/WiCom.2008.1969.
- 51) Nuryakin, Rochmi Widayanti, Ratna Damayanti & Susanto. The importance of market information accessibility to enhancing SMEs Indonesian superior financial performance, International Journal of business innovation & research, Vol. 25, No. 1,1-18, https://doi.org/10.1504/IJBIR.2021.115010
- 52) Stavroulakis P, Toulfatzis AI, Pantazopoulos GA, Paipetis AS. Machinable Leaded and Eco-Friendly Brass Alloys for High Performance Manufacturing Processes: A Critical Review. *Metals*. 2022; 12(2):246. <a href="https://doi.org/10.3390/met12020246">https://doi.org/10.3390/met12020246</a>
- 53) Hiralal Desrani (2013), study of A Comparative Study of Profitability Analysis of Selected Brss Industries Global Research Analysis, Vol-2, Issue:7,ISSN No. 2277-8160, 115-116
- 54) Saravanan, Palanisamy & Maram, Srikanth & Avabruth, Suhas. (2017). Compensation of top brass, corporate governance and performance of the Indian family firms An empirical study. Social Responsibility Journal. 13. 10.1108/SRJ-03-2016-0048.
- 55) Nuryakin, 2024. "Entrepreneurial orientation and SME export performance: Unveiling the mediating roles of innovation capability and international networking accessibility in the brass industry," Journal of Entrepreneurship, Management and Innovation, Fundacja Upowszechniająca Wiedzę i Naukę "Cognitione", vol. 20(1), pages 30-46.
- 56) <a href="http://www.financialexpress.com/article/industry/banking-finance/private-banks-profit-outpace-psbs-inq1">http://www.financialexpress.com/article/industry/banking-finance/private-banks-profit-outpace-psbs-inq1</a>
- 57) <a href="http://finmin.nic.in/fmspeech/fm-speech/fm-statement-75-report-standing-committee-finance-lok-sabha">http://finmin.nic.in/fmspeech/fm-speech/fm-statement-75-report-standing-committee-finance-lok-sabha</a>.
- 58) https://www.researchgate.net/publication/295243588\_Enhancement\_of\_Productivity\_of\_Traditional\_Brass\_Manufacturing\_Industry\_Using\_Sustainable\_Manufacturing\_Concept
- 59) https://www.researchgate.net/project/Enhance-the-competitiveness-of-local-brass-manufacturing-industry-with-sustainable-manufacturing-concepts

"A study of Financial Competency of Selected Brass Industry of Jamnagar District."
60) https://www.reliancemoney.co.in/a-story-of-turnaround-for-the-brass-parts-manufacturing-cluster-jamnagar
61) <a href="https://www.wfmj.com/story/42535779/brass-wires-market-size-industry-share-global-analysis-development-status-regional-trends-opportunity-assessment-and-comprehensive-research-study">https://www.wfmj.com/story/42535779/brass-wires-market-size-industry-share-global-analysis-development-status-regional-trends-opportunity-assessment-and-comprehensive-research-study</a>
62) <a href="https://www.wfmj.com/story/42484160/global-brass-wires-market-2020-industry-size-analysis-top-manufacturers-market-share-growth-factor-and-forecast-to-2026">https://www.wfmj.com/story/42484160/global-brass-wires-market-2020-industry-size-analysis-top-manufacturers-market-share-growth-factor-and-forecast-to-2026</a>
63) https://www.researchgate.net