



# A Bibliometric study on Skill Management Strategies in Banking Sector

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## Abstract

**Purpose** – This study helps to understand the new trend of skill management strategies in banks. The paper helps in identifying the variables, keywords, and most cited papers for improving the performance of bank employees. The study also suggests the scope for further study on this topic.

**Design/methodology/approach** – In this paper, Bibliometric analysis is used. Data are retrieved from the SCOPUS database. A total of 341 papers is selected from 456 papers for the study. VOS viewer software is also used for analysis and drawing inferences. Papers are limited to time (from 2005 to 2022), subject area (Business, Management and Accounting, Psychology, Social Sciences, Economics, Econometrics, and Finance), and language- English.

**Findings** – This study helps in identifying the variables of skill management to improve employee performance in banks. This paper helps scholars, top management of banks, policymakers, etc. for improving or adopting various strategies that can improve the employee performance. In addition, this paper also contributes to the skill management strategies for improving employee performance in banking sector literature by identifying the keywords, authors, journals, citations by countries, affiliations, and publications in a year.

**Research limitations/implications** – This study uses the data from the past 18 years to understand the topic in terms of the document published per year, most cited papers by countries, most impactful journals, keywords, top authors, etc. the study shows there are very few papers on this topic. We need to research more on this topic for a better understanding.

**Originality/value** – The paper helps understand skill management strategies in the banking sector to improve organizational performance. It helps the top management of the banks to adopt several strategies for improving the skills of the employee. In addition, these findings can be a road map for the researchers to investigate further Skill management strategies in banks.

**Keywords-** Banking sector, Skill management strategies, Employee performance, VOS viewer software, and Bibliometric Analysis

**Paper type-**Literature review

## 1. Introduction

In this age of rapid technological innovation and globalization, the Indian banking industry faces many issues. These difficulties include digital transformation, fintech rivalry, changing customer preferences, and regulatory compliance. Indian banks must use skill management strategies to ensure their employees have the skills to meet industry demands. Indian banks must digitally change. Banking staff need digital abilities as technology is used more. According to a report by McKinsey, Indian banks need to reskill and upskill their employees to meet the demands of the digital age (McKinsey & Company, 2018). This requires banks to implement training programs to help their employees acquire digital skills such as data analytics, artificial intelligence, and machine learning. Another challenge faced by Indian banks is the increasing competition from fintech companies. These firms are disrupting traditional banking by delivering faster and more comfortable solutions. This has increased demand for fintech-related expertise. KPMG reports that Indian banks must invest in personnel management and foster innovation to compete with fintech businesses (KPMG, 2019). Indian banks face evolving client needs. Customers desire personalized, convenient banking across platforms. Customers want empathy, communication, and problem-solving skills. To improve customer service, Indian banks require a customer-centric culture and training, according to Deloitte (Deloitte, 2021). Compliance challenges Indian banks. As transparency increases, banks must train employees on regulatory compliance. According to a PwC analysis, Indian banks should take a risk-based approach to compliance and engage in employee compliance training (PwC, 2021). Indian banks must use skill management strategies to ensure their workers have the skills to fulfil industry demands. These tactics include investing in digital, customer-centric, and compliance training programmes, fostering a culture of innovation to compete with fintech startups, and taking a risk-based approach to compliance. These measures can help Indian banks keep their workers competitive in the ever-changing banking business.

This paper will explore various skill management strategies that can be used in the banking sector to enhance the productivity and efficiency of employees. It will cover the importance of identifying key skills and competencies required for specific roles, creating individual development plans, and providing relevant training and development opportunities. The paper will also examine the role of leadership in promoting a culture of continuous learning and development, and the use of performance feedback and rewards to motivate employees. Overall, this paper aims to provide valuable insights and practical recommendations for banking institutions looking to implement effective skill management strategies to enhance their employees' performance, job satisfaction and retention rates. The study will cover topics such as identifying necessary skills, training and development programs, mentorship and coaching, and performance management.

In this paper, Bibliometric analysis is used to study the trends of skill management strategies in banks by year, authors, source, affiliations top journals, country wise analysis. We have also done keywords co-occurrence visualization network analysis. Bibliometric analysis is a quantitative method used to analyze scholarly literature and evaluate the impact and visibility of research outputs, such as articles, journals, authors, and institutions. It is a useful tool in the field of scientometrics and information science that enables researchers to map the intellectual structure of a particular field, identify influential authors and publications, and track the evolution of research trends over time. Bibliometric analysis typically involves the use of bibliographic databases, such as Web of Science, Scopus, and Google Scholar, to collect publication data, including publication year, authors, journal title, citations, and abstracts. The collected data can then be analyzed using a range of statistical techniques, such as citation analysis, co-authorship analysis, and keyword co-occurrence analysis, to generate meaningful insights into research trends and patterns.

The rest of the paper is organized as follows: Section 2 describes the Review of literature. Section 3 contains the Research Methodology & description of data. Section 4 gives the results of data analysis and Section 5 concludes the whole study.

## 2. Review of Literature

### **Skill Management:**

Skill management is an essential strategy for organizations to achieve their business goals, and the banking sector is no exception. Skill management strategies play a pivotal role in enhancing employee performance by equipping them with the necessary tools to succeed. These strategies lead to a more competent, motivated, and adaptable workforce, ultimately driving organizational success. By investing in skill development, organizations not only improve individual performance but also achieve long-term growth and sustainability. Skill management strategies, such as targeted training and development programs, ensure that employees acquire the necessary skills to perform their tasks efficiently. Continuous upskilling and reskilling initiatives keep employees abreast of industry trends and technological advancements, thus enhancing their capabilities and performance. When organizations invest in skill development, employees feel valued and appreciated. This boosts morale and job satisfaction, leading to higher motivation levels. Motivated employees are more likely to take initiative, exhibit creativity, and strive for excellence in their roles. Employees with well-rounded skill sets can perform their tasks more efficiently and with greater accuracy. Skill management strategies that focus on optimizing skill utilization ensure that the right people are in the right roles, reducing redundancy and increasing overall productivity. Effective skill management aligns employee skills with the strategic goals of the organization. By identifying and developing key competencies required to achieve business objectives, companies can ensure that their workforce is well-prepared to meet current and future challenges.

This literature review aims to explore the skill management strategies adopted by banks to enhance their employees' skills and competencies. According to Muhd and Rosli (2019), banks are continually facing intense competition, and the changing economic environment and technology advancements necessitate banks to adopt skill management strategies to remain competitive. One of the important skill management strategies that banks uses is training and development programs. Banks invest in their employees' training and development to equip them with the necessary skills and knowledge to perform their tasks effectively. Training and development programmes help staff improve technical, functional, and behavioral skills that support banks' goals, according to Suwarsih et al. (2020). These programmes boost

job satisfaction, lowering turnover. Banks use performance management to manage skills. Performance management involves creating and tracking employee goals. Performance management helps banks identify employees' strengths and weaknesses and create training programmes to improve their skills, according to Ahmed et al. (2021). Performance management also aligns employees' skills and competences with bank goals. Banks utilise competency frameworks to manage skills. Competence frameworks outline the skills, knowledge, and attitudes needed for job success. Competency frameworks assist banks assess employees' present and future skill needs and build training programmes to fill skill gaps, according to Sohail and Shaheen (2019). Competency frameworks help banks hire and retain qualified workers. According to Chen and Huang (2014), skill management strategies involve identifying, developing, and utilizing the skills of employees to achieve organizational goals. One of the key strategies used by banking organizations is training and development programs. These programs aim to enhance the technical and soft skills of employees through various training methods such as classroom training, e-learning, and on-the-job training. For instance, ICICI Bank in India offers a range of training programs to its employees to improve their skills and knowledge (Chakraborty, 2020). Job rotation involves moving employees from one job to another within the organization to expose them to different functions and roles. This helps employees to develop new skills and gain diverse experiences, which can improve their performance and increase their job satisfaction (Gibson & McLeod, 2021). For example, Bank of America has a job rotation program that allows employees to rotate to different departments within the bank to enhance their skills and knowledge (Gibson & McLeod, 2021). Mentoring pairs experienced workers with junior workers to assist them learn new skills and accomplish career goals. Coaching, on the other hand, comprises giving staff feedback and skills training (Khalid, Abbas, & Zafar, 2020). Barclays Bank in the UK has a mentorship and coaching programme that helps workers build skills and accomplish professional goals (Khalid, Abbas, & Zafar, 2020). Karkoulian and Harakeh (2017) examined how motivation affects work satisfaction and organizational commitment in Lebanese banking. Job satisfaction and organizational commitment were predicted by autonomy, competence, and relatedness. Khandekar and Sharma (2019) examined banking staff performance and motivation. Hygiene and motivators were major determinants of employee success. Hygiene factors like wage and job stability improved employee performance, while motivators like recognition and personal growth had a greater effect.

There are several studies on skill management strategies in banking sector but no study has been done on the bibliometric analysis of skill management strategies for employees in banking sector for last 18 years. This study helps to understand the new trend of skill management strategies in banks. The paper helps in identifying the variables, keywords, and most cited papers for improving the performance of bank employees. The study also suggests the scope for further study on this topic.

### **3. Research Methodology**

In the paper, Bibliometric analysis is used to study the trends of skill management strategies in banks by year, authors, source, affiliations, top journals, country wise analysis. We have also done keywords co-occurrence visualization network analysis. The paper helps in identifying the variables, keywords, and most cited papers for improving the performance of bank employees. The study also suggests the scope for further study on this topic.

**3.1. Search Criteria:** The data are retrieved from the Scopus database using the following search criteria:

- TITLE-ABS KEY (employee AND performance AND in AND banking AND sector ) ;
- Time: 2005–2022;
- Language: English;
- Subject area: Business, Management and Accounting, Psychology, Social Sciences, Economics, Econometrics and Finance.

**3.2. Process:** To conduct the research presented, the following steps were followed:

1. Data collection
2. Data cleansing
3. Feature selection
4. Data Analysis

**3.3. Data collection:** Data are collected from the Scopus database by using TITLE-ABS-KEY (skill AND Management AND Strategies OR employee AND performance AND banking AND sector). Total 456 documents are retrieved for the study.

**3.4. Data cleansing and Feature selection:** Data cleansing is one of the most important steps in data analysis. Incomplete data, missing author names, and missing titles are removed from the records. After data cleansing, feature selection is done by limiting the documents by following features:

1. **Time:** Documents are limited to time from 2005 to 2022, 443 documents are retrieved, and 16 documents are excluded.
2. **Language:** Documents are limited to English language and 441 documents are retrieved.
3. **Subject area:** Business, Management and Accounting, Psychology, Social Sciences, Economics, Econometrics and Finance. Again 441 documents are limited to this subject area and 341 documents are finalized for data analysis.

**3.5. Software used:** For analysis, all data are exported in .csv files and VOS viewer version 1.6.18 software is used for bibliometric analysis. VOS viewer version 1.6.18 is a software tool for constructing and visualizing bibliometric networks. It enables users to analyze and visualize bibliometric networks based on co-citation, co-authorship, or bibliographic coupling relationships, with the ability to handle large datasets. VOS viewer has an intuitive interface and allows users to export the network visualization as an image or in various data formats. It is a useful tool for researchers and analysts who want to explore bibliometric data in a visual and interactive way.

## 4. Results of Data Analysis

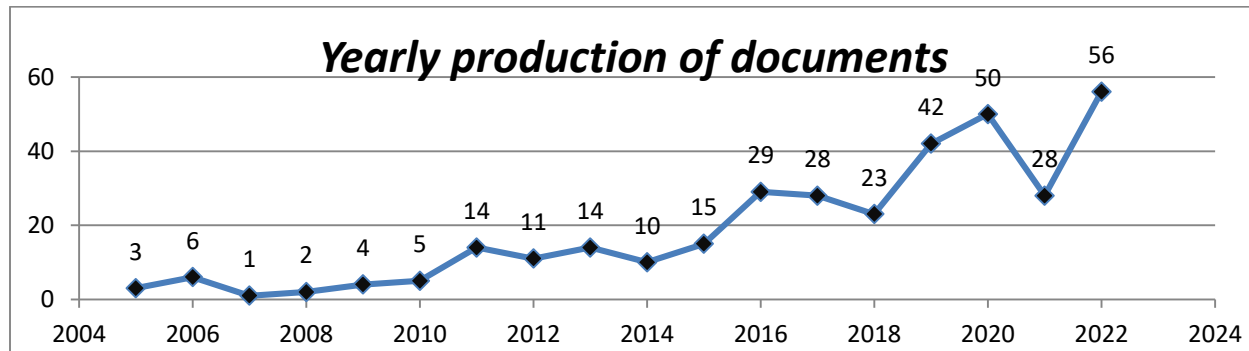
In this section, we present the results of bibliometric analysis of skill management strategies for employees in Banks regarding Document per year, top 10 documents by authors, top 10 documents by source, top 10 documents by affiliation, documents by country wise, types and subject areas of documents and Network visualization for keyword co-occurrence.

### 4.1. Yearly production of documents

Documents published per year are shown in Figure 1. Total no. of documents published from 2005 to 2022 is 341. From 2005 to 2010, only 6 % of the articles were published. In the period 2011-2015, 19 % of the articles were published. From the year 2011 articles publication were increased at faster rate as seen in Figure 1. From 2016 to 2022, there is significant increase in the no. of articles published, total 75% (256) of the articles published. In the year 2022, maximum no. of

articles published ie 56 documents. In the period 2019- 2022, there is hike in documents publication total 176 (51%) documents are published.

**Figure 1:** Documents published per year.

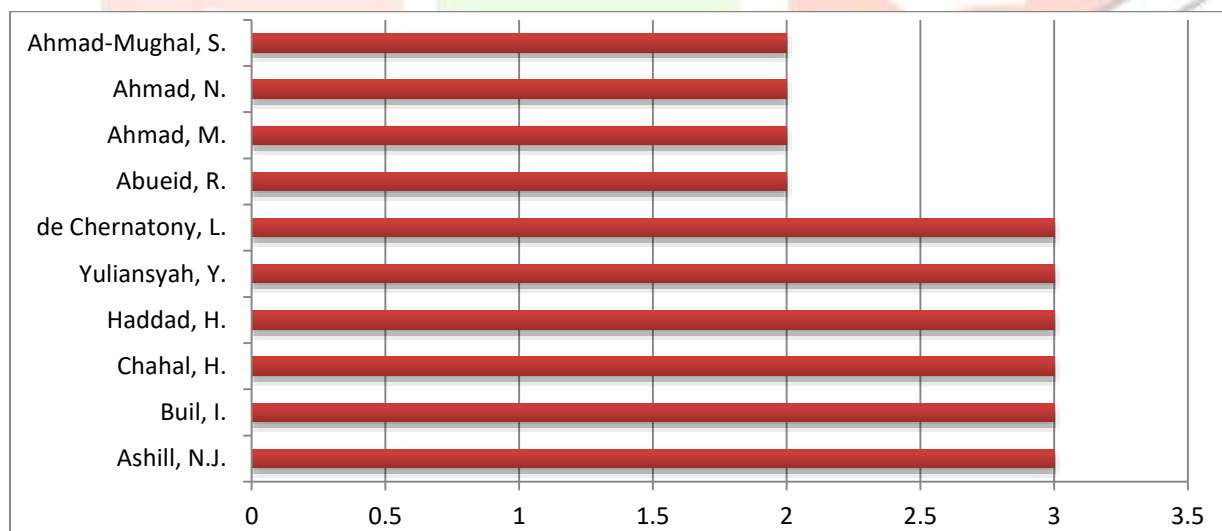


**Source (s):** Scopus Database

#### 4.2. Most productive authors

Figure 2 shows the top 10 authors who published an article on this topic. Authors named Ashill, N.J., Buil, I., Chahal, H., Haddad, H., Yuliansyah, Y., and de Chernatony, L. published a maximum no. of documents i.e., 3 articles each. Other authors named Abueid, R., Ahmad, M., Ahmad, N., Ahmad-Mughal, S., Ahmed, U., Ali, M., etc published 2 documents each on this topic. We also noticed that few papers are published by authors. Researchers need to do more work in this field.

**Figure 2:** Documents published by author.



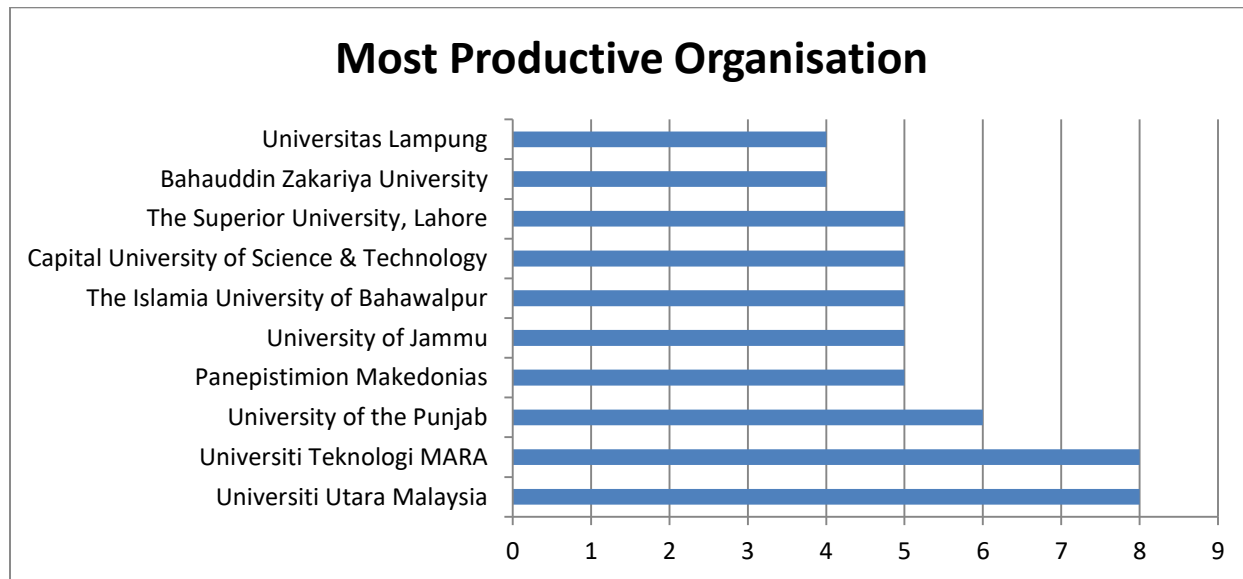
**Source (s):** Authors own articulation.

#### 4.3. Most productive organization

Figure 3 shows the documents published by the top 10 affiliations. Universiti Utara Malaysia and Universiti Teknologi MARA have published a maximum no. of documents which are equal to 2% of the total sample each. The University of the Punjab has published six papers (1.75%). Other Affiliations named Panepistimion Makedonias, University of Jammu,

The Islamia University of Bahawalpur, Capital University of Science & Technology, The Superior University, Lahore, Bahauddin Zakariya University, and Universitas Lampung contribute only 1% of total documents each.

**Figure 3:** Documents published by organization.



**Source (s):** Scopus database

#### 4.4. Most productive journal

Figure 4 shows the top 15 documents by source. International Journal of Bank Marketing and Sustainability Switzerland are the two leading journals that published 12 documents each. Only these two journals were comprises 3.5% of the total documents each. International Journal of Applied Business and Economic Research has published 8 documents which are equal to 2% (approx.) of total documents. Journal named Banks and Bank Systems, and Management Science Letters has published 6 documents each which is equal to 2% (approx.) of total documents. Other journals named Employee Relations, International Journal Of Productivity And Performance Management, International Journal Of Recent Technology And Engineering, European Journal Of Social Sciences, and International Journal Of Innovation Creativity And Change have published 1% (approx.) of total documents.

Figure 4: Top 15 most productive journal



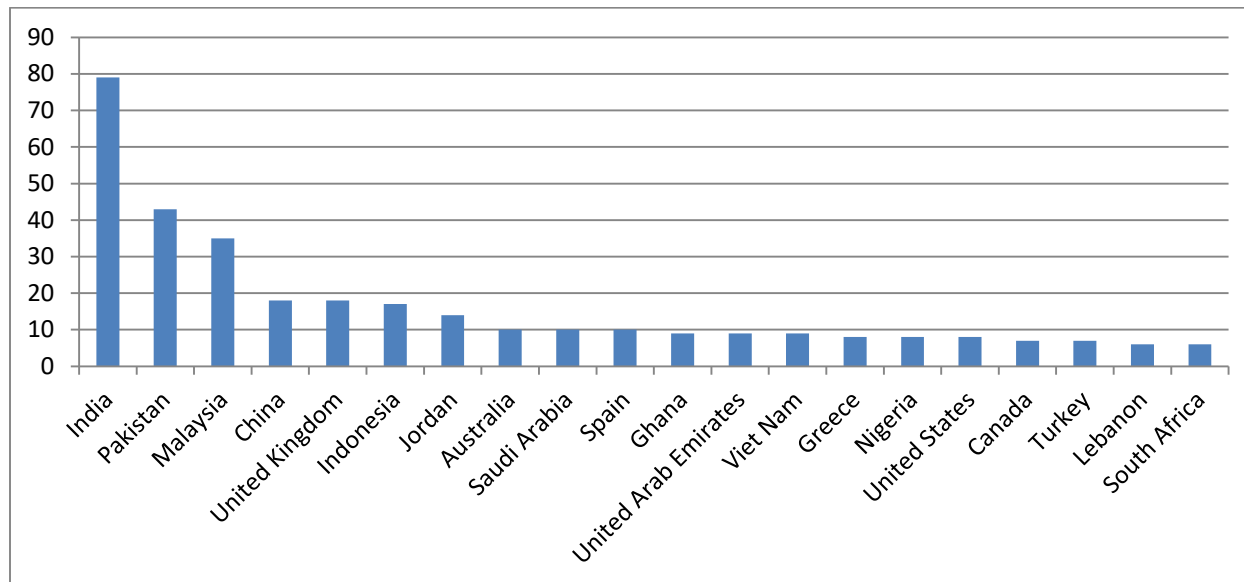
Source (s): Scopus database

#### 4.5. Most productive countries

Figure 5 shows the documents by country. India has contributed a maximum no. of papers ie,79 in this field. India’s share in total documents is 23%. India is the most Influential country followed by Pakistan and Malaysia which contributed 43 and 35 articles respectively. Other countries also contributed their documents in this field such as China, the United Kingdom, and Indonesia have contributed 5% of shares in total documents each. Similarly, Jordan has a 4% of share in total documents published and Australia, Saudi Arabia, and Spain have contributed 10 (3%) documents each in this field.



Figure 5: Most productive countries based on documents.

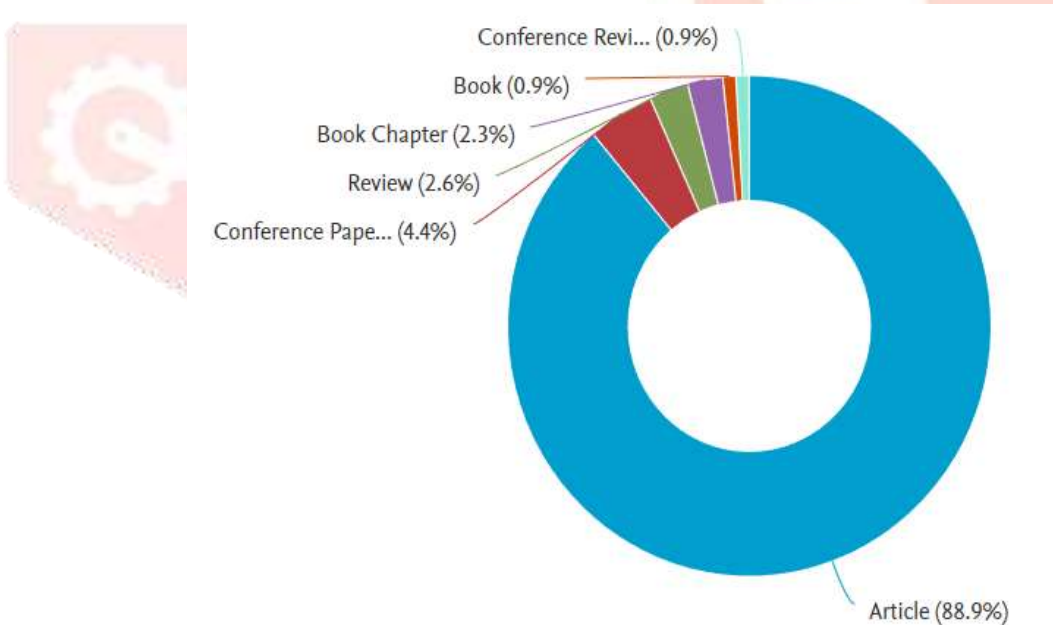


Source (s): Scopus database

#### 4.6 Document type

This figure shows the document type contributed in this topic which depict that 88.9% were article, 4.4% were conference paper, 2.3% were review paper, rest of the book chapter, book and conference papers.

Figure6: Document on the basis of types

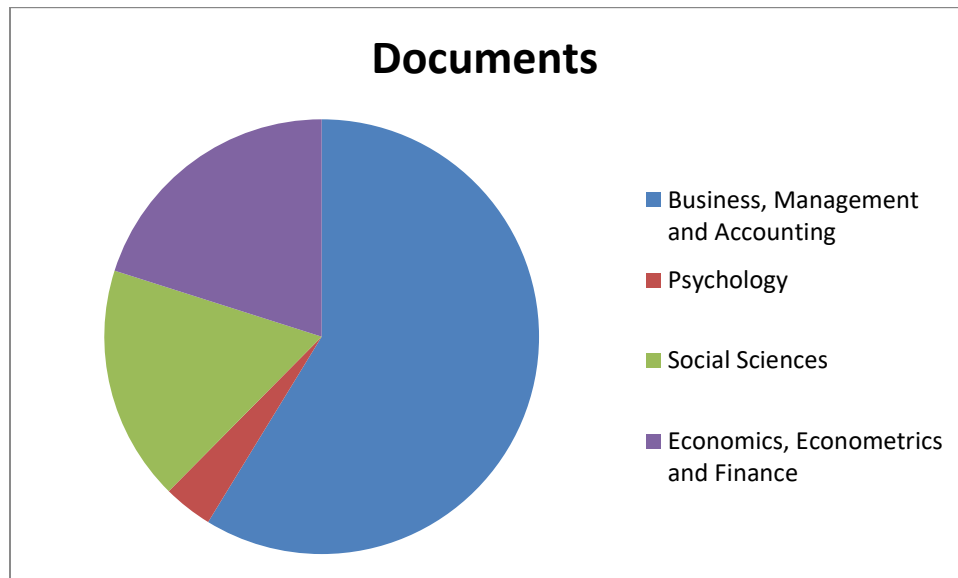


Source (s): Scopus database

#### 4.7 According to the Broad Subject Area

This figure shows the data according to the broad subject area which shows that most of the document published in the Business, management and accounting domain its contributed 272 papers. In Economics, econometrics and Finance domain contributed 93 research papers which stood on the second position. Social sciences contributed 81 documents. Psychology domain have least number of documents published.

Figure:7

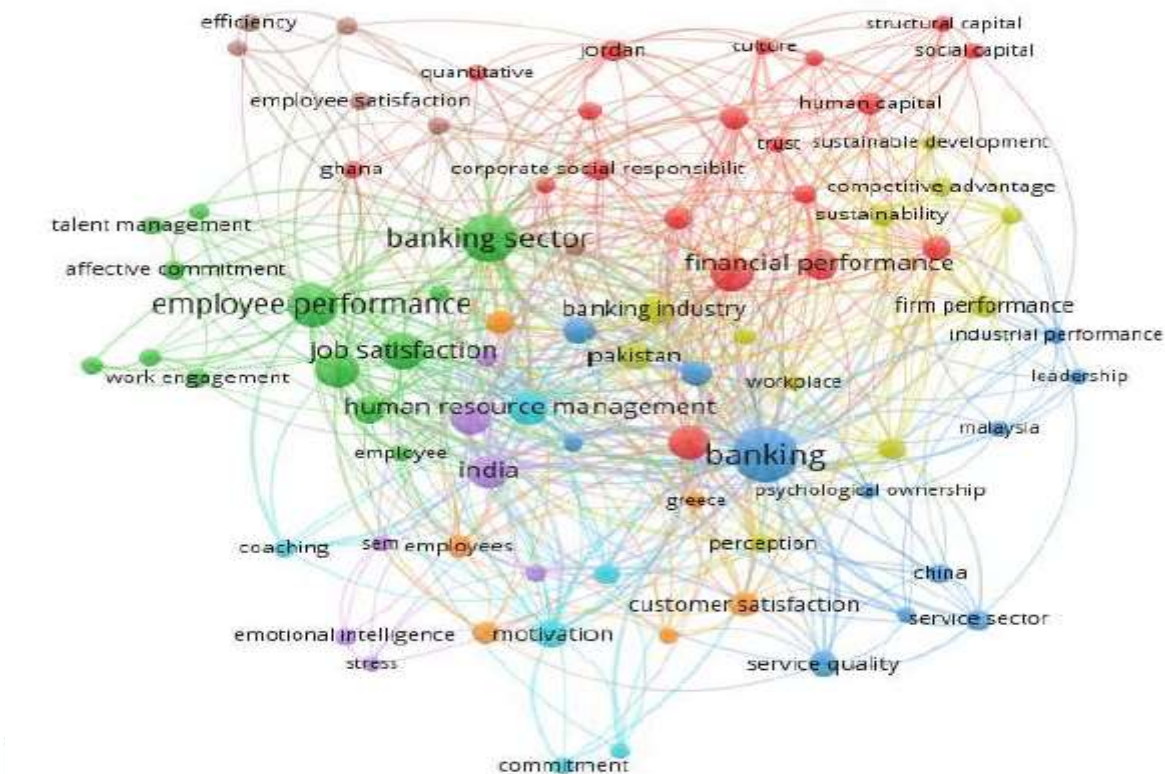


Source (s): Scopus database

#### 4.8. Network visualization for keyword co-occurrence

For keywords analysis, we set the minimum no. of occurrences of a keyword as four. We got a total of 80 keywords with 594 links and total link strength of 866. In Figure 8 we see different colors in which items are classified into 8 clusters. It also shows the most frequent keywords such as Banking sector, employee performance, Banking, job satisfaction, financial performance, human resource management, and banking.

From the network visualization of keywords co-occurrence, we find various skill management strategies in banks such as motivation, service quality, talent management, leadership, training, and development, etc. we also find several methods for measuring the organizational performance of banks such as employee performance, job satisfaction, job commitment, financial performance, work engagement, emotional intelligence, customer satisfaction.

**Figure 8:** Network visualization for keyword co-occurrence

Source (s): Vos-viewer software

## 5. Conclusion

In this paper, we have done a bibliometric analysis of Skill Management Strategies for Employees in the Banking Sector. We have collected data from the SCOPUS database. We have got 456 documents and after that, we apply data cleaning process by various filters such as Time: 2005–2022; Language: English; Subject area: Business, Management and Accounting, Psychology, Social Sciences, Economics, Econometrics, and Finance and we finally got 341 documents for data analysis. We exported .csv files of all documents and analyses in VOS viewer software. In bibliometric analysis, data is analyzed in 6 parameters: (4.1) Documents published per year showed that there is a growing trend in this field and the maximum no. of papers published in the year 2022 (56 documents). (4.2) Top 10 authors who published an article on this topic. The name of the top five Authors is Ashill, N.J., Buil, I., Chahal, H., Haddad, H., Yuliansyah, Y., and de Chernatony, L. who have published 3 articles each on this topic. (4.3) Documents published by top 10 affiliations in which University Utara Malaysia and Universiti Teknologi MARA have published a maximum no. of documents i.e., 8 research papers each. (4.4) In the top 10 documents by source, the International Journal of Bank Marketing and Sustainability Switzerland are the 2 leading journals that published 12 documents each. (4.5) Based on the document published by country, India is the most Influential country that published 79 documents and followed by Pakistan and Malaysia which contributed 43 and 35 articles respectively. (4.6) Network visualization for keyword co-occurrence by using VOS viewer, we found a total of 80 keywords with 594 links and total link strength of 866 with 8 clusters in different colors. We also found various skill management strategies and methods for measuring organizational performance in banks.

From the study, we find that there is a need to work more in this field to improve the organizational performance of banks. We also noticed that very few papers are published in other subject areas except Business Management and accounting. There is a research gap in this field, the researcher would have to write more papers for different countries, as we can see only India is the most influential country in this field. From the Network visualization for keyword co-occurrence, we found various skill management strategies and methods for measuring organizational performance in banks suggest for further scope in this field.

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