

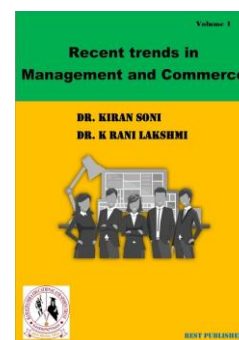


Recent trends in Management and Commerce

Vol: 1(3), 2020

REST Publisher; ISSN: 978-81-936097-6-7

Website: <http://restpublisher.com/book-series/rmc/>



Evaluation of Management of Financial Services and Institutions using the DEMATEL Method

K Prabhakaran Anuradha

SSt College of Arts and Commerce, Maharashtra, India.

*Corresponding Author Email: anuradhprabhakaran@sstcollege.edu.in

Abstract: *Management of Financial Service and Institutions. Simply described, financial management is the process of allocating available financial resources to a corporation to maximize profitability and return on investment (ROI). All business transactions are organized, planned, and managed by experts in financial management. Making financial decisions and maintaining control over the organization's money are the primary responsibilities of financial managers. They employ methods including financial forecasting, profit and loss analysis, and ratio analysis. Planning, arranging and controlling financial processes aid businesses in running efficiently and making good profits. Financial managers have a key role in making decisions that take into account the company's short- and long-term goals. Budgeting, investing (spending money), and financing are among the responsibilities of a financial manager (raising money). Raising the company's value is the major goal of the financial manager, whose decisions frequently have long-term consequences. The five pillars of investments, income planning, insurance, tax planning, and estate planning are simple yet extensive approaches to financial planning. They serve as the cornerstone of the financial independence curriculum in every financial program. The five main goals of financial management are prospecting, acquisition, allocation, allocation, and financial estimates. The main facets of financial management, which is an essential element of overall management, are planning, raising, regulating, and administering the finances used in business. Financial organizations lend money to both businesses and individuals. Small enterprises and startups can launch their venture by utilizing the long- and medium-term loans offered by these institutions. New employment possibilities and economic expansion will result from this. Assisting in the creation of new enterprises and jobs, facilitating savings and investments, providing risk protection, and other critical activities are all carried out by the financial industry. The sector must make efforts to offer these activities to society in a way that is both sustainable and sustainable. DEMATEL (Decision-Making Trial and Evaluation Laboratory). They are divided into analyses using the Management of Financial Services and Institutions of the Marketing, Finance, Operations, Planning, and Systems Evaluation Parameters Marketing, Finance, Operations, Planning, and Systems in the value. Marketing, Finance, Operations, Planning, and Systems. Marketing, Finance, Operations, Planning, and Systems. Systems have the highest rank whereas Planning has the lowest level.*

Keywords: *Bank of Montreal, Canadian Imperial Bank of Commerce, Export Development Canada, National Bank Financial Group, Royal Bank of Canada, DEMATEL Method.*

1. INTRODUCTION

Banks have an impact on sustainable development both directly and indirectly. In addition to choosing which projects or company borrowers to fund, they also decide whether to offer goods and services that bring financial returns in addition to mixed or shared benefits to the environment and society. Since they give loans to some sectors, they may affect the sustainability of other sectors and must manage the same sustainability risks and opportunities as businesses from other sectors. Risk management is likely more important in the financial sector than in most other economic sectors. The majority of the top institutions in the world are financial institutions, and they are crucial to the economies of all nations as well as the overall structure of the global economy. Taking chances in the face of uncertainty is the foundation of their entire business. The Turnbull Report on Risk Management and Internal Control, which applies to all UK-listed companies and is widely disseminated worldwide, fully acknowledges this fundamental concept. Effective risk management, rather than risk eradication, is the main objective. Risk-free commercial ventures are unlikely to generate satisfying profits in today's competitive market economy. On the other hand, capital markets, which are especially careful not to be shocked by bad news, are unlikely to benefit from very variable returns. A company must make the proper judgments if it is to reach its

greatest potential, just as Turnbull did by making the right choices and not passing up important opportunities. Retailers, banks, insurance companies, and car dealers used to have close relationships with their customers. They frequently understood them personally, were conscious of their preferences, and offered them specialized care. They were able to gain the trust of their customers and a large chunk of their business as a result. Customers, however, effectively end this relationship by paying greater prices because this is a costly and ineffective system. Through the years, customers have exchanged relationships for anonymity, a smaller selection, and lower prices as a result of mass marketing and rising consumerism.

2. MATERIALS AND METHOD

Bank of Montreal

The environmental risk management procedure applies to all qualified corporate and commercial borrowers that BMO recognized in their 2009 report. This paper is one of our "Integrating environmental hazards into the credit risk management process" categories. Additionally, we classified the reference as a quantitative indicator of "all qualifying corporate and commercial borrowers". The bank places a strong emphasis on "responsible lending methods and strategies, training programs, and technologies to promote effective decision-making on environmental credit risks. Economically speaking, BMO believes there is a connection between sustainable development and the long-term profitability of their company, and they assert that environmental concerns are taken into account when evaluating the credit risk of all corporate and commercial customers.

Canadian Imperial Bank of Commerce

Environmental hazards are also incorporated into CIBC's credit management process and reported on. According to the Bank, determining and managing environmental risks is a crucial factor in its lending decisions. The importance of the CIBC Environmental Credit Risk Management Program, which was launched in 1991, is demonstrated by the following comment. We created regulations and recommendations during the course of the 1990s to make sure environmental issues were recognized and handled properly. As a result, every small business, mid-market, and large corporate credit transaction, as well as merchant banking and project finance, is evaluated for environmental risk. Using nine principles, CIBC clarifies how environmental risks are evaluated throughout the credit risk management process and specifically addresses the incorporation of environmental hazards into all credit transactions. Based on the "loan amount, borrower's industry sector, and whether real property is taken as collateral," risk management criteria and procedures are applied.

Export Development Canada

As a financier and lender, EDC provides the following information about how environmental risks are incorporated into their risk management procedures:

"The point of departure is the EDC's environmental policy, which establishes the guidelines to be followed when evaluating the environmental risks of transactions that the EDC is asked to support. Environmental implications are assessed for every EDC firm".

EDC evaluates social and political risks in addition to environmental concerns, which are important to an export finance organization as well. In 2009, they finished creating a consistent procedure for evaluating human rights. The assessment makes use of data on minorities who are at risk as well as Country Governance Indicators from the World Bank. To disclose the foundation of indicators, EDC undertakes thorough social and environmental risk analyses for every transaction. The EDC reports that they examined 21 projects in 2009 and approved 14 in the accord by the Environmental Review Order, even though they even state the economic effectiveness of doing so.

National Bank Financial Group

The National Bank Financial Group highlighted that although financial institutions have a very little direct environmental impact, "they play an essential role by providing services that support their financial policies and good conduct" in its 2009 Corporate Social Responsibility Report. As a result, the Bank recognizes the significance of incorporating environmental issues into its operations and their indirect environmental impact. The bank notes that "assets taken by National Bank Financial Group conform with environmental norms" by incorporating environmental criteria into lending rules. The Bank concentrates on Environmental Site Assessments because they are necessary for all financing requests for major residential or commercial buildings. National banks also stipulate that site assessments be carried out by an outside environmental assessment firm and that the bank closely supervises the property's cleanup.

The National Bank, therefore, provides information on how environmental concerns are included in credit risk management procedures.

Royal Bank of Canada

According to RBC, the bank has put in place environmental risk policies and procedures as well as credit regulations and standards to evaluate the credit, legal, and reputational risks related to environmental challenges. They evaluate social concerns in addition to environmental problems. RBC created an Environmental Risk Management Policy for all corporate

credit transactions to incorporate these risks into credit risk management efforts. This policy governs environmental compliance, management, and concerns relating to water, biodiversity, and climate change. As a result, they discuss how environmental concerns are included in credit risk management procedures. RBC concentrates on industry risks and counterparty risks more than other banks in this analysis. They looked at how 100 of their biggest borrowers in the heavy industry sectors were affected by climate change rules and hazards. It proves that the bank discloses the economic importance of environmental hazards to the lending business and supports a sector-specific environmental risk assessment. Additionally, RBC provides quantitative indicators and trend analysis: in 2009, 750 transactions were examined for environmental credit risk, and between 2008 and 2010, there were 15% more environmental risk assessments. RBC does not assign a performance rating to its work in evaluating environmental credit risk.

3. DEMATEL METHOD

The DEMATEL method can identify the interdependence among the constituents of an organization for a purpose, pinup Bound problems, and structural modeling strategies that may contribute to determining solutions that could paint through a hierarchical structure, influence the basic Concept of situational relations, and more. as a result of the elements' influence There are many directional graphs used in the chart. It executes issues through the use of visualization tools, analyses, and solutions. It is built on the fundamental DEMATEL principle. Modeling this structure Approach adopts the form of a driven diagram, which is a causal effect for presenting values of influence between interrelated relationships and factors. By analyzing the visual relationship of conditions between systemic Factors, all components of A causal group and the effect are divided into groups. It also provides researchers with Structure between system components Better understanding of the relationship and complexity for troubleshooting computer problems Can find ways. The DEMATEL system is integrated with Emergency management together with Manage. In the manner proposed, it is not necessary to fuzzily obscure numbers before using the DEMATEL method. Therefore, this method is uncertain of whether evaluation Will truly reflect the character. Finally, to get the final results from different aspects Twice in each integrated PPA We use DEMATEL, which is ours. Decision Testing and Assessment Laboratory (DEMATEL). The DEMATEL method is a powerful method of gathering team knowledge to build a structured model and visualize the causal relationship of subsystems. But crisp values the ambiguity of the real world Is adequate reflection. DEMATEL explores the interdependence between equity The number of investment factors and factors and ANP to assess their dependencies Integrated. This section is, first of all, DEMATEL Establishes network relationships through, secondly, for each factor ANP to increase weight compared to Uses. Third, a methodical approach to data collecting is offered. The DEMATEL method quickly separates the complex set of factors into a sender organization and a receiving institution, effectively calculating the results between criteria, and then transforming it into the appropriate way for selecting a management tool. Between different arrangements and Sources of Explicit Priority Weights, The ZOGP model also enables businesses to plan effectively and put the best management systems in place while utilizing their limited resources. DEMATEL procedures. This has a causal effect Source for impacted group barriers or group barriers themselves can be regarded as due. Therefore, to effectively implement electronic waste management, barriers belonging to a causal or an influential group Should be considered on a priority basis. Therefore, decision-makers need to determine obstacles. The legal framework is strong. Make sure it is controllable to minimize the impact or influence barriers. Therefore, derived from ISM and DEMATEL methods the results are somewhat consistent. Integrated ISM DEMATEL Results for e-waste management constraints determine not only the structure but also the structure and the interactions between these barriers.

TABLE 1. Management of Financial Services and Institutions

	Marketing	Finance	Operations	Planning	Systems	Sum
Marketing	0	3	1	5	6	15
Finance	4	0	3	2	8	17
Operations	6	4	0	2	1	13
Planning	3	3	2	0	2	10
Systems	2	5	6	3	0	16

Table 1 shows the DEMATEL Decision making trial and evaluation laboratory in the Management of Financial Service and Institutions of the Marketing, Finance, Operations, Planning, and Systems sum of the pair in the value zero.

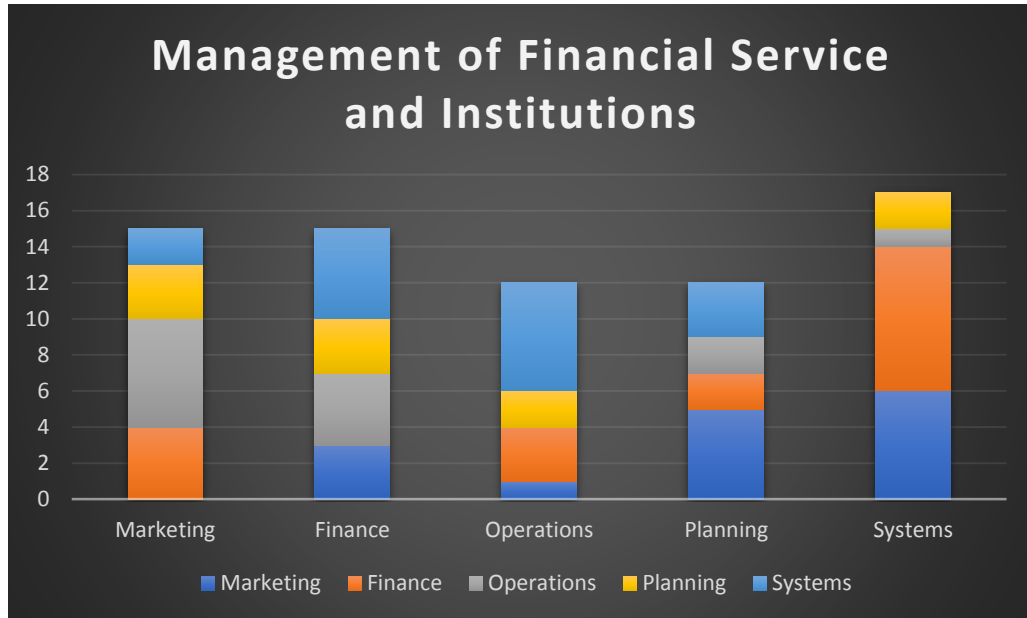


FIGURE 1. Management of Financial Services and Institutions

Figure 1 shows the DEMATEL Decision making trial and evaluation laboratory in the Management of Financial Service and Institutions of the Marketing, Finance, Operations, Planning, and Systems sum of the pair in the value zero.

TABLE 2. Normalization of Direct Relation Matrix

Normalization of direct relation matrix					
	Marketing	Finance	Operations	Planning	Systems
Marketing	0	0.176470588	0.058823529	0.294117647	0.35294118
Finance	0.235294	0	0.176470588	0.117647059	0.47058824
Operations	0.352941	0.235294118	0	0.117647059	0.05882353
Planning	0.176471	0.176470588	0.117647059	0	0.11764706
Systems	0.117647	0.294117647	0.352941176	0.176470588	0

Table 2 shows the Normalization of the direct relation matrix in the Management of Financial Services and Institutions of Marketing, Finance, Operations, Planning, and Systems. The diagonal value of all the data sets is zero.

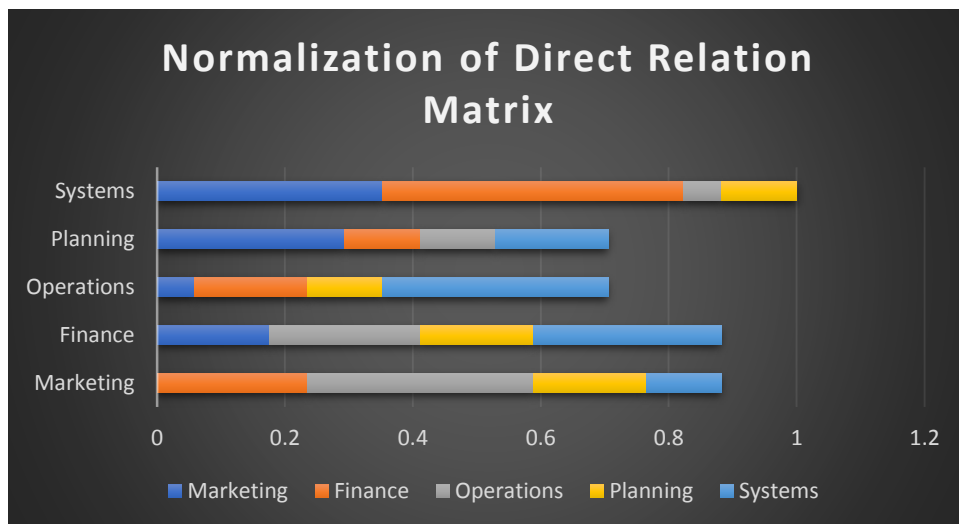


FIGURE 2. Normalization of Direct Relation Matrix

Figure 2 shows the Normalization of the direct relation matrix in the Management of Financial Services and Institutions of Marketing, Finance, Operations, Planning, and Systems. The diagonal value of all the data sets is zero.

TABLE 3. Calculate the total relation matrix

	Marketing	Finance	Operations	Planning	Systems
Marketing	0	0.176471	0.058823529	0.294117647	0.352941176
Finance	0.235294118	0	0.176470588	0.117647059	0.470588235
Operations	0.352941176	0.235294	0	0.117647059	0.058823529
Planning	0.176470588	0.176471	0.117647059	0	0.117647059
Systems	0.117647059	0.294118	0.352941176	0.176470588	0

Table 3 Shows Calculate the total relation matrix in the Management of Financial Services and Institutions of the Marketing, Finance, Operations, Planning, and Systems. Calculate the Value.

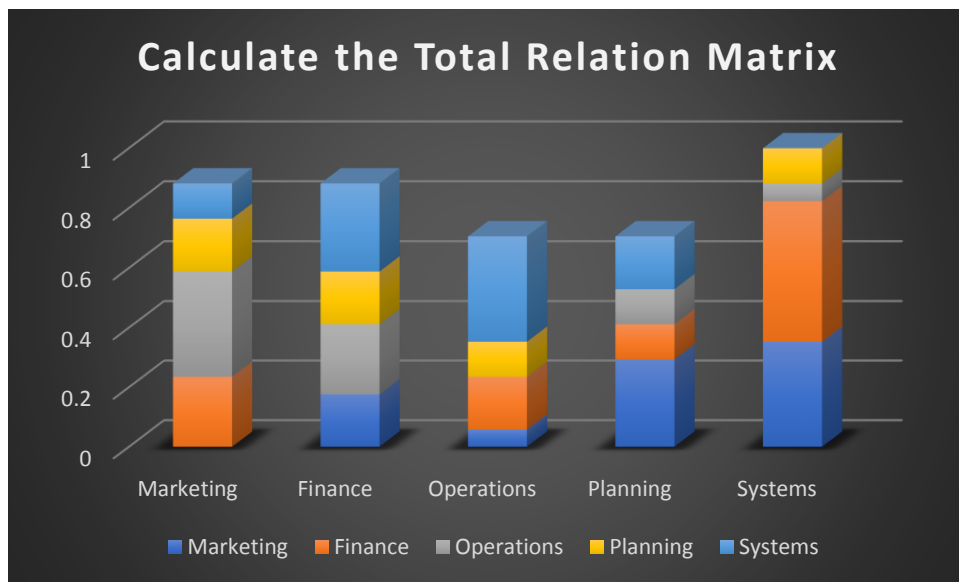


FIGURE 3. Calculate the Total Relation Matrix

Figure 3 Shows Calculate the total relation matrix in the Management of Financial Services and Institutions of the Marketing, Finance, Operations, Planning, and Systems. Calculate the Value.

TABLE 4. $T= Y (I-Y)^{-1}$, I= Identity matrix

I				
1	0	0	0	0
0	1	0	0	0
0	0	1	0	0
0	0	0	1	0
0	0	0	0	1

Table 4 Shows the $T= Y (I-Y)^{-1}$, I= Identity matrix in Marketing, Finance, Operations, Planning, and Systems is the common Value.

TABLE 5. Y

Y				
0	0.176471	0.058824	0.294118	0.352941
0.235294	0	0.176471	0.117647	0.470588
0.352941	0.235294	0	0.117647	0.058824
0.176471	0.176471	0.117647	0	0.117647
0.117647	0.294118	0.352941	0.176471	0

Table 5 shows the Y Value in Marketing, Finance, Operations, Planning, and Systems. Calculate the total relation matrix Value and Y Value is the same value.

TABLE 6. I-Y Value

I-Y				
1	-0.17647	-0.05882	-0.29412	-0.35294
-0.23529	1	-0.17647	-0.11765	-0.47059
-0.35294	-0.23529	1	-0.11765	-0.05882
-0.17647	-0.17647	-0.11765	1	-0.11765
-0.11765	-0.29412	-0.35294	-0.17647	1

Table 6 Shows the I-Y Value for Marketing, Finance, Operations, Planning, and Systems table 4 $T = Y(I-Y)^{-1}$, I= Identity matrix, and table 5 Y Value Subtraction Value.

TABLE 7. (I-Y)⁻¹ Value

(I-Y) ⁻¹				
1.990009	1.200905	0.971163	1.097373	1.453718
1.348681	2.225017	1.210578	1.105147	1.7243
1.193131	1.132552	1.787136	0.900016	1.165081
0.871393	0.897079	0.740168	1.618976	0.963712
1.20567	1.353732	1.231678	1.0575	2.259444

Table 7 shows the (I-Y)⁻¹ Value Marketing, Finance, Operations, Planning, and Systems Table 6 shows the Min verse Value.

TABLE 8. Total Relation Matrix (T)

Total Relation matrix (T)				
0.990009	1.200905	0.971163	1.097373	1.453718
1.348681	1.225017	1.210578	1.105147	1.7243
1.193131	1.132552	0.787136	0.900016	1.165081
0.871393	0.897079	0.740168	0.618976	0.963712
1.20567	1.353732	1.231678	1.0575	1.259444

Table 8 shows the Total Relation Matrix of the Marketing, Finance, Operations, Planning, and Systems direct relation matrix multiplied by the inverse of the value that the direct relation matrix is subtracted from the identity matrix.

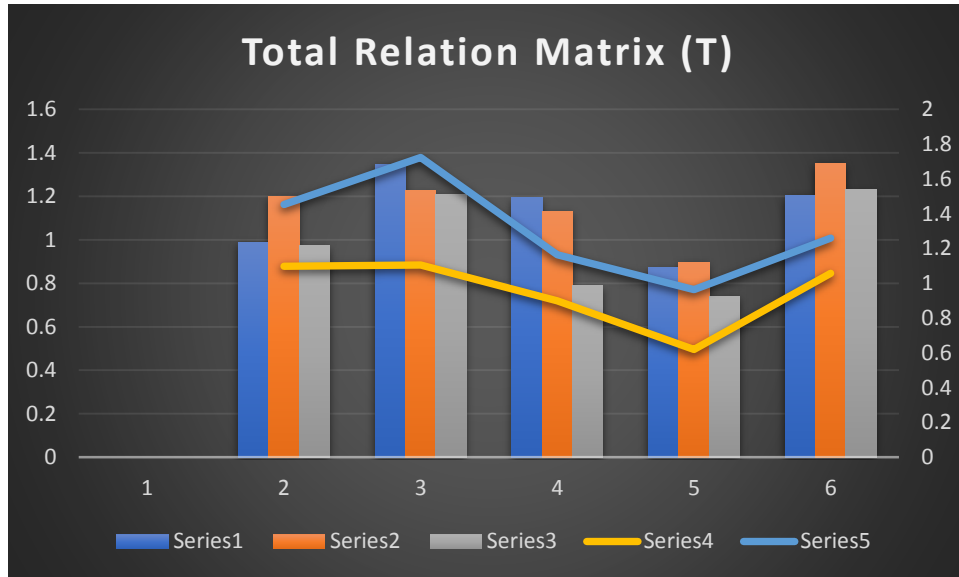


FIGURE 4. Total Relation Matrix (T)

Figure 4 shows the Total Relation Matrix of the Marketing, Finance, Operations, Planning, and Systems direct relation matrix multiplied by the inverse of the value that the direct relation matrix is subtracted from the identity matrix.

TABLE 9. Ri, Ci Value

	Ri	Ci
Marketing	5.713169	5.608884
Finance	6.613722	5.809286
Operations	5.177917	4.940723
Planning	4.091327	4.779012
Systems	6.108025	6.566255

Table 9 shows the Management of Financial Services and Institutions of the Marketing, Finance, Operations, Planning, and Systems Ri, Ci Value. Finance is showing the Highest Value for Ri and Planning is showing the lowest value. Systems is showing the Highest Value for Ci and Planning shows the lowest value.

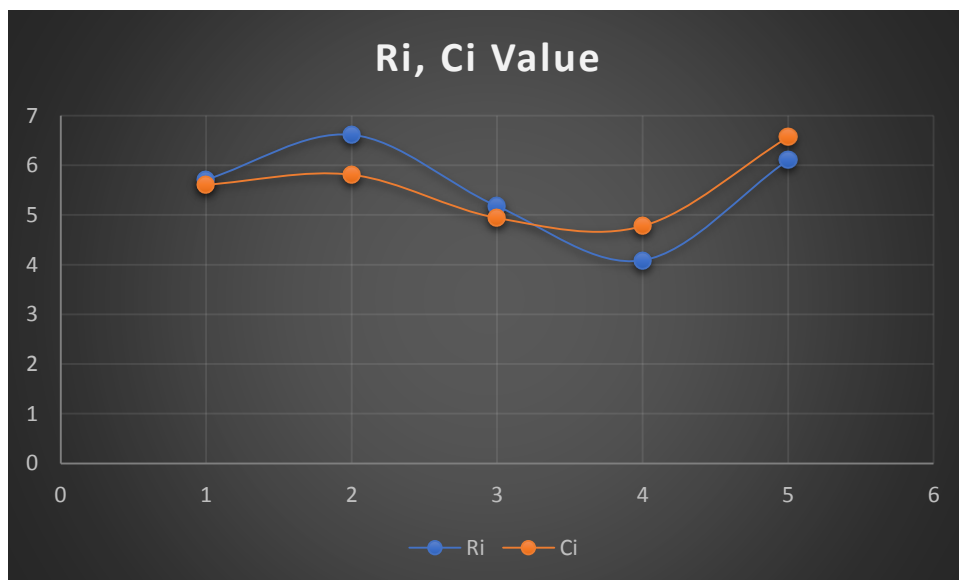


FIGURE 5. Ri, Ci Value

Figure 5 shows the Management of Financial Services and Institutions of the Marketing, Finance, Operations, Planning, and Systems Ri, Ci Value. Finance is showing the Highest Value for Ri and Planning is showing the lowest value. Systems is showing the Highest Value for Ci and Planning shows the lowest value.

TABLE 10. Calculation of Ri+Ci and Ri-Ci to Get the Cause and Effect

	Ri+Ci	Ri-Ci	Rank	Identity
Marketing	11.32205	0.104285	3	cause
Finance	12.42301	0.804437	2	cause
Operations	10.11864	0.237193	4	effect
Planning	8.870339	-0.68769	5	effect
Systems	12.67428	-0.45823	1	effect

Table 10 shows the Calculation of Ri+Ci and Ri-Ci to Get the Cause and Effect. Management of Financial Services and Institutions of the Marketing, Finance, Operations, Planning, and Systems. Systems got the first rank whereas Planning has the lowest level.

TABLE 11. T Matrix Value

T matrix				
0.990009	1.200905	0.971163	1.097373	1.453718
1.348681	1.225017	1.210578	1.105147	1.7243
1.193131	1.132552	0.787136	0.900016	1.165081
0.871393	0.897079	0.740168	0.618976	0.963712
1.20567	1.353732	1.231678	1.0575	1.259444

Table 11 shows the T Matrix Value Calculate the Average of the Matrix and Its Threshold Value (Alpha) Alpha **1.108166** If the T matrix value is greater than the threshold value then bold it.



FIGURE 6. Shown the Rank

Figure 6 shows the Rank using the DEMATEL for Systems got the first rank whereas Planning has the lowest level.

4. CONCLUSION

To include environmental hazards in credit risk management policies, strategies, and practices, we undertook a two-step mixed-methods analysis. In the first stage, we conducted a qualitative analysis of nine Canadian financial companies' CSR reports. The qualitative analysis was finished in a second step with a quantitative comparison between Canadian commercial banks and their international counterparts to confirm that the results of the independent assessments are similar to those of the qualitative analysis and to compare the outcomes of Canadian financial institutions with those of their peers. As it emerges from the turbulent twentieth century, Africa's financial services sector is growing and has the potential to become an innovation hub in the quickly evolving digital world. With the assistance of practitioners, politicians, and academics, the industry can become an African success story. We anticipate that the contributions in this special issue will provide practitioners of evidence-based management with valuable insights. The three themes and three study directions outlined in this issue are by no means exhaustive, but we do believe they will advance our knowledge of the major developments, chances, and difficulties in managing African financial institutions. Since the banking industry has gotten more attention, additional research is required in the areas of insurance, capital markets, microcredit, and domestic financial institutions. Banks today serve as conduits rather than gatekeepers for financial goods. The bank acted as a constrictive middleman in the prior gatekeeper model, limiting the variety of items that customers could choose from. In the new gateway model, the bank performs the flexible intermediary role and provides access to a variety of products and distribution channels. Some items, like insurance, entertainment, travel, and investment management, can even come from outside sources rather than the bank. People can participate in the e-commerce nexus by using banks as a type of trustworthy portal. Businesses that fall behind the online revolution are probably only going to be able to offer financial goods to intermediaries.

REFERENCES

- [1]. Adeleye, Ifedapo, Yaw A. Debrah, and Lilac Nachum. "Management of financial institutions in Africa: Emerging themes and future research agenda." *Africa Journal of Management* 5, no. 3 (2019): 215-230.
- [2]. Weber, Olaf. "Environmental credit risk management in banks and financial service institutions." *Business Strategy and the Environment* 21, no. 4 (2012): 248-263.
- [3]. Carey, Anthony. "Effective risk management in financial institutions: the Turnbull approach." *Balance sheet* (2001).
- [4]. Hussain, Mostaque, and A. Gunasekaran. "An institutional perspective of non- financial management accounting measures: a review of the financial services industry." *Managerial Auditing Journal* (2002).
- [5]. Peppard, Joe. "Customer relationship management (CRM) in financial services." *European Management Journal* 18, no. 3 (2000): 312-327.
- [6]. Scheuing, Eberhard E., and Eugene M. Johnson. "New product development and management in financial institutions." *International Journal of Bank Marketing* 7, no. 2 (1989): 17-21.
- [7]. Scheuing, Eberhard E., and Eugene M. Johnson. "New product development and management in financial institutions." *International Journal of Bank Marketing* 7, no. 2 (1989): 17-21.
- [8]. Rhyne, Elisabeth, and Maria Otero. "Financial services for microenterprises: Principles and institutions." *World Development* 20, no. 11 (1992): 1561-1571.
- [9]. Koveos, Peter, and Dipinder Randhawa. "Financial services for the poor: assessing microfinance institutions." *Managerial Finance* (2004).
- [10]. Ifinedo, Princely. "Information technology security management concerns in global financial services institutions: Is national culture a differentiator?." *Information Management & Computer Security* 17, no. 5 (2009): 372-387.
- [11]. Merton, Robert C. "Financial innovation and the management and regulation of financial institutions." *Journal of Banking & Finance* 19, no. 3-4 (1995): 461-481.
- [12]. Grosse, Robert. "Are the largest financial institutions global?." *Mir: management International review* (2005): 129-144.
- [13]. Aloqab, Abdullab, Farouk Alobaidi, and Bassam Raweh. "Operational risk management in financial institutions: An overview." *Hunan University, Hunan University, China* (2018).
- [14]. Castrogiovanni, Gary, Domingo Ribeiro-Soriano, Alicia Mas-Tur, and Norat Roig-Tierno. "Where to acquire knowledge: Adapting knowledge management to financial institutions." *Journal of Business Research* 69, no. 5 (2016): 1812-1816.
- [15]. Duncan, Elizabeth, and Greg Elliott. "Customer service quality and financial performance among Australian retail financial institutions." *Journal of Financial Services Marketing* 7 (2002): 25-41.
- [16]. Foot, Michael. "Operational risk management for financial institutions." *Journal of financial regulation and compliance* 10, no. 4 (2002): 313-316.
- [17]. Agyapong, Daniel. "Implications of the digital economy for financial institutions in Ghana: an exploratory inquiry." *Transnational Corporations Review* 13, no. 1 (2021): 51-61.

- [18]. Oh, JaeShup, and Ilho Shong. "A case study on business model innovations using Blockchain: focusing on financial institutions." *Asia Pacific Journal of Innovation and Entrepreneurship* (2017).
- [19]. Zhu, Kevin, Kenneth L. Kraemer, and Jason Dedrick. "Information technology payoff in e-business environments: An international perspective on value creation of e-business in the financial services industry." *Journal of management information systems* 21, no. 1 (2004): 17-54.
- [20]. Claessens, Stijn. "Access to financial services: A review of the issues and public policy objectives." *The World Bank Research Observer* 21, no. 2 (2006): 207-240.
- [21]. Nguyen, Nha, and Gaston LeBlanc. "The mediating role of corporate image on customers' retention decisions: an investigation in financial services." *International journal of bank marketing* 16, no. 2 (1998): 52-65.
- [22]. Prorokowski, Lukasz, and Hubert Prorokowski. "Organisation of compliance across financial institutions." *Journal of Investment Compliance* 15, no. 1 (2014): 65-76.
- [23]. Harelimana, Jean Bosco. "The role of risk management on the financial performance of banking institutions in Rwanda." *Global Journal of Management and Business Research* 17, no. C1 (2017): 29-34.
- [24]. Garcia, Virginia. "Seven points financial services institutions should know about IT spending for compliance." *Journal of Financial Regulation and Compliance* 12, no. 4 (2004): 330-339.