Springer Link

Search 🔍   🛒   Log in

International Conference on Emerging Technologies in Computer Engineering

ICETCE 2022: **Emerging Technologies in Computer Engineering: Cognitive Computing and Intelligent IoT** pp 90–98

An Empirical Investigation in Analysing the Proactive Approach of Artificial Intelligence in Regulating the Financial Sector

Roopa Balavenu, Ahamd Khalid Khan, Syed Mohammad Faisal, K. Sriprasadh ✉ & Dharini Raje Sisodia

Conference paper │ First Online: 26 May 2022

362 Accesses

Abstract

The use of artificial intelligence (AI) within the finance industry can be considered as a transformative approach as it enables the financial institutions to enhance their performance capacity. The use of artificial intelligence within the finance sector helps the industries to streamline the processes and optimise their management efficiently for various types of operations pertaining to credit decisions-making, financial risk assessment and management

and quantitative trading. The paper aims at analysing the proactive approach that can be taken with the use of AI in order to enhance effective management within the financial sector. The empirical study conducted in the paper utilizes various types of secondary materials with a qualitative approach. The findings of the study demonstrate the enhanced capacity of AI that can be used for a proactive approach, utilised for the assessment of risks or threats prior to any mismanagement incident. In this regard, fintech companies such as *Enova, Ocrolus, ZestFinance, and DataRobot* and so on have taken a predominant position in aiding the financial industries to use AI-based systems that aids the management process. However, the inclusion of AI within the financial sector is faced with certain challenges such as lack of knowledge regarding technological infrastructure, poor financial investment especially for government aided banks, unawareness of the employees and weak collaboration with the IT industry. Regardless, AI technologies in recent years have achieved great advancement, leading to the enhancement of its capacity to assist the effective management within the financial sector.

Proactive approach   **Risk management**

Organisational performance

This is a preview of subscription content, access via your institution.

⌄ Chapter	**EUR 29.95**
	Price includes VAT (India)

- DOI: 10.1007/978-3-031-07012-9_8
- Chapter length: 9 pages
- Instant PDF download
- Readable on all devices
- Own it forever
- Exclusive offer for individuals only
- Tax calculation will be finalised during checkout

<div style="border:1px solid #ccc;text-align:center">Buy Chapter</div>

› eBook	**EUR 93.08**
› Softcover Book	**EUR 109.99**

Learn about institutional subscriptions

References

1. Truby, J., Brown, R., Dahdal, A.: Banking on AI: mandating a proactive approach to AI regulation in the financial sector. Law Financ. Mark. Rev. **14**(2), 110–120 (2020)

2. Soni, V.D.: Role of artificial intelligence in combating cyber threats in banking. Int. Eng. J. Res. Dev. **4**(1), 7 (2019)

3. Wipro.com: Why banks need artificial intelligence. Available at: https://www.wipro.com/business-process/why-banks-need-artificial-intelligence/ (2021). Accessed 24 Oct 2021

4. Siponen, M., Klaavuniemi, T.: Why is the hypothetico-deductive (HD) method in information systems not an HD method? Inf. Organ. **30**(1), 100287 (2020)

5. Lui, A., Lamb, G.W.: Artificial intelligence and augmented intelligence collaboration: regaining trust and confidence in the financial sector. Inf. Commun. Technol. Law **27**(3), 267–283 (2018)

6. Kibria, M.G., Nguyen, K., Villardi, G.P., Zhao, O., Ishizu, K., Kojima, F.: Big data analytics, machine learning, and artificial intelligence in next-generation wireless networks. IEEE Access **6**, 32328–32338 (2018)

7. Tcs.com: The state of AI in risk management. Available at: https://www.tcs.com/content/dam/tcs/pdf/Industries/Banking%20and%20Financial%20Services/Stat

e-of-AI-in-Risk-Management.pdf (2019). Accessed 24 Oct 2021

8. Allayannis, G.Y., Becker, J.M.: A global fintech overview. Darden Case No. UVA-F-1860 (2019)

9. Norrestad, N.: Share of investment banks worldwide using artificial intelligence (AI) as of 2020, by types of application. Statista.com. Available at: https://www.statista.com/statistics/1246874/ai-used-in-investment-banking-worldwide-2020/ (2021). Accessed 24 Oct 2021

10. Kuhn, K., Bicakci, S., Shaikh, S.A.: COVID-19 digitization in maritime: understanding cyber risks. WMU J. Marit. Aff. **20**(2), 193–214 (2021). https://doi.org/10.1007/s13437-021-00235-1

11. Mahrishi, M., Hiran, K.K., Meena, G., Sharma, P. (eds.): Machine Learning and Deep Learning in Real-Time Applications. IGI Global (2020)

12. Kaur, D., Sahdev, S.L., Sharma, D., Siddiqui, L.: Banking 4.0: 'The influence of artificial intelligence on the banking industry & how AI is changing the face of modern day banks'. Int. J. Manag. **11**(6) (2020)

13. Golić, Z.: Finance and artificial intelligence: the fifth industrial revolution and its impact on the financial sector. Zb. Rad. Ekon. Fak. Istoč. Sarajevu **19**, 67–81 (2019)

14. Wójcik, D.: Financial geography II: the impacts of FinTech–Financial sector and centres, regulation and stability, inclusion and governance. Prog. Hum. Geogr. **45**(4), 878–889 (2021)

15. Mhlanga, D.: Industry 4.0 in finance: the impact of artificial intelligence (ai) on digital financial inclusion. Int. J. Finan. Stud. **8**(3), 45 (2020)

16. Jain, A., Yadav, A.K., Shrivastava, Y.: Modelling and optimization of different quality characteristics in electric discharge drilling of titanium alloy sheet. Mater. Today: Proc. **21**, 1680–1684 (2019)

17. Jain, A., Pandey, A.K.: Modeling and optimizing of different quality characteristics in electrical discharge drilling of titanium alloy (Grade-5) sheet. Mater. Today: Proc. **18**, 182–191 (2019)

18. Jain, A., Pandey, A.K.: Multiple quality optimizations in electrical discharge drilling of

mild steel sheet. Mater. Today: Proc. **8**, 7252–7261 (2019)

19. Panwar, V., Sharma, D.K., Kumar, K.V.P., Jain, A., Thakar, C.: Experimental investigations and optimization of surface roughness in turning of EN 36 alloy steel using response surface methodology and genetic algorithm. Mater. Today: Proc. (2021). https://doi.org/10.1016/j.matpr.2021.03.642

Author information

Authors and Affiliations

Department of MBA, K S School of Engineering and Management (Visvesvaraya Technological University), Bangalore, India

Roopa Balavenu

Management, Jazan University, Jazan, Saudi Arabia

Ahamd Khalid Khan & Syed Mohammad Faisal

Department of Computer Science and Engineering, Thirumalai Engineering College, Kilambi, Kanchipuram, India

K. Sriprasadh

Management, Army Institute of Management and Technology, Greater Noida, India

Dharini Raje Sisodia

Corresponding author

Correspondence to K. Sriprasadh .

Editor information

Editors and Affiliations

Aurel Vlaicu University of Arad, Arad, Romania

Prof. Valentina E. Balas

Myanmar Institute of Information Technology, Mandalay, Myanmar

Dr. G. R. Sinha

Indian Institute of Information Technology Kota, Jaipur, India

Dr. Basant Agarwal

Shobhit University, Gangoh, India

Tarun Kumar Sharma

SKIT, Jaipur, India

Pankaj Dadheech

SKIT, Jaipur, India

Mehul Mahrishi

Rights and permissions

Reprints and Permissions

Copyright information

About this paper

Cite this paper

Balavenu, R., Khan, A.K., Faisal, S.M., Sriprasadh, K., Sisodia, D.R. (2022). An Empirical Investigation in Analysing the Proactive Approach of Artificial Intelligence in Regulating the Financial Sector. In: Balas, V.E., Sinha, G.R., Agarwal, B., Sharma, T.K., Dadheech, P., Mahrishi, M. (eds) Emerging Technologies in Computer Engineering: Cognitive Computing and Intelligent IoT. ICETCE 2022. Communications in Computer and Information Science, vol 1591. Springer, Cham. https://doi.org/10.1007/978-3-031-07012-9_8

.RIS ⤓   .ENW ⤓   .BIB ⤓

SPRINGER NATURE