7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Best Practice 1

Title of the Practice: Enhancing Academic Communication and Knowledge Dissemination through "Gyan Management" Journal (ISSN 0974-7621).

Objectives of the Practice: The primary objective of *Gyan Management* is to enhance teaching and learning in the fields of Management & Commerce, Information Technology, and Business Strategies. The journal aims to collate and disseminate applied research and reflections relevant to various disciplines, establishing an effective communication channel between decision-makers, policy-makers in business, and academicians. The underlying principle is to recognize and promote the implementation of effective systems in the business world. The journal is registered with the RNI PUNENG/2007/24871.

The Context: Launched in 2007 by the Gian Jyoti Institute of Management and Technology, *Gyan Management* addresses the need for a dedicated platform to publish high-quality research in the domains of management, technology, and business strategies. The journal has consistently published bi-annually in June and December, providing a reliable outlet for research dissemination, even amidst challenges such as the COVID-19 pandemic.

Recognizing the evolving demands of academic publishing and the need to enhance the journal's quality, the Internal Quality Assurance Cell (IQAC) decided to collaborate with SAGE Spectrum. In January 2024, an MoU was signed for a five-year partnership, with the first issue under this collaboration scheduled for January 2025 (Vol. 19, Issue 1). This collaboration is aimed at elevating the journal's standards to align with international practices, further broadening its reach and impact. Additionally, articles published in *Gyan Management* are now assigned Digital Object Identifiers (DOIs), ensuring their accessibility and traceability in the global research community.

The Practice: *Gyan Management* publishes original, research-based papers, articles, cases, and book reviews on current topics in management and technology affecting the business environment. The journal covers various areas, including global marketing practices, financial management, HR challenges, contemporary accounting practices, sustainable business strategies, and advances in information technology.

Despite challenges such as being delisted from the UGC-approved list of journals in 2018, *Gyan Management* has remained steadfast in its commitment to improving the quality of submissions. The journal does not charge publication fees, ensuring that it remains accessible to researchers from diverse backgrounds, which promotes a broad range of high-quality submissions. This accessibility has been a key factor in maintaining the journal's relevance and appeal to both seasoned and emerging scholars.

Gyan Management stands out due to its comprehensive coverage of multiple disciplines and its role in bridging the gap between academia and industry. Although it has faced challenges such as fluctuating submission rates and the need to maintain high indexing standards, the journal has continuously worked to overcome these obstacles through dedicated editorial efforts and strategic outreach. The partnership with SAGE Spectrum is expected to significantly contribute to these ongoing efforts.

Evidence of Success: Since its inception, 18 volumes of *Gyan Management* with two issues each year have been published, indicating sustained productivity and relevance. The journal's inclusion in databases like Google Scholar, Index Copernicus, EBSCO, UlrichsWeb, and others demonstrates its reach and recognition in the academic community. The assignment of DOIs to published articles further enhances the journal's academic credibility and facilitates the easy retrieval of research. The recent MoU with SAGE Spectrum is anticipated to further elevate the journal's quality and visibility from January 2025 onwards, aligning with its mission to support and disseminate high-quality research.

Problems Encountered and Resources Required: Challenges encountered include fluctuating submission rates and the ongoing effort to attract high-quality papers, which has been a significant hurdle. The need to continuously improve quality to regain UGC listing has also been pressing. To address these challenges, the journal requires resources such as dedicated editorial and peer review teams, financial support for partnerships, and technological tools for efficient manuscript management and indexing. The collaboration with SAGE Spectrum is expected to help overcome these obstacles by providing access to advanced editorial resources and expertise.

सत्यमेव जयते

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Date: 2024.09.04 14:37:37 +05'30'

Sugata Ghosh

Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

MEMORANDUM OF AGREEMENT

Between

Gian Jyoti Institute of Management and Technology

And

Sage Publications India Pvt. Ltd.

Sugata Ghosh Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

JSBedi Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

Journal Publishing Services Agreement

This Agreement is made on this 09-Jan-2024 Day of January 2024 at New Delhi

Between

Gian Jyoti Institute of Management and Technology (GJIMT), Phase 2, Mohali (Near Bassi Theatre), Sector-54, Punjab 160055, India (hereinafter referred to as the "**GJIMT"**). (*which expression shall, unless repugnant to the context or meaning thereof, include its successors-in-business, assigns, and legal representatives*) of the FIRST PART

And

Sage Publications India Private Limited, Unit No. 323-333, 3rd Floor, F-Block, International Trade Tower, Nehru Place, New Delhi – 110 019, India (hereinafter referred to as "**Sage**") (*which expression shall, unless it be repugnant to the subject or context thereof, be deemed to include its successors-in-business, assigns, and legal representatives*) of the SECOND PART.

Hereinafter, each of which may be referred to individually as "Party" or collectively as "Parties."

WHEREAS:

A. GJIMT is a premier institution in India, delivering quality education in the areas of Management, Information Technology and Commerce for the last 25 years. GJIMT emphasizes on developing ethical leaders with entrepreneurial and global mindset striving for sustainability and inclusive growth.

B. SAGE Publications India Private Limited is a globally renowned publisher and a leading international provider of journals, spanning a wide range of subject areas including publishing services. Sage also acts as a service provider for Spectrum Journals: Journal Publishing Services (JPS) which is a part of Sage's publishing solutions offered to institutions as a package for publishing and disseminating research through open-access channels. These standard services, as specified in Annexure-A (Service Level Agreement), are intended to support GJIMT from the initial phase of development to the establishment of the journal.

Sugata Ghosh Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID : 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ________________

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ________________

C. GJIMT has been publishing an online Journal – Gyan Management ('Journal') and has published the same till Volume 18, Issue 2. GJIMT has represented and warranted that it is the registered owner and publisher of the said journal.

D. GJIMT now wants to bring out and establish the Journal as a bi-annual Journal for the purposes of dissemination of knowledge on related topics and plans to bring out the said journal in the first quarter of the year 2025, from Volume 19, Issue 1.

E. GJIMT wishes to partner with Sage and avail of Sage standard Spectrum Journal Publishing Services in order to support the development and establishment of the Journal on an Open Access (OA) model. Sage has agreed to handle and execute the Journal Publishing Services for the Journal.

F. Both organizations have agreed to work together on the project on the terms and conditions defined in this Agreement.

G. GJIMT has been co-publishing its Journal – 'Gyan Management' ('Journal') with ACS Publisher for the purposes of dissemination of knowledge on related topics. GJIMT now wants to transfer the Journal from its co-publisher to Sage and plans to bring it out bi-annually in the months of January and July from the year 2025.

H. GJIMT has proposed that it shall terminate its agreement dated 2nd August, 2021 with ACS Publisher to determine it by 31st December, 2024 and then transfer the Journal to Sage to be covered under the present agreement.

I. Basis such assurance, and successful termination of the agreement as mentioned in recital 'H', Sage has agreed to provide consultancy on publishing processes till such date when the existing agreement between GJIMT and ACS Publisher is concluded and thereafter provide publishing services for the publication of the Journal. This is further subject to GJIMT and ACS Publisher working out any procedural issues that may question the co-terminus status of both agreements (Agreement dated 2nd August, 2021) between GJIMT and ACS Publisher and the present agreement between GJIMT and Sage. Sage is entering into this agreement in Good Faith.

NOW THEREFORE THE PARTIES HEREIN AGREE AS FOLLOWS:

1. GJIMT is desirous to partner with Sage to publishing its Journal and Sage will provide its guidance relating to publishing of a Journal through its Spectrum Journals: Journal Publishing Services ('Project'). GJIMT has agreed to avail Sage's services for the Project.

Sugata Ghosh
Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ________________

JSBedi
Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ________________

2. Sage shall provide to GJIMT, its Journal Publishing Services which include publishing the GJIMT owned Journal along with an endeavour to provide, where necessary and appropriate, the following Services:

   - Guidance on policies and standards
   - Defining/Reviewing Aims and Scope + Description based on GJIMT's vision
   - Suggesting strategies to commission quality content
   - Guidance on registration with RNI and ISSN of the Journal
   - Providing web-based online manuscript submission platform and peer review administrative services
   - Defining Author contributions guidelines & Contribution agreement form
   - Defining OA & permission policy for the Content published in the Journal
   - Defining production workflows
   - Services on defining & executing journal format, style & cover for the Journal
   - Editing services covering basic language, structure, plagiarism, copyright violation
   - Editorial & production services
   - Essential Services relating to the editorial board in the direction of building an excellent editorial board
   - Online Content Hosting solutions and provide a dedicated content hosting platform
   - Customer Relationship Management
   - Open Access dissemination and promotion of published issues
   - Suggesting strategies for growing journal citations
   - Services on the process to apply for indexing
   - Services on Developing indexing portfolio in the web of science, UGC, Scopus, ESCI, ABDC, EBSCO, ProQuest, Google Scholar, etc.
   - Continued deployment, monitoring and managing Journal and a bi-annual report

   (hereinafter referred to as 'the services)

Sugata Ghosh Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID : 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

JSBedi Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

3. The processes, timelines, specifications, and other details governing the services are being provided under Annexure – A (Service Level Agreement) to this Agreement.

4. The Journal will be published 2 times in a year i.e., January and July. Each issue will consist of not more than 124 pages and the volume will contain 248 pages (increase or decrease of 5% is acceptable), and it will be in Royal Size (9.5 x 6.25 inches). In the event GJIMT wishes to increase the number of stipulated pages, it shall discuss such request with Sage at least 4 weeks in advance of the content submission deadline. GJIMT shall reimburse Sage for the additional costs on per page basis at a rate to be mutually agreed, for such increased page count than the one stipulated above.

5. GJIMT as the owner of the Journal shall have editorial control of the Journal, including appointment of the Journal's Editor(s) and Editorial Board. All the decisions regarding the Journal shall vest with GJIMT. The Editor(s) shall be responsible for the compilation and peer-review of each issue (ensuring double-anonymized peer-review with a minimum of 2 independent reviews per article) and shall provide Sage with all contributions electronically via STS and e-mail together with all necessary illustrations in a form suitable for publication, acceptable to Sage and ready for production no less than 16 weeks prior to the first day of the scheduled month for publication of each issue. In the event any illustrations are not provided in final, reproducible form, Sage may have the artwork prepared at the GJIMT's cost. The Editor(s) of the Journal shall be responsible for editing the articles of each issue of the Journal for technical content, form, conciseness, clarity, and accuracy. Sage shall be responsible for copy-editing, and typesetting unless otherwise agreed in writing between the INSTITUTE and Sage. The GJIMT shall be responsible to register the journal with the Registrar of Newspapers of India (RNI) and ensure that all compliances under the Press and Registration of Books Act of India are in place and also comply with any other applicable or necessary legal or regulatory compliances, approvals or registrations and shall maintain such registrations. In the event that the GJIMT fails to meet its obligations under this clause, Sage shall have the sole discretion to immediately terminate the contract without Notice and may, if necessary invoke the indemnity under Clause 7 of this Agreement.

Sugata Ghosh

Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

JBedi

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

6. GJIMT shall ensure that that all final copy for each issue is supplied no less than 16 (sixteen) weeks prior to the first day of the scheduled month for publication of each issue to ensure that the compilation and publication of the issue is not delayed. The Journal Editor(s) shall read, check and correct the proofs and return them to Sage within 5 working days of their receipt, failing which Sage may consider the proofs as passed for press. The Editor(s) may alter the text of any article in the proofs thereof, on condition that all charges for alterations made (exclusive of correcting printer's or production's) shall be charged to GJIMT by Sage and paid for by GJIMT.

7. GJIMT shall be the owner of the Journal, Manuscript and/or Articles and the related Copyright and shall take all decisions on the content of the Journal and as such shall be solely responsible for compliance with all laws, rules and regulations, circulars or Government Notifications (including RNI Compliances under the Press and Registration of Books Act) for the time being in force as may be applicable. The GJIMT shall ensure that the content is not in violation of any applicable laws, rules, regulations or government circulars or notifications including intellectual property laws and laws against plagiarism. Sage shall endeavour to assist the GJIMT by highlighting any issues of plagiarism or copyright violations in the event the same comes to its notice. If GJIMT publishes an article which is, or may be, in violation of any applicable laws including plagiarism and/or in the event any third-party action is brought alleging violation of any applicable laws, rules, regulations, government circulars or notifications, GJIMT shall indemnify Sage and hold it harmless from all losses, damages, expenses and costs arising out of any such action or threat of action brought against Sage for publication of the content, article, or any piece, whole or in part of the Journal.

8. GJIMT and Sage will retain all their respective rights to pre-existing ideas, processes, procedures, and materials used by them for the Project. The Copyright and all other Intellectual Property Rights in the Journal shall vest in GJIMT. GJIMT permits Sage to use GJIMT's name on Sage's website as a client.

9. GJIMT shall, as part of their responsibilities, work with Sage by sharing relevant information, content, processes, plans, and other details regarding the Project diligently and within time to enable them to render services. It is understood that Sage shall be able to render timely and satisfactory services only when the material, details, and information are shared with Sage in time as per agreed terms. Any delay in providing details shall delay the delivery from Sage by equal time. Sage will provide reports regarding the assigned Project to GJIMT on bi-annual basis.

Sugata Ghosh

Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID : 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

JSBedi

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

10. The parties agree that Sage will supply print copies of the Journal, on such request made for print copies ('POD'). In case, GJIMT requires print copies of the journal, it shall raise request for such POD copies, 4 (four) months in advance. The printing cost, dispatch cost and any administrative charges shall be shared with GJIMT by Sage and only after approval of such amounts, the copies will be printed for supply. Sage shall invoice GJIMT for supply of POD copies, with an addition of applicable taxes. GJIMT shall make payment within 15 days of receipt of invoice.
11. Sage shall have a right to supply POD copies to any other customer, who places an order for print copies of the Journal. Sage shall sell such POD copies to such customers and after deduction of printing cost, dispatch cost, any administrative charges, and applicable taxes, if any, from the price, pay 70% of the balance amount to GJIMT. Such payments shall be made up annually covering the financial year from 1 April to 31 March, delivered by the thirtieth day of the following June, after deducting taxes as may be applicable.
12. In case, GJIMT requires any changes in Annexure-A, or any additional services are required by GJIMT, the same would be chargeable and an addendum may be entered, in writing, signed by both, GJIMT and SAGE. For back issues digitization and hosting, GJIMT and SAGE shall agree on additional charges in advance, which shall be paid by GJIMT as per the provisions of this Agreement.
13. SAGE will inform GJIMT, in writing, of any problem/issue which arises regarding the Scope of Work or services, including any failure to receive resources or complete tasks required for Sage to meet its deadlines. The GJIMT shall co-operate with SAGE in a professional manner in order to help resolve the problem/issue(s) raised by Sage.
14. GJIMT and Sage shall nominate Representatives from their respective organizations as the first point of contact to co-ordinate on the project and to represent their organizations.
15. Sage shall have a right/license from GJIMT to submit on its behalf, complete content or part of the Journal, for the purposes of Indexing, to third party indexing Databases/Aggregators or any such sites/agencies, for credibility and visibility.
16. Either of the Parties will not be liable to other for indirect or consequential losses or damages of any kind or nature, arising from breach of contract, warranty or otherwise. The liability for damages including indemnity for Sage will not exceed the total amount payable to Sage under this agreement during the year.

Sugata Ghosh

Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

JSBedi

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

17. This Agreement shall be deemed effective from the date of execution and shall terminate, after completion of 5th year (of services by Sage or publication of 23rd volume, Issue 2. ('The Term'). Unless notified otherwise by GJIMT or by Sage in writing on or before 31st December, 2028, this Agreement shall be renewed automatically for further successive period of 5 years, with the same notice period as specified above.

18. The total consideration to be paid by GJIMT to Sage, for providing the services by Sage to GJIMT during the term shall be as below:

    1st Year: INR 12,00,000

    2nd Year: INR 12,00,000

    3rd Year: INR 12,00,000

    4th Year: INR 12,00,000

    5th Year: INR 12,00,000

    [Total Consideration payable by GJIMT during the term: INR 60,00,000 (INR Sixty Lakhs) Only] applicable tax shall be charged additionally. Cost for each issue for the purposes of this Agreement is valued at INR 6,00,000/- (INR Six Lakhs) Only.

19. The consideration for each year shall be payable by GJIMT in two equal instalments of INR 6,00,000/- (INR Six Lakhs) payable in the months of August in the previous year (for January issue) & February (for July of current year) of each publication year. For the first January 2025 issue, the total amount (INR 6,00,000) shall be payable immediately after signing of this agreement. From the next year, Sage shall raise the invoice for the bi-annual consideration along with the GST, which shall be payable by GJIMT within 30 days or receipt of invoice. GJIMT shall deduct taxes at source as per applicable tax laws.

20. The party deducting taxes from the payments to the other, pursuant to this Agreement, shall comply with all the statutory regulations to give effect to such deduction in the other party's name including timely deposition of such taxes in the name of/ to the credit of the other party, furnishing requisite certificates etc.

21. Additionally, applicable fee (if any) and taxes, as applicable for submitting the journal to the relevant (indexing) databases shall be payable by GJIMT. Such costs shall be shared by Sage with GJIMT in advance.

Sugata Ghosh

Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID : 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

22. GJIMT shall respect and follow Sage's (Third Party) Anti-Harassment and Bullying Policy, which is designed for safeguarding interests of all personnel engaged with Sage. It shall familiarize itself with the policy, which is available on the Sage website (https://in.Sagepub.com/en-in/sas/third-party-anti-harassment-and-bullying-policy-india) and shall act in a manner which is consistent with the Policy. The parties agree that the spirit and purpose of the policy is upheld and respected at all times.

23. GJIMT and Sage each shall keep the confidentiality of the terms of this Agreement. Each shall respect and follow the other's policies related to working with their respective personnel. Sage agrees that it shall conduct business in conformance with sound ethical standards of integrity and honesty and in compliance with all applicable laws including laws relating to confidentiality of Government Information. It shall honour all codes of conduct.

24. Neither Sage nor GJIMT shall be liable for any failure to perform an obligation under this Agreement when such failure is due to causes beyond their reasonable control or is because of Force Majeure.

25. Each person signing this Agreement represents and warrants their authority to sign this on behalf of the organization they represent and the capability, due authority, and power of that organization to enter into this Agreement.

26. The organizations may at any time vary the terms of this Agreement by mutual agreement in writing.

27. GJIMT has represented that the current agreement is not in violation of any existing arrangement or agreement with any third party.

28. Either party shall have a right to terminate this agreement before the full 5-year term by serving an advance written notice of 12 months on the other. However, this right shall not be applicable within the first 36 months of this contract being in force. In the event of a merger, amalgamation, change in control, closure or any other internal restructuring of either party business, in whole or in part, or for any other commercial reason due to which Sage is unable to continue publishing the Journal, Sage may after mutual consent terminate this Agreement.

29. Further, Sage may, pursuant to internal evaluation and process review and basis the mutual discussions between the Parties, agree to move current journal from Spectrum Journals to Sage Portfolio. Accordingly, to give effect to such an exception the current agreement may be terminated followed by a detailed Memorandum of Agreement, wherein, Sage will assume the responsibilities of a Publisher.

Sugata Ghosh

Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ____________

JSBedi

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ____________

30. In case, GJIMT decides to discontinue publication of the Journal, for whatsoever reason, and/or terminate the agreement within the first 36 months, GJIMT shall pay to Sage the balance of any unpaid agreed consideration for the remaining period between discontinuation of the Journal or termination and the date 36 months after commencement of this Agreement. Such amounts shall be payable by GJIMT within 3 months of issuance of written demand by Sage.

31. This Agreement shall be governed by and construed in accordance with the laws of India and both, GJIMT and Sage, hereby irrevocably submit to the exclusive jurisdiction of the courts of New Delhi in relation to any matter arising out of it.

Sugata Ghosh Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

JSBedi Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ___________________

IN WITNESS HERE OF the parties have entered into this Agreement on the date above.

Sugata Ghosh Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

SIGNED______________________________

Sugata Ghosh, Vice President - Publishing
for Sage Publications India Pvt Ltd.

IN THE PRESENCE OF:

Rachna Sehgal Signed by Rachna Sehgal, Date: 09-Jan-2024 04:35 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

SIGNATURE___________________________

Name of WITNESS: Rachna Sehgal

Address of WITNESS: –R-603, Javer Nagar Society, Wadegaon Sheri, Pune - 411014

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

SIGNED______________________________

Mr. J. S. Bedi, Chairman
for Gian Jyoti Institute of Management & Technology

IN THE PRESENCE OF:

Signed by Monish Chadha, Date: 09-Jan-2024 03:19 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

SIGNATURE___________________________

Address of WITNESS: Mr. Monish Chadha, Account Officer, Gian Jyoti Institute of Management & Technology, Phase 2, Mohali (Near Bassi Theatre), Sector-54, Chandigarh, Punjab 160055, India

Sugata Ghosh Signed by Sugata Ghosh, Date: 09-Jan-2024 04:10 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ______________

Signed by J. S. Bedi, Date: 09-Jan-2024 02:07 PM +05:30, DocID: 1a0b3299-4a4e-4273-b795-02326ae0f487.

Signature ______________

Annexure – A

Service Level Agreement (SLA)

Index

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1) Goals & Objectives of the SLA

This SLA aims to obtain and record a mutual agreement between Sage Publications India Pvt. Ltd. (Sage) and **GJIMT** on all processes and deliverables for the services to be provided to the GJIMT. The objectives include:

I. Defining workflows for each section of the Services

II. Detailed description of the services provided by Sage

III. Provide an understanding of service level ownership for each section, and deliverables against each task

IV. Roles and responsibilities and obligations of both parties

2) SLA Overview

This SLA is a part of the Agreement dated 09-Jan-2024 executed between GJIMT and Sage and shall be co-terminus with the agreement. Broadly, the services shall consist of the following:

I. Bringing out the Journal;

II. Article submission process;

III. Management of peer review process;

IV. Author management;

V. Checking for completeness of articles received;

VI. Editing of the articles;

VII. Structuring of articles and issue as per the journal style, including checking volume & issue numbers, table of contents, running heads, cover, back-cover, advertisements, and any other essential elements;

VIII. Typesetting;

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IX. Preparing and posting online articles and issue;

X. Publishing issue online;

XI. Journal management (post bringing out of the journal issue);

XII. Preparing print-ready files;

XIII. Developing Indexing portfolio;

***Style:** APA preferred for HSS journals.

3) Points-of-Contact

Sage and GJIMT agree to the following as authorized points of contact for all queries, work-related resolution, and representing their respective sides for the purposes of this SLA:

Sage Representatives

Journal Management

a. Project Manager: Rahul Kumar Sharma (rahul.sharma@sagepub.in)

Peer Review and Editorial & Production

a. Project Manager: Richa Diwan (richa.diwan@sagepub.in)

GJIMT Representatives

Journal Management

a. Editor-in-Chief: Dr. Aneet Bedi (aneet@gjimt.ac.in)

b. Relationship Manager: Dr. Bushra S. P. Singh (bushra.gjimt@gmail.com)

c. Project Manager: Dr. Rakhee Dewan (drrakhee.gjimt@gmail.com)

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In case of any issue, GJIMT will approach to their day-to-day contact and their respective managers, if it is not satisfactorily resolved within specify period, then it should be escalated to Ms. Rachna Sehgal at rachna.sehgal@sagepub.in.

4) Definitions:

I. **Article**: The Script of a Research Paper, a book review, a preliminary report, case study, a short communication, or any such reasonable and acceptable text of academic research.

II. **Non-articles:** These could include but are not limited to: book reviews, editorial, commentary, letter to editor, etc.

III. **Article Submission:** Submission of Articles as per Journal submission guidelines.

IV. **Accepted Article:** Article that has gone through the peer-review process and has been accepted for publication.

V. **Author:** Writer of the article/paper/manuscript or document.

VI. **Editor-in-Chief (EIC)**: An authorized representative(s) of the Society/ Institution/ Publisher, also referred to as Journal Editor. They are ultimately responsible for the health of the journal and make decisions whether a submitted manuscript will be published.

VII. **Associate Editor** (AE): Editors who work on the Journals as advised by the Journal Editor or the Editor-in-Chief. The Editor-in-Chief delegates work to these associates and may deputize some decisions to them. A Journal may have one or more associate editors.

VIII. **Copy Editor (CE)**: One who checks and edits the manuscript for correct spelling, grammar, and punctuation errors. Ensures the manuscript is styled as per the journal style shared with GJIMT.

IX. **Reviewer:** Reviewers evaluate article submissions to journals based on the requirements of that journal, predefined criteria, and the quality, completeness and accuracy of the research presented. These will be chosen by GJIMT.

X. **Erratum/Corrigendum/Addendum:** Correction notice for the errors or corrected errors published in a subsequent issue of the journal.

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XI. **Issue**: A compilation of manuscripts previously published online first. Issues will have both Volume and issue number.

XII. **Journal Editor (JE):** An authorized representative(s) of the Society/Institution/Publisher, also referred to as Editor-in-chief. They are ultimately responsible for the health of the journal and make decisions whether a submitted manuscript will be published.

XIII. **Project Manager (PM):** Sage's point of contact who is responsible for ensuring the deliverables are met as per the standard expectations.

XIV. **Publishing Month:** Month in which the journal is slated for publishing.

XV. **PRA:** Peer Review Associate is a Sage employee who will be tasked to work on the Peer Review of the journal.

XVI. **Manscript:** A collection of Articles, Research Paper, Reviews, Cases, etc. assembled by the Editor-in-Chief.

XVII. **STS:** SAGE Track SAGE (web-based manuscript submission platform).

XVIII. **TOC:** Table of contents**.**

XIX. **TAT:** Means Turnaround time for tasks executed.

XX. **Working Days:** Monday – Friday, 9.30 am – 5.30 pm.

5) Workflow

I. Bringing out of Journal

Sage shares Questionnaire with GJIMT post-signing >> GJIMT to revert with the details, as applicable >> Sage reviews the responses to the questionnaire and initiates the discussion >> Sage shares the milestones & timelines for provisional development plan with GJIMT >> GJIMT to provide consent or propose any modification to the plan >> GJIMT & Sage to work on the proposed action plan as per mutual agreement.

II. Article Submission Workflow

Author submits Article to Sage Track (**Sage online manuscript submission platform)** >> PRA checks-in Article based on standard checklist>> Editor Assignment/Assign AE>> Reviewer selection done by the editor >> Editor to take a decision on the article post assessing the reviewers' comments >> ithenticate check on the accepted articles>> Contributor form in >> Pre-production checklist >> Article exported to Production.

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III. Article Production

Article transmitted to Production >> Article checked for completeness >> Contributor Agreement Forms Check >> Copyediting based on guidelines provided by Sage and as per package (See Appendix A for level 1 copyediting) >> Typesetting based on standard template >> Proofs to Author/Editor for Review, Author Query Resolution >> Collation of author/editor corrections >> Revised Proofs Review by Sage >> Article published OnlineFirst, ahead of print.

IV. Issue Production

JE shares ToC or PM creates ToC basis available OnlineFirst Articles >> Issue Compilation

>> Typesetting of Issue >> Issue 1st Proof, Review by PM >> Print-PDF approved and shared with Printer/Editor as per contract for Printing >> Approval and Publication of Online Issue.

V. Print & Distribution (as per contract)

Soft copy approval before final printing >> Printed Stocks prepared for Dispatching >> Dispatch commences.

VI. Management of Journal (post bringing out the journal issue)

Sage to monitor the content against the journal themes/aims and scope >> Sage to share strategies for maintaining on-time publication, optimum frequency, and global publishing standards >> Sage to advise on call for papers to attract articles for the journal>> Sage to conduct a biannual review of the journal and share a Journal report card with GJIMT.

VII. Developing Indexing Portfolio

Sage to share indexing plan for the journal post-publication of 2-3 on-time issues >> Sage to review the journal for indexing applications, eligibility, and criteria Sage to provide the journal report card mapping the indexing criteria for different databases >> Sage to propose the journal application for submission to indexing databases when ready >> GJIMT to provide consent for application submission >> Sage or GJIMT to fill out the applications of indexing databases following the timelines defined by the databases >> Sage to share costs, if any, to be incurred in the process of applying to indexing databases >> Sage to share strategies to increase citations to enhance the impact of the journal.

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6) Obligations & Responsibilities of Parties

- ***Bringing out of Journal***

1. GJIMT
    - Responsible for providing complete, comprehensive, and accurate details as per Sage's Questionnaire for the Sage services to be initiated within 15 working days of the agreement
    - Decision on journal peer review policy (double-anonymized with minimum two external reviews in place) and adhere to the same in the process
    - Decision on the open access policy for the journal
    - Timely finalising the draft provided by Sage on author contributor forms & author submission guidelines
    - Addressing all queries received within 5 working days
    - Taking timely decisions concerning the manuscripts
    - Provide the issue line-up to Sage for issue publication one month before the publication month
    - Adhere to Sage's action plan for journal development
    - Defining parameters on accepting content
    - Provide required documents for RNI registration.
    - Discussing and co-operating on points which require input from GJIMT
2. Sage
    - Defining the Aims & Scope of the Journal
    - Guidance on Registration with RNI and ISSN
    - Provide services for bringing out a journal with accepted standards and publishing policies
    - Reviewing and providing guidance on creating a new Editorial Board
    - Sharing of the peer review guidelines.

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- Defining and Creating Author/Contributor Guidelines
- Defining Open Access Policies including the pricing for Print Copies (Print on Demand)
- Creating and agreeing on Journal Format and Style (including a style guide for publishing)
- Manuscript Submission Guidelines
- Defining the production workflow
- Defining publishing timelines and revising Service Level Agreement, if required
- Setting up Print on Demand facilities to service print copy requests
- Defining and implementing Technology Solutions for providing the online manuscript platform and online hosting platform as agreed between GJIMT and Sage
- Re-define all timelines if GJIMT or Sage is not able to meet the milestones/ timelines laid in the proposed plan. Inform all concerned in Sage and GJIMT

➢ ***Management of Journal (post bringing out the journal issue)***

1. GJIMT
   - Maintain the publishing ethics and qualitative standards of the content published in the journal to meet the fundamental requirement of developing a journal.
2. Sage
   - To provide recommendations to develop the journal
   - Strategies for growing journal impact.
   - Continued deployment, monitoring, and managing the Journal publishing
   - Monitoring content with journal themes/aims and scope
   - Fine-tuning Peer Review workflow to ensure content is checked for plagiarism and copyright violations and Peer Review is at arm's length with little or no conflict of interest

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- Ensuring that the journal is published based on the agreed timelines
- Optimising Editorial Workflows to ensure journal is published on time
- Technology team to monitor smooth functioning
- Monitoring and delivering on Print on Demand Solutions
- Includes setting up of systems to collect payments for orders
- Strategies for maintaining on-time publication, optimum frequency, and global publishing standards

➢ ***Developing Indexing Portfolio***

1. GJIMT
    - Meet all external timelines as specified by Sage for developing journal abstracting & indexing portfolio.
        - Including publishing on time
        - Quality content
        - Working on increased citations as advised by Sage
2. Sage
    - Responsible for making journals ready for acceptance in indexing databases and in their application process.
    - Services on Journal Indexing Review and Support
    - Services on the process to apply for indexing
    - Preparing the Journal for submission of application & acceptance in relevant and reputed indexing databases in phases, e.g. Scopus, UGC, Web of Science, EBSCO, ProQuest, Google Scholar, COPE (Committee of Publication Ethics), etc.
    - Strategise improving the metrics for databases where the journal may already be indexed
    - Re-define all timelines if EIC is not able to meet the milestones/timelines laid in the proposed plan. Inform all concerned in Sage and EIC
    - Continued deployment, monitoring and managing journal and a biannual report

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- ***Article Submission***

1. GJIMT
    - Ensure authors submit their manuscripts as per journals submission guidelines
    - Ensure that authors respond to any production queries (e.g. any missing elements) within 48 hours of receipt of the email
2. Sage
    - The PRA checks the manuscript based on a checklist that will be shared with GJIMT. These checks are related to total word count, anonymization, co-author accounts, citations, etc.

- ***Peer Review Management Process***

1. GJIMT
    - Confirm any changes to editorial staff (EIC/AE) in advance
    - Review plagiarism report sent by Sage
    - Final Approval on Papers to be accepted for publication rests with the editor appointed by the GJIMT
2. Sage
    - Adhere to appropriate response times associated with service-related incidents on STS. The timelines will be agreed upon with the editor while setting up the site.
    - Advance intimation on scheduled site maintenance

- ***Article and Issue Production***

1. GJIMT
    - Ensure authors and JE respond to any escalation and queries to SAGE as per agreed TAT
    - Journal editor to decide on author manuscript if a response from the authors is not received based on agreed timelines

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- Table of Contents (TOC) or any other instructions for the issue, e.g. special issue into/title, Ed. Board changes, are submitted to the PM at least 60 working days in advance of the publication month
- JE returns all articles after review as per the agreed TAT

2. Sage
    - Ensure authors respond to proofs and author queries as per agreed TAT
    - Escalate delays in Author responses to EIC authorised representative/JE
    - Timely raise concerns with EIC and follow through on issues that may derail on-time journal issue publishing
    - For multiple-round author corrections and post-publication corrections, we will go as per contractual policies
    - Publish a maximum of pages as per the page budget captured in the List of Details and Features section. Anything beyond the page budget will be chargeable

7) In-Scope Assumptions

I. Bringing out of Journal

- GJIMT to ensure accuracy and completeness of all information provided to Sage

II. Management of Journal (post bringing out the journal issue)

- GJIMT to consider and implement the recommendations of Sage

III. Developing Indexing Portfolio

- Sage to provide Journal indexing support and guidance

IV. Article Submission

- Authors will be required to submit their articles in MS Word
- Author must provide photographs and other illustrations in JPEG or TIFF files, with high printable-quality resolution (300 dpi or above)
- Decision to accept/reject article for publication lies solely with the Journal Editor or anyone EIC authorizes

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V. Management of Peer Review Process

- The editor appointed by GJIMT to locate and assign reviewers for manuscripts in peer review, and ensure double-anonymized review with minimum two external reviews in place
- Sage does not control reviewers' response time, and this may impact the First Decision and eventually the acceptance timeline and publishing of the article
- Minimum of 2 independent external reviews for each article

VI. Article & Issue Production

- Manuscript page is considered as 250 words to a page
- Authors will receive the PDF Proofs for review along with the author queries.
- Authors are strictly disallowed from adding any significant content at the proof stages. Any major new additions will be automatically rejected
- To ensure timely publication, Sage will only send the proofs for review at article stage and this will be the last opportunity to review the proofs.
- The proofs of only the first issue will be sent to the editors for review; post that, any corrections must be submitted at article stage only

8) Service Management

This agreement lists the available scope of services provided by Sage, which details availability, monitoring, service requests, and other relevant factors for maintaining adequate service levels.

I. Service Availability

Coverage parameters specific to the service(s) covered in this agreement are as follows:

- **Email support: Monitored 9.30 am to 5.30 pm Monday – Friday**
    - All emails received during this time will be responded to within 24-hours (excluding weekends and Sage holidays)

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II. Service Requests

In support of services outlined in this agreement, the EIC/Sage will respond to service-related incidents and/or requests submitted by EIC/Sage within the following time frames.

- Incomplete manuscript query resolution: 2 working days

  Upon receipt of all manuscripts, Sage will check for manuscript completeness and associated documents and raise any missing components or if clarifications are required via email to EIC.

- Complex manuscripts/author delays leading to delay in publishing: 3 working days

  Sage will intimate EIC in case of

  - Delay/incomplete manuscripts

  - Complex Manuscripts

  - Poorly written Manuscripts that may need developmental or language editing

  - Non-responsive authors

  - Unforeseen circumstances

9) Standard Turnaround-Time (TAT)

TAT for Journal Production

a. Bringing out of Journal	:	65 Working Days from receipt of the final copy to issue publication
b. Time to first decision	:	64 Working Days average time from Submission of a manuscript on STS to peer review's first decision (That is, after a reviewer has reviewed the article, letting the author know whether the manuscript is being accepted or rejected or is to be revised)

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c. Time to final decision : 128 Working Days from submission to final decision/acceptance

d. Online Article Publishing : 30 Working Days from receipt of article by project manager

e. Online Issue Publishing : 15 Working Days from approval of Table of contents (ToC) from Journal editor

f. Author review : 5 Working Days (inclusive in above schedule)

g. Journal Editor review : 5 Working Days (inclusive in above schedule and simultaneous with author review)

h. Printing (POD) : 10 Working Days from the day of issuing the PO to the printer (Provided GJIMT has let Sage know of its print copies requirement at least 4 months in advance (as in contract)

i. Dispatch : 4-5 Working Days under normal circumstances from the next day of completion of printing

Note: Above TAT is subject to authors/Journals Editors reviewing and returning the proofs to Sage within the standard TAT. Any delays at the authors/journals editors end may result in delays in publishing the article and/or issue.

TAT for Journal Development

a. Workflow before the issue is brought out
   - Sage shares Questionnaire with GJIMT post-signing in 5 working days
   - GJIMT to revert with the details in 15 working days
   - Sage reviews the responses to the questionnaire and initiates the discussion in 15 working days
   - Sage shares the milestones & timelines for provisional development plan with GJIMT in the next 25 working days
   - GJIMT to provide consent or propose any modification to the plan in 5 working days
   - GJIMT & Sage to work on the proposed action plan as per mutually agreed timelines

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b. Post bringing outing the journal issue
- Sage to monitor the content against the journal themes/aims and scope – Bi-annually
- Sage to share strategies for maintaining on-time publication, optimum frequency, and global publishing standards – Annually
- Sage to advise on call for papers to attract articles for the Journal – Bi-annually
- Sage to conduct a review of the journal and share a Journal report card with Sage – Bi-annually

c. Timelines of Developing indexing portfolio
- Sage to share indexing plan for the journal within 25 working days post-publication of 3 on-time issues
- Sage to review the journal for indexing applications, eligibility, and criteria – Bi-annually post-publication of 3 on-time issues
- Sage to provide the journal report card mapping the indexing criteria for different databases – Bi-annually
- Sage to propose the journal application for submission to indexing databases when ready – Sage to share costs, if any, to be incurred in the process of applying to indexing databases - GJIMT to provide consent for application submission within 3-5 working days
- Sage or GJIMT to fill out the applications (as per the requirement) of indexing databases following the timelines defined by the databases withing 10 working days
- Sage to share strategies to increase citations to enhance the impact of the Journal - Annually

* Journal Development Support/Review: Ongoing

Note: Above TAT is subject to on time publication and indexing criteria fulfilment.

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10) List of Details & features

Automated Manuscript (MSS) Submission System:

- Online manuscript submission system
- Peer Review Administrative (PRA) support
- Plagiarism checks on accepted articles/manuscripts

Production and Editorial Services:

- Copyediting (Please refer Annexure-B)
- Generation of print-ready PDFs
- Print copies on demand and Payment collection facilities
- Maximum of 124 pages per issue in royal size (9.5 x 6.25 inches) and black & white with Paperback Binding
- Printing on 70 GSM paper /Cover – 250 GSM

Marketing Services:

- Online Hosting Platform: The journal will have independent online hosting platform which would include the following key features:

  -- Content hosting facility

  -- Dedicated journal home page

  -- Archiving facility

  -- Journal metrics

  -- Dedicated web space for announcements
- Search Engine Optimization – SEO
- Online First/Issue-based hosting functionality
- DOI hyperlinking
- Google Analytics Linking
- Cover Design
- Standard marketing promotion

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Journal Development Services:

- Guidance on developing the journal as per the publishing standards
- Developing indexing portfolio
- Annual Journal Performance Report

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Annexure-B

SPECTRUM JOURNALS: JPS - EXPECTATIONS FROM COPY EDITORS

The following tasks are performed by our copy editors:

- Ensuring that all elements as per the journal requirements are present in the article including, but not limited to:
    - Article title
    - Author name(s)
    - E-mails of all the authors
    - Affiliation(s)
    - Corresponding author's name and postal address
    - Abstract (structured/unstructured, depending on the journal style)
    - Keywords (between 3 to 6 keywords specific to the article, or as per the journal style)
    - Main body of text (often divided into Introduction, Materials and Methods, Discussion, Results, Conclusion)
    - Floating matters (tables and figures)
    - End matter (e.g., Acknowledgement(s) (optional), Author Contribution (optional), Declaration of Conflicting Interests, Funding statements, endnotes, appendixes, glossary, and references).
- Ensuring that critical information (e.g., article title, author names and affiliations) matches with the ones provided in the original manuscript.
- Checking figures, tables, numbers, dates, decades, centuries, italics, diacritics, statistical values, and references are matching with the journal style.
- Raising author queries for any missing information.
- Ensuring consistent treatment with regard to capitalization, spelling, punctuation, and word uSage in running heads, article titles, author names and affiliations, article text and end matter.
- Finding and correcting incorrect spellings and typos.

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- Line editing for correcting grammatical errors the involves:
  - subject–verb agreement
  - tenses
  - prepositions
  - correct use of punctuation
  - capitalization
- Defining nonstandard acronyms and abbreviations at the first mention in the abstract, in text, and in each table and figure. Query authors as needed.
- Checking for ambiguous terms in text (e.g., +/- stands for ±).
- Cross-verifying reference citations and floating matters for sequential appearance and presence.
- Flagging inappropriate sentences or phrases to the author.
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Research Papers

Servant Leadership Characteristics - Testing the Reliability of Scale in Select Government Hospital

Prof. Meenakshi Malhotra *
Ms. Aanchal Malik **

Abstract

Purpose: The study is an attempt to test the standardization of a foreign scale on Servant Leadership Characteristics that is 'The Organizational Leadership Assessment' (OLA) (revised) evolved by James Alan Laub (1999) in selected Hospital Organization in Panchkula (India).

Design/Methodology/Approach: Specifically, as defined by James Alan Laub, the dimensions which are six in number that is a.) Values People, b.) Develops People, c.) Builds Community, d.) Displays Authenticity, e.) Provides Leadership, and f.) Shares Leadership were used to build a servant leadership scale. The questionnaire was filled by 100 respondents from Panchkula (India). Further to test the reliability and validity of it, Cronbach's Alpha and Measures of Dispersion were used.

Findings: The 6 dimensional measure of 60-items instrument maintains the Cronbach's alpha for Servant leadership dimensions ranging between 0.879 - 0.921 which is above the significance level of 0.60. All the items have reliability above prescribed significance level, i.e.0.60.

Practical Implication: It is anticipated that the Organizational Leadership Assessment will function as a valuable and significant resource for doing more study in various fields in the future.

Keywords: *Servant Leadership, Reliability* .

Introduction

"Servant leadership is all about making the goals clear and then rolling your sleeves up and doing whatever it takes to help people win. In that situation, they don't work for you; you work for them."

- Ken Blanchard, Business consultant, American author and motivational speaker

In the contemporary healthcare environment, servant leadership offers a unique way to evaluate leadership conduct and gauge how it relates to commitment and job satisfaction.

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Today's healthcare organization managers are cognizant of both the demands and constraints placed on them by the businesses they work for, as well as the needs of their clients. If the leadership is poor in the health care arrangements it may cause harmful symptoms that have adverse impact on organizational work cultures, employee satisfaction which lead to burnout, staff turnover, dissatisfied workers, critical medical mistakes, etc(Wolor, C. W, 2022). Effective servant leadership is a prerequisite for leaders who want to succeed in the confusing environment of today and manage these conflicting demands.(Foster, B. A. 2000).

1.2 Theoretical Framework

In the 21st century, the way of doing business has changed. Now, knowledge drives economics and attitudes of corporates are socially responsible in nature. With these changes in the environment, the servant leadership theory has grown as a management style of today's redefined business world. Servant Leadership is often misunderstood and confused to have the words servant and leadership together (Sendjaya, S. 2015). Servant Leadership not only means motivation to lead but it also includes need to serve both employees and organization.

1.3 Definitions Of Servant Leadership

Robert K. Greenleaf (1970) defined servant leadership as,"The servant-leader is servant first... It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. That person is sharply different from one who is leader first; perhaps because of the need to assuage an unusual power drive or to acquire material possessions... The leader-first and the servant-first are two extreme types. Between them there are shadings and blends that are part of the infinite variety of human nature."

In the words of Laub (1999),"Servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader. Servant leadership promotes the valuing and development of people, the building of community, the practice of authenticity, the providing of leadership for the good of those led and the sharing of power and status for the common good of each individual, the total organization and those served by the organization."

1.2.1 Essential Components of Servant Leadership

- The moral element of the servant leader in which he encourages enhanced moral reasoning among his or her followers which can be applied and tested in order to achieve the organizational goals.
- The serving element of the servant leader which focuses not only good for the organization but also emphases on the progress and development of the subordinates which would help them to reach to their fullest potential.

1.3 Definition of Hospital Service Organizations

As per WHO, "A hospital is an integral part of a social and medical organization, the function of which is to take care of the complete health of the population, both curative and preventive, and where patients serve out to the family and its home environment, the hospital is also a centre for the training workers and bio-social research."

1.3.1 Challenges Encountered by Employees in Hospital Organizations

The challenges encountered by employees in Hospital Organizations are as follows:

- Growing Health Care Sector: Indian government and Indian private sector spends a good amount of budget on health care service Organizations.
- Increase in Income Level of Consumers: With the increase in income level of consumers they can afford costly medicines. As the population enters old age, the number of body ailments increases; more pressure on health care employees will increase.
- Rise of Diseases: In India, communicable ailments such as eye flu, dengue, viral hepatitis, tuberculosis, malaria, and pneumonia has again become active and stubborn resistance to drugs. The reasons for these are sub-standard housing, sewerage and waste management systems, inadequate water, poor public health infrastructure, and more air travels.
- Deteriorating Infrastructure: The physical structure is inadequate to meet emergency requirements in the nation.

1.4 Research Methodology

1.5.1 Need of the Study

Organizations that have embraced servant leadership believe that people should be helped to realize their full potential by attending to their needs. An organization's culture that values servant leadership contributes to the creation of the conditions and frameworks needed to increase worker commitment to the company and satisfaction with their work.

The requirement of conducting the study, “SERVANT LEADERSHIP CHARACTERISTICS-TESTING THE RELIABILITY OF SCALE IN SELECT GOVERNMENT HOSPITAL” has been concise in the following points:

- The ability of management to provide assistance, the ability to address issues promptly, and the rapport between nursing staff and supervisors will work to strike a balance with patients' increasing demands for higher-quality healthcare.
- Servant leadership is mandated in health care organizations in India because it can enhance the patient-provider relationship and increase the value of care.

1.5.2 Scope of the Study

In research, the term "scope" refers to the parameters and range of a study, outlining its precise goals, target audience, variables, approaches, and constraints. These details aid in maintaining focus and giving researchers a clear idea of the subject matter that will be examined. The study is focusing on the population of nursing staff serving in the Government Hospital in Panchkula to test the reliability of Servant Leadership Scale in select Government Hospital.

1.5.3 Objective of the Study

The main objective of the study is to purify the scale for measuring Servant Leadership characteristics for Hospital Organization and to test the reliability of foreign scale in Indian Context.

1.5.4 Research Design

The framework of research methodologies and techniques selected by a researcher to carry out a study is known as research design.

The design enables researchers to focus on the most effective research techniques for the topic at hand and organize their investigations for success. The process of formulating a research subject clarifies the nature of the research, including survey, experimental, semi-experimental, etc.

1.5.5 Sources of Data

The data collection shall be done from the primary as well as the secondary sources.

Primary data was collected from nursing staff through questionnaires. The questionnaire was distributed to respondents. Regular follow up through telephones or personal visits was also done.

Secondary data was collected from various documented reports, online resources and researches done on the variables.

1.5.6 Sample Design and Sample Size

For data collection, the government hospital is selected from the city of Panchkula. This hospital is selected according to the bed capacity. For the purpose of this study, hospital having bed capacity of 200 or above is selected. The estimated number of nursing staff working in these hospitals is around 150 in total. Based on the sample size calculation table, Krejcie and Morgan Table (By the Research Advisors, 2006, see Appendix A), the number of nursing staff selected as a sample shall be approximately 100. Judgmental sampling technique has been adopted by the researcher.

1.5.7 Data Collection Tools

The questionnaire was constructed and it was divided in four sections:

Section A contains the demographic information of the respondents which will include age, gender and years of experience of the respondent.

Section B will include Servant Leadership Scale known as The Organizational Leadership Assessment (OLA) (revised) developed by James Alan Laub (1999).For this study, the OLA was used because it looks at respondents' perceptions and investigates a number of traits associated with servant leadership. Originally created by Laub (1999), the Servant Organizational Leadership Assessment (SOLA) contained 60 Likert-style items, gave rise to OLA.

a.) Value people

b.) Develop people

c.) Build community

d.) Displays Authenticity

e.) Provides Leadership

f.) Shares Leadership

1.6 Data Analysis and Findings

1.6.1 Reliability Analysis

The degree to which a research approach produces results that are dependable and consistent is known as research reliability. A measure is considered reliable when it is used to the same item of measurement multiple times and produces consistent results.

1.6.2 Questionnaire for the Study

The questionnaire was prepared in English. It was a structured questionnaire. The main aim of the study was to test the reliability of foreign scale in context of India. The questionnaire included questions related to various dimensions of Servant leadership which were filled from nurses of select Government Hospital in city of Panchkula.

1.6.3 Analysis of the Study

Reliability testing–The degree to which a scale yields consistent readings after multiple measurements is referred to as reliability. The degree, to which measurements are free of random errors or Xr, is known as reliability.

A Cronbach's α (alpha) is a statistic. It is frequently used to gauge how reliable or consistent a psychometric test result is for a sample of respondents. Lee Cronbach originally called it alpha in 1951 because he intended to add more coefficients. Alpha is not resilient to missing information.

A SPSS (Statistical Program for Social Science) sheet was utilized for analysis. The scale items were arranged in a variable sheet. Respondents' responses were coded on a data sheet.

Table 1 shows that for the purpose of the study, the information was gathered from 100 nurses

Table 1: Profile of Sample Respondents

DEMOGRAPHIC MEASURES		
GENDER	NUMBER OF RESPONDENTS	AGGREGATE
MALE	25	25%
FEMALE	75	75%
TRANSGENDER	-	-
TOTAL	100	100%
AGE	NUMBER OF RESPONDENTS	AGGREGATE
BELOW 29	25	10%
30 - 39	35	25%
40 and above	30	30%
TOTAL	100	100%
EXPERIENCE	NUMBER OF RESPONDENTS	AGGREGATE
0 - 5 YEARS	36	35%
6 - 10 YEARS	27	12%
11 YEARS and above	40	15%
TOTAL	100	100%
INCOME (pm)	NUMBER OF RESPONDENTS	AGGREGATE
BELOW Rs 30,000	15	5%
Rs30,000 - Rs 59,000	45	45%
Above Rs 60,000	40	40%
TOTAL	100	100%

from the select government hospital. As given in the Table 2 in the sample for genders, age groups, education and experience were taken and was conducted in dual mode, i.e. online google form and offline personal visit to these selected hospital. In the study, 75 females and 25 males have participated. For age profile, respondents ranged from above 40 are 30%, between 30 to 39 are 25% and rest 10% followed by below 29. The respondents in experience category had maximum participation form 11 years and above. In the income part, highest earners ranked between Rs 30,000 – Rs 59,000 per month.

1.6.4 Findings of the Study

As stated above, for the purpose of analysis, Cronbach's alpha has been applied on the data collected from respondents.

Table 2 depicts that Cronbach's alpha for Servant leadership dimensions are ranging between 0.879 - 0.921 which is above the significance level of 0.60. The scores of dimensions namely- Value People is 0.921, Develop People is 0.891, Builds Community is 0.891, Displays Authenticity is 0.879, Provides Leadership is 0.925 and Shares Leadership is 0.918. Hence, they can be retained for further studies.

Table 2: Reliability Coefficient of the Scales Used

SR. NO.	SCALES	NO. OF ITEMS	CRONBACH'S ALPHA
1.	SERVANT LEADERSHIP		.889
i	Values people	11	.921
ii	Develops people	08	.891
iii	Builds community	12	.891
iv	Displays Authenticity	13	.879
v	Provides Leadership	11	.925
vi	Shares Leadership	05	.918

1.7 Limitations of the Study

1) The size of sample on which study was conducted was very small.
2) The response of the employees could be biased as it was filled during working hours.

1.8 Suggestions for the Study

The following suggestions can be incorporated for the future research:

1) The researcher can test variable on other service organizations, such as banking, insurance, hospitality, IT corporates and many more to authenticate the variable testing.
2) The researcher can execute the testing on the large sample as well.

1.9 Conclusion

Servant leadership is a leadership philosophy (Anderson, J. 2008) in which serving others is a leader's primary objective. A servant leader is one who delegates authority, prioritize the needs of their team members, and assist them in reaching their full potential.(Mahon, D. 2021). The objective of the study was to adapt foreign scale in Indian `research context. So to do so, Cronbach's Alpha was applied. The instrument consisting of 6 dimensions of 60-items maintains the Cronbach's alpha ranging between 0.879 - 0.921 which is above the significance level of 0.60. All the items have reliability above prescribed significance level, i.e. 0.60.

References

Anderson, J. (2008). The writings of Robert K. Greenleaf: An interpretive analysis and the future of servant leadership. In Servant Leadership Research Roundtable. Regent University.

Armstrong, M. (2006). A handbook of human resource management practice. Kogan Page Publishers, London, 264.

Barbuto, J. E., & Gifford, G. T. (2010).Examining gender differences of servant leadership: An analysis of the agentic and communal properties of the Servant Leadership Questionnaire. Journal of Leadership Education, 9(2), 4-21.

BarbutoJr, J. E., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. Group & Organization Management, 31(3), 300-326.

Bellet, Paul S.; Michael J. Maloney (1991)."The importance of empathy as an interviewing skill in medicine". The Journal of the American Medical Association, 226 (13), 1831–1832.

Belsky, J. (2016). Servant leadership can save the health care profession. Smart business online. August 26, 2016.

Belton, L. (2017). Servant Leadership: A journey, not a race. Health Management.org. 17(4), 268-270.

Bovenzi, G. (2016). Servant Leadership and Cultural Characteristics as Predictors of Follower Engagement.

Campbell, P. T., & Rudisill, P. T. (2005). Servant leadership: A critical component for nurse leaders. Nurse Leader, 3(3), 27–29.

Cerit, Y. (2009). The effects of servant leadership behaviours of school principals on teachers' job satisfaction. Educational Management Administration & Leadership, 37(5), 600-623.

Cerit, Y. (2010). The effects of servant leadership on teachers' organizational commitment in primary schools in Turkey. International Journal of Leadership in Education, 13(3), 301-317.

Earnhardt, M. P. (2008). Testing a servant leadership theory among United States military members. Emerging Leadership Journeys, 1(2), 14.

Eva, N., Robin, M., Sendjaya, S., Van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. The Leadership Quarterly, 30(1), 111-132.

Farmer, S. W. (2010). Servant leadership attributes in senior military officers: A quantitative study examining demographic factors (Doctoral dissertation, North Central University).

Foster, B. A. (2000). Barriers to servant leadership: Perceived organizational elements that impede servant leader effectiveness. The Fielding Institute.

Greenleaf, R. K. (1970). The servant as leader (an essay). Greenleaf Organization.

Greenleaf, R. K. (2002). Servant leadership: A journey into the nature of legitimate power and greatness. Paulist Press.

Hunter, E. M., Neubert, M. J., Perry, S. J., Witt, L.

A., Penney, L. M., & Weinberger, E. (2013). Servant leaders inspire servant followers: Antecedents and outcomes for employees and the organization. The Leadership Quarterly, 24(2), 316-331.

India facing shortage of 600,000 doctors, 2 million nurses: Study available at https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/india viewed on 5th November 2019.

Joseph, E. E., & Winston, B. E. (2005). A correlation of servant leadership, leader trust, and organizational trust. Leadership & Organization Development Journal, 26(1), 6-22.

Mahon, D. (2021). Can using a servant-leadership model of supervision mitigate against burnout and secondary trauma in the health and social care sector?. Leadership in Health Services, Vol. 34 No. 2, pp. 198-214.

Patterson, K. A. (2003). Servant leadership: A theoretical model (Doctoral dissertation, Regent University).

Patton, M. Q. (2002). Qualitative research and evaluation methods .Thousand Oakes.

Population of India available at http://statisticstimes.com/demographics/population-of-india.php viewed on 5th September 2023.

Robbins, S. P., & Judge, T. (2005). Organizational Behavior, 11th ed., Prentice-Hall, Upper Saddle River, NJ.

Salameh, K. M. (2011). Servant leadership practices among school principals in educational directorates in Jordan. International Journal of Business and Social Science, 2(22), 138-145.

Sendjaya, S. (2015). Personal and organizational excellence through servant leadership. Australia: Springer International Publishing Switzerland.

Van Dierendonck, D., & Nuijten, I. (2011). The servant leadership survey: Development and validation of a multidimensional measure. Journal of business and psychology, 26(3), 249-267.

Wolor, C. W., Ardiansyah, A., Rofaida, R., Nurkhin, A., & Rababah, M. A. (2022).Impact of Toxic Leadership on Employee Performance. Health psychology research, 10(4).

Fin Tech – A Game Changer, Risks and Return

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Abstract

Fin Tech revolution can be traced to the global financial crisis. In the Indian context, the Fin Tech revolution has been primarily in the field of payment systems and there has been a quantum increase in the last decade. Regulators have taken a number of regulatory initiatives for the development of Fin Tech landscape. The digital advancement is also fraught with risks pertaining to mis-selling, data privacy and online fraud. Therefore, in order to harness the potential of digital innovations, it is important there is need for spreading awareness among regarding risks associated with online/cyber transactions, there is also need for bolstering up the digital infrastructure and also costeffective technology to reach the under privileged sections of the society.

1.1 Introduction

Fin Tech (Financial Technology) can be defined as the usage of technological innovation with reference to the design and delivery of the financial services e.g. online loan applications which enable customers to avail of loan through online credit appraisal and disbursal of loan. As per the Financial Stability Board of BIS, Fin Tech is defined as "Fin tech is technologically enabled financial innovation that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions in the provision of financial services". The current fin tech revolution can trace it's origin from the global financial crisis of 2007-08. The historical background of technological innovation in case of financial services can be traced to 1950s-1970s with the advent of main frame computer systems. The 1980s saw emergence of digital technology companies include core banking system providers. The current trend/wave of fin tech revolution has been characterized by greater interaction between the fin tech companies and customers without physical presence of the customers, through digital medium.

Fin tech Innovations can be categorized in to the following categories :

i. Payments, Clearing and Settlement : This is associated with Mobile and Web based payments and digital currencies distributed ledger.

ii. Deposits, Lending and Capital raising : which includes Crowd-funding Peer-to-

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Peer lending digital currencies distributed ledger.

iii. Market Provisioning : Smart contracts cloud computing e-aggregators.

iv. Investment Management : Robo Advice smart contracts e-trading.

v. Data Analytics and Risk Management : which includes Big Data Artificial Intelligence and Risk Management.

Fin Tech and Payments Systems :

The total value of fin tech investments rose from $ 10 billion in 2013 to $ 122 billion in 2020 globally. An Industry analysis has forecasted that global fin tech lending would increase to $ 4.9 trillion by 2030. Global Fin Tech Sector which generates $ 245 billion currently amounting to 2% of global financial revenue is expected to reach a level of $ 1.5 trillion by 2030. The pandemic gave push to the volume of digital transactions globally, as per World Bank data, at least 58 governments had used digital payments to remit relief related payments to the general public. The global Findex database 2021 has also reported a significant jump in financial inclusion. In case of Emerging Market/Developing countries/ economies, 71% of general populace have bank account which have risen from 42% in previous decade. The pandemic gave a push to digital payments in the Indian context grew by 64 per cent and 23 per cent respectively in 2021-22 respectively (in volume and value terms) and correspondingly it increased to 58 per cent and 19 per cent in 2022-23 respectively (both in volume and value terms). There has been expansion in the underling payment infrastructure in tune with the increasing demand, in the form of increased number and density of point of sale terminals and quick response codes. This increased adoption of the digital payment methods on account of growing digital awareness, increased access to smart phones and debit cards and directed welfare schemes.

Fast Payment Services (FPS) have been implemented in more than 100 countries, FPS is characterized by 24X7X365 transfer of funds and immediate availability of funds to the payee. In Brazil, fast payment service which is known as Pix was launched by Central Bank of Brazil in Nov 2020, the system allowed funds transfer between all type of transaction accounts, this platform also used QR code. Since Dec 2021, approx. 109 million consumers and 7.6 million consumers have been active users of this platform. TARGET Instant Payment Settlement (TIPS) was an FPS introduced by Euro System in 2018. TIPS was developed to be an extension of TARGET 2 of RTGS and it in turns ensures settlement of transactions within 10 seconds. This has enabled Euro citizens to make and receive transfers using internet, mobile banking or using QR codes. India's UPI has also emerged as a very effective FPS which can map payment accounts to a single payment identifier. Initially UPI had interface with bank accounts however subsequently payment could be made from wallets even credit cards. UPI now supports payment made through various modes such as UPI Lite, UPI 123 Pay, UPI credit. In fact, in value terms UPI transactions have increased from Rs. 0.0038 billion in July 2016 to Rs. 17,158 billion in Oct 2023. In case of Indonesia, an FPS known as BI Fast was introduced in Dec 2021 for making payments on 24X7X365 basis for bank and non-bank customers. The methods subsumed under BI Fast includes bank transfers, mobile payment apps and also digital wallets. Since it's introduction, BI Fast participants have reached a total of 122 constituting 94% of the national retail system.

In the Indian context, there has been massive increase in digital payments from 4.98 billion transactions amounting to Rs. 9,600 billion in 2010-11 to 16.23 billion transactions amounting to Rs. 3,435 billion in 2019-20. As per Global Data, which is data and analytics company in it's 2017 survey had mentioned that India is one of the leading global markets with reference to digital adoption with 55.4% survey respondents having indicated usage of digital cash[1]. Indian Fin Tech Industry is expected to generate $ 200 billion revenue by 2030 and will generate approx. 13% of global fintech revenue.

Fin Tech has had far reaching consequences for the consumers of financial services, it has led to unbundling of financial services since the consumer can choose different service providers for different financial products. Digital consumer interface has enabled new entities to directly reach their customers. The advent/proliferation of technology has led to the streamlining of back and middle office, it has led revamping of back office for lowering costs. New entrants are building new platforms for handling their core banking activities. Cloud based platforms are allowing smaller banks for outsourcing technological operations.

The expansion/growth in fintech industry would have profound impact on the regulatory landscape. When financial services value chain is spread across different entities, customer relationship, customer funds, data analytics, etc., it will pose supervisory challenges and in case of any wrongdoing it would be difficult to pin point the source of the same. Multiple entities would also create a larger surface for attack by cyber criminals which would require stronger regulatory approach towards cyber security. The reliance of ATM, cash transport and payments related infrastructure on small number of cloud service provider can lead to concentration risk. Therefore, the issues related to disaggregation can be addressed through regulatory dispensation on outsourcing and clear allocation of duties and responsibilities on outsourcing e.g. RBI had issued in 2017 guidelines on managing risks and code of conduct of outsourcing of financial services by NBFCs. While FinTech offer innovative financial solutions, their reliance on data raises concerns about privacy and security[2], reputational damage, etc., RBI had issued digital lending guidelines in Sept 2022, laying down guidelines regarding collection, usage of data obtained from borrowers undertaking digital loans. It can also be mentioned that technological innovations such as Robo Advisors and trading platforms have also exposed customers to market risks from new instruments with reference to which customers are not well aware.

Regulatory Initiatives :

A number of regulatory initiatives have been undertaken for the development of Fin Tech landscape globally. A number of these initiatives are enumerated as under :

1) Basel Committee on Banking Supervision had set up a Task Force on Fin Tech for identification and also assessing the risks arising from digitalization of finance with

[1]Digital Cash is any currency, money or money like asset that is primarily managed, stored or exchanged on computer systems. It is different from CBDCs since CBDCs are digital currencies which are issued by Central Banks and it is the liability of Central Banks (Source : Wikipedia)

[2]Payment aspects of financial inclusion in the fintech era, Committee on Payments and Market Infrastructures World Bank Group, 2020

a focus area of studying the impact of financial technology on banks' business models. The work of the Task Force will involve mapping of the Fintech Industry and technologies with the objective to gain a greater understanding of the major innovations and also the adoption by banks of such technologies.

2) Financial Stability Board (FSB) had set up a Task Force which was named Financial Innovations Network for the assessing Fin Tech. FSB had identified three important promises pertaining Fin Tech innovations, greater access to and convenience of financial services; greater efficiency of financial services and a push towards a more decentralized financial system.

3) Committee on Payments and Market Infrastructures (CPMI) is monitoring the developments and evolution of digital currency schemes. CPMI has established a dedicated Working Group for looking in to the impact digital innovations and for analyzing the impact of such digital innovations.

4) The Committee on Payments and Settlement Systems and International Organisation of Securities Commissions had in April 2012 had issued 24 principles, these principles in turn apply to all systemically important payment systems, central securities depositories, securities settlement processes.

5) European Commission in Nov 2016 had set up a Task Force on Financial Technology for assessing and also developing strategies for addressing challenges posed by such Fin Tech innovations.

6) World Bank Group interfaces with national authorities/regulators for laying down frameworks for adoption of technology.

7) BIS had issued instructions for setting up BIS Innovation Hub in June 2019 for fostering international collaboration within the central banking community. The role of the Hub was envisaged as identifying critical trends in technology, developing public goods in technology space and also to serve as a focal point for network of central banks for cooperation with reference to innovation. It was envisaged that the innovation Hub will be set up initially in Basel, Hong Kong and Singapore.

Innovation Hubs provide support, guidance to regulated or unregulated entities for navigating the regulatory framework or identifying the supervisory, policy or legal issues. Some of the advantages of setting up Innovation Hub includes reducing regulatory uncertainty, reducing the time it takes for bringing an innovative product, supporting innovators by providing them services and improving access to regulatory institutions.

Testing of innovations can be expensive or could have adverse implications for the market, therefore Regulatory Sand Box refers to live or virtual testing of new products or services. Regulatory Institutions provide regulatory support by relaxing regulatory stipulations for the testing of a new product or service.

Regulatory/Sand Box innovations hubs have been created by a number of countries, which are mentioned as under :

i. Australia : Australian Securities and Investments Commission had issued a regulatory framework in 2016 on innovation hub/sand box for allowing the eligible Fin Tech companies. This allows the eligible businesses for notifying regulator and for commencing testing.

ii. U.K. : Financial Conduct Authority, U.K. had implemented a regulatory sandbox in June 2016 and the objective of setting up sandbox was to create a safe environment where businesses can test their innovative products, services and business models.

iii. Singapore : Monetary Authority of Singapore (MAS) had implemented a regulatory sandbox in June 2016 had published it's regulatory guidelines with reference to regulatory sandbox testing during Nov 2016, thereby encouraging and enabling experimentation of innovations which utilize technology for delivery of financial products and services, this in turn is done by undertaking relaxation of legal and regulatory requirements.

iv. Netherlands : Dutch Central Bank and Netherlands Authority for the Financial Markets had set up a pilot Fin Tech Innovation Hub in June 2016 for providing support to market participants who seek introduce innovative financial services and products. The main objective of the Hub is to provide support to new participants at an early stage of developing and introducing innovative product or financial service, the Hub in turn also in turn facilitates access to supervisory authorities.

v. USA: Office of the Comptroller of Currency (OCC), U.S. had in Dec 2016 released a paper titled 'Exploring Special Purpose National Bank Charters for Fin tech Companies' which laid down OCC's plans for allowing Fin Tech companies for applying to become special purpose national banks. Sandboxes have limitations with reference to the test market whereas OCC's special purpose charter does not have any such restrictions. Therefore, national banks having OCC special purpose charter would be subject to same type of regulatory oversight as a national bank.

vi. Japan : Japan Financial Services Authority had set up " Fin Tech Support Desk" in Dec 2015, the objective of setting up the desk was to be one stop point of contact for inquiries and opinions pertaining to business involving Fin Tech with reference to Japan's financial service environment. Bank of Japan also set up a Fin Tech Center in April 2016 which played a catalytic role for promotion of interaction among financial practices and innovative technologies. One of the important role of the Center was to provide guidance and support to regulated and unregulated entities involved in Fin Tech innovations.

Initiatives taken in the Indian Context :

RBI has taken a number of initiatives for the development of the Fin Tech ecosystem in the country, RBI issued Payments System vision for the first time in Dec 2001 for the period 2001-04 with the mission statement of establishingsafe, secure, sound and efficient payment and settlement systems of the country.Board of Payments and Settlements (BPSS) was constituted as a Committee of the Central Board of RBI in terms of BPSS Regulations 2005 and it is highest policy making body in the country with reference to payment systems. National Payments Corporation of India (NPCI) was set up in 2008, with the objective of increasing retail electronic payments in the economy. NPCI has introduced a variety of innovative retail products in the system such as IMPS, RuPay

Card scheme, UPI, NACH, Aadhar enabled Payments system, Aadhar Payments bridge system, NETC, *99#, etc. The volume of UPI transactions was more than 9.41 billion transactions valuing about Rs. 14.89 trillion were transacted in May 2023 and for the year 2022-23 the total value of UPI transactions was nearly 50% of India's nominal GDP. The digital payments have seen a massive increase from 4.98 billion in 2010-11 to 16.23 billion in 2019-20, in value terms the total value of payments increased from Rs. 96,000 billion in 2010-11 to Rs. 34,35,000 billion in 2019-20. As per Consumer Payments Insight Survey conducted Global Data, a data and analytics company, it was observed that India is one of top markets globally with reference to digital cash adoption of 55.4%, India is followed by China and Denmark, compared to adoption level in India, it is much higher compared to US and UK.RBI had also issued guidelines pertaining to Account Aggregators in 2016 and also regarding Peer to Peer Lending in 2017. The Regulatory Sandbox framework was issued by RBI in Aug 2019, since then five theme based cohorts pertaining to retail payments, cross border payments, SME lending and prevention and mitigation of financial frauds, which were undertaken and fifth cohort is theme neutral. Some of the successful initiatives which have originated from the Regulatory Sandbox include UPI 123 Pay. RBI had also organized Global Hackathon titled HarBInger 2021 for bringing more innovation in retail payments, 363 proposals from 22 countries were received. RBI has set up Reserve Bank Innovation Hub (RBIH). For enabling frictionless credit, in Aug 2023 RBI had announced the launch of Digital Public Tech Platform, which had been conceptualized in coordination with RBIH. RBI has also launched Central Bank Digital Currency pilot project and currently 9 banks are participating in whole sale pilot and 13 banks are participating in retail pilot project. Some of the features that are planned to be introduced in the pilot project include offline functionality, programmability and cross border transactions.

It can also be mentioned that in the G 20 declaration in New Delhi, it has been resolved that access to digital payments and digital infrastructure will be improved and also to leverage digital transformation opportunities for boosting sustainable and inclusive growth. G-20 Policy Recommendations for Advancing Financial Inclusion through Digital Infrastructure were to enable and foster use of DPIs for accelerating financial inclusion, to develop well-designed DPIs through widely accepted good practices and also encouraging risk based regulation, supervision and oversight arrangements for financial sector DPIs and also taking care of consumer interests. It has also been mentioned in the G-20 declaration that G-20 forum welcomes the BIS Innovation Hub report on lessons learnt on CBDCs. One of the key learning which has emerged from the report is that CBDCs with off-line payment functionality could emerge as a powerful payment instrument. This is in consonance with RBI's initiative of allowing off-line payments through UPI 123 Pay which is ultimately beneficial to large segment of population which still does not have access to smart phones.

Digital Lending:

As per BIS data, global credit (Fin Tech and Big Tech) amounted to $ 795 billion in 2019. China, US and UK have emerged as the largest markets for Fin Tech credit, whereas Asia (China, Japan, Korea and Southeast Asia) have emerged as the major center for Big Tech. Digital Lending has shown CAGR of 39.5% over a decade in India. Indian digital lending has received investments in excess of $ 1 billion which is expected to increase to $ 515 billion by 2030. As per an RBI Working Group Report, out of 1,100 digital lending Apps, approx. 600 were illegal loan apps. If a user uses such apps it could collect user's personally identifiable information, financial data and other sensitive details. Subsequently RBI had issued digital lending guidelines in Sept 2022, whereby guidelines regarding customer protection especially from the perspective of data collection were laid down.

Cyber Security and Fin Tech :

With increase in technical innovation, the risks to the financial institutions has increased manifold. Companies in the financial sector and banking sector are prime targets for cyber attacks. In order to address cyber security issues in the banking system, guidelines were issued by RBI in June 2016. Banks were advised to set up a Security Operations Centre for monitoring and managing cyber risks on a real time basis. Banks were further advised to put in place a Cyber Crisis Management Plan. Indian Computer Emergency Response Team (CERT IN) was set up in Jan 2004, as per the IT Amendment Act 2008, CERT-IN was in turn designated as national agency, which is responsible for collection, analysis and dissemination of information on cyber threats. Indian Cyber Crime Coordination Center was set up in 2020 for tackling cyber crimes and also for undertaking effective coordination between Law Enforcement Agencies. Use of personal and sensitive information by FinTechs raises confidentiality concern[3]. In this regard, as per IT Act 2000, guidelines were laid down for compensating a body corporate in case of negligence in handling sensitive personal information or data.

The risks associated with Fin Tech are mentioned are that for regulated entities may face legal, reputational, governance and operational risks in addition to the usual credit, market and liquidity risks, from a customer's perspective, key risks involved are mis-selling, discrimination, data privacy and security and from a regulator's point of view, there are risks with reference to financial stability, market integrity and customer protection.

Fin Tech Experience so far :

As per a World Bank Report in May 2019, several central banks both in the advanced economies and emerging economies are experimenting with CBDCs. Central Banks are also undertaking experimentation with CBDCs, some of the reasons for the same are falling use of cash, in some countries with underdeveloped financial systems, the CBDCs is also seen as a means of furthering financial inclusion. It was also concluded that Fin tech applications and companies are not having a critical mass. Public Authorities especially in EMEs have recognized the constraints such as gaps in legal framework restricting payment systems to only banking sector, infrastructure gaps like limited penetration of broadband and mobile telephony and gaps in digitization of govt. systems e.g. tax records and land records. Fin Tech innovations in the retail sector have combined the features of mobile money with APIs and QR codes. Mobile money has in turn allowed for payment services to be delinked from bank account. There is also

[3] INDIA FINANCE REPORT 2023 CONNECTING THE LAST MILE, it has been mentioned that Digital Lending can aggravate consumer safety related risks since customers share a lot of personal data with the digital loan Apps

increasing trend of third party apps getting access to bank accounts which has led to authentication of consumer details e.g. Aadhar authentication in Indian context. Faster payments have enabled the real time clearing and settlement of payments across different payment providers. A number of countries have implemented faster payments e.g. TIPS in Canada, Euro Area, India, Malaysia, Mexico, Thailand and U.K. and such systems have enabled mobile the money providers, banks and third party applications for providing the real-time payment system services to Individuals, businesses and Govts.

Fin Tech and Financial Inclusion :

It has been estimated that 71% of adults in emerging economies in 2021 compared to 56% in 2011, this increase has been aided by digital push received during the pandemic. Despite this progress, approx. 1.4 billion adults mostly women are financially excluded, MSMEs in emerging market economies face a financing gap of $ 5 trillion. Digital Payment Infrastructures in the form of Application Programming Interfaces can be configured with appropriate channels for reaching the poor. An example in this regard is the e-KYC or remote authentication services. In the Indian context, Aadhar Biometric has covered 1 billion people and supports Application Programming Interfaces which enables remote identification and authentication. Mobile money systems has bridged the gap between financially included and excluded sections of the society, it has been estimated that approx. 1.2 billion adults have been enabled access to financial services during the past decade, with highest progress recorded in Sub-Saharan Africa. Fin Tech Lenders has also eliminated the information asymmetry by extending credit to poor households who would not have obtained credit from the traditional sources of credit i.e. banking sector. Digital Financial Inclusion was successful in mitigating the economic fall-out of the pandemic by enabling fiscal transfers.

Inferences/Suggestions/Conclusion :

Technological innovations have revolutionized the payments systems and financial landscape especially in emerging economies where digital innovations are being used to bridge the banking gap in the form of inadequate bank branch network, capital constraints for putting in place necessary infrastructure for enhancing financial inclusion. However, an important requirement in order to facilitate the Fin Tech adoption is that of extensive and robust internet facility. Although the internet penetration has gone up from 4% in 2007 to 48.7% in 2022, approx. 51% of population still remains deprived of the benefits of the digital innovations. Another important constraint is that of the risk associated with online banking/ financial services. As per data, 7,00,000 complaints of online fraud have been reported in April 2023 itself, Rs. 2.76 billion was the amount involved in debt and card related frauds in 2022-23, it has been further reported that 71,800 cyber crime cases are pending investigation.

Some of the recommendations/suggestions in this regard can be mentioned as under :

i. There is a need for creating awareness regarding electronic banking and risks associated with electronic banking and financial services through online frauds. RBI Regional Offices has been involved in organizing electronic banking and awareness training programmes in various parts of the country and RBI also has been spearheading a digital awareness through print and audio-visual media which was launched in 14 languages. There is a need for undertaking such awareness programmes in a sustained manner with active involvement of Govt. and especially District Administration so that there is spread of awareness at the grassroot level.

ii. There is need to bolster the investment in technological infrastructure, GoI has taken a number of digital initiatives for strengthening digital infrastructure in rural areas such as Bharat Net Project, Telecom Development Plan and initiatives in North – Eastern Region through Comprehensive Telecom Development Plan. Although GoI has been taking such initiatives and undertaking the fiscal burden on this account, Private Sector players can be encouraged as a CSR initiatives to invest in the development of IT infrastructure in the country.

iii. There has been greater international understanding and cooperation between countries in terms of standardization and regulation of digital innovations such as G-20 forum, there is need for enhanced cooperation for the same and also to increase the membership of countries within these forums to enhance the efficacy of the guidelines evolved by them.

iv. In the emerging market economies, there is need for developing technologies for catering to the interests of poor and under privileged segments of the society. An illustration of the same is UPI 123 Pay in the Indian context which is a payment system which is meant for non-smart phone/feature phone which is used for making payment using UPI without internet connectivity. There is need for broad basing of such technologies/ systems.

v. There is need for investment in education, research and development which will provide a base for development of digital technologies. Recently GoI has been approved an $ 255.5 million for improving of technical education and it is expected that this project will support 275 govt. run technical institutions covering 3,50,000 students each year over a period of next five years.

References:

RBI (2005), Payment Systems in India 2005-08

RBI (2017), Press Release – Reserve Bank cautions regarding risk of virtual currencies regarding bitcoins

RBI (2018), Report of the Working Group on Fin Tech and Digital Banking

BIS (2019), BIS to set up Innovation Hub for Central Banks

IMF (2019), Fin Tech : The Experience so far

RBI (2020), Journey in the Second Decade of the Millenium

Economic Times (2020), Article titled 'Reserve Bank to evaluate impact of 'RBI Kehta Hai' campaign'

IMF (2022), Fin Tech and Financial Inclusion : An Overview

RBI (2022), Guidelines on Digital Lending

Jain M.K. (2023), The FinTech Revolution in India- Innovation, Inclusion and Regulation, International Research Conference on FinTech: Innovation, Inclusion, and Regulation jointly organized by the Indian Institute of Management (IIM), Ahmedabad and the Centre for Advanced Financial Research and Learning (CAFRAL) in Ahmedabad

https://www.cert-in.org.in/

https://bfsi.economictimes.indiatimes.com/news/fintech/indias-digital-lending-market-likely-to-grow-515-bn-by-2030-report/101057337

https://www.wionews.com/business-economy/

https://www.worldbank.org/en/news/press-release/2023/06/23/india-world-bank-approves

https://www.thehindubusinessline.com/news/national/

https://www.mea.gov.in/Images/CPV/G20-New-Delhi-Leaders-Declaration.pdf

Awasthy, Misra & Dhal (2023), Cash versus Digital Payment Transactions in India : Decoding the Currency Demand Paradox

Examining Employees' Perception in the Postal Department: A Comprehensive Review

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Abstract

The postal department of India fosters national integration and socio-economic development by acting as a cornerstone of communication, connectivity and commerce. With the changing business scenario, practices of business organization have changed dramatically which ultimately redefines the role of employees. This review study examines employees' perceptions within the postal department, aiming to understand the various factors that influence their perception. Through a comprehensive analysis of existing literature, including empirical studies and theoretical frameworks, the research highlights key determinants such as job satisfaction, workplace culture, reward system, management citizenship, communication, and opportunities for growth. By synthesizing these findings, the study underscores the importance of addressing these factors to enhance employee satisfaction, foster a positive work environment, and ultimately improve organizational performance within the postal sector. This abstract provides valuable insights for postal department managers and policymakers seeking to optimize employee perceptions and improve overall effectiveness in the workplace.

Keywords: *Employees' perception, Engagement, Job satisfaction and Motivation.*

Introduction

The postal department of India fosters national integration and socio-economic development by acting as a cornerstone of communication, connectivity and commerce. The digitalization has changed the traditional functioning of the post department. Due to globalization and liberalization and technology, the workplace policies and administrative governing of postal departments or public departments have changed. With the changing business scenario, practices of business organization have changed dramatically which ultimately redefines the role of employees. In this forced environmental changes, what an employee perceives constitutes an important aspect of their working. Therefore, it becomes imperative to understand the employees'

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perception within the department of posts to ensure continued relevance in serving the nation. The role of employees is pivotal in facilitating financial transactions across rural and urban landscapes. The intricate dynamics has reshaped the attitude and beliefs of employees towards administrative working. As per Ristino& Michalak (2018), it is fundamental for any organization to understand employee perception for their performance enhancement and effective functioning. It becomes more imperative in public sector organizations where citizens' satisfaction is directly impacted by service quality offered by public sector units. Furthermore, employees' perception serves as a barometer for evaluating an organization's adaptability and acceptance for changes. (Weber & Weber, 2001). Against this backdrop, this research endeavors to explore the multifaceted dimensions of employees' perceptions within the Indian Postal Department, considering factors such as job satisfaction, perception towards administrative efficiency, organizational culture, leadership effectiveness, and technological integration.

Research Objective and Methodology

The present study reviews and synthesizes empirical studies assessing various aspects of employees' perceptions within the postal department considering the methodologies employed, trends, gaps, themes, implications of perception on performance and job satisfaction.

The present study adopted observational analysis in which various categories and opportunities are identified from published literature of different journals. Through content analysis techniques, literature was synthesized by accessing academic sites like research gate, google scholar, PubMed, SSRN and ScienceDirect. The studies relating with job satisfaction, management citizenship & continuous improvement, job performance, employee engagement, sustainable employability, employee motivation, value perception and other aspects were analyzed to understand multifaceted perception of postal employees.

Review of Literature

1. Bingham (1997) assessed supervisor and employee evaluations related to their experience with mediation of equal employment opportunity complaints. The study adopted social account and justice theory to analyze that satisfaction of participants with mediation as outcome, was a function of controlled mediation process and opportunity to present ideas, fairness and respectful treatment by the mediator. Further the study elaborated that the speed of mediation, dispute resolve, relative outcome a significant and positive perception for long -term effect satisfaction.
2. Kick et al., (2006) explored worker perceptions towards management citizenship and assessed its impact over worker commitment. In the qualitative data collection process, it was presented that workers perceived performance management practices unjustified and were not in connection with societal and perceived organizational goals. The regression analysis demonstrated that management practices occurred as a result of organizational commitment, workers' perceptions vary as per race, gender and workplace. The study drew general and global implications for management citizenship strategies.

3. Njuguna (2011) determined the perception of employees towards implementing changes in management practices followed within the organization. The descriptive study design presented that a change team, need recognition, good communication, committed planning, training & development, custom norms, organizational structure, formal control environment affected successful implementation of change management. Changes in organization can be better managed by use of technology, managing resistance to change, good management style, resources mobilization and adoption of government regulations. The study concluded that an employee's resistance to change can be overcome by counseling and decision making.

4. Mittal and Ratan (2013) conducted a study to identify the level of job satisfaction among employees working in post offices with regard to HRM practices in three cities of Chandigarh, Panchkula and Mohali. 60 employees of postal rank were drawn conveniently to represent the population. The factors were ordered in satisfaction level as Role and recognition, growth, motivational and reward factor. It was suggested that minimum qualification should be raised at entry level. However, performance evaluation methods, promotion process, recruitment policy and reward system need to be improved for the sustainable growth of post offices.

5. Karimi (2013) examined the impact of communication on motivation of employees working in Kenya postal corporation. The stratified sampling method was adopted to collect the response of 95 postal employees and it was examined that communication acted as a motivating effect on postal employees which further lead satisfaction. Study also highlighted that 34 percent of employees were not satisfied from the channels of communication which negatively affect their working towards targets. The study suggested use of feedback and proper communication channels for a better motivational environment.

6. Thulasipriya (2014) identified the investment pattern of government employees using primary data collection methods collected using questionnaires. The results of the chi-square test showed that employeesof the postal department made maximum investment in saving avenues. Employees of the education department and banking sector reflected significant association for Post Office Saving Schemes. Also, investors who made investment in postal savings, didn't seem to invest in mutual funds, bonds, shares and other investment avenues. The study concluded that risk free return with reasonable returns was the reason not preferring the capital market.

7. Vennam, U. & Prasad, R. (2014) studied the gap between expectations and perceptions of postal assistants regarding quality of training and discovered the factor structure of the training quality to augment skills in four revenue districts of Andhra Pradesh state. The researcher uses SERVQUAL technique to analyze the quality of five dimensions i.e., Job – related knowledge of postal assistant, marketing skills, customer handling skills, job ownership skills and innovative skills. It was analyzed through ANOVA that training parameters need to be focused

and trainers should be careful with the items relating to customer handling skills. The regression analysis presented a strong relationship between happiness level and dimensions of service quality.

8. Mugwe (2014) analyzed the perception of employees towards training and motivation and the effect of value perception, training and staff motivation on performance was investigated with 100 sample employees belonging to four different departments. The descriptive analysis of data presented that independent variables are closely associated with dependent variables and training majorly influenced the achievement of targets. It was also revealed in the study that HRM policies, remuneration levels of staff and strategic levels of HRM positively influence performance targets. The perception of employees towards human resource practices significantly affects their target attainment. The study concluded that training and motivation directly influence the performance target attainment.

9. Gupta and Adhikari (2015) identified the relationship between organizational role stress (ORS) variables and consequences of stress. This study has been carried out in West Bengal by collecting responses of 614 postal employees. The physiological, psychological and behavioral consequences were linked with ORS to understand their correlation. In analysis of interdependence of stress consequences with role variables, it was observed that postal employees were gaining moderate to high levels of role stress. Such role stressors were consequently affecting them on a physiological and behavioral basis. The authors suggested the postal organization tackle such issues for effective working.

10. Ramaswamy and Kothari (2016) studied the level of satisfaction and perception of employees towards their organization, job status and HR practices followed in post offices and analyzed the gap between the same. Multi-stage random sampling technique was used to collect responses from 205 Postal Assistant, Postman and Multitask. Results revealed that a significant relationship existed between the level of perception and satisfaction of employees working in the post office organization. It was suggested in the study that organizations should organize regular checkups and should offer an attractive system of rewards and recognition for the good relations among employees. The study concludes that employees expressed a good level of perception for their Job status, working environment, prevailing conditions and policies of compensation.

11. Otieno (2016) attempted to evaluate the factors affecting work satisfaction of postal employees. The study exhibited a relationship between psychological contract, work motivation, and employee welfare with employee satisfaction as a dependent variable. The study revealed a major influence of psychological contract followed by work motivation and employee welfare. It was suggested that employee involvement, commitment and professional contribution should be enhanced using human resource strategies.

12. Gomathi (2016) analyzed the work value perception of women employees in the Indian postal department. For the purpose of this study, the researcher

collected responses from 500 top, middle and lower-level women postal employees. The study revealed that employees with post-graduation, aged between 19 to 40, one child, income more than 3 lakhs, experience with 3 years or more, worked in top level and earned no promotion had higher levels of value perception. The lower level of value perception was revealed by respondents with under graduation, aged between 41 to 60 years, experience of 20 or more years, income of 50000 or more, working at top level management and had two promotions.

13. Flecker et al., (2016) presented the perception of postal workers affected by liberalization and privatization of public services in Austria, Germany and Switzerland. The fairness of work was examined through three different angles i.e., labor perspective, subject perspective and restructuring. The study highlighted distribution issues of income, working hours, employment security, were addressed by contracts and changed forms of employment. The worse wages and conditions were perceived as degradation of occupation.

14. Anand et al., (2016) studied the association between demographic factors and employee engagement in India Post and to identify factors influencing employee engagement. The analysis of chi-square test and regression shows that emotional energy, learning behavior, discretionary efforts, role clarity, growth and development has significant impact on employee engagement. Individual factors such as Discretionary efforts, role clarity, psychological feeling, emotional energy affect employee engagement positively. The study reported that significant relationships existed among employee engagement and career satisfaction and retention.

15. Akuto (2016) studied the perceived effect of job evaluation on job satisfaction of postal employees. In this descriptive designed study, the researcher through equity and expectancy theory of motivation highlighted the importance of equal remuneration and fulfillment of expectations. The inferential analysis through regression found that deployment system, varied responsibilities, support for additional training and education resulted from job evaluation. The study highlighted that employees were not satisfied from job locations, increase in salary and vocational offers.

16. Watetu (2017) studied the factors affecting employee performance using four variables which were job design, motivation, working conditions and management style. The analysis of statistical data indicated that the four variables had a positive relation with employee performance. Further study highlighted that employees wanted to get recognized by their superiors. Employees were not much encouraged for decision making and not motivated enough. The study suggested that management should involve the staff in the decision-making process.

17. Mokoena & Mbohwa (2017) discussed the perceptions on continuous improvement in postal services. In this primary study, the researcher through techniques analyzed that total involvement, communication, commitment, change management and project arrow like initiatives have had

significant impact on improvement in postal services. Further study elaborated that the use of appropriate technology aided tools, capacitation and empowerment could act as greater opportunity for recovering postal mails.

18. Asienya (2017) studied the relationship between perceived effectiveness and commitment among employees of the postal department. In this cross-sectional descriptive survey, the responses of 161 postal employees were analyzed in linear regression. Significant relationship was reported between performance appraisal and organizational commitment. The researcher suggested that organizations should focus on effective implementation of performance appraisal to improve organizational commitment.

19. Tiwari and Aggarwal (2018) studied about the work efficiency of employees and the impact of postural discomfort on the work performance. In the study the 120 respondents were selected using random and purposive sampling technique in Lucknow city. The collected data was analyzed using descriptive statistics tools like correlation, frequency, percentage and standard deviation. To assess the impact of postal discomfort on the work performance of employees of India Post, two hypotheses were made. The study revealed that no employee made good score in work efficiency. The significant difference was found between the gender and Postural discomfort. It was assessed that postal discomfort affects the performance of the respondents and it varies according to age and gender.

20. Tarekegn (2018) evaluated the determinants of work lives and non-work lives on engagement of employees. A sample size of 276 employees was taken to analyze their perception. The study reported that personal values and growth opportunities determine employee engagement positively and significantly. The individual t test presented positive but insignificant relation with reward & recognition, perceived organizational support, job characteristics and quality of leadership. Similarly, Participative decision-making, organizational justice, religiosity and social obligation has a negative and insignificant impact on employee engagement. Overall employee engagement was found at a moderate level.

21. Strenitzerova & Achimcky (2019) analyzed the employee perspective on satisfaction and identified job attributes and socio-demographics features affecting employee satisfaction. The survey of 1775 questionnaires of employees revealed the prominence of employee satisfaction and loyalty as important concerns for sustainable human resource management. The study presented employer's lack of interest in employee's opinions and inappropriate financial rewards as dissatisfaction among postal employees. The analysis of regression and correlation found that age of employees, regional labor market, job position, and length of employment strongly influence the satisfaction and loyalty of postal employees.

22. Kanda & Bhalla (2021) checked the administrative efficiency aspects of organization from related perspectives. The administrative efficiency of employees was checked in north-western India using primary study in ten years. For analyzing the results, the author proposed

eight propositions for flexibility and HR attributions. For sampling purposes four districts from Punjab, Haryana, Himachal and Delhi were selected. The analysis was performed at three independent stages. The results revealed that post bank, insurance and other indicators had movement because of flexibility. The other five indicators represented movement due to HR attributions.

23. Neupane et al., (2022) studied the indicators of sustainable employability changed over time among older Finnish postal service employees. The nine indicators using three major domains as health, employability and well-being were defined using Fleuren and colleagues' model. Study reported no significant change in eight indicators which were time & resources, work ability, recovery after work, motivation, job satisfaction, on the job training, perceived employability and relevance of work after follow-up of two years. Six indicators had a significant effect on age and employability was sustained throughout. The study suggested age as an important determinant for sustainable employability.

24. Bhuvaneshwari & Tamilarasi (2022) attempted to study the adoption of technology by postal employees along with understanding the problems and satisfaction felt by them while adopting such technology. To analyze the impact of digitalisationon the postal sector, the responses of 260 postal employees were collected in Chengalpattu, Kanchipuram and Chennai districts. In this primary study the analysis of data has been done by performing regression analysis and SEM. It was analyzed that digitalisation has impacted the Postal employees as they find it difficult in adopting technology. Employees were found less satisfied due to lack of proper training, poor infrastructure and connectivity. It was recommended that adequate devices should be used to render uninterrupted services.

Analysis and Interpretations

The study based on conceptual set up of multifaceted perception of employees analyzed the perceptual studies relating with job satisfaction, management citizenship & continuous improvement, job performance, employee engagement, sustainable employability, employee motivation, value perception and other aspects. Further, the study highlighted the factors which directly affect the perception of employees on job satisfaction, management citizenship & continuous improvement, job performance, employee engagement, sustainable employability, employee motivation, value perception and other aspects. The analysis of study is presented through figure given on the next page:

Findings of the Study

1. Employees of the post department perceived that their job satisfaction is subjected to welfare, remuneration, training and development policies of the organization.
2. Perception of employees towards their performance is directly affected by performance appraisal, organizational commitment and HR attributes.
3. Employees perceived sustainable employability through job satisfaction,

Figure-1: Factors Affecting Employees' Perception Within Postal Department.

PERCEPTION OF EMPLOYEES ON:	Factor	Description
	Job Satisfaction	Work motivation, employee welfare, equal remuneration, fulfillment of expectations, adequate trainning, job position, job length, age and labor market, recognition, growth , reward, role and motivation.
	Employee Engagement	Demographic factors, recognition by superiors, personal values and growth opportunities
	Management Citizenship and Continuous Improvement	Race, gender, workplace, total involvement, communication, commitment, change management and project arrow
	Job Performance	HR attributes, flexibility indicator, performance appraisal , organizational commitment and their relation in between.
	Sustainable Employability	Speed of mediation, dispute resolve, relative outcome results, long term satisfaction, time & resources, work ability, recovery after work, motivation, job satisfaction, on the job training, perceived employability and relevance of work after follow up of two years
	Motivation and Value Perception	HRM policies, remuneration and demographic variables
	Other Factors	Other factors reveal that employees perceived postal savings safer, stress leads behavioural changes. Perception of employees towards change implementation is affected by a change team, need recognition, good communication, committed planning, training & development, custom norms, organizational structure, formal control environment.

motivation, dispute resolve and relevance of work.

4. HRM and remuneration policies decided the motivation level and value perception of postal employees.
5. Employees perceive themselves more engaged when they are recognized by their superiors and are provided with growth opportunities.
6. Adequate workplace, commitment, communication, total involvement and change management affects the perception of employees positively towards continuous improvement.
7. Other factors reveal that employees perceive postal savings safer and perception of employees towards change implementation is affected by need recognition, training & development,

custom norms and formal control environment.

Limitations and Future Directions

1. The present study encompassed twenty-four existing studies; its scope was limited to published literature. Future studies could extend the scope by involving more studies to encompass entire spectrum of factors influencing employee perceptions.
2. The quality of included studies varies, potentially impact the reliability of findings. Future researches could incorporate more rigorous quality criteria therefore can enhance methodological rigor.
3. The findings of the study are collected from specific department of posts only, limiting their generalizability to other organizations. Future studies could consider cross sector comparative studies.

Conclusion

In conclusion, this review study sheds light on employees' perceptions within the postal department, highlighting factors that influence their perception towards job satisfaction, motivation, job performance, management citizenship, employee engagement and employability sustainability. By synthesizing findings from various sources, it becomes evident that factors such as workplace culture, recognition, total involvement, custom norms, communication, and opportunities for growth significantly impact employee perception.Based on the findings of the study, policymakers could consider implementing initiatives aimed at enhancing employee engagement and satisfaction within the Indian Postal Department. This could involve providing opportunities for professional development, promoting a culture of recognition and appreciation, and fostering transparent communication channels between management and employees. Understanding and addressing these factors can lead to a more positive work environment, increased employee satisfaction and ultimately improved organizational performance within the postal department.

References

Akuto, D. K. (2016). Perceived Effect of Job Evaluation on Employee Job Satisfaction at Postal Corporation of Kenya in Nairobi County (Doctoral dissertation, University of Nairobi).

Anand, V. V., Banu, C. V., Rengarajan, V., Thirumoorthy, G., Rajkumar, V., & Madhumitha, R. (2016). Employee engagement–A study with special reference to postal employees in rural areas of Thanjavur. Indian Journal of Science and Technology, 9(27), 1-8.

Asienya, L. (2017). Relationship Between Perceived Effectiveness of Performance Appraisal and Commitment Among Employees of Postal Corporation of Kenya (Doctoral dissertation, University of Nairobi).

Bhuvaneshwari, D. & Tamilarasi, S. (2022). Digitalisation and its Impact on Indian Postal Service Sector- A Study Using Structural Equation Modeling. Journal of Positive School Psychology, 6(3), 7930-7937.

Bingham, L. B. (1997). Mediating employment disputes: perceptions of Redress at the United States Postal Service. Review of Public Personnel Administration, 17(2), 20-30.

Flecker, J., Schultheis, F., & Vogel, B. (2016). A 'Problem of fairness' in the making: The transformation of public services from the perspective of postal workers. British Journal of Industrial Relations, 54(4), 768-789.

Gomathi, D. R. K. (2016). A Study on Work value Perceptions of Women Employees in Indian Postal Department with Special Reference to Tamilnadu State. International Journal of Advance Research, Ideas and Innovation in Technology, 2(6), 1-8.

Gupta Sen, R.P. & Adhikari, A. (2015). Relationship between Organizational Role Stress and Stress Consequences- A Study among Postal Employees in West Bengal. Anweshan, 3 (1), 1-16.

Jeske Van Beurden, Karina Van De Voorde& Marc Van Veldhoven (2020): The employee perspective on HR practices: A systematic literature review, integration and outlook, The International Journal of Human Resource Management, DOI: 10.1080/09585192.2020.1759671.

Kanda. R. and Bhalla. G.S. (2021). Administrative Efficiency of Employees of Indian Post Offices: A Case Study on North-Western India. Administrative Development: A Journal of HIPA, Shimla, 8 (1), 103-116.

Karimi, M. J. (2013). The impact of communication on employee motivation in The Kenyan public service: a case study of postal Corporation of Kenya (Doctoral dissertation, University of Nairobi,).

Kick, E. L., Fraser, J. C., & Davis, B. L. (2006). Performance Management, Managerial Citizenship and Worker Commitment: A Study of The United States Postal Service with Some Global Implications. Economic and industrial Democracy, 27(1), 137-172.

Mittal, M., & Rattan, M. (2013). Analysis of Employees' Perception and Job Satisfaction: A study of HRM practices in Post Offices. International Journal of Management & Information Technology, 3 (5), 643-647.

Mokoena, T. J., &Mbohwa, C. Perceptions on Continuous Improvement in Postal Services.

Mugwe, M. (2014). Perceptions of postal corporations of Kenya management level employees on performance targets of 2007–2012 (Doctoral dissertation, University of Nairobi).

Neupane, S., Kyrönlahti, S., KC, P., Siukola, A., Kosonen, H., Lumme-Sandt, K., & Nygård, C. H. (2022). Indicators of Sustainable Employability among Older Finnish Postal Service Employees: A Longitudinal Study of Age and Time Effects. Sustainability, 14(9), 5729.

Otieno, J. F. (2016). Factors influencing satisfaction of management employees in state corporations: a case of postal corporation of Kenya (Doctoral dissertation, Strathmore University).

Ramaswamy, U., & Kothai, K. (2016). Level of Perception and Satisfaction of Indian Postal Employee's–Gap Analysis. Asia Pacific Journal of Research ISSN (Print), 2320, 5504.

Ratković, M., Pavlović, M., & Anđelković, M. (2017). Comparative analysis of customer satisfaction in postal and banking services. International Review, (1-2), 108-120.

Ristino, R. J., & Michalak, J. M. (2018). Employee perceptions of organizational culture's influence on their attitudes and behavior. Journal of East European Management Studies, 23(2), 295-322.

Strenitzerová, M., &Achimský, K. (2019). Employee Satisfaction and Loyalty as a Part of Sustainable Human Resource Management in the Postal Sector. Sustainability, 11(17), 4591.

Tarekegn, T. (2018). Determinants Of Employees Engagement: The Case of Ethiopian Postal Service Enterprise (Doctoral dissertation, St. Mary's University).

Thulasipriya, B. (2014). Investment pattern of government employees-An empirical study. International, Journal on Global Business Management & Research, 3(1), 35.

Tiwari, A., & Agarwal, S. (2018). Corollary of postural discomfort on work efficiency of the employees of the post offices. International Journal of Home Science, 4(3), 96-99.

Vennam, U., & Prasad, R. (2014). Measuring Skill-Gaps of Frontline Employees in Marketing Services by Applying SERVQUAL Tool–A Case Study of North Andhra Post Offices. 1) Implementation of IFRS in India: A Study of Awareness among Practicing Chartered Accountants, 21.

Watetu, J. P. K. (2017). Factors Affecting Employee Performance in an Organization: A Case Study of Postal Corporation of Kenya (Doctoral dissertation, MUA).

Weber, P.S., & Weber, J. E. Weber. “Changes in employee perceptions during organizational change. “Leadership & Organizational Development Journal, 22(6), 291-300.

Human Resource Transaction Management System Security Optimize using Multithreading with Blowfish Algorithm

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Abstract

At the current time designing, developing and viewing latest architectural trends, this paper today's HRMS (Human Resource Management System) applications surrounding transferring data from one location to another are challenging, and doing so with real-time data, minimizing maintenance and keeping data secure is even more difficult. In this article, we will use the Blowfish algorithm with multi-threading technology to solve the latency problem using a distributed data streaming platform. This approach is perfect for everyday life, where each user receives services optimally and safely sends the proposed new-age software services namely SLCMS-Lite for short term courses with diligent market study also trying to capabilities to address the challenge in Cloud environment.

Keywords: *HRMS, Blowfish algorithm, Multithreading, Password hashing and management, Compare and Swap optimization.*

Introduction

Today Human Resource [HR] application around data transmitting from one place to another is challenging and doing this with real-time data is even more difficult to service optimize and secure under Health ERP. In this paper using Blow fish algorithm with multithreading technology we will solve the waiting time using distributed data streaming platform. This approach will be become ideal to daily life where each and every user get services in optimize way with secure direction. It is critical for companies to align their human resources to better achieve their strategic goals. If you don't the duration, assets along with vitality will be wasted. An organization's alignment with its corporate goals can be enhanced by reviewing hiring procedures, communicating mission and vision

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statements, using shared goals, designing effective reward systems, empowering staff, and promoting team development within the organization. HR administration is the management function that helps leaders to plot, pay, recruit, appoint, supervise, grow, pay off and retain the executive members. HR management pursues four objectives: social, organizational, functional and personal development. Organizations must develop policies. It has clear procedures and clear policies for its people, which contribute to the effectiveness, continuity and stability of the organization. HRMS communication utilizing blowfish and multithreading with open space in an optimize the secure communication The optimal secure communication between substances requires a secure method that prevents third parties from spying on them, ensuring they communicate without interference or listening in. Secure communication refers to the methods applied for inurement the truthfulness and its privacy of data transposed between individuals, in such a way that third parties cannot captured what they say. Beyond face-to-face discussions that cannot be listened stealthily, laws, assets, specialized issues (capture attempts and encryption), and sheer volume of communications offer assistance constrain observation. Innovation and its encroachments are at the center of this talk, as many communications take put over long separations and through innovation, and there's a developing mindfulness of the significance of the issue of capture attempts. For this reason, this article centers on communications that are intervened or catching by innovation. See too Trusted Computing. Typically, an approach right now beneath advancement that gives in general security at the potential taken a toll of constrained dependence on businesses and government offices.

After execution of this concept it'll be guarantee to fast communication and diminish holding up time amid surge hours. Too it guarantees an supreme prepare without making client stand in holding up. Concurring to the back staff were posted at the clinic to assist the client get it the steps and benefits of utilizing this benefit. Where imperative part will be play utilize of great adjusting in Blow angle secure innovation and administrations is or maybe straightforward when managing with effortlessly unsurprising workloads and ideally dependable accessible server.

1.1 Blowfish Algorithm

Bruce Schneier's 1993-developed Blowfish is a popular symmetric-key block cipher encryption technique known for its quick encryption and decryption processes. This post explores its major characteristics, encryption process, and Java implementation.

Centre for attraction of Blowfish

Block Cipher: Is a block cipher which encrypts each individual block of sixty-four bits' of plain text.

Symmetric Key Encryption: It encompasses the encryption method using a symmetric key to ensure the same key is used for encryption and decryption, to and fro.

Variable Key Size: It converts the encrypted block in a variable key sizes of up to four hundred forty eight bits, making it more safe than unadventurous encryption practices.

Feistel Cipher: Feistel Cipher structure is used to encrypt the block data and dole out plaintext into two cut up and recursively encrypts each half using mathematical operations.

1.2 Encryption Process

The Blowfish's encryption procedure utilized below mentioned ladders:

- Key Generation: The key expansion algorithm is used for production of encryption key to the original key and generates a series of sub keys.
- Initial Permutation: The first permutation dispatches the 64-bit plaintext.
- Splitting: The -bit block is divided into two half, each having thirty-two bits.
- Rounds: Blowfish is a block game with 16 rounds, each involving a complex sequence of replacements and permutations to both blocks.
- Final Permutation: With completion of sequences of sixteen, a last permutation is applied to the encrypted text after a last sequence.

1.3 Multithreading:

Multithreading is a computer execution method that allows several threads to be created within a process, each of which runs independently yet shares process resources. Threads, depending on the hardware, can execute in perfect parallel if distributed throughout any process.

The major reason for adding threads to a program is to increase performance. Performance can be expressed in a variety of ways:

- Web servers employ many threads to handle data requests concurrently.
- An image analysis algorithm launches multiple threads simultaneously, segmenting a picture into quadrants before applying filtering to the image.
- A ray-tracing program runs many threads to compute visual effects, with the main GUI thread rendering the final results.

Additionally, multithreading optimizes and minimizes the utilization of computer resources. Because requests from one thread do not impede requests from other threads, application responsiveness increases.

The fact that multithreading requires less resource intensity than executing many processes at once should not be overlooked. Compared to establishing and managing threads, creating progressions involves a lot more overhead, time consumption, and regulating..

1.4 Compare-And-Swap optimization

Compare-and-swap could be a method utilized in multithreading to supply non-blocking string security. So distant what we have seen with synchronized and Reentrant Bolt, are the blocking components. This CAS procedure is indeed actualized at the hardware level right into the machine's Instruction Set. For case, within the Intel x-86, it is executed as CMPXCHG (compare-and-exchange) instruction. All the advanced multiprocessor models back CAS in their instruction set. It is the foremost well known primitive for executing non-blocking concurrent collections. Most of the concurrent collections in Java utilize CAS in combination with minimal locking (Lock Striping) to realize a better degree of concurrency. To get it how CAS works, consider our Counter situation, where we have two strings T1 and T2 and both are attempting to increase the esteem of the Counter protest. We know that the increase operation isn't nuclear. It really isolates into three nuclear operations: Perused, Increase, and Type in. And it is at the Type in operation the CAS comes into the picture.

1. My Proposed Work:

My research methods based on multithreading java concept using blowfish algorithm where there is an improvement in the time involvement and security in a group of consumer and application server. Now we'll illustrate a classic interaction between two threads: application server and a Consumer. An application server A thread generates messages and queues them, while a customer declaims and shows the output. For the sake of realism, we set the queue's maximum depth. To make things more interesting, we will also make our consumer thread considerably lazier and slower than the Communication thread. This means that algorithm at application server be able to implement reduce the duration complexity between consumer and application server. Now we'll illustrate a classic interaction between two threads: A application server and a Consumer. An application server thread generates messages and adds them to a queue, which a client may later read and see.

Algorithm

Actual steps Blowfish algorithm using Multithread follows in order to encrypt:

Require: DataSeries: series of data

Require: EN: number of element in the series

Ensure: DataSeries: series of processed data

EN is 64 bits input data

EN is divided into two equal parts en1 and en2

For i=0 to 15 EN1=en1 xor Pi EN2=f(en1) xor en2

// Process optimize using Multithreading concept

```
//*
Function THREADPROCESS (lower, upper, DataSeries, EN)
for i = lower to upper do
 for j = lower + 1 to N do
if (DataSeries[i].P1 R A[j].P1) then .      R is the relation between elements
DataSeries [i].P2 = DataSeries [i].P2 ∪{A[j]}
DataSeries [j].P2 = DataSeries [j].P2 ∪{A[i]}
EN1=en2 xor P18
EN2=en2 xor P17
Combine en1 and en2

 end if
    End for
        End for
            Return DataSeries
                End function
*//
```

For decryption, this process is applied, except that the sub-keys Pi must be provided in opposite direction.

Program Implementation

```
//*
import java.io.UnsupportedEncoding Exception;
import java.nio.charset.Charset;
import java.security.InvalidKeyException;
import java.security.NoSuchAlgorithm Exception;
import java.util.Base64;
```

```
import javax.crypto.BadPaddingException;
import javax.crypto.Cipher;
import javax.crypto.IllegalBlockSize
Exception;
import javax.crypto.NoSuchPadding
Exception;
import javax.crypto.spec.SecretKeySpec;

// Security optimize time
public class BlowfishThread {

   public void run()
  {

public String encrypt(String password, String
key) throws
      NoSuchAlgorithmException, NoSuch
PaddingException,
      InvalidKeyException, IllegalBlockSize
Exception,
      BadPaddingException, Unsupported
EncodingException {
     byte[] KeyData = key.getBytes();
SecretKeySpec KS = new SecretKeySpec
(KeyData, "Blowfish");
Cipher cipher = Cipher.getInstance
("Blowfish");
cipher.init(Cipher.ENCRYPT_MODE, KS);
String encryptedtext = Base64.getEncoder().

encodeToString(cipher.doFinal(password.get
Bytes("UTF-8")));
     return encryptedtext;

  }
   public String decrypt(String encryptedtext,
String key)
          throws NoSuchAlgorithmException,
NoSuchPaddingException,
                 InvalidKeyException,
IllegalBlockSizeException,
             BadPaddingException {
     byte[] KeyData = key.getBytes();
             SecretKeySpec KS = new
SecretKeySpec(KeyData, "Blowfish");
             byte[] ecryptedtexttobytes =
Base64.getDecoder().
             decode(encryptedtext);
             Cipher cipher =
Cipher.getInstance("Blowfish");
     cipher.init(Cipher.DECRYPT_MODE, KS);
             byte[] decrypted =
cipher.doFinal(ecryptedtexttobytes);
     String decryptedString =
                  new String(decrypted,
Charset.forName("UTF-8"));
     return decryptedString;

   }

     try {

     }
     catch (Exception e) {
       // Throwing an exception
             System.out.println("Exception is
caught");
     }
   }

   public static void main(String[] args) throws
```

```
Exception {

BlowfishThread obj=new BlowfishThread ();
Thread t =new Thread (obj);
final String password = "Cdac@123";
      final String key = "cdac12345";
                System.out.println("Password: " + password);
                   BlowfishDemo obj = new BlowfishDemo();
                   String enc_output = obj.encrypt(password, key);
            System.out.println("Encrypted text: " + enc_output);
                   String dec_output = obj.decrypt(enc_output, key);
            System.out.println("Decrypted text: " + dec_output);
      t.start();
   }
}
}
*//
```

Output:

Password: KKTr@123
Encrypted text: 4DTHqnctCuk=
Decrypted text: KKTr@123

The research' applications results show that the suggested Multithreading Blowfish algorithm has the following advantages over the current Blowfish algorithm:

- The first The benefit is the identical input is converted to encrypted text, significantly improving the ideal time security feature. This is because a different random number is generated in each round, which causes variations in the multithreading blow-fish algorithm function's performance.
- The second major benefit is that it takes less time than Blowfish algorithm because the Multithreading parallel processing is used.
- 3rd advantage is higher throughput.
- 4th advantage is high security metric.
- 5th advantage is Avalanche value.
- 6th advantage is high efficiency.
- 7th advantage is high throughput.
- 8th advantage is higher efficiency.

In nutshell Blowfish algorithm with multithreading is much more efficient compared to blowfish algorithm. The above results clearly show that blowfish algorithm with multipronged reading is more efficient than blowfish algorithm in terms of encryption time, decryption time, throughput, Avalanche effect, and Power consumption. Blowfish Multithreading algorithm can be used on consumer electronic devices like personal digital assistants (PDAs) and smart phones, which consume less memory and consume less power. It can be used on personal database programs and can be used to encrypt in removable media. It can be used for clinical data collection and biometrics such as voice, facial, or finger print authentication. This study can be extended further with optimization techniques that have high potential.

1. Conclusion

Conclusion the Blowfish Algorithm with multithreading was thoroughly studied. The algorithm was implemented as a software application using Java. The software application demonstrated the encryption and decryption processes successfully.

After implementation of this concept it will be ensure to quick communication and reduce waiting time during rush hours. Also it ensures an absolute process without making client stand in waiting. According to the support personnel were posted at the organization to help the HRMS User understand the steps and benefits of using this service. Where important role will be play use of good balancing in Blow fish secure technology and services is rather simple when dealing with easily predictable workloads and ideally reliable available server.

References

Dr. Madhurendra Kumar,"Cloud computing Network Problem and Storage solutions Using Ant colony optimization" International Journal of Scientific & Engineering Research Volume 7, Issue 12, December-2016, ISSN 2229-5518

Dorigo M. and Blum C., "Ant Colony Optimization Theory: A Survey," in Theoretical Computer Science, vol. 344, no. 2, pp. 243-278, 2005.

Dorigo M., Birattari M., and Stutzel T., "Ant Colony Optimization," IEEE Computational Intelligence Magazine, vol. 1, no. 4, pp. 28-39, 2006.

Fangzhe C., Ren J., and Viswanathan R., "Optimal Resource Allocation in Clouds," in Proceedings of the 3rd International Conference on Cloud Computing, Florida, USA, pp. 418- 425, 2010.

Gao K., Wang Q., and Xi L., "Reduct Algorithm Based Execution Times Prediction in Knowledge Discovery Cloud Computing Environment," the International Arab Journal of Information Technology, vol. 11, no. 3, pp. 268- 275, 2014.

Gao Y., Guan H., Qi Z., Hou Y., and Liu L., "A Multi-Objective Ant Colony System Algorithm for Virtual Machine Placement in Cloud Computing," Journal of Computer and System Sciences, vol. 79, no. 8, pp. 1230-1242, 2013.

R. Buyya and M. Murshed. GridSim: A Toolkit for the Modeling and Simulation of Distributed Resource Management and Scheduling for Grid Computing. Concurrency and Computation: Practice and Experience, 14(13-15), Wiley Press, Nov.-Dec., 2002.

Ghalem B., Tayeb F., and Zaoui W.,"Approaches to Improve the Resources Management in the Simulator Cloudism," in Proceedings of the Conference on Interaction and Confidence Building Measures in Asia, Lecture Notes in Computer Science, Istanbul, Turkey, pp. 189-196, 2010.

Hsu C. and Chen T., "Adaptive Scheduling Based on Quality of Service in Heterogeneous Environments," in Proceedings of the IEEE International Conference on Multimedia and Ubiquitous Engineering, California, USA, pp. 1-6, 2010.

Ijaz S., Munir E., Anwar W., and Nasir W.,"Efficient Scheduling Strategy for Task Graphs in Heterogeneous Computing Environment," the International Arab Journal of Information Technology, vol 10, no. 5, pp. 486-492, 2013.

Kessaci Y., Melab N., and Talbi E., "A Pareto-Based GA for Scheduling HPC Applications on Distributed Cloud Infrastructures," in Proceedings of the IEEE International Conference on High Performance Computing and Simulation, Istanbul, Turkey, pp. 456-462, 2011

Bancassurance Business in India: Reviews from the Perception of Bank Employees

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Abstract

Over the past one decade, financial market of India has witnessed a remarkable change in banking and insurance sector. The insurance company sells insurance related products with the help of bank sales channel. When these two big financial institutions join together with a mutual purpose, it gives birth to "Bancassurance". The success of bancassurance business hinges on the employees' attitude who executes bancassurance practices in banks. The purpose of the study is to provide better insights of the employees' perspective on bancassurance.The study reviewed various research papers taken from relevant research databases. Further, study explains the analysis of employee's perspective under three dimensions i.e. motivating factors of bancassurance, perceived benefits of bancassurance and problems of bancassurance. The results of the study revealed that positive perception of employees plays a vital role in success of bancassurance and enhances the excellent customer's relationship.

Introduction

In any modern economy, the banking sector is considered as an important financial pillar of the economy. Various entities and commercial banks in financial sector have adopted portfolio diversification as a means of enhancing their overall financial performance (Chepkori & Mugo, 2018). The customers of banks now a day are getting more sophisticated in their financial needs and lays greater emphasis on single provider for all financial products. For customer retention, it is therefore imperative for the Indian banks to include insurance in the product offering. On one hand, it is the banking sector which is highly competitive and on the other hand the insurance sector which has a lot of potential for growth. The combination of these two sectors results in an innovative concept of "BANCASSURANCE". Bancassurance is a French term that referring to the selling of insurance products through a bank's established distribution channel (Kumaraswamy, 2012). The success of bancassurance hinges on the employees'

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attitude who executes bancassurance practices in banks. Behavior of staff supposed to be determined the behavior of customers. A customer of bancassurance will neither get motivated if the employees don't act in desired direction. Thus positive perception of employees plays a vital role in success of bancassurance and enchases the excellent customer's relationship. The digital era brought about significant changes. Overall, the evolution of bancassurance enhances operational efficiency and customer experience by creating a connected ecosystem between banking and insurance services. The evolution of bancassurance summarized through several key stages:

Stage 1 (1980's): In this phase banks sold insurance products through bank branches. It facilitates personal consultations.

Stage 2 (2000's): In this phase bank distribute insurance products online, ensuring secure online environment and addressing privacy concerns.

Stage 3 (2010's): In this phase insurance products offered with mobile banking app.

Stage 4 (2020's): In this period Application Programming Interface enables third party developers to incorporate insurance services to their applications.

Source: Bakker et al., 2021

Research Methodology

Content Analysis method is followed for review of literature. It is an observational research which helps to identify the literature in terms of various categories and create research opportunities. The reviews include the published papers in various journals and thesis of different universities. Different academic sites like Sci hub, Google scholar, Research gate and Shodhganga were explored to have more access to the literature on Employees perspective on Bancassurance.

Literature Review

1. Karunagaran (2006) highlighted the scope of bancassurance as a feasible strategy of sustainable income to banking

sector in India. The study also highlighted some issues in general as well as specific from the point of supervisor and regulator. The study revealed that success of bancassurance hinges on banks that required excellent customer relationship. It was recommended that clear identification of activities between banks & insurance at the institution's level and adequate training could avert the banks' staff resistance that would be proved a win-win situation for parties' involved.- banks, insurance companies and customers.

2. Agrawal & Hajela (2012) in the study 'Bancassurance -A Challenging Convergence in Indian Prospective' observed bank employees are usually over-burdened due to work load itself and they are not much interested to participate in selling and promoting insurance products. The financial benefits and commission do not come directly to the employees' pocket. Therefore interest of selling insurance is automatically lost.

3. Grover (2014)explored the bankers and customers perspectives on bancassurance in Punjab. Primary data was collected from 551 customers and from 184 bank employees of from three cities of Punjab. It was also found that perceived benefits from Bancassurance affect significantly the banker's desire to initiate Bancassurance in Punjab. Employees also faced various problems in implementation of Bancassurance practices.

4. Satsangi (2014) studied on effectiveness of bancassurance as a distribution channel. Data was collected from 200 policyholders, 25 banks and from 20 insurance company managers of Agra district. The study explored effectiveness of bancassurance on three factors i.e. motivating factors, benefits and implementation problems of bancassurance. It was found that fee based income, effective utilization of the resource and improved profit margins, were motivated factors for banks to enter into bancassurance. The study concluded that private sector banks and insurers performed more effectively as compared to public sector banks and insurers.

5. Aravind (2015) examined the opportunities and challenges of bancassurance in Kerala. This study conducted two surveys i.e. one among bank managers and other among customers. The sample size consisted of 534 bank managers and 400 bancassurance customers. Study examined the perception of manager towards bancassurance. It is revealed that main opportunity of bancassurance business was generation of fee income for banks but the main problem was uncertain value of the market linked policies. It was suggested that some measures related to marketing, HR, technology and operations should be improved and banks should periodically examined the performance of bancassurance channel in branches.

6. Popli & Popli (2015) highlighted the Opportunities, Challenges and Problems of bancassurance business in India. Primary data covered 75 bank officials, 75 bank customers, 75 insurance officials and 25 Govt. officials of Delhi. Two different questionnaires were developed i.e. one for officials and another for bank customers. It was observed that banks and insurance companies' employees had

faced various problems in their tie ups. The study suggested that to ensure smooth working environment, banks and insurers should try to resolve these issues.

7. Dharamarajan (2017) in his doctoral work analyzed the perception of bank Manager towards bancassurance. Data was collected from 141 managers of five banks (two public sector and three private sector) in Tamilnadu. The element insurers support, perceived benefits, management commitment, support systems, training and development and customer focus had analyzed. The results revealed that the banks are proactive towards implementation of bancassurance practices due to attention and commitment is extended by top management.

8. Ranganath & Rao (2017) conducted the study on performance of bancassurance from Bankers Perspective. Primary data was collected Srikakulam District through judgmental sampling technique. The study explored that key success factors of bancassurance are regulations/tax, banking network, consumer habits, and managements. It was found that overall efficiency of banks regarding insurance policies depends on these factors and all the factors positively influence the effectiveness of bancassurance.

9. Thiruvenatraj & Ramya (2017) studied on employee's perception towards bancassurance. The study explains the different factors that influence the employee's perception. It is found that different problems like rigid rules & regulations and undefined goals affected the employee's performance. The study suggested that training programmes should introduce to further development of bancassurance business.

10. Bansal& Anil (2018) conducted research to study the issues and trends of bancassurance business in India. Data collected through 14 qualitative interviews from experienced top banking officials who were experts in Bancassurance business. The study finds out the various issues and challenges faced by bank staff. The major issues and challenges that banks face includes lack of trust, competition, long term vision, lack of awareness and complications of multiple tie-ups. The study concluded that success of this business is dependent upon the integration of bank's long term programmes with insurance partner.

11. Chepkorir&Mugo (2018) explored the influence of bancassurance on financial performance of commercial banks in Kenya. The study targeted the 11 commercial banks and data was collected from 55 head portfolio managers. It was found that bancassurance had a weak correlation with financial performance. The study recommended that the more studies need to be undertaken to ascertain whether fee based income increases due to the adoption bancassurance product, whether selling through the banks enhance portfolio performance and promotes bank's efficiency and whether selling through bank increase bank's commission income, non interest income and shareholders' value.

12. Gujral (2018) assessed the Development of bancassurance in India. Primary data was taken from 115 customers and 30 employees of eight different banks in Vadodara district. The study analyzed the response of employees for examine whether bancassurance increased the

productivity of the banks. It revealed that majority of the employees consented that bancassurance increased the productivity of the banks. The study concluded that success of this business depends on how well insurers and banks understand each other.

13. Joshi (2019) conducted the study on perception among employees of banks towards the bancassurance in Nepal. Quantitative data was collected from 100 employees of 20 commercial banks. Data analyzed with descriptive as well as inferential statistics (correlation and regression). The study explored the perception of employees which categorized under awareness, tools used to make aware, contributing factor on success of bancassurance and type of insurance product sold by banks. Study concluded that major factors that affect the bancassurance status were design of product and brand image. Awareness of retail banking and distribution channel not affects the status of Bancassurance in Nepal.

14. Kumar & Giridhar (2019) highlighted the various problems faced by employees in selling insurance product. For this purpose data was collected from 40 employees. It was revealed that respondents consider less faith in banks is the main problem in selling insurance products. The study suggested that employee should undergo frequent training to understand the specialized products. Regular products should be customized to meet the customer's requirements.

15. Pius (2019) studied the employee's perception towards bancassurance in Ernakulam of Karela state. For this purpose data was collected from 60 employees. Findings of the study revealed that bancassurance helps the employees in increasing their productivity but the major problem faced by employees is poor customer response, poor returns and over workload. The study suggested that banks should take consideration to control workload of employees and rewards should introduced for motivates the employees for further increase the sale of bancassurance.

16. Darak (2020) conducted his doctoral work on SBI's Performance of bancassurance. For this purpose 80 rural and 80 urban branches 8 districts of Marathwada Region of Maharashtra State were selected. Data was collected from 800 customers and 480 bank employees. Study stated that Bancassurance segment of SBI created some problems to the employees these included problems related with human Resources, infrastructure work Environment, marketing and training. It is recommended that the Banks should make an arrangement to appoint 'Relationship Manager' to develop the good relations with the customers.

17. Ghazaryan (2020) explained the motivated factors of bancassurance striving for a sustainable future. The study revealed that bank's motivations included diversification of revenues, different product and services, strengthening the interaction between customer and bank, Commission, competitive advantage, maintenance of banking branches and increasing employee competencies. The study concluded that bancassurance was strategic form of alliance for insurance company and banks, as it helped to maintain competitive advantage and strive for a sustainable future.

18. Kalaivani & Karunanithi (2020) highlighted the banker's opinion towards marketing practices of LIC products through bancassurance channel. The primary data were collected from 200 bankers of Madurai division. The study explored the thirteen different statements that influence the bank manager towards bancassurance which shows that for public sector manager, most influence factor was marketing expertise of bank and for private banks indispensable product based services. Study concluded that bankers have good opinion about the performance of bancassurance business.

19. Mishra & Pradhan (2022) investigated the perception of bankers and customers towards bancassurance. Primary data was consisted 50 customers and 50 employees of SBI, Canara, PNB and Indian bank. It is concluded that Canara bank has high level of attitude towards bancassurance and display material in branches have most effective way to spread the information regarding bancassurance products among customers.

20. Nanda (2023) explored the perception of bank employees towards bancassurance. For this purpose data was collected from 200 employees of SBI and ICICI bank. The objectives of the paper was to identify the factors influence the perception of bank employees, assess the knowledge level of employees towards products and examine the challenges and opportunities faced by employees on sale of insurance products. The study concluded that employees have positive perception towards bancassurance but they face number of problems such as lack of training, regulatory compliance and competition from other distribution channels.

Theoretical Perspectives of Employee's Perception towards Bancassurance

The perception of bank employees towards bancassurance can vary. Some may see it as a valuable opportunity to enhance customer relationships and increase revenue while others might view it as a distraction from their core banking responsibilities. The motivation to sale a product is highly associated with the benefits and perks associated with the sale of product. In contrast, the motivation is adversely affected by the problems attached in selling products. Factors like motivation, perceived benefits and problems identify from the different literature that influence the employee's perception. These are given on the next page:

Suggestions and Policy Implications of the Study

Bancassurance channel is growing through various tie-ups between banks and insurance companies, but the pace of growth is considered to be slow in India. Here, an attempt is made to suggest some measures to improve performance of the bancassurance channel. These are explains below:

1. Bank officials should concentrate on providing quality insurance service after evaluating the attitude, habit and requirement of the customers.
2. Separate bancassurance officer should be appointed in the branch for dealing with the distribution and promotion of insurance policies so that the performance of bancassurance business can be further improved.
3. Banks should adopt direct marketing mediums such as communication through emails, telephone, SMS, customer newsletters, inserts with credit card billing

MOTIVATIONAL FACTORS Kalaivani & Karunanithi, 2020; Mishra & Pradhan, 2022; Kumari & Giridhar, 2019; Satsangi , 2014; Aravind, 2015; Ghazaryan, 2020; Grover, 2014; Ranganath & Rao, 2017.	• More financial services under one roof • Marketing expertise of bank staff • Sales oriented culture • Availability of Huge customer database • Reliable and Trustworthy image of the bank • Product diversification • Risk free income for banks • Less requirement of additional capital • Already existing marketing and processing Capabilities • Employees Familiar with financial language and terminology
PERCEIVED BENEFITS Kumari & Giridhar, 2019; Dharamarajan, 2017; Satsangi, 2014; Aravind, 2015; Mishra, 2012; Popli & Popli, 2015; Grover, 2014.	• Service synergies • Cost saving due to efficient utilization of databases • Improve customer retention • New way of generating fee income • Increases the productivity of employees • Increase in the size of market • Bancassurance increases brand visibility of bank • Increase in return on assets • Reduction on reliance on traditional products • Diversion of surplus work force
PROBLEMS Nanda & Bhol, 2023; Kumari & Giridhar, 2019; Satsangi, 2014; Aravind, 2015; Mishra, 2012; Popli & Popli, 2015; Bansal & Anil, 2018; Grover, 2014; Darak, 2020; Pius, 2019; Agrawal & Hajela, 2012.	• Absence of posters and communication on Bancassurance • Dual regulation of banks and insurance companies is a great challenge for Bancassurance • Difficult to find potential customers from huge number of bank customers • Insurance marketing mainly depends on personal relationship with customers which is very difficult in banks • No sharing of commission as incentives to bankers • Banks have agreement with one or two insurance companies leads to frustration among employees • Bank staff is not getting sufficient training about education for dealing with insurance products • Value of market linked insurance policies depends on market, which may adversely affect customer satisfaction • Difficulty in maintaining the same level of technical standard as that of insurance company • Lack of Involvement of top management

Source: Deshmukh, 2021

and indirect marketing mediums such as print media, banners, posters, hoardings, press releases and announcements.

4. Banks should devise policies to offer attractive incentive remuneration packages to bank staffs involved in cross selling of insurance products.
5. Banks should periodically evaluate the performance of bancassurance business in the branches.

The analysis reveals number of theoretical reasons as to why banks should enter into the insurance market in India. It is seen from above discussion that Bancassurance seems lucrative to banks because it is a source of additional income and keeps on yielding in form of commission. But to implement Bancassurance properly they are still facing problems. Therefore, study provides valuable suggestions to overcome these problems.

Limitations of the Study and Future Prospects in the Field

1) The study is conducted by analysing the perception of bank employees only. Another possibility is the comparing the perspective of insurance companies on insurance products.
2) The views of customers are also play a vital role in the success of Bancassurance business, are not surveyed. Future studies may analyse the perception of customers towards Bancassurance business.
3) The review based study may be susceptible to publication bias, as it relies solely on published literature. However information collected by conducting primary survey will provides more meaningful results.

Conclusion

Indian insurance companies are looking for the competitive advantage based on key success indicators in related to technology, distribution channels, distribution marketing etc. to create a sustainable business model. Hence "Bancassurance" model is suited model to make money. The success of bancassurance business hinges on the employees' attitude who executes bancassurance practices in banks. Behavior of staff supposed to be determined the behavior of customers. A customer of bancassurance will neither satisfied and get motivated if the employees doesn't act in desired direction i.e., employees must be inclined/motivated to salepolicies of insurance. So there should be proper policy implementation and incentives designed for the further growth of bancassurance. Additionally, employees should be educated on risk management and compliance to navigate the complexities of insurance services within a banking context. Ongoing training to stay updated with industry trends is crucial for the success of bancassurance initiatives.

References

Agrawal, R., & Hajela, A. (2012). Bancassurance- A challenging convergence in India prospective. International Journal of Research in IT, Management and Engineering, 1(4), 21-32.

Aravind, J. (2015). Opportunities and challenges of Bancassurance in Kerela. PhD thesis submitted in Research and Post Graduate Department of Commerce in Mahatma Gandhi University.

Bakker, M., Kroon, M., Cortet, M., & Rijke, V. (2021). Bancassurance 4.0: Open Banking APIs as a new growth engine. Retrieved from https://www.innopay.com

Bansal, J., & Anil, K. (2018). Qualitative Research on Issues and Trends in the Bancassurance Model in India: An Interview Report. International Journal of Banking, Risk and Insurance, 6(2), 67-78.

Chepkorir, A. & Mugo, R. (2018). Influence of Bancassurance on Financial Performance of Commercial Banks Listed on Nairobi Securities Exchange. International Journal of Business Management and Processes, 3(3), 01-06.

Darak, R. K. (2020). A Study of Performance of Bancassurance – A Case Study of State Bank of India. PhD thesis submitted in Department of commerce in Swami Ramanand Teerth Marathwada University, Nanded.

Deshmukh, A. (2021). Leadership strategies to grow the Bancassurance channel. Retrieved from https://learnsure.ai

Dharmarajan, S. (2017). Perception of Bank Managers and Customers on Bancassurance A study of selected Banks in Tamil Nadu. PhD thesis submitted in Jawaharlal Nehru technological University, Hydrabad.

Grazaryan, A. (2020). Motivations for Bancassurance: how do alliances between banks and insurers contribute to their sustainable future?

Grover, N. & Bhalla, G. S. (2013). Level of Awareness Regarding Bancassurance and Choice of Insurance Product among Bank Customers in India. Eurasian Journal of Business and Economics, 6(12), 63-77.

Gujral, T.M. (2018). Contemporary prominent development of Bancassurance in India. International Journal of Multidisciplinary Research Review, 3(10), 731-738.

Joshi, U. (2019). Perception among employees of banks towards the Bancassurance in Nepal. Nepalese Journal of Insurance and Social Security, 2(2), 71-80.

Kalaivani, N. & Karunanithi, G. (2020).Banker's opinion towards marketing practices of LIC products through Bancassurance channel in Madurai division. Studies in Indian Place Names, 40 (13), 1539-1548.

Karunagaran, A. (2006). Bancassurance: A Feasible Strategy for Banks in India. Reserve Bank of India Occasional Papers, 27(3), 125-162.

Kumara, N. & Giridhar, K.V. (2019). Bancassurance- A New Avenue for Indian Banks. International Journal of research in Engineering, IT and Social Sciences, 9(6), 60-65

Kumaraswamy, S. (2012). Bancassurance: Tapping of Insurance into Banking Pursuit. International Journal of Scientific and Research Publications, 2(7).

Mishra, B. & Pradhan, K. (2022). Bancassurance changing dimensions of Banker's and Customer's Perception. Journal of Research in Business and Management, 10(9), 48-64.

Nanda, S. & Bhol, B.P. (2023). Perception of Bank employees towards Bancassurance in India. International Journal of Multi-disciplinary Education Research, 12(9), 161-170.

Pius, A. (2019). A study on Bank employee perception to Bancassurance. International Journal of Management and Commerce Innovations, 7(1), 309-313.

Popli, G. & Popli, R. (2015). Bancassurance business Opportunities, Problems and Challenges in India. Banking & Insurance e journal.

Rachna, A. & Anubhuti, H. (2012). Bancassurance - A Challenging Convergence in Indian Perspective, IJRIME, 1(4), 21-31.

Ranganath, N., & Rao, G. (2017). Performance evaluation of Bancassurance– An empirical study on Bankers' perspective. Global Journal of Business Management, 11(1), 1-8.

Satsangi, R. (2014). An analysis of effectiveness of Bancassurance as a distribution Channel in India. Delhi Business Review, 15(1).

Thiruvenkatraj, T.R. & Ramya, T. (2017). Employee Perception. International Journal of research trend and innovation, 2(6), 348-351.

Default Risk Prediction in Firms via Statistical Techniques – A Review

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Abstract

The current study presents the literature review of default risk prediction studies for the period 1930-2022. The rising corporate default is a reason of concern for banks and companies. It has particularly attracted the attention of researchers since the global crisis of 2008-09. The review is based on statistical techniques including discriminant analysis, multiple discriminant analysis, logistic regression, conditional logistic regression and probit regression. The review targets the following aspects of the studies: country origin, period of study, financial indicators used and accuracy of results. Analysis of review depicts that logistic regression (LR) is the most applied technique among statistical techniques to predict corporate failure. However, focus has now been shifting to intelligent techniques in 21st century.

Keywords: *Classroom Incivility, Uncivil Behaviour, Student Incivility, Bibliometric Analysis*

Introduction

Prediction of financial health is an important function of business firms. Prediction of corporate failure in advance can help in avoiding bankruptcy situations for a firm. It is a situation where a firm fails to fulfill its financial obligations (Altman, 1968). The situation of business failure has extremely negative consequences for stakeholders. For instance, the collapse of General Motors in 2009 severely affected its employees who were laid off due to this failure. The contagious effects of corporate failure attracted the attention of researchers to come up with mechanisms that can predict default risk before it moves to the insolvency stage.

The literature has provided various default forecasting models to predict corporate failure in real-time before it becomes bankrupt. The correct classification by models between firms that go bankrupt and firms that remain insolvent is considered to be an important achievement of modern finance (Scott, 1981). There has been a significant improvement in default risk literature since the formal univariate studies in the 1930s. This paper will

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cover the review of those research papers where bankruptcy prediction models were developed utilizing statistical techniques during the period 1930-2022. The main objective of this paper is to draw the attention of researchers towards this interesting research problem of failure prediction that will enrich the default risk literature by providing solutions to problems faced by banks and financial institutions.

The study is useful for researchers who are working on developing the default prediction models by providing evidence about the statistical technique that produces the most accurate results. Secondly, it contributes to the literature on accounting and finance by demonstrating the country producing the maximum number of default prediction studies. The current review covers the following aspects in upcoming sections: (i) it mainly focuses on statistical techniques. (ii) It gives a summary of how default prediction models have evolved in nine decades. (iii) It will provide a base to pursue further research work in this study area.

Review Methodology

Bankruptcy prediction models are developed by applying two types of techniques: (a) Statistical techniques and (b) Intelligent techniques. The scope of this review is limited to statistical techniques only. The current review has summarized the bankruptcy prediction work done in the last nine decades The methods covered under statistical techniques are (i) Multiple discriminant analysis, (ii) logistic regression, (iii) conditional logistic regression and (iv) probit regression. The study also covers the comparison between statistical and intelligent techniques. Further, the review covers the following characteristics, namely, the time period of the study, sources of data, country of origin, various financial indicators used to predict corporate default, and the results obtained for the review studies. Table 1 presents the details for all papers such as (i) number of ratios considered, (ii) source of data, (iii) time period of the sample, (iv) country of origin, (v) technique applied in the study, (vi) model accuracy.

Summary of bankruptcy prediction studies: 1930 to 2022

The former studies related to default prediction were based on univariate analysis where a single ratio was used to discriminate between a distressed and non-distressed firm. The literature demonstrated that there was a significant difference between the mean ratio characteristics of default and non-default firms. The significance of univariate analysis in corporate default prediction was formally witnessed in the study of Beaver (1966). The results indicated that net profit to total debt had the highest prediction accuracy of 92 percent for one year before default. The first study using multiple ratios, namely, profitability, leverage, solvency, liquidity and activity ratios was conducted on US-based firms by applying multiple discriminant analysis (Altman, 1968). It is one of the most highly used and cited default prediction models in accounting literature with prediction accuracy of 95 percent one year before default. Deakin (1972) found that discriminant analysis had a high predictive capability and was a reliable measure of prediction for at least three years in advance.

Ohlson (1980) later applied logistic regression to overcome the difficulties related to discriminant analysis. The results indicated nine financial ratios to be significant contributors to default prediction. Scott

Table 1: Brief review of some related articles

	Author's Name and Year of Publication	Country of Origin	Samples	Techniques Used / Independent Variables (Financial Ratios)	Sample Period	Model Accuracy
[1][1]	Altman (1968)	USA	66	MDA / 5	1946-65	For initial sample 95% for one year prior to bankruptcy
[2]	Aggarwal (2019)	INDIA	270	MDA, Logistic Regression/ 1	2000-12	Estimated sample Hold out Sample LR 81.7% 65.6% MDA 80% 63.3%
[3]	Bandopadhyay (2006)	INDIA	104	MDA, Logistic Regression/ 5	1998-03	MDA- 91%
[4][2]	Beaver (1966)	USA	158	UA / 30	-	Model accuracy: 50% to 92%
[5]	Bhunia And Sarkar (2011)	INDIA	64	MDA / 16	1996-05	Model accuracy: 86-96% for each of 5 years prior to failure
[6]	Chen (2011)	TAIWAN	240	LDA, LR, C5.0, CART,SVM, DTC / 8	2000-08	SVM had the highest accuracy with 86.79% level
[7]	Deakin (1972)	USA	-	MDA / 14	1969-75	Model accuracy: For failed Firms (1 year prior to failure)- 77% For non-failed firms (1 year prior to failure) - 82%
[8]	Doumpos and Zopounidis (1999)	Greece	118	M.H. DIS, DA, LOGIT / 8	1986-90, 1988-92	
[10]	Jo, Han and Lee (1997)	Korea	544	MDA, NN, CBF / 61	1991-93	Average accuracy of three models- 81.5 to 83.8%
[11]	Jones & Hensher (2004)	Australia	6241	Mixed Logit Model,MNL / 7	1996-2000	Mixed Logit- 98.73%, MNL- 90%
[13]	Karels and Prakash (1987)	-	14 in 1972, 11 in 1976	MDA / 5	1972,76	Bankrupt firms- 54.5% Non-bankrupt firms- 96.0%
[14][3]	Kim (2011)	Korea	33	Logistic Regression, SVM, ANN, MDA / 17	1995-02	MDA- 72.6%, LR- 80.00%, ANN- 91.6%, SVM- 95.95%
[15]	Lee and Choi (2013)	Korea	229	BNN, MDA / 6	2000-09	For general model- BNN- 81.43%, MDA- 74.82
[16]	Lennox (1999)	UK	949	Probit / 9	1987-94	
[17]	MatusMihalovic (2016)	SLOVAK REPUBLIC	236	DA, Logistic Regression/ 5	2014	Training Data Test Data Discriminant Function 61.86% 64.41% Logit Function 73.73% 68.64%

[19]	Ohlson (1980)	USA	2163	Logistic / 9	1970-76	For 1 Year prior to bankruptcy Model 1 Model 2 Model 3 96.12% 95.55% 92.84%
[21]	Shumway (2001)	USA	300	Hazard / 13	1962-92	Hazard model outperformed all other statistical models
[22]	Singh And Mishra (2016)	INDIA	208	MDA, LOGIT, PROBIT / 4	2006-14	Re-estimated model accuracy Altman- 96.923 Ohlson- 95.938 Zmijewsiki- 89.231
[24]	Wu, Liang and Yang (2008)	Taiwan	48	BPNN, MDA / 7	1998-02	BPNN- 81.25% MDA- 48%
[25]	Zmijewsiki (1984)	USA	1681	Probit / 6	1972-78	Bankrupt firms- 20%, Non-Bankrupt firms- 99.5%

[1]MDA- Multiple Discriminant Analysis; LR- Logistic Regression

[2]UA- Univariate Analysis; LDA- Linear Discriminant Analysis; LR- Logistic Regression; SVM- Support Vector Machine; DTC- Decision Tree Classification; CBF- Case Based Forecasting; MNL-Multinominal Logit; MDA- Multiple Discriminant Analysis; '-' :Indicates Data Not Available

[3]LR- Logistic Regression; SVM- Support Vector Machine;MDA- Multiple Discriminant Analysis;ANN-Artificial Neural Networks; BNN-Back Propagation Neural Networks

(1981) developed a new theory for default prediction. He found that existing theories explain the success of empirical models. However, new theories of corporate default are required to be developed for the changing time periods and financial conditions.

Zmijewsiki (1984) developed a default forecasting model for US-based firms by applying the probit regression technique. The study mentioned two estimation biases in a study that arise when sample data is collected non-randomly. The first bias results from the 'oversampling' of distressed firms and falls under the topic of choice-based sample biases. The second results from using a 'complete data' sample selection criterion and is included under the head of sample selection biases.

According to Grice and Dugan, (2001), the most cited default forecasting studies include Altman (1968), Ohlson (1980) and Zmijewsiki (1984). Karel and Prakash (1987) conducted their research for three main objectives. (i) whether the financial ratios used in previous studies fulfilled normality conditions (ii) the construction of financial ratios that were either completely normal or near to normal (iii) comparing the results of newly constructed ratios using a discriminant model with the results of previous studies. The results reported a classification accuracy of 96% for healthy firms and 54.5% for failed firms.

Since then, several studies have been conducted drawing comparisons between classification methods such as discriminant analysis, logistic regression and probit regression. Lennox (1999) found that logistic and probit regression more efficiently predicted the defaulting firms. The results further identified the important indicators of corporate default, namely, profitability, leverage, cash flow and size. Bandopadhyay (2006) developed a new default prediction model for the Indian bond market using MDA and logistic regression. The results indicated that the new default forecasting model outperformed the original Altman's Z-Score (1968) model. Jones and Hensher (2004) compared the efficiency of mixed logit to that of standard logistic regression. The results indicated that the new mixed logit outperformed the standard logit model by massive margins.

Mihalovic (2016) compared the results of logistic regression versus discriminant analysis using data from companies listed in the Slovak Republic. The results suggested that the logit model had an incremental predictive accuracy than multiple discriminant analysis. Chen (2011) compared statistical methods for predicting corporate failure with intelligent techniques such as neural networks and decision tree classification. The empirical results showed that statistical techniques were more accurate for predicting financial distress for large sample size while intelligent techniques showed better accuracy for small datasets. Lee and Choi (2013) outlined the importance of industry factors in predicting corporate default. The results further indicated that the back-propagation neural network had a higher accuracy than multivariate discriminant analysis. Similarly, Jo et al., (1997) concluded that neural networks outperformed the multiple discriminant analysis by significant margins.

Singh and Mishra (2016) developed a revised default forecasting model using data from Indian bankrupt and non-bankrupt companies. The study re-estimated the original Altman's Z-score, Ohlson's X-score and Zmijewsiki's Y-score models and found that new models outperformed the original models with significant margins. Kim (2011) conducted a study to develop an optimal bankruptcy model for Korean hotels by investigating the functional characteristics of Multivariate Discriminate Analysis, Logistic, Artificial Neural Networks, and Support Vector Machine (SVM). When taking into account both Type 1 and Type 2 errors, the study found that the error rate of ANN was lower than that of SVM and ANN should be considered for prediction of hotel bankruptcy.

Similarly, Du Jardin (2010) found that the set of variables chosen for representing the financial characteristics of healthy companies plays a role in reducing Type I error. Recently, Agrawal and Maheshwari (2019) assessed the impact of industry beta on the firm's chances of default. They applied logistic regression and MDA on a sample of Indian firms and found that industry beta is significant in predicting corporate failure. Gupta and Jain, (2021) applied multinomial logistic regression and indicated that their model is robust in predicting the default probability of firms and can be used by banks and financial institutions for credit risk assessment.

Discussion

Table 1 where other dimensions of the review are presented indicates that maximum studies of bankruptcy prediction have been conducted in the USA. The study which brought revolution and laid down a benchmark for forecasting the bankruptcy of firms found its roots in the USA. The world's most applicable model Altman Z-Score was also developed in the same country using data from US firms. The table also depicts that among the statistical techniques, logistic regression is the most popular technique applied by researchers followed by MDA and Probit. Some studies where the comparison between statistical and intelligent techniques has been done indicate that the latter shows high accuracy over the statistical techniques. This review also shows that most studies have targeted the manufacturing industry for the development of default prediction models. Some studies have also developed industry-specific models. Overall, the findings indicate that statistical technique, namely, logistic regression is widely used for the prediction purpose. However, logistic regression overcomes the limitations of DA and is one of the prominent statistical techniques.

Conclusion

The current review has summarized the bankruptcy prediction work done in the last nine decades based on statistical techniques including Discriminant Analysis, Logistic regression and Probit Regression. The main focus of the review is on statistical techniques employed besides some other dimensions such as source of data collection, country of origin, number of variables employed have been covered. The comparison of performance between these techniques has been made in terms of prediction accuracy. Analysis of models from the table suggests that LR is the most employed technique by researchers. However, hybrid models in integration with other techniques can further increase the predictive accuracy. Therefore, for future directions, it is suggested that researchers should investigate other combinations of statistical and intelligent techniques for developing new models. Since some industries have more failure rate than others, therefore, industry-specific models in a particular country can be developed.

References

Agrawal, K., & Maheshwari, Y. (2019). Efficacy of industry factors for corporate default prediction. IIMB Management Review, 31(1), 71-77.

Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The journal of finance, 23(4), 589-609.

Bandyopadhyay, A. (2006). Predicting probability of default of Indian corporate bonds: logistic and Z-score model approaches. The Journal of Risk Finance.

Beaver, W. H. (1966). Financial ratios as predictors of failure. Journal of accounting research, 71-111.

Bhunia, A., & Sarkar, R. (2011). A study of financial distress based on MDA. Journal of Management Research, 3(2), 1-11.

Chen, M. Y. (2011). Bankruptcy prediction in firms with statistical and intelligent techniques and a comparison of evolutionary computation approaches. Computers & Mathematics with Applications, 62(12), 4514-4524.

Deakin, E. B. (1972). A discriminant analysis of predictors of business failure. Journal of accounting research, 167-179.

Doumpos M.; Zopoudinis C. (1999). A multicriteria discrimination method for the prediction of financial distress: the case of Greece. Multinational Finance Journal 3(2): 71–101

Du Jardin, P. (2010). Predicting bankruptcy using neural networks and other classification methods: The influence of variable selection techniques on model accuracy. Neurocomputing, 73(10-12), 2047-2060.

FitzPatrick, P. 1932. A comparison of ratios of successful industrial enterprises with those of failed companies. The Certified Public Accountant (October, November, December): 598-605, 656-662, and 727- 731, respectively.

Grice JS, Dugan M (2001) The limitations of bankruptcy prediction models: Some cautions for the researcher. Rev Quant Finan Acc 17:151–165.

Gupta, P. K., & Jain, K. K. (2022). Credit default prediction for micro-enterprise financing in India using ensemble models. Global Business and Economics Review, 26(1), 84-98.

Jo, H., Han, I., & Lee, H. (1997). Bankruptcy prediction using case-based reasoning, neural networks, and discriminant analysis. Expert Systems with Applications, 13(2), 97-108.

Jones, S., & Hensher, D. A. (2004). Predicting firm financial distress: A mixed logit model. The Accounting Review, 79(4), 1011-1038.

Karels, G. V., & Prakash, A. J. (1987). Multivariate normality and forecasting of business bankruptcy. Journal of Business Finance & Accounting, 14(4), 573-593.

Kim, S. Y. (2011). Prediction of hotel bankruptcy using support vector machine, artificial neural network, logistic regression, and multivariate discriminant analysis. The Service Industries Journal, 31(3), 441-468.

Lee, S., & Choi, W. S. (2013). A multi-industry bankruptcy prediction model using back-propagation neural network and multivariate discriminant analysis. Expert Systems with Applications, 40(8), 2941-2946.

Lennox, C. (1999). Identifying failing companies: a re-evaluation of the logit, probit and DA approaches. Journal of economics and Business, 51(4), 347-364.

Merwin, C. L. (1942). Financing small corporations in five manufacturing industries, 1926-1936. National Bureau of Economic Research, New York.

Mihalovic, M. (2016). Performance comparison of multiple discriminant analysis and logit models in bankruptcy prediction. Economics & Sociology,+ 9(4), 101.

Ohlson, J. A. (1980). Financial ratios and the probabilistic prediction of bankruptcy. Journal of accounting research, 109-131.

Scott, J. (1981). The probability of bankruptcy: A comparison of empirical predictions and theoretical models. Journal of banking & finance, 5(3), 317-344.

Shumway, T. (2001). Forecasting bankruptcy more accurately: A simple hazard model. The journal of business, 74(1), 101-124.

Singh, B. P., & Mishra, A. K. (2016). Re-estimation and comparisons of alternative accounting based bankruptcy prediction models for Indian companies. Financial Innovation, 2(1), 1-28.

Smith, R. F., & Winakor, A. H. (1935). Changes in the financial structure of unsuccessful industrial corporations. University of Illinois.

Wu, D. D., Liang, L., & Yang, Z. (2008). Analyzing the financial distress of Chinese public companies using probabilistic neural networks and multivariate discriminate analysis. Socio-Economic Planning Sciences, 42(3), 206-220.

Zmijewski, M. E. (1984). Methodological issues related to the estimation of financial distress prediction models. Journal of Accounting research, 59-82.

Bibliometric Analysis of Global Research on Classroom Incivility

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Priya Kumari Butail **

Abstract

Purpose- The purpose of this study is bibliometric analysis of classroom incivility articles published in the journals indexed in Scopus database between 1996 to25thMay, 2023.

Design/Methodology/Approach-In bibliometric analysis, a systematic review of classroom incivility using Scopus database has been done.

Findings: The publishing trend indicated that the analysis in the field of classroom incivility is in nascent stage.Regarding journals, citation impact, co-authorship, institutions, and authors in this research topic, the United States placed first. Classroom incivility has mainly been associated with nursing field.The most influential journals are Journal of Nursing Education followed by Nurse Educator, Nurse Education Today, and Nursing Education Perspectives. And the most popular keywords are student incivility, social behaviour, incivility and classroom incivility on the basis of their occurrence.

Keywords: *Classroom Incivility, Uncivil Behaviour, Student Incivility, Bibliometric Analysis*

1. Introduction

Education has always been the most essential component of any civilization. It has evolved over time to meet the changing demands of the period, to keep up with evolutionary changes, and to go in the direction of meaning-making and lifelong learning.The concept of civility is not a formal etiquette guideline but rather a general concern with how one should treat others.Higher education institutions are important in influencing social behavior of students and instilling in them the morality and manners necessary to coexist peacefully in society. The educational sector has given uncivil behavior a lot more attention as a result of the interactions between teachers and students from different social origins, races, castes, and cultures. The Latin term "civitas," which means communal and societal concern, is the source of the English word "civility," which refers to the practice of treating people with decency and respect. No matter what culture a person comes from, they should

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always act with decency and respect when interacting with others. Since the dawn of civilization, civility has been used as a symbol of respect for fellow citizens. It is morally correct to treat fellow citizens with respect, and it is immoral not to. Civility is the result of countless sacrifices made in order to live together. Incivility antithesis of civility and a relatively strange addition to the category of unfavorable workplace conduct, started to be a problem in the workplace in the late 1990s. Classroom Incivility is a growing issue relating to academic well-being of a student. Incivility is a phenomenon that exists in every field. We occasionally encounter uncivil behavior, whether from superiors, juniors, or our peer group. Workplace incivility and classroom incivility both result in low productivity and low learning engagement.

The uncivil behaviour in classroom setting results in emotional and physical distress, which in turn lowers the motivation of students to learn. Students or instructors may experience sentiments of dread, fury, hatred, and resentment when they fail to comprehend and uphold these standards of respect for one another (Clark, 2008). Impolite behaviour ranges from somewhat annoying and bothersome to very angry, threatening, and sometimes violent (Clark et al., 2009).

Caza & Cortina (2007) in their paper titled “From insult to injury: explaining the impact of incivility” defined two dimensions of classroom incivility namely: top-down incivility and lateral incivility.

Top-Down Incivility: It refers to incivility instigated from higher ranking individuals. The same actions as those found in lateral and horizontal incivility are referred to as vertical incivility since they are directed from the top (Faculty) to the bottom. Top-down incivility in the classroom is the behavior that is impolite to students from faculty, staff, or administration. The learning engagement of the pupils would suffer if it is discovered that they are being mistreated and behaving badly. Faculty claim that students should take their knowledge and experience at face value. As a result, when these irrational expectations are not met, faculty members could act uncivilly towards the students. Incivility among students is only fueled by the faculty's propensity for bad behavior. According to (Berger, 2000), classroom civility can be achieved by teachers bending forward to answer questions from students and practicing prosocial behaviors such as asking, "Do you understand?" and maintaining eye contact. Incivility in the classroom will result from a lack of pro-social behavior on the part of instructors and staff. Faculty who exhibits the following behaviors is considered top-down incivility:

- Fast-paced lectures with little to no involvement or interaction from the students;
- Delivering lectures quickly with little to no student participation or contact;
- Acting distantly or aloofly towards students;
- Surprise class with unexpected test problems;
- Showing up late for class or calling off the lesson without warning allowing pupils to make fun of or criticize their classmates.

Lateral Incivility: Incivility that is initiated by peers or others of a similar status is referred to as lateral incivility. It will be considered lateral incivility if one student starts the conflict.

The following student-related factors could cause classroom incivility (Kuhlenschmidt & Layne, 1999):

- Diseases or possible prescription medication use by children (both physical and mental)
- Tiredness
- Emotional challenges (such losing a loved one or ending a relationship);
- Emotional immaturity;
- Poor problem-solving skills.
- Problems with your hearing, vision, or other senses

The learning process may also be influenced by classmates. Peers are referred to as a class trait who divided them into two categories: first, interaction norms (peer pressure to avoid speaking, peer pressure to keep comments brief, peer pressure to discourage the expression of controversial opinions, peer attention, and peer disrespect), and second, emotional well being such as friendships, peer support, and cooperative behavior among pupils (Fassinger, 1995). Typically, passive students will ask active students to speak for them when they ask questions. In order to be equally active in class, active students wanted to sit with their peers.

Reviewing literature on classroom incivility reveals that, until the middle of the 1990s, conduct of students was not taken into consideration. However, due to lack of understanding or ignorance, this issue continues to be mostly overlooked and unnoticed.

The study in the field of classroom incivility is conducted by (Boice, 1996) for the first time at the State University of New York at Stony Brook. The goal of the research was to investigate little-known literature on classroom disruption in higher education by undertaking a five-year longitudinal study of college students. Low student participation was a result of the high level of class disrespect. High classroom incivility was associated with hurried lectures, confused or irritated students, and negative impressions of students of the competence and concern of the lecturers. Pro social and proactive attitude of teachers was determined to be the main cause of classroom disrespect.

Student rule breaking, implied rule violations, and inappropriate classroom behaviour are all student problem behaviours from the perspective of the teacher, and in this situation, teacher intervention is necessary (Sun & Shek, 2012). This phenomenon thus stems from a comprehensive understanding of the university student experience.

Classroom incivility has been investigated in many educational institutions. Most of the studies are done in Nursing Institutes. Incivility in nursing education is mostly caused by stress, attitude, poor communication, and disengagement (Clark , 2008). Any words or deeds that disturb the balance of the teaching-learning environment are considered to be acts of classroom incivility. Additionally, there is a claim that unruly behaviour can be so upsetting and drastically disturb the learning environment that it can really put an end to learning (Feldmann, 2001). Classroom incivility can cause students to become less engaged in their studies or to completely give up on them (Vuolo, 2018). Males and females may have different thresholds for recognizing a breach of their standards of respect(Cortina et al., 2002 ;Montgomery et al., 2004).According to Arbuckle & Little (2004) males exhibited more aggression than females in both basic and secondary education. Women experienced more incivility than men (Settles & O'Connor, 2014). Undergraduate students lacked more civility (Black et al., 2011) but conflict levels were connected to the manner of instructions of professors, attitude, and response to difficult circumstances rather than their demographic characteristics or the features of their courses (Meyers et al., 2006). Students perceive uncivil behaviour moderately on regular basis in their classes (Bjorklund & Rehling, 2009).

The classroom incivility has been studied in several countries like United States followed by Australia, Germany, Canada, Norway, Belgium, and Indonesia. It is quite distinct from other types of deviant behaviours like aggression and bullying, which are done with the aim of hurting the other person. Incivility is not intended and occasionally goes unnoticed by the victims(Ferris et al., 2017).

This paper seeks to give an overview of the literature on classroom incivility, including the distribution of articles by years, the authors, organizations and countries that have contributed the most, as well as the most frequently used keywords in articles about classroom incivility and to analyze that literature using bibliometric methods. This could lead to the identification of gaps, which would open the door to more research in this field.

1.1 Research Objectives

The following research questions are the focus of this bibliometric analysis, which examined articles from 1996 to 25th May, 2023 that address classroom incivility.

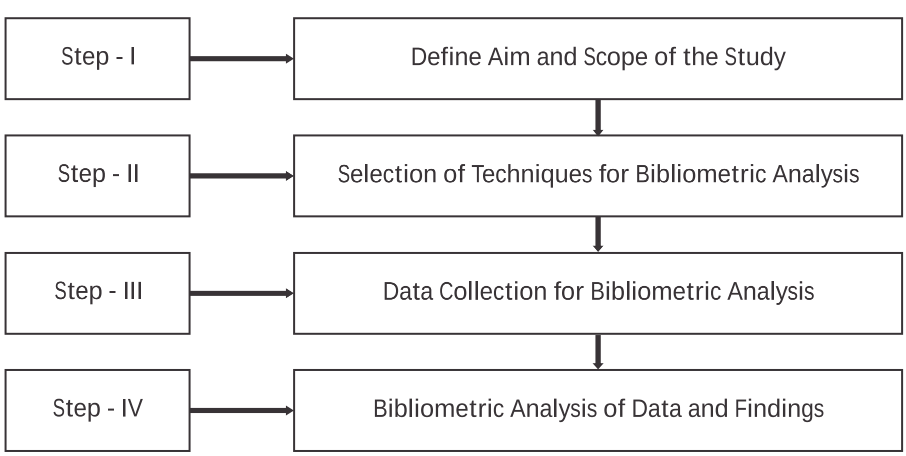
1. To find out the distribution of articles related to classroom incivility by years.
2. To find out the most cited (citation and co-citation) authors in articles related to classroom incivility.
3. To find out which journals, organizations and countries are contributing the most in research on classroom incivility.
4. To find out the most used keywords in articles related to classroom incivility.

2. Research Methodology

For the current study, bibliometric analysis is more suited because it facilitates the identification of prominent authors, works, journals, institutions, and geographic locations associated with a particular field of study, as well as the evaluation of the relationships among them (Donthu et al., 2021b).

Figure 1 depicts the four processes involved in performing a bibliometric analysis. Establishing the goal and parameters of the

Figure 1. The procedure for Bibliometric Analysis



research is the first step. This is followed by choosing an analytic method, gathering data, conducting the analysis, and reporting the findings. The main objective of the study is to provide bibliometric data on classroom incivility published in journals that were listed in the Scopus database between 1996 and 25thMay, 2023.

Bibliometric analysis is a technique for analyzing the literature that evaluates the significance and influence of a specific field of study using quantitative data such as number of publications, citations, and authors (Bornmann & Mutz, 2015)

Step-I: Define Aim and Scope of the Study

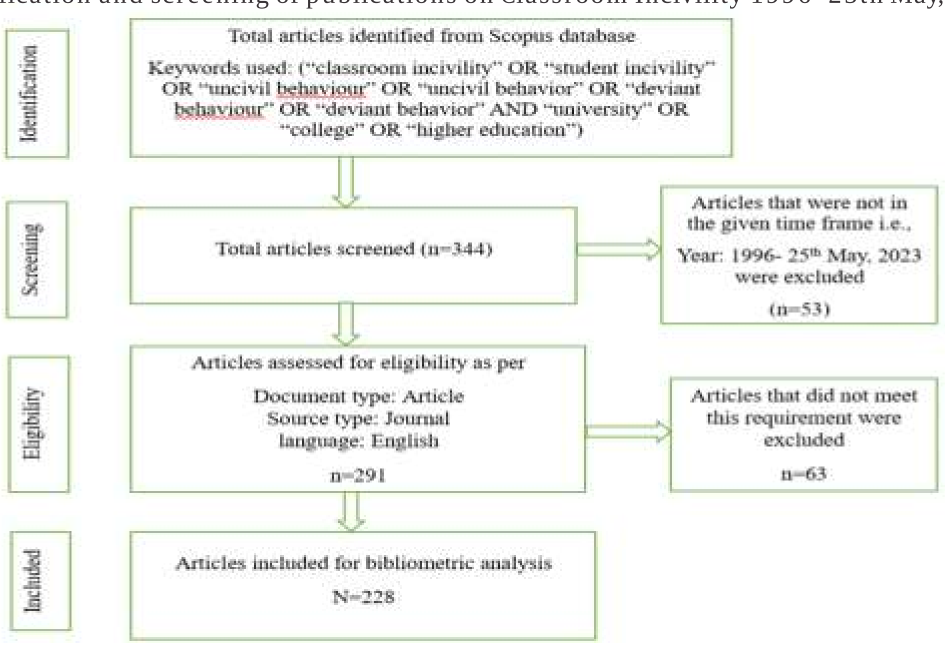
An enormous and disorganised body of literature on classroom incivility is the focus of this study in order to provide structure and clarity. In this study, data from Scopus journals has been used. The Scopus database, which is larger than the Web of Science (WoS) database in total abstract and indexing coverage for social sciences(Singh et al.,2021). The Scopus search was restricted to studies that were published between 1996 to 25thMay, 2023.The Scopus database was searched using the appropriate keywords in relation to the topic "Classroom Incivility". The following keywords were included in the search terms: “classroom incivility”, “uncivil behaviour”, “uncivil behavior”, “student incivility”,“deviant behaviour” and “deviant behavior”.

The aim of the research was to identify trends in classroom incivility studies published in journals with access to the Scopus database by determining the annual counts, frequently used keywords, most referenced authors, countries, organisations and top journals. The benefit of this analysis is getting a broad perspective of a particular subject of research (Bjork et al., 2014).

Step-II: Selection of Techniques for Bibliometric Analysis

PRISMA provided the instructions required to

Figure 2. PRISMA flow diagram for bibliometric analysis detailing steps in the identification and screening of publications on Classroom Incivility 1996- 25th May, 2023



record the identification of the documents in this study's systematic review (Moher et al., 2009).

Scopus database was used for the search, and the following search criteria were used:

- Inclusion: Dates: 1996 to 25th May,2023
- Inclusion: Searching key words: ("classroom incivility" OR "student incivility" OR "uncivil behaviour" OR "uncivil behavior" OR "deviant behaviour" OR "deviant behavior" AND "university" OR "college" OR "higher education"
- Inclusion: Document Type: articles
- Inclusion: Source type: Journal
- Inclusion: language: English

Step-III: Data collection for bibliometric analysis

Table 1: Search and Filtering Criteria

Search Criteria	Total Results
TITLE-ABS-KEY ("classroom incivility" OR "student incivility" OR "uncivil behaviour" OR "uncivil behavior" OR "deviant behaviour" OR "deviant behavior" AND "university" OR "college" OR "higher education")	344

Filtering Criteria	Reject	Accept
Year: 1996- 25th May, 2023	53	291
Document type: Article Source type: Journal language: English	63	228

Source: *Author*

Step-IV: Bibliometric Analysis of Data and Findings

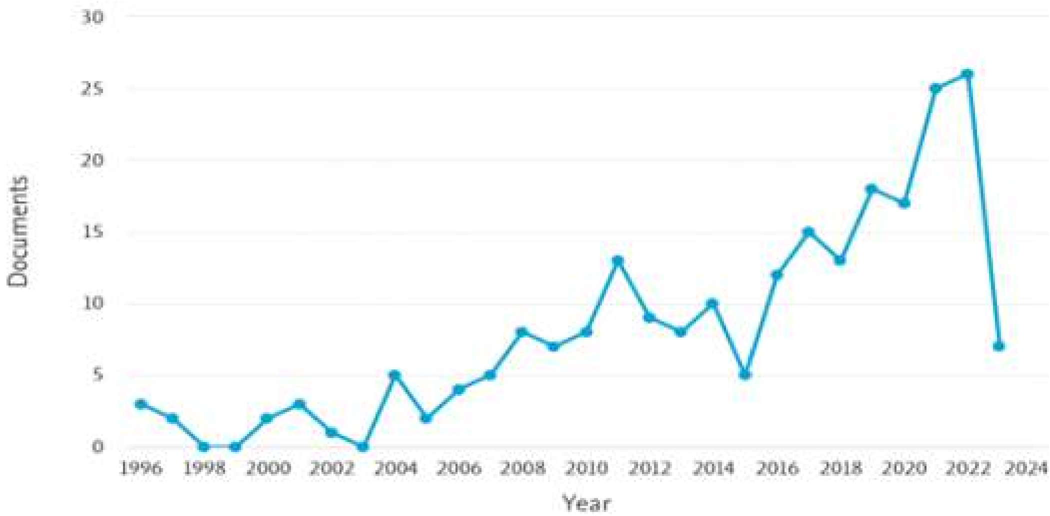
In the fourth step bibliometric analysis will be performed and reporting of findings will be done. The Scopus database was used to conduct this bibliometric analysis both quantitatively and subjectively as mentioned earlier. The Publish or Perish software by Harzing is utilized for the analysis of academic citations, including citation metrics, paper count, overall citations, and h-index (Harzing, 2007). Additionally, bibliometric networks such journals, authors or individual publications, citations, bibliographic coupling, co-citation or co-authorship relationships, nations, and keywords are shown using the VOSviewer software. VOSviewer is regarded as the best tool for visualising bibliometric data (Van Eck & Waltman, 2009).

3. Data Analysis and Findings

Objective- 1: To find out the distribution of articles related to classroom incivility by years.

In Figure 3, the number of articles published on the subject of classroom incivility in higher education is plotted against the corresponding year of publication to illustrate the trends in this volume. As seen in Figure 3, the State University of New York at Stony Brook was the site of the first classroom incivility research (Boice, 1996). His paper has the maximum

Figure-3: Publications on Classroom Incivility from 1996 to 2023



citations till date that is 228. The graph shows that the number of articles published in 2020 has been trending upward. Around 25 articles published in the year 2021, 26 articles have already been published in the year 2022 and 7 articles have been published till 25th May, 2023.

Objective-2: To find out the most cited (citation and co-citation) authors in articles related to classroom incivility.

Table 2 depicts top 10 most prolific authors in classroom incivility research. The number of citations for an author indicates how well-known their research is in a given area of study. Based on citations count in total, B. Boice is the most prominent and well regarded writer, having228 total citations, followed by P.R. Vowell, J. Chen with 215 citations, B.B. Caza and L.M. Cortina with 206 citations, C.M. Clark with 194 citations,C. Lampman, A. Phelps, S. Bancroft, M. Beneke with 191 citations, W.L. Bjorklund, D.L. Rehling with 187 citations, C.M. Clark, P.J. Springer with 181 citations,H.C. Alberts, H.D. Hazen, R.B. Theobald with 180 citations, G. Altmiller with 165 citations and J.P. Kopp, S.J. Finney with 153 citations.

Objective-3: To find out which journals, organizations and countries are contributing the most in research on classroom incivility.

Table 3 gives statistics about the periodicals that have contributed to the study of classroom incivility. With 266 citations, the Journal of Nursing Education leads the field. It is followed by the Journal of Information Technology and Politics with 160 citations, Nurse Educator with 150 citations, and Nurse Education Today with 128 citations.

Table 4 provides a thorough summary of the organizations that have contributed to the amount of knowledge already available on classroom incivility. The most influential organization, with 160 citations, is the Department of Political Science and Geography at the University of Texas in San Antonio in the United States. It is followed by Center for Independent and Distance Learning, University of Oklahoma, United States, Department of Psychology, University

Table 2:Top 10 Most Prolific Authors in Classroom Incivility Research

S. No.	Title	Authors	Journal	Year	Total Citations
1	Classroom incivilities	B. Boice	Research in Higher Education	1996	228
2	Predicting academic misconduct: A comparative test of four sociological explanations	P.R. Vowell, J. Chen	Sociological Inquiry	2004	215
3	From insult to injury: Explaining the impact of incivility	B.B. Caza, L.M. Cortina	Basic and Applied Social Psychology	2007	206
4	Faculty and student assessment of and experience with incivility in nursing education	C.M. Clark	Journal of Nursing Education	2008	194
5	Contrapower harassment in academia: A survey of faculty experience with student incivility, bullying, and sexual attention	C. Lampman, A. Phelps, S. Bancroft, M. Beneke	Sex Roles	2009	191
6	Student Perceptions of Classroom Incivility	W.L. Bjorklund, D.L. Rehling	College Teaching	2009	187
7	Academic nurse leaders' role in fostering a culture of civility in nursing education	C.M. Clark, P.J. Springer	Journal of Nursing Education	2010	181
8	Classroom incivilities: The challenge of interactions between college students and instructors in the US	H.C. Alberts, H.D. Hazen, R.B. Theobald	Journal of Geography in Higher Education	2010	180
9	Student perceptions of incivility in nursing education: Implications for educators	G. Altmiller	Nursing Education Perspectives	2012	165
10	Linking academic entitlement and student incivility using latent means modeling	J.P. Kopp, S.J. Finney	Journal of Experimental Education	2013	153

Source:Publish or Perish (PoP)

Table 3: Top 10 Most Productive Journals on Classroom Incivility

S. No.	Source	Documents	Citations
1	Journal of Nursing Education	6	266
2	Journal of Information Technology and Politics	1	160
3	Nurse Educator	7	150
4	Nurse Education Today	7	128
5	Nursing Education Perspectives	4	116
6	Journal of Educational Psychology	1	109
7	Sex Roles	3	109
8	Journal of Communication	1	98
9	Advances in Developing Human Resources	2	86
10	Journal of Leadership and Organizational Studies	1	84

Source:Publish or Perish (PoP)

Table 4: Top 10 most productive organizations in Classroom Incivility research

S. No.	Organizations	Documents	Citations
1	Department of Political Science and Geography, University of Texas at San Antonio, United States	1	160
2	Center for Independent and Distance Learning, University of Oklahoma, United States	1	109
3	Department of Psychology, University of Oklahoma, United States	1	109
4	School of International Relations, University of California, Los Angeles, United States	1	98
5	Department of Political Science, University of Oslo, Norway	1	98
6	Kantar Public, Brussels, Belgium	1	98
7	Mannheim Centre for European Social Research, University of Mannheim, Germany	1	98
8	University of Nebraska at Omaha, United states	1	84
9	Miami University, United States	1	73
10	Department of Nursing, Boise State University, United States	1	72

Source:Publish or Perish (PoP)

Table 5: Most Influential Countries/Territories contributing to the existing body of knowledge in the field Classroom Incivility

S.No.	Country	Documents	Citations
1	United States	76	1695
2	Australia	11	165
3	Germany	3	144
4	Canada	9	131
5	Norway	2	120
6	Belgium	1	98
7	Indonesia	6	50
8	Malaysia	2	43
9	Austria	3	44
10	Netherlands	2	46

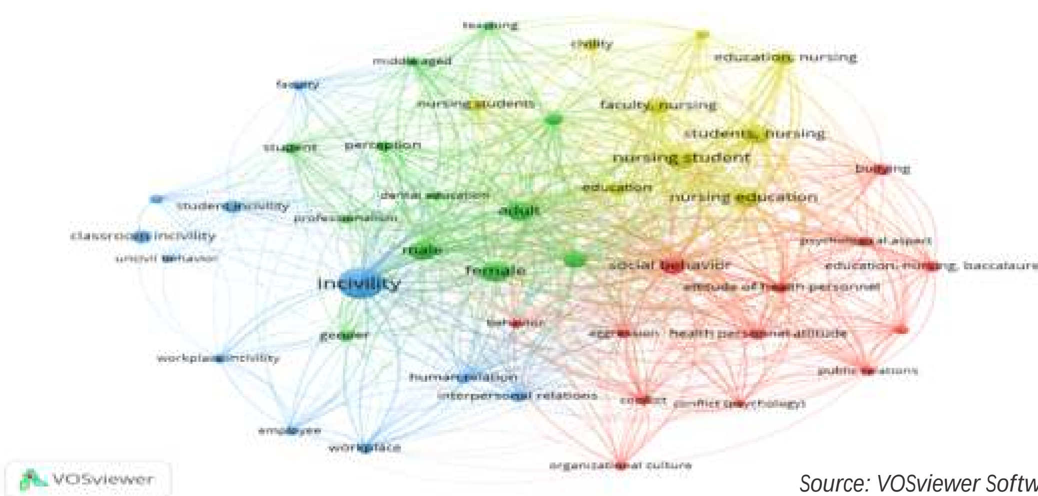
Source:Publish or Perish (PoP)

of Oklahoma, United States with 109 citations respectively.

Table 5 depicts country wise citation analysis that appear to have a wide range of distributions. The number of citations for papers by country as a unit of analysis reflects the level of interest in a particular area of study. With 1695 citations and 76 publications, the United States topped the list, making it the most significant country in terms of its contributions to the corpus of existing knowledge in pertinent fields. Australia and Germany were next with 165 and 144 citations, respectively.

Figure 4: The network displays the keywords that are used most frequently in the study of

Figure 4: Bibliometric map created based on author keywords co-occurrence in Classroom Incivility studies



Source: VOSviewer Software

classroom incivility.

In the VOS viewer, "author keywords" was chosen as the analysis unit and "co-occurrence" as the type of analysis. Three times was chosen as the minimum number of repetitions of the keywords. The most popular keywords are student incivility (f=14),social behaviour (f=23), incivility(f=79), classroom incivility (15).

4. Summary of Review

The bibliometric analysis indicates that the publishing trend in the field of classroom incivility is in nascent stage and interest of academia has emerged in recent years since 2020. Using Harzing's Publish or Perish software and VOSviewer, top contributors to the field have been identified. The analysis used author, source, organization, country and keywords as its units of analysis.

B. Boice with the maximum number of citations, became the most influential author followed by P.R. Vowell, J. Chen, B.B. Caza and L.M. Cortina.The most influential journals are Journal of Nursing Education followed by Journal of Information Technology and Politics, Nurse Educator, Nurse Education Today, Nursing Education Perspectives and Journal of Educational Psychology. The departments that have made the largest contributions are the Department of Political Science, the University of Texas at San Antonio's Geography Department, the United Center for Independent and Distance Learning,University of Oklahoma, United States, Department of Psychology, and University of Oklahoma, United States. The countries leading in this field of study include United States, followed by Australia, Germany, Canada and Norway on the basis of maximum citations. And the most popular keywords are student incivility, social behaviour, incivility, and classroom incivility on the basis of their occurrence.

5. Implications

The recommendations for academicians, researchers, and practitioners to ensure a deeper grasp of various facets of the idea of classroom incivility. In order to guarantee that students are engaged in their education, the current research may serve as a guide for future studies in this field.

6. Conclusion and Limitations

The investigations and advancements in the area of disrespect in the classroom have been summarized in this paper. On the basis of the major contributions (authors, publications, journals, and themes), it sought to identify several historical and current situations pertaining to this research field. The rise of classroom incivility studies began in the US followed by Australia, Germany, Canada, Norway, Belgium, and Indonesia. In higher education, study of classroom incivility continues to be of significant interest, as seen by the rise in the number of publications since 2021 attempting to define the concept and comprehend its various dimensions.

The major publications in this field as well as the journals that have largely influenced their readership were identified in this investigation. Additionally, analysis identified are as and organizations that have produced the most significant research streams, as well as the authors that have had the greatest impact on the subject. University-affiliated authors from the United States have significantly influenced how classroom incivility is conceptualized from a broader perspective. Organizing and systematizing the significant and growing body of publications has been made possible through bibliometric review.

It is necessary to address some limitations as well. The first limitation of this study is that only the Scopus database in the investigation has been used. Other sources of data (such WoS and Google Scholar) were excluded. The second limitation is number of articles. Although this idea has been examined since 1996, there have been less publications after then. The publications have grown since 2020. 7 articles have been published as of 25thMay, 2023, and more are anticipated to be added before the year ends. It is clear from this that interest in this field has been steadily increasing in recent years.

References

Alberts , H. C., Hazen , H. D., & Theobald, R. B. (2010). Classroom incivilities: The challenge of interactions between college students and instructors in the US. Journal of Geography in Higher Education, 34(3), 439–462.

Altmiller, G. (2012). Student Perceptions of INCIVILITY in Nursing Education: Implications for Educators. Nursing Education Research, 33(1), 15-20.

Andersson, L. M., & Pearson, C. M. (1999). Tit for Tat? The Spiraling Effect of Incivility in the Workplace. Academy of Management, 24(3), 452-471.

Arbuckle , C., & Little, E. (2004). Teachers' Perceptions and Management of Disruptive Classroom. Australian Journal of Educational & Developmental Psychology, 4(1), 59-70.

Berger, B. A. (2000). Incivility. American Journal of Pharmaceutical Education, 64(4), 445-450.

Bjork, S., Offer, A., & Soderberg, G. (2014). Time series citation data: the Nobel Prize in economics. Scientometrics, 98(1), 185–196.

Bjorklund, W. L., & Rehling, D. L. (2009). Student Perceptions of Classroom Incivility. 58(1), 15-18.

Black , L. J., Wygonik, M. L., & Frey, B. A. (2011). Faculty-Preferred Strategies to Promote a Positive Classroom Environment. Journal on Excellence in College Teaching, 22(2), 1-26.

Boice, B. (1996). Classroom Incivilities. Research in Higher Education, 37(4), 453-486.

Bornmann, L., & Mutz, R. (2015). Growth Rates of Modern Science: A Bibliometric Analysis Based on the Number of Publications and Cited References. Journal of the Association for Information Science and Technology, 66(11), 2215–2222.

Caza, B. B., & Cortina, L. M. (2007). From Insult to Injury: Explaining the Impact of Incivility. 29(4), 335-350.

Caza, B. B., & Cortina, L. M. (2010). From Insult to Injury: Explaining the Impact of Incivility. Basic and Applied Social Psychology, 29(4), 335-350.

Clark, C. M. (2008). Faculty and Student Assessment of and Experience with Incivility in Nursing Education. 47(10), 458–465.

Clark, C. M., & Springer, P. J. (2007). Thoughts on incivility: student and faculty perceptions of uncivil behavior in nursing education. 28(2), 93-7.

Clark, C. M., Farnsworth, J., & Landrum, R. (2009). Development and description of the incivility in nursing education (INE) survey. Journal of Theory Construction & Testing, 13(1), 7-15.

Cortina, L., Lonsway, K. A., Magley, V., & Freeman, L. (2002). What's Gender Got To Do with It? Incivility in the Federal Courts. 27(2), 235-270.

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021a). How to conduct a bibliometric analysis: An overview and guidelines. Journal of Business Research, 133(11), 285-296.

Donthu, N., Kumar, S., Pandey, N., & Lim, W. M. (2021b). Research Constituents, Intellectual Structure, and Collaboration Patterns in Journal of International Marketing: An Analytical Retrospective. Journal of International Marketing, 29(2), 1-25.

Fassinger, P. A. (1995). Professors' and Students' Perceptions of Why Students Participate in Class. Teaching Sociology, 24(1), 25-33.

Feldmann, L. J. (2001). Classroom Civility is Another of Our Instructor. College Teaching, 49(4), 137-140.

Ferris, D. L., Chen, M., & Lim, S. (2017). Comparing and Contrasting Workplace Ostracism and Incivility. Annual Review of Organizational Psychology and Organizational Behavior, 4(1), 315-338.

Harzing, A. W. (2007). https://harzing.com/resources/publish-or-perish.

Kopp, J. P., & Finney , S. J. (2013). Linking academic entitlement and student incivility using latent means modeling. The Journal of Experimental Education, 81(3), 322-336.

Kuhlenschmidt, S. L., & Layne, L. E. (1999). Strategies for Dealing with Difficult. New directions for teaching and learning, 1(77), 45-58.

Lampman, C., Phelps, A., Bancroft, S., & Beneke, M. (2009). Contrapower Harassment in Academia: A Survey of Faculty Experience with Student Incivility, Bullying, and Sexual Attention. 60(1), 331–346.

Meyers , S. A., Bender, J., Hill, E. K., & Thomas, S. Y. (2006). How Do Faculty Experience and Respond to Classroom Conflict? International Journal of Teaching and Learning in Higher Education, 18(1), 180-187.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and. PLoS Medicine, 6(7), 1-6.

Montgomery, K., Kane, K., & Vance, C. M. (2004). Accounting for Differences in Norms of Respect: A Study of Assessments of Incivility through the Lenses of Race and Gender. 29(2), 248-268.

Segrist, D., Bartels, L. K., & Nordstrom, C. R. (2018). “But Everyone Else is Doing It:” A Social Norms Perspective on Classroom Incivility. College Teaching, 66(4), 181-186.

Settles, I. H., & O'Connor, R. C. (2014). Incivility at academic conferences: Gender differences and the mediating role of climate. Sex Roles, 71(1), 71-82.

Singh, P., Karmakar, M., Leta, J., Mayr, P., & Singh, V. K. (2021). The journal coverage of Web of Science, Scopus. Scientometrics, 126(6), 5113-5142.

Sun, R. C., & Shek, D. T. (2012). Student Classroom Misbehavior: An Exploratory Study Based on. The Scientific World Journal, 2012(1), 1-8.

Van Eck, N. J., & Waltman, L. (2009). Software survey: VOSviewer, a computer program. Scientometrics, 84(1), 523–538.

Vowell, P. R., & Chen, J. (2004). Predicting Academic Misconduct: A Comparative Test of Four Sociological Explanations. Sociological Inquiry, 74(2), 226-249.

Vuolo, J. C. (2018). Student nurses' experiences of incivility and the impact on learning and emotional wellbeing. Journal of Nursing Education and Practice, 8(4), 102-111.

Green Human Resource Management Practices in the Hotel Industry: Ethiopian Perspective

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Abstract

This article's primary focus is on the application of green HRM techniques by the hotel sector. Every subordinate and the management bodies must be committed to making the organization green. Nowadays, the larger picture of human resource management is examined in light of sustainability. The degree of application was examined by identifying and evaluating six key GHRM item components. Green employee empowerment and participation, green training and development, green performance management and appraisal, green reward and compensation, and green management of organizational culture were the highlighted GHRM practices. The degree and scope of green HR practices are evaluated using an exploratory research design. For this study, data from both primary and secondary sources were compiled. In order to update and validate the list of fundamental GHRM practices that had previously been found through literature reviews, input and suggestions from aspiring HR managers were now critically needed. According to the findings, the overall GHRM practice implementation is 2.07, which is regarded as a low level. Moreover, the statistical outcome indicates that workers are receiving compensation and benefits for their contributions even in the lack of appropriate eco-friendly hiring, training, and development guidelines. The results of statistical analysis indicated a strong positive correlation between environmental performance and the six green HRM practices.

Keywords: *Environmental Performance, Green Human Resources Management, Hotel Industry.*

1. Introduction

The term "green human resource management" describes ecologically friendly and sustainable development strategies that need to be applied across the board in the company. Every subordinate as well as the organization's management bodies must be committed to it. According to Saha et al. (2020), this viewpoint included seeing the company as a whole, seeing the staff as its lifeblood, committing to quality in all activities,

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and maintaining enthusiasm. These days, both well-run and poorly managed nations are concerned about environmental issues, green practices, and sustainable development. Due to these worries, there has been increased enforcement, and business and industry have been encouraged to adopt environmentally friendly practices and products in order to develop, enhance, and use green human resources management (Masri&Jaaron, 2017). As a continuous process, deciding which conservation practices should be used in every facet of a business, implemented, and adhered to at every stage of an organization is a critical responsibility of the human resource function (Yusoff, 2018). Furthermore, the sustainability of the entire human resources management context is currently taken into consideration. It is a significant branch of management that looks after an organization's most valuable assets (Ahmad, 2015). Environmental awareness has been growing across many industries, particularly hospitality companies, as a result of severe ecological issues, an increase in environmental laws, and marketing pressure (Pham & Tuckova, 2017). Environmental sustainability tactics and management concerns have grown in importance in the hotel sector. Additionally, implementing green HR practices has benefits for the hotel industry. For example, workers who are aware of green HRM practices and have environmental knowledge are more likely to be motivated to adopt green behavior and engage in environmental activities within their organizations (Tan et al., 2019). Thus, the goal of this research is to investigate GHRM practices used in the hotel sector from an Ethiopian perspective.

2. Literature Review

The idea of integrating environmental and human resource management to green an organization began in the 1990s, presumably as a result of Wehrmeyer's (1996) editing of the book "Greening people: environmental management and human resources." "Green HRM practices can increase employee responsibility for environmental conservation (Cherian and Jacob, 2012)." The organization's identification of GHRM as the main driver behind pursuing a green initiative is correlated with the HRM function (Mandip, 2012, Jabbour and Jabbour, 2016). The degree of GHRM implementation sustains profitability and enhances work-life balance. Furthermore, Yusoff (2015) assert that GHRM practices support the social, environmental, and economic balance—the three pillars of sustainability. The organization's overall financial performance is positively impacted by proactive environmental management and GHRM practices. Consequently, it is expected of the organization's management bodies to educate staff members on how to enhance environmental performance through human behavior (Shaikh, 2012). Supervisors need to engage staff members in environmentally friendly initiatives at every stage of HRM procedures; if these initiatives become standard, they will be viewed as part of the company culture.

2.1 Eco-friendly Recruitment And Selection

An organization should give preference to hiring candidates who are enthusiastic about environmental protection and green initiatives when hiring, selecting, and recruiting new employees (Renwick et al, 2013). By offering a representation of the candidate's environmental knowledge, values, and beliefs, green recruitment aids in the organization's recruits' ability to recognize its green culture and share its environmental values and contribution (Renwick et al., 2013). (2010) Jackson and Seo. Green environmental requirements should be incorporated into the hiring process and the information provided (Arulrajah et al., 2015). In the course of the job analysis phase, job specifications and descriptions ought to clarify the expectations for the prospective green employee and emphasize their accomplishments and environmental aspects (Mandip, 2012; Renwick et al., 2013). One of the selection criteria for talent should be environmental awareness, according to the organization. In order to give candidates access to the organization's greening focus, organizations should replicate their green practices and sustainability issues on their website and other public channels (Kapil, 2015a; Arulrajah et al., 2015). The results of Guerci (2016), who discovered that environmental sustainability-related issues and green practices can be highly successful in drawing in candidates, corroborated this.

2.2 Eco-Friendly Training and Development

Jabbour (2013) states that in order to support environment management initiatives, environmental training should be given, particularly with regard to GHRM practices. According to Opatha and Arulrajah (2014), environmental training significantly increased the level of environmental awareness among employees. Encouraging an environment that will support green practices at all organizational levels requires this kind of training. Parallel to this, Arulrajah et al. (2015) discussed the significance of staff training and green learning in providing the information and abilities needed for effective environmental performance. Social and environmental issues should be included in employee training and development programs at all levels (Mehta and Chugan, 2015). As a result, seminars and workshops that help staff members gain and expand their knowledge of environment management should be included in training, learning, and development plans (Liebowitz, 2010; Prasad, 2013).

2.3 Eco-Friendly Performance Management and Appraisal

To attain the intended environmental performance, performance management systems ought to be utilized as a benchmark for gauging employee performance (Ahmad, 2015). According to Jackson (2011), the performance management system guarantees that green practices and management work are effective over time. Human resource management and green environmental performance should be integrated into PMS by setting environmental management objectives, monitoring EM behaviors, and utilizing green work ratings as the primary metrics for evaluating employee performance (Kapil, 2015).Managerial and staff evaluation records should be included in the green work rating (Prasad, 2013). Managers in every organization should regularly provide staff members with feedback on how they are doing to help them enhance their environmental performance by attaining environmental goals (Arulrajah 2015). The employees' abilities, skills, and knowledge will all be enhanced by the feedback they receive, and their involvement in environmental management duties will rise as a result. Thus, the human resources departments of the company should improve the performance appraisal rating system so that employees can be rated based on their behavioral and technical environmental sustainability competencies (Ahmad, 2015).

2.4 Eco-Friendly Reward and Compensation

Organizations can achieve their greening goals by recognizing employees who are committed to environmental practices, according to Jabbour and Santos (2008). Reward and compensation could help environmental management by encouraging employees to adopt green practices and helping them avoid bad behaviors. In this situation, the goal of the reward and compensation structure should be to encourage environmentally conscious behavior on the part of the staff, and it ought to be connected to the results of industry-wide environmental initiatives. Green practice rewards come in a wide variety of forms. According to Renwick (2013), there are various types of rewards available for environmental management, including financial, non-financial, recognition-based, and positive feedback-based incentives. According to Renwick et al. (2013), these reward and compensation schemes place a high value on workers who support environmental sustainability and green practices. Employee participation in eco-initiatives and performance in green management practices are significantly influenced by management commitment, claim Daily and Huang (2001).

2.5 Eco-Friendly Employee Empowerment and Participation

Human resource managers must empower staff members to actively engage in green practices and eco-friendly activities as part of the environmental performance enhancement practices (Ahmad, 2015). In order to hear employee input and change environmental goals, the company should strengthen employee empowerment and participation mechanisms (Harvey et al., 2013). In addition, the company ought to permit workers to actively engage in developing an environmental strategy (Margaretha and Saragih, 2013). As a result, people are able to acquire tacit knowledge, forge close bonds with large communities, and perform better environmentally (Renwick et al., 2013).

2.6 Eco-Friendly Management of Organizational Culture

One tool for ensuring ongoing improvement of a business's environmental performance through the development of a green corporate culture is its operational culture (Gupta and Kumar, 2013; Margaretha and Saragih, 2013). If HRM provides enough support, GHRM develops a green organizational culture (Jabbour and Santos, 2008). Furthermore, all organization personnel should be regularly informed about environmental initiatives, programs, and goals by top management. In addition to reiterating them through instruction and training, management should offer feedback based on environmental performance to achieve appropriate values (Fernandez et al., 2003).

2. Material and Method

An exploratory research design is used to measure the level and magnitudes of GHR practice in the hotel industry, Hawassa City, Ethiopia. Using a mixed methods research approach, the design inquiry methodically addresses both qualitative and quantitative aspects. For the following primary reasons, a mixed-methods approach was selected for this study. When shedding light on the underlying insights of the relationships found in an operational setting that is representative of real life, the mixed-methods approach is especially suitable. Furthermore, it reveals other contextual elements that might influence the application of green HRM in the hospitality sector (Tashakkori and Teddlie, 1998).The quantitative approach is quite different from a qualitative approach, its key feature being a numeric measurement of events and control theoretical variables affecting those events. Qualitative research method can be used for examination of new perspectives, motives, intentions, or gain more information that cannot be conveyed quantitatively.

This made it possible for the researcher to learn in-depth details about environmentally friendly HRM procedures used in the hospitality sector. Journals were cited in relation to the ideas, theories, plans, and regulations of greening human resources management. These journals were rich sources of expert opinion that could be used to learn more and carry out the most effective and efficient analysis of the information gathered on the issue. Together, these journals make up the literature on a GHRM. To achieve this, HR managers from ten different star hotels that were implementing GHRM initiatives at different levels participated in semi-structured interviews. For data collection, every interview was taped, and as soon as the interviews were over, the tapes were transcribed. In order to ensure data dependability, a guiding protocol (Creswell, 2004) was employed as a backup to steer discussion around key GHRM concepts. To fully investigate the kind and scope of GHRM practice implementation, interview subjects were also asked a wide range of questions. A survey as a kind of research instrument was eventually developed in order to ascertain the relationship between the environmental performance from a literature review and the identified GHRM practices. O'Donohue and Torugsa's (2016) research validated and enhanced the procedure employed in the creation of this research tool. To improve the survey's validity and internal consistency, five human resource managers and seasoned practitioners participated in a pilot study before it was fully implemented among the targeted hotel industries. The pilot-testing process provided recommendations for rearranging several of the practices that were taken into consideration before its widespread implementation, as indicated by Mohtar and Rajiani (2016).

There were three main components to the instrument. Ten items in the first section collected data describing the demographics of the respondents. The second section comprised twenty-eight items that gauged how much GHRM practice was being used. The response options in this section were divided into six groups: (1) Eco-Friendly recruitment and selection, (2) Eco-Friendly training and development, (3) Eco-Friendly performance management and appraisal, (4) Eco-Friendly reward and compensation, (5) Eco-Friendly employee empowerment and participation, (6) Eco-Friendly management of organizational culture.

Sampling Procedure

The study's target populations included managers and operational staff from six (6) different hotels in Hawassa City. A portion of the population chosen to represent the entire population is the sample size. The C.R. kotari (2004) formula was applied to determine a statistically representative sample size of the population. As a result, 68 operational staff members and 36 managers were chosen as a sample for this study in order to represent the 1,420 total population. Given the variety of departments within the hotel industry, stratified random sampling was employed to ensure appropriate representation. Self-administered questionnaires were used to collect data over the course of three months. Each item in the survey had five possible ratings, which were as follows: 1-Not at all, 2-To a slight extent, 3-To a moderate extent, 4-To a large extent, and 5-To a very large extent.According to Roy and Khastagir (2016), this rating made it possible to evaluate how much GHRM was applied in Ethiopia's various hotel industries.

Data Analysis

The results of the correlation analysis are presented in this section along with a detailed analysis of the data acquired through the questionnaire. This study was examined using the Statistical Package for the Social Sciences, version 26. Internal consistency of survey instrument was evaluated using the Cronbach Alpha method.

3. Result and Discussion

4.1 Eco-Friendly Human Resource Management Practices in the Hotel Industry

Descriptive analysis was used to evaluate respondent input regarding green HRM in the context of Ethiopian hotel industry. As indicated in table 4.2, the means of the respondents were utilized to determine and assess the application level for each GHRM practice. The hotel industry's level of adoption of green HRM practices is reflected in the applications of the interval of application degrees. Respondents were rated on a five-point Likert scale (1 being not at all, 2 being to a slight extent, 3 being to a moderate extent, 4 being to a large extent, and 5 being to a very large extent).

Table 4.1: Intervals of application degrees

Interval	Degree
1.00 - 1.80	Very low
> 1.80 - 2.60	Low
> 2.60 - 3.40	Moderate
> 3.40 - 4.20	High
> 4.20 - 5.00	Very High

Table 4.2: Descriptive examination of every item covered by GHRM practices

No	*Green Recruitment and Selection Items*	Mean	Application Degree
1	Job description and specification includes environmental concerns	1.89	Low
2	Environmental performance of the industry attracts highly qualified employees	1.75	Very low
3	Selecting applicants who are sufficiently aware of greening to fill job vacancies	1.81	Low
4	Recruitment messages include environmental behavior/commitment criteria	1.87	Low
5	jobs positions designed to focus exclusively on environmental management aspects of the industry	1.69	Very low
Overall Mean and Application Degree		1.80	Low

Sources: Own Survey, 2023

No	Green Training and Development Items	Mean	Application Degree
6	Educating industry participants on environmental issues to raise awareness of environmental issues	2.67	Moderate
7	When analyzing training requirements, keep environmental issues in mind.	2.79	Moderate
8	Observing orientation sessions that prioritize environmental concerns	1.94	Low
9	Employees have online access to all training materials in order to reduce the expense of paper.	1.21	Very low
10	Comparing environmental training to other company training programs, environmental training comes first.	2.57	Low
Overall Mean and Application Degree		2.2	Low

Sources: Own Survey, 2023

No	Eco-Friendly Performance Management and Appraisal Items	Mean	Application Degree
11	Workers are aware of their individual green targets, objectives, and duties.	2.58	Low
12	Performance indicators evaluate and include contributions to environmental management and environmental behavior.	2.69	Moderate
13	Assessors' roles in attaining environmentally friendly results	3.01	Moderate
14	Regular feedback to teams or employees can help them improve their environmental performance and meet environmental targets.	1.74	Very low
15	The industry's performance assessment framework incorporates environmental management goals and targets by Corporate.	1.96	Low
Overall Mean and Application Degree		2.4	Low

Sources: Own Survey, 2023

No	Green Reward and Compensation Items	Mean	Application Degree
16	Initiating rewards for innovative environmental performance	3.21	Moderate
17	In accordance with environmental accomplishments, the organization provides both monetary and non-monetary rewards.	2.59	Low
18	Environmental performance is recognized publically	2.64	Moderate
	Overall Mean and Application Degree	2.81	Moderate

Sources: Own Survey, 2023

No	Green Employee Empowerment and Participation Items	Mean	Application Degree
19	Presenting green helplines and whistleblowing	1.87	Low
20	Allowing staff members to participate in collaborative problem-solving sessions and green suggestion programs for environmental issues.	2.67	Moderate
21	Employees can share implicit knowledge and improve their environmental behavior by attending workshops offered by the company.	1.74	Very low
22	Employee participation in developing the environmental strategy	2.43	Low
23	Top managers work together to manage the organization's environmental issues and to increase awareness of them.	3.14	Moderate
	Overall Mean and Application Degree	2.37	Low

Sources: Own Survey, 2023

No	Eco-Friendly Management of Organizational Culture Items	Mean	Application Degree
24	Environmental practices are actively supported by upper management.	2.94	Moderate
25	The environmental issue is mentioned in organizational vision and mission statements.	2.76	Moderate
26	The organization's top management makes environmental management information and values clear.	3.01	Moderate
27	Top management creates sanctions and fines for environmental management noncompliance.	2.63	Moderate
28	departmental budgets cover environmental impact	1.74	Very low
	Overall Mean and Application Degree	2.62	Moderate

Sources: Own Survey, 2023

Table 4.2 presents the application degree for GHRM practices in a sliding order. The overall GHRM practice implementation is 2.07, which is regarded as a low level based on the results.In addition, the hotel sector uses green reward and compensation items with mean values of 2.62 and 2.81, as well as green corporate culture management. Green recruitment and selection is the least common item, with a mean value of 1.80.

No	GHRM Practices in the Hotel Industry	Mean	Application Degree
1	Green reward and compensation items	2.81	Moderate
2	Green management of elements of organizational culture	2.62	Moderate
3	Eco-friendly performance management and appraisal items	2.4	Low
4	Eco-friendly employee empowerment and participation items	2.37	Low
5	Eco-friendly educational resources and training materials	2.2	Low
6	Green hiring and selection materials	1.80	Low
	Overall Mean and Application Degree	2.07	Low

Table 4.3: The correlation coefficient between environmental performance and Green Human Resources Management practices

GHRM Practices	**Pearson's Correlation**	EP	Type of Correlation
Eco-Friendly Recruitment and selection	Correlation Coefficient	**.624 ****	Positive
	P-value (Sig.)	0.000	
Green training and development	Correlation Coefficient	**.619 ****	Positive
	P-value (Sig.)	0.000	
Green performance management and appraisal	Correlation Coefficient	**.608 ****	Positive
	P-value (Sig.)	0.000	
Green reward and compensation	Correlation Coefficient	**.602 ****	Positive
	P-value (Sig.)	0.000	
Green management of organizational culture	Correlation Coefficient	**.584 ****	Positive
	P-value (Sig.)	0.000	
Green employee empowerment and participation	Correlation Coefficient	**.546 ****	Positive
	P-value (Sig.)	0.000	

*** Pearson's Correlation is significant at the 0.05 level*

4.3 Examining the relationship between environmental performance and GHRM practices

Given that all of the P-values in Table 4.3 are less than 0.05, it is clear that environment performance and the six groups of GHRM practice items have a significant correlation. These groups of practices have a collective impact on environment performance. These practices do, however, show a positive correlation with environment performance; the practice of "green employee empowerment and participation" has the lowest correlation (ρ=0.546), while practice of "green recruitment and selection" has highest correlation (ρ=0.624).

5. Conclusion

The primary goal of this study is to evaluate green HRM practices in the hospitality sector. The degree of application was examined by identifying and evaluating six key GHRM item components. Green employee empowerment and participation, green training and development, green performance management and appraisal, green reward and compensation, and green management of organizational culture were the highlighted GHRM practices. However, the analysis's conclusion showed that there was only a minimal level of GHRM practice implementation overall. Additionally, the statistical analysis confirmed that there is a significant positive correlation between the six green HRM practices and environmental performance. The practice that was found to have the greatest influence was "green reward and compensation items." Conversely, the practice that had the least impact was "green recruitment and selection items. The statistical results indicate that without the appropriate green hiring and selection, training, and development policies, employees are being compensated and rewarded for the work they do on their own. Therefore, if the Ethiopian hotel industry makes greater investments in training programs and environmentally friendly recruitment and selection procedures, it should be able to increase its level of green HRM implementation from a low to at least a moderate level. If it is planned and acted well on the six GHRM items, the level of application might goes to the higher level. It is well known that achieving high levels of environmental performance in the future is difficult without improved green recruitment selection, and training programs (Daily, 2012). Moreover, incorporation of eco-friendly management practices into organizational culture fosters employee commitment and environmental performance awareness. Therefore, greening people means linking the human resources to environmental management.

References

Ahmad, S. (2015). Green Human Resource Management: Policies and practices. In Cogent Business and Management. https://doi.org/10.1080/23311975.2015.1030817

Arulrajah, A. A., Opatha, H. H. D. N. P., Nawaratne, N. N. J., 2015. Green Human Resource management practices: a review. Sri Lankan Journal of Human Resource Management, 15, 1–16.

Brío, J.Á., Junquera, B., Ordiz, M., 2008.Human resources in advanced environmental approaches–a case analysis.International Journal of Production Research, 46, 6029–6053.

Cherian, J. P., Jacob, J., 2012. A study of green HR practices and its effective implementation in the organization: a review. International Journal of Business and Management, 7, 25–33.

Cotati.C.R. (2004).Researcher methodology method and technique. New age international ltd

Publisher. Ethiopian labor proclamation 377/2003

Creswell, J.W., 2004. Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research, seconded. Pearson Education, Columbus.

Daily, B. F., Bishop, J., Steiner, R., 2007. The mediating role of EMS teamwork as it pertains to HR factors and perceived environmental performance. Journal of Applied Business Research, 23, 95–109.

Daily, B., Huang, S., 2001.Achieving sustainability through attention to human resource factors in environmental management. International Journal of Operations & Production Management, 21, 1539–1552.

Fernandez, E., Junquera, B., Ordiz, M., 2003. Organizational culture and human resources in the environmental issue: a review of the literature. International Journal of Human Resource Management, 14, 634–656.

Guerci, M., Montanari, F., Scapolan, A., Epifanio, A., 2016. Green and non-green recruitment practices for attracting job applicants: exploring independent and interactive effects. The International Journal of Human Resource Management. 27(2), 129-150.

Gupta, S., Kumar, V., 2013. Sustainability is the corporate culture of a brand for superior performance. Journal of World Business, 48, 311-320.

Harvey, G., Williams, K., Probert, J., 2013. Greening the airline pilot: HRM and the green performance of airlines in the UK. The International Journal of Human Resource Management, 24, 152-166. DOI: 10.1080/09585192.2012.669783

Jabbour, C. J. C., Jabbour, A. B. L. de S., 2016. Green human resource management and green supply chain management: linking two emerging agendas. Journal of Cleaner Production, 112, 1824-1833.

Jackson,S. E., Seo, J., 2010. The greening of strategic HRM scholarship. Organization Management Journal, 7, 278-290.

Jackson, S. E., Renwick, D. W. S., Jabbour, C. J. C., Müller-Camen, M., 2011. State-of-the-art and future directions for green human resource management: Introduction to the special issue. German Journal of Human Resource Management: Zeitschriftfür Personal forschung, 25, 99-116.

Kapil, K., 2015b. Green HRM: trends and prospects. GE- International Research Journal of Management Research.1, 43–55.

Kapil, P., 2015. Green HRM- Engaging Human Resource in reducing carbon footprint and enhancing environment sustainability: A case study based approach. International Journal of Engineering Technology Science and Research, 2, 5–14.

Liebowitz, J., 2010. The role of HR in achieving a sustainability culture. Journal of Sustainable Development, 3, 50–57.

Mandip, G., 2012. Green HRM: people management commitment to environmental sustainability. Research Journal of Recent Sciences, 1, 244-252

Margaretha, M., Saragih, S., 2013.Developing new corporate culture through green human resource practice. International Conference on Business, Economics, and Accounting. Bangkok - Thailand.

Masri, H. A., & Jaaron, A. A. M. (2017). Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. Journal of Cleaner Production, 143, 474–489. https://doi.org/10.1016/j.jclepro.2016.12.087

Mehta K., Chugan P.K., 2015. Green HRM in pursuit of environmentally sustainable business.

Universal Journal of Industrial and Business Management, 3, 74-81.

Mohtar, N.S., Rajiani, I., 2016.The conceptual model in using ability and opportunity as GHRM framework to determine environmental performance. International Business Management, 10, 3840-3846.

O'Donohue, W., Torugsa, N., 2016.The moderating effect of 'Green' HRM on the association between proactive environmental management and financial performance in small firms. The International Journal of Human Resource Management. 27, 239-261.

Opatha, H.H.D.N.P., Arulrajah, A., 2014. Green human resource management: simplified general reflections. International Business Research, 7, 101–112.

Pham, N. T., & Tuckova, Z. (2017). Green Human Resource Management Practices in the Hospitality Sector. 2017.

Prasad,R. S., 2013. Green HRM- partner in sustainable competitive growth. Journal of Management Sciences and Technology, 1, 15-18.

Renwick, D. W. S., Redman, T., Maguire, S., 2013. Green human resource management: a review and research agenda. International Journal of Management Reviews, 15,1-14.

Roy, M., Khastagir, D., 2016.Exploring the role of green management in enhancing organizational efficiency in the petrochemical industry in India. Journal of Cleaner Production, 121, 109-115.

Saha, S., Sarker, R., & Ahmed, S. M. (2020). Impact of Green Human Resource Management (GHRM) practices in the Garment industry : Bangladesh Perspective. 2(2), 22–30.

Shaikh, M., 2012. Green HRM: a requirement of 21st century. Journal of Research in Commerce and Management, 1, 122-127.

Sharma, S., Gupta, N., 2015. Green HRM: an innovative approach to environmental sustainability. Proceeding of the Twelfth AIMS International Conference on Management. 2-5 January, Calicut, India, 825-830.

Tan, N., Tučková, Z., José, C., Jabbour, C., Bata, T., & Republic, C. (2019). Greening the hospitality industry : How do green human resource management practices influence organizational citizenship behavior in hotels ? A mixed-methods study. Tourism Management, 72(December 2018), 386–399. https://doi.org/10.1016/j.tourman.2018.12.008

Tashakkori, A., Teddlie, C., 1998. Mixed Methodology: Combining Qualitative and Quantitative Approaches. Sage Publications, London.

Wehrmeyer, W., 1996. Greening People: Human Resources and Environmental Management.

Greenleaf Publishing, Sheffield.

Yusoff, Y.M., Ramayah, T., Othman, N., 2015. Why examining adoption factors, HR role, and attitude towards using E-HRM is the start-off in determining the successfulness of green HRM? Journal of Advanced Management Science, 3, 337–343.

Yusoff, Y. M. (2018). Linking Green Human Resource Management Practices to Environmental Performance in the Hotel Industry. https://doi.org/10.1177/0972150918779294

The Nexus of Education and Innovation with Sustainable Development

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Abstract

Education and innovation are critical drivers of sustainable development. Education empowers individuals and communities to understand and address complex sustainability challenges, while innovation provides the tools and technologies needed to transition to a sustainable future. The digital age has revolutionized global education, presenting both transformative opportunities and complex challenges.

The paper highlights the nexus between education and innovation, emphasizing the role of education as a catalyst in driving innovation and sustainable development. Digital technologies, such as artificial intelligence, virtual reality, and augmented reality, offer transformative potential to enhance teaching, learning, and accessibility, fostering personalized learning experiences. Additionally, the paper presents real-world examples of how education and innovation are being leveraged to promote sustainable development. It acknowledges regional variances in educational landscapes. The paper presents key findings that demonstrate the crucial role of education in fostering sustainability consciousness and empowering individuals to make informed decisions for a sustainable future, also emphasizes the role of innovation as a catalyst for sustainable development, driving the creation of new technologies, processes, and business models to address environmental, social, and economic challenges.

The paper suggests integrating sustainable education principles, fostering innovation ecosystems, investing in education and research, empowering individuals with knowledge, and promoting global cooperation. The paper emphasizes the importance of a holistic approach that embraces digital technologies, supports innovation, and advances sustainable development. It also acknowledges the need for tailored strategies that address regional variances and ensure equitable access to quality education for all. By harnessing the power of education and innovation, we can pave the way for a more sustainable and equitable future for all.

Keywords: *Global Education, Innovation, Sustainable development, Digital technologies, Equitable future*

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Introduction

In the era of interconnectedness and rapid technological advancements, education and innovation stand as powerful forces driving transformative change towards sustainable development. This research delves into the unleashing of student potential as agents of change within Higher Education for Sustainable Development (HESD). While established researchers and practitioners are often the focus of innovation efforts, the next generation – students – harbor immense, yet untapped, capabilities. They can not only generate novel and impactful ideas, but also mobilize support and build coalitions for positive change.

Addressing the urgent challenges outlined in the United Nations' 17 Sustainable Development Goals (SDGs), such as poverty, hunger, climate change, and environmental degradation, demands innovative solutions that transcend siloed academic disciplines. Interdisciplinary learning has emerged as a powerful tool, prompting students to connect diverse perspectives and generate holistic solutions. Universities play a crucial role in fostering this kind of collaborative learning and empowering students to become active agents of sustainable development within their communities.

- Despite this immense potential, students' contributions to sustainable innovation remain largely unacknowledged in HESD:
- Few studies have examined the current state of student creativity in the field of sustainability.
- Research on developing creativity skills through HESD is limited.
- Evaluations of educational settings for their potential to enhance student creativity in HESD are scarce.

This research takes a bold step towards bridging this gap by investigating students' innovation in HESD, focusing on interdisciplinary and mono-disciplinary project-based learning as two potential pathways.

The complex challenges outlined in the 2030 Agenda for Sustainable Development defy siloed academic disciplines. Interdisciplinary learning has emerged as a powerful tool, prompting students to connect diverse perspectives and generate holistic solutions. Given their access to varied knowledge and methodologies, interdisciplinary student teams may hold an edge over mono-disciplinary teams in terms of innovation.

However, the relationship between team diversity and innovation remains nuanced and requires further exploration. This study adopts a longitudinal approach to compare the effectiveness of interdisciplinary and mono-disciplinary project-based learning in nurturing student innovation, tracking its development over time.

By delving into students' idea generation and promotion within both interdisciplinary and mono-disciplinary settings, this research aims to make a significant contribution to the field of HESD. The longitudinal analysis across four occasions offers valuable insights into student team processes and provides practical implications for designing effective interdisciplinary teaching and learning experiences in HESD.

1. Research Objectives

- To analyze the interplay between education and innovation in addressing sustainability challenges
- To identify and compare practices in

fostering the nexus between education and innovation

- To know the education and innovation contribution to the achievement of the Sustainable Development Goals (SDGs).

2. Literature Review

The tapestry of our future is woven with three threads: education, innovation, and sustainable development. Brundtland's seminal work, "Our Common Future," established the foundation for this intricate connection, reminding us that only through responsible progress can we meet the needs of today without compromising the future. UNESCO's "Education for Sustainable Development Goals" further illuminates this path, providing five guiding threads for weaving knowledge and action into a tapestry of sustainability.

At the heart of this interplay lies innovation, the engine that drives solutions to the complexities of a changing world. The World Economic Forum paints a vivid picture of future education systems, where classrooms become crucibles for creativity, critical thinking, and problem-solving skills – the very tools needed to forge a sustainable future. This journey, however, demands a shift beyond traditional learning models, requiring us to embrace holistic approaches that resonate with heart and mind, as Rieckmann eloquently argues.

Across the globe, inspiring threads of this innovative tapestry already shine. UNESCO's "Good Practices" database is a treasure trove of diverse case studies, showcasing how education can seamlessly integrate the SDGs into its very fabric. The World Bank's "Education for Green Jobs" initiative paints a vibrant picture of a future workforce equipped with the skills to navigate a sustainable economy. These models, like stepping stones across a rushing river, not only offer practical guidance but also spark further innovation in the ever-evolving landscape of education and sustainability.

Yet, translating lofty ideals into tangible action requires more than just good intentions. As Sterling warns, transformative education demands a critical reexamination of existing systems, challenging the status quo and paving the way for a future-oriented approach. Biesta's insightful critique of data-driven accountability serves as a vital reminder that the true measure of success lies not in numbers but in the depth and authenticity of learning, and the empowerment of students to become agents of change.

Only by delving deeper into the rich tapestry of specific case studies, meticulously examining the threads woven by diverse perspectives and best practices, can we fully comprehend the transformative potential of this nexus. Through collaborative efforts, guided by a clear vision for a sustainable future, we can design and implement solutions that bridge the gap between theory and practice, leaving a legacy of shared responsibility and progress for generations to come.

3. Methodology

3.1 Research Design

This study employed a mixed-methods approach, combining a comprehensive literature review with an in-depth analysis of multiple case studies. The purpose of this approach was to gain a multifaceted understanding of the nexus between education, innovation, and sustainable development, as well as to identify and analyze innovative practices that effectively address this nexus.

3.2 Data Collection

3.2.1 Literature Review

- A systematic review of peer-reviewed academic literature, policy documents, and reports was conducted using relevant databases and search engines, including ERIC, JSTOR, and Scopus.
- Search terms included "education for sustainable development," "innovation for sustainability," "SDGs and education," and "case studies in sustainable innovation."
- Publications were selected based on their relevance to the research objectives, methodological rigor, and publication date within the last 10 years.
- Key findings, theories, and frameworks were extracted from the selected literature.

3.2.2 Case Studies

- A diverse range of case studies were selected to represent various levels of education (schools, universities), sectors (NGOs, businesses), and geographic regions.
- Case study selection criteria included:
  - Clear focus on innovative practices that foster the nexus between education and innovation for sustainable development.
  - Alignment with one or more specific SDG targets.
  - Availability of detailed documentation and data on the design, implementation, and impact of the practice.
- Established case study protocols were used for data collection, including document review, stakeholder interviews (if available), and observation.

3.3 Data Analysis

3.3.1 Literature Review

- Thematic analysis was employed to identify recurring themes, patterns, and relationships within the extracted data from the literature review.
- Findings from different sources were compared and contrasted to synthesize theoretical insights and empirical evidence.
- Findings from the literature review were triangulated with information from case studies to enhance validity and reliability.

3.3.2 Case Studies

- Qualitative data analysis techniques, such as thematic analysis or narrative analysis, were used to analyze the collected data from case studies.
- Strengths, weaknesses, and potential outcomes of the chosen innovative practices were identified.
- Generalizable lessons and recommendations were drawn based on the specific case study findings.

3.4 Ethical Considerations

- Informed consent was obtained from any research participants involved in case study data collection (e.g., interviews).
- Confidentiality and anonymity of all participants and their data were protected.
- Data security measures were implemented to safeguard collected data.

3.5 Dissemination

- Findings of the study will be disseminated through publications in peer-reviewed journals, presentations at relevant conferences, and engagement with key stakeholders in the fields of education, innovation, and sustainable development.

4. Education for Sustainable Development

Education plays a fundamental role in equipping individuals and communities with the knowledge, skills, and values necessary to make informed decisions and create a more sustainable future. Education for Sustainable Development (ESD) goes beyond traditional academic disciplines, integrating environmental, social, and economic considerations into learning processes. ESD aims to foster critical thinking, problem-solving abilities, and a sense of global citizenship, enabling individuals to contribute to a more just and equitable world.

5. Innovation for Sustainable Development

Technological innovation holds immense potential for addressing sustainability challenges. From renewable energy technologies and green infrastructure to precision agriculture and circular economy models, innovative solutions can accelerate progress towards the Sustainable Development Goals (SDGs). However, responsible innovation requires ethical considerations and inclusive approaches to ensure that benefits are equitably distributed and do not exacerbate existing inequalities.

6. The Nexus

The nexus of education and innovation for sustainable development lies in harnessing the transformative power of both. Education can nurture creativity, critical thinking, and entrepreneurial skills, fostering a pipeline of innovators equipped to tackle sustainability challenges. Conversely, innovation can inform and enhance educational practices, providing engaging and interactive learning experiences that prepare students for the realities of the 21st century.

7. Challenges and Opportunities

7.1 The Challenge of Unequal Access

- Limited Access to Quality Education: The foundation of sustainable development is an educated populace. Yet, millions worldwide lack access to quality education at all levels:
- Primary Education: 262 million children are still out of school, with girls disproportionately affected.
- Secondary Education: Only 61% of young people globally complete secondary education.
- Higher Education: Less than one-third of the world's youth have access to tertiary education.

7.1.1 Reasons for Limited Access

- Poverty: Families struggling to make ends meet may prioritize work over education for their children.
- Geographical Barriers: Remote areas often lack schools or qualified teachers.
- Gender Discrimination: Cultural norms and biases can prevent girls from attending school.
- Conflict and Displacement: Wars and humanitarian crises disrupt education systems and displace children.

7.1.2 Bridging the Access Gap

- Public-private partnerships: Governments and businesses can collaborate to build schools, train teachers, and provide scholarships.

- Technology-based learning: Online platforms and digital tools can reach students in remote areas and overcome resource constraints.
- Inclusive education: Schools must cater to diverse needs and abilities to ensure everyone has a chance to succeed.

7.2 The Challenge of Awareness and Understanding

- Lack of Awareness and Understanding of ESD Principles: Education for Sustainable Development (ESD) equips individuals with the knowledge, skills, and values to create a more sustainable future. However, awareness and understanding of ESD principles remain low.
- Limited Integration in Curricula: Many education systems lack curriculum frameworks that address sustainability issues comprehensively.
- Teacher Training Gaps: Many educators lack the training and resources to effectively teach ESD concepts.
- Community Engagement Disconnect: Schools often operate in isolation from their communities, limiting opportunities for real-world learning and action.

7.2.1 Raising Awareness and Promoting Understanding

- Curriculum Reform: Integrating ESD principles into all subjects and grade levels is crucial.
- Professional Development for Educators: Teachers need training on ESD pedagogy and content to effectively deliver it.
- Community-Based Learning: Engaging with local communities on sustainability challenges provides authentic learning experiences.
- Public Awareness Campaigns: Raising public understanding of ESD through media, campaigns, and community events is essential.

7.2.2 The Challenge of Inadequate Investment

Inadequate Investment in Research and Development for Sustainable Technologies: Technological advancements are crucial for addressing global challenges like climate change and resource depletion. However, investment in R&D for sustainable technologies lags behind:

- Limited Funding: Public and private sector investments in sustainable technologies are often outweighed by those in traditional, unsustainable industries.
- Fragmented Ecosystem: Collaboration between researchers, entrepreneurs, and investors is often hampered by a lack of coordination and communication.
- Focus on Short-Term Profits: Businesses may prioritize immediate profits over long-term sustainability goals.

7.2.3 Boosting Investment in Sustainable Technologies

- Increased Public Funding: Governments should allocate more resources to R&D for sustainable technologies through grants, tax breaks, and other incentives.
- Public-Private Partnerships: Collaboration between governments, businesses, and

universities can leverage resources and expertise for greater impact.

- Focus on Long-Term Value: Investors should consider the environmental and social benefits of sustainable technologies alongside financial returns.

7.3 The Challenge of the Digital Divide

Digital Divide and Unequal Access to Technology-Based Learning Resources: The digital divide refers to the gap between those who have access to technology and those who do not. This gap can limit access to quality education and sustainable development opportunities:

- Unequal Internet Access: Millions worldwide lack access to reliable and affordable internet connectivity, hindering online learning and information access.
- Limited Digital Literacy: Many lack the skills and knowledge to effectively use technology for learning and development.
- Inadequate Infrastructure: Rural and marginalized communities often lack the infrastructure needed to support technology-based learning.

7.3.1 Bridging the Digital Divide

Investing in Infrastructure: Expanding internet access through fiber optic cables, mobile networks, and community Wi-Fi initiatives is crucial.

- Developing Low-Tech Alternatives: Offline learning materials and non-digital educational tools can reach those without internet access.
- Promoting Digital Literacy Training: Equipping individuals with the skills to use technology effectively for learning and development is essential.

8. Some Crucial Areas where Education and Innovation Interwine to Drive Sustainable Development

8.1 Green Skills Development: Building a Workforce for a Sustainable Future

The green revolution isn't just about wind turbines and solar panels; it's about reshaping our workforce. Green skills development empowers individuals with the knowledge and expertise to spearhead this transformation, opening doors to exciting careers in renewable energy, circular economy, and other sustainable sectors.

Imagine specializing in harnessing the power of the sun, designing buildings that breathe with nature, or managing waste as a valuable resource. These are just a glimpse of the opportunities that await those equipped with green skills. Renewable energy technologies, energy efficiency strategies, sophisticated waste management systems, water conservation techniques, sustainable agriculture practices, and circular economy processes all demand a new breed of workers. Green building design and environmental restoration add to this spectrum, creating a diverse and rewarding landscape for skilled individuals.

But navigating this transition isn't without its challenges. Identifying which green skills will prove future-proof in a rapidly evolving landscape, ensuring accessible training programs reach diverse communities, and bridging the gap between acquired skills and available job opportunities are all hurdles to overcome.

Fortunately, solutions are blossoming. Collaborative efforts between educational institutions, forward-thinking industries, and supportive governments are crucial. Developing relevant curricula that blend cutting-edge knowledge with practical application, creating internship opportunities within green businesses, and facilitating effective job-placement programs are key steps towards building a resilient green workforce.

Investing in green skills development is not just about securing individual livelihoods; it's about building a future where environmental responsibility and economic prosperity go hand in hand. By nurturing a generation of green-skilled professionals, we empower ourselves to tackle climate change, build a circular economy, and create a truly sustainable world.

8.2 Entrepreneurial Education

Imagine classrooms buzzing with ideas, students brimming with creativity, and a palpable spirit of innovation. This is the vision of entrepreneurial education, where the focus shifts from textbooks to business plans, and lectures give way to brainstorming sessions. At its core, this approach nurtures a culture of problem-solving and critical thinking, not just to build successful businesses, but to craft sustainable solutions that benefit both society and the environment.

However, fostering this entrepreneurial spirit requires more than just textbooks with "venture capitalist" on the cover. It demands an ecosystem that empowers these budding innovators. Access to funding becomes crucial, providing the fuel for fledgling ideas to take flight. Mentorship and guidance from experienced entrepreneurs can offer invaluable navigation through the often-turbulent waters of startups. Finally, strong networks bridge the gap between aspiring change makers and the resources they need to turn their visions into reality.

Bridging this gap can be achieved through integrating entrepreneurial principles into existing curricula, not as mere add-ons but as threads woven into the fabric of every subject. Business plan competitions become battlegrounds of ingenuity, where classroom theories clash and morph into tangible solutions. Hackathons provide platforms for collaboration, while guest speakers from the startup world bring real-world experience into the classroom.

These interconnected steps foster an environment where creativity thrives, where "can we?" becomes the rallying cry, and where sustainable solutions not only turn a profit, but also pave the way for a brighter future. Entrepreneurial education is more than just teaching business; it's equipping the next generation with the tools and vision to build a world that's not just successful, but sustainable.

8.3 Technology-Enhanced Learning: Bridging the Gap Between Sustainability and Engagement

Digital technologies have opened doors to revolutionize learning about sustainability. Imagine students exploring virtual rainforests, engaging in gamified challenges to design solar-powered villages, or analyzing pollution data through interactive graphs. These are just a glimpse into the world of Technology-Enhanced Learning (TEL) for sustainability.

This approach leverages virtual reality simulations, interactive platforms, data visualization tools, and online courses to create immersive and engaging experiences. However, bridging the digital divide and ensuring responsible technology use remain significant challenges. Not everyone has equal access to the internet or devices, and we must be mindful of potential digital distractions and privacy concerns.

Solutions lie in finding alternative ways to reach everyone. Low-tech options like board games and outdoor activities can bring sustainability concepts to life. Additionally, promoting digital literacy training empowers individuals to navigate the online world safely and effectively. Finally, creating culturally relevant content that addresses specific sustainability challenges faced by communities strengthens the impact of TEL.

Ultimately, Technology-Enhanced Learning has the potential to transform sustainability education, not just by providing information, but by sparking curiosity, fostering critical thinking, and empowering individuals to become active agents of change in their communities and the world. By addressing the challenges and embracing creative solutions, we can bridge the gap between technology and sustainability education, fostering a generation of informed and engaged change makers.

8.4 Open Innovation Platforms

Imagine a bustling marketplace where educators, researchers, innovators, and community members gather, not to buy and sell, but to share ideas, knowledge, and expertise. This is the vision of open innovation platforms for sustainable development: dynamic hubs where diverse stakeholders collaborate to accelerate the creation and adoption of solutions for a greener future.

Think of it as democratizing knowledge sharing. No longer are groundbreaking ideas locked away in research labs or hidden within community knowledge pockets. Open platforms act as bridges, fostering collaboration across disciplines and sectors. Educators can share best practices in sustainability education, researchers can showcase their latest climate-friendly technologies, and communities can contribute local wisdom and insights. This collective brainstorming fuels rapid innovation, leading to practical solutions like sustainable farming techniques, eco-friendly building designs, or community-driven renewable energy projects.

But building these vibrant marketplaces isn't without its challenges. Trust is a cornerstone, and ensuring everyone feels welcome and heard in a diverse space requires intentional effort. Creating inclusive platforms that cater to varying levels of technical expertise and address language barriers is crucial. Quality control also becomes a concern. With open knowledge comes the risk of misinformation, so robust vetting mechanisms are essential to separate credible solutions from well-meaning but flawed ideas. Finally, navigating intellectual property rights can be a delicate dance, balancing open collaboration with protecting rightful ownership of innovations.

So, how do we overcome these hurdles and unleash the full potential of open innovation platforms? Technology plays a key role. Online platforms can host open-source databases brimming with research findings, educational resources, and practical guides. Hackathons and innovation challenges can spark collaborative problem-solving, bringing together diverse skillsets to tackle specific sustainability issues. And perhaps most importantly, fostering a culture of transparency and ethical collaboration is vital. Clear guidelines, open communication, and shared credit mechanisms can build trust and ensure everyone benefits from the collective effort.

Open innovation platforms are not just tools; they represent a shift in mindset. They move us from siloed approaches to open collaboration, from one-way knowledge transfer to collective learning, and from top-down solutions to community-driven innovation. By embracing these platforms and tackling the challenges head-on, we can unlock a powerful force for a sustainable future, one where knowledge truly empowers everyone to be a part of the solution.

9. Findings and Solutions

Objective 1: Interplay between Education and Innovation for Sustainability

Findings:

- Synergistic relationship: Education equips individuals with knowledge, skills, and values for tackling sustainability challenges, while innovation fuels the development of solutions and technological advancements. This fosters a feedback loop where education informs innovation and vice versa.
- Multifaceted interplay: The nexus operates across various levels, from individual learning to institutional collaborations and global knowledge sharing. Effective policies and supportive environments are crucial for amplifying this interplay.
- Innovation types matter: Technological innovation alone isn't enough. Social and institutional innovations, focusing on behavior change, governance, and inclusive models, are equally important for addressing complex sustainability issues.

Solutions:

- Promote interdisciplinary learning: Encourage educators to integrate sustainability challenges and innovative solutions across diverse disciplines, fostering holistic thinking and problem-solving.
- Cultivate creativity and design thinking: Nurture skills like critical thinking, collaboration, and prototyping to empower individuals to develop and implement innovative solutions.
- Bridge the gap between research and practice: Facilitate knowledge exchange between academia, industry, and communities to ensure practical and context-specific innovations.

Objective 2: Practices in Fostering the Education-Innovation Nexus

Findings:

- Diversity of approaches: Successful practices vary across contexts, from implementing ESD curricula in schools to establishing innovation labs and maker spaces, to community-based co-creation initiatives.
- Role of technology: Digital tools like online platforms, simulations, and virtual reality can enhance learning, collaboration, and remote engagement in sustainability and innovation projects.
- Importance of partnerships: Strong collaborations between educational institutions, NGOs, local communities, and private sector actors are crucial for resource sharing, expertise exchange, and scaling up successful practices.

Solutions:

- Map and share best practices: Establish platforms to document and disseminate successful approaches in fostering the education-innovation nexus, facilitating knowledge transfer and adaptation.

- Support capacity building: Provide training and resources for educators, community leaders, and other stakeholders to effectively implement innovative practices in their contexts.
- Foster peer learning and networking: Encourage knowledge exchange and collaboration among practitioners through workshops, conferences, and online communities.

Objective 3: Education and Innovation for Achieving the SDGs

Findings:

- Essential contribution: ESD equips individuals with the knowledge and skills to understand and address the SDGs, while innovation drives the development of solutions and technologies for achieving the goals.
- Focus on specific SDGs: Education and innovation interventions can be tailored to address specific SDG targets, like promoting renewable energy through STEM education or developing climate-resilient agricultural practices through community-based innovation.
- Monitoring and evaluation: Robust data collection and analysis are crucial to assess the impact of education and innovation initiatives on achieving the SDGs, ensuring targeted interventions and course correction.

Solutions:

- Align education policies with SDGs: Integrate the SDGs into education policies and curricula to ensure a clear focus on sustainability challenges and desired outcomes.
- Invest in research and development: Support research and development efforts focused on creating innovative solutions aligned with the SDGs, particularly in areas like clean energy, resource efficiency, and climate change mitigation.
- Develop robust monitoring and evaluation frameworks: Establish clear indicators and data collection methods to track progress towards SDG targets and assess the effectiveness of education and innovation interventions.

10. Conclusion: Cultivating a Sustainable Future Through Education and Innovation

The challenges we face in the 21st century demand a paradigm shift. Business as usual, siloed approaches, and outdated models will not pave the path to a sustainable future. Instead, we must forge a new path, one illuminated by the potent nexus of education and innovation.

Education is the bedrock of this endeavor. It is not merely the transmission of knowledge; it is the cultivation of critical minds, adept problem solvers, and individuals imbued with a sense of global citizenship and responsibility. Through Education for Sustainable Development (ESD), we can equip future generations with the tools and knowledge to understand complex challenges, envision solutions, and navigate the complexities of a rapidly changing world.

Innovation, fueled by advancements in technology, offers the tools to translate ideas into reality. From renewable energy solutions and green infrastructure to sustainable agriculture and circular economy models, innovation can be the engine that propels us towards the Sustainable Development Goals (SDGs). However, innovation must be guided by ethical considerations and inclusive approaches, ensuring that its benefits reach all corners of society and exacerbate existing inequalities.

The true magic lies where these two forces converge. Education can nurture creativity, critical thinking, and entrepreneurial skills, fostering a pipeline of innovators equipped to tackle sustainability challenges. Conversely, innovation can inform and enhance educational practices, providing engaging and interactive learning experiences that prepare students for the realities of the 21st century

References

Brundtland, H. G. (1987). Our common future: Report of the World Commission on Environment and Development. Oxford University Press.

UNESCO. (2016). Education for sustainable development goals: Learning objectives. UNESCO.

World Economic Forum. (2020). The future of education and skills 2020: Learning to unlock human potential in the Fourth Industrial Revolution. World Economic Forum.

Tilbury, D., Berrone, P., & St. Pierre, M. (2015). Education for sustainable development and transformative learning. In Handbook of theory and research in sustainable development education (pp. 224-249). Springer.

Gadotti, M. (2009). Educating for sustainable development: A critical contribution to the twenty-first century agenda. UNESCO International Bureau of Education.

UNESCO & UNEP. (2012). Education for sustainable development sourcebook. UNESCO.

World Future Council. (2019). Education for transformation: Retooling our education systems for sustainable development. World Future Council.

Sterling, S. R. (2014). Higher education, sustainability and the transformation of the public world: Playing the long game. Routledge.

A Bibliometric Analysis on Transformational Leadership

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Abstract

This paper reveals the literature on transformational leadership. The study focuses on gathering the information related to the transformational leaders. The data was collected from 6,090 papers published from 2012 to 2022. The search items considered the following keywords: "transformational leadership", "transformational leader", "transform leadership", "transform leader". Searching the Scopus database for transformational leadership titles, abstracts, and author key words yielded a total of 12,874 entries. Prior to processing the analysis, the author keywords were re-labeled by making a thesaurus file. The current study has used PRISMA (Preferred reporting items for systematic reviews and meta- analyses) guidelines and procedures. This study also focused on how the researches have been continuously progressing on transformational leadership. Its goal is to make this topic's research more visible by showcasing its present features and providing a thorough and retrospective evaluation of publications. The study used VosViewer to analyze the collected data.

Keywords: *Transformational Leadership, Bibliometric Analysis, Transformational Leader, Transform Leadership*

1. Introduction

In the era of rapid changing business environment leaders play a very crucial role in the growth of the organization. Every organization needs the co-operation among their employees to grow. The behavior of the employees plays a vital role in the development of the organization which depends upon the behavior of their leaders. The behavior of the subordinates is largely impacted by the qualities and behavior of their superiors which will ultimately lead to the success of the organization. Burns presented the idea of transformational leadership in his study of political leaders that was descriptive in nature in 1978. A process known as "leaders and followers helping each other to advance to a higher level of morale and motivation" is what Burns refers to as "transforming leadership."

Avolio and Bass (1985), extended the work of burns by explaining the psychological mechanisms that underlie transforming and

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transactional leadership; Bass also used the term "transformational" instead of "transforming." Transformational leadership largely impacts the motivation and the performance of its followers. The followers of the transformational leaders always feel trust, loyalty, respect and admiration for their leader. And the followers work with more enthusiasm than originally expected because of the qualities of the transformational leader.

The bibliometric analysis of transformative leadership from 2016 to 2021 was carried out by Sadif et al. (2023). 200 articles were taken out of the Scopus database and published in different publications. Harzing's Publish or Perish was used as the research methodology. Based on the goal of the study and research questions to aid in bibliometric analysis, nine research questions were proposed. The study's findings indicated that 10,089 citations on the subject have been made throughout the course of six years. The fields that study business, management, and accounting the most are also those that study transformational leadership, followed by psychology, nursing, and health professions. Furthermore, it was shown that between 2016 and 2021, the number of studies on transformational leadership declined year over year, with the highest number of publications occurring in 2016 (41) and the lowest number in 2021 (6 publications).

There were significant studies on transformational leadership and their other associated structures. Nevertheless, there aren't many researches that measure and analyze scientific publications on transformational leadership from an international standpoint.

Research Methods

The goal of this research is to examine and asses the growth of article/ research publications on transformational leadership published between 2012 and 2022 (the last decade). This study employs a bibliometric analysis because it offers a comprehensive view of the research trends in the literature. PRISMA guidelines and procedures (Preferred reporting items for systematic reviews and meta-analyses) were followed in this investigation. The information was taken from the Scopus database between 2012 and 2022 in order to look through every article written about transformational leadership. The primary categories of data studied for bibliometrics, according to Abramo et al. (2011), include journals, institutions, authors, keywords, nations, references, and trends within the specific theme.

The current study carried the bibliometric analysis both qualitatively and quantitatively. Choudhri et al. (2015) stated that Scopus has built- in analyzer features which is required for the bibliometric analysis. Afterwards, VOSviewer software was used to visualize the data such as analysis of citations, countries, co-occurrences and keywords.

Literature Search

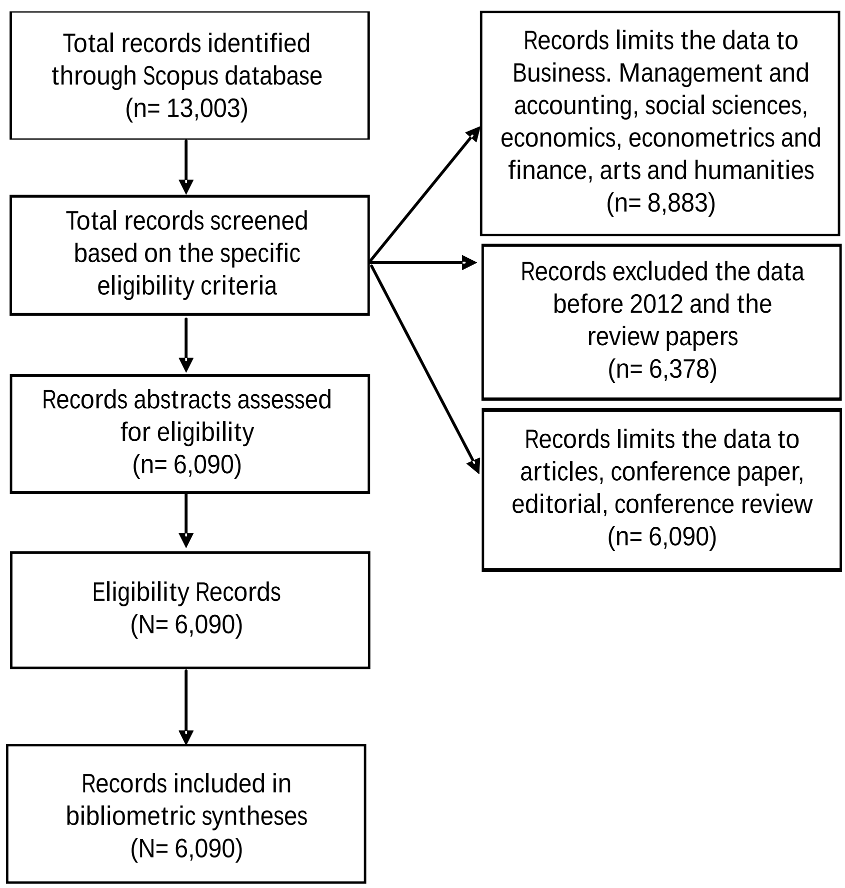
The search process in Scopus was limited to research that was published between 2012 and 2022. The search items utilized the following keywords: “transformational leadership”, “transformational leader”, “transform leadership”, “transform leader”.

Mapping the body of existing research on transformative leadership across all disciplines was the main focus of the search. The research articles from several books, journals, trade magazines, conference papers, conference proceedings, and book chapters were all included in the study; however, review papers were left out.

- Inclusion: Dates: 2012 to 2022
- Inclusion: Searching key words "transformational leadership", "transformational leader", transform leadership", transform leader".
- Inclusion: Document type: article, book chapter, conference paper, book, editorial, conference review.
- Exclusion: Document type: review paper, erratum, letter, short survey, data paper.

A total of 12,874 entries were found by searching the Scopus database for transformational leadership titles, abstracts and author key- words. Then based on the eligibility, the publications were selected from 2012 to 2022 and the review papers, erratum were not included. 4159 irrelevant papers were excluded by using the Scopus filters. Finally, 6,090 eligible records were left for this bibliometric analysis (see figure 1).

Figure 1: PRISMA flow diagram detailing steps in the identification and screening of publications on transformational leadership 2012- 2022

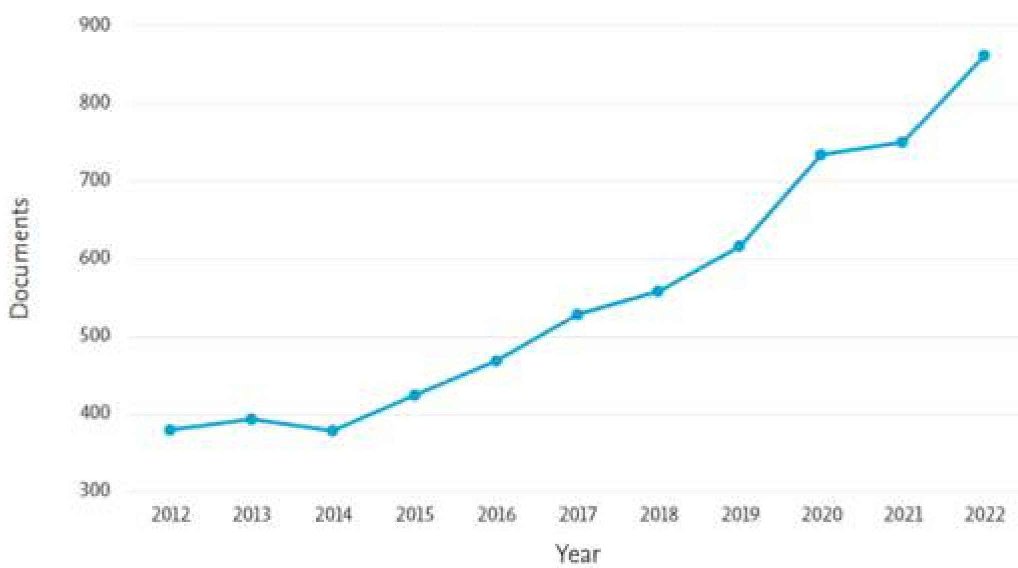


Analysis of Result

Publication growth of research interest

Figure 2 shows the gradual growth of transformational leadership publications from 2012 to 2022. As from the year 2012 to 2014 there was no massive change in the publication output and research output on transformational leadership. It was discovered that the Scopus Database has 379 studies in 2012 and 378 studies in 2014 on transformational leadership. But after 2014 there was rapid and continuous increase in the publications on transformational leadership till 2020. In 2020 the studies raised to 734. The studies were continuously rising from 2014 to 2020 but the annual publications were less than 100 till 2019. And from 2019 to 2020 there was a massive growth of 118 in the publications. However, from 2015 to 2020 the number of publications showed accelerated growth. A total of 3,328 transformational leadership research papers had been published within 6 years. Then it declined in the next year to 750 publications. And again, started to rise in 2022. It can be included that the decrease in the publications in the year 2021 is due to the covid- 19 and eventually after that the publications started rising. It could be anticipated that the interest will be continuously rising in the future.

Figure 2. Publications on Transformational Leadership from 2012 to 2022.



Leading Authors, Top Journals, Institutions and Countries

The top 10 authors of transformational leadership, who are associated with various nations including Malaysia, Denmark, Sweden, Israel, and so on, are listed in Table 1. The first publications of the 108 articles, written by the ten academics, were released between 2012 and 2020. According to the authors, studies on transformational leadership have been conducted in the fields of business, management, and accounting, social sciences, econometrics, finance, economics, and art and humanities.

According to Scopus, the most prolific transformational leadership authors are Rowold, J. from Germany, who have published 16 articles, 21 h- index, 481 citations, the another author is Andersen, L.B. from Denmark, who have published 15 articles, 26 h- index, 310 citations and Dartey- Baah, K. from Ghana who have published 13 articles, 11 h- index and 166 citations. It is noted that 2nd, 4th and 6th top authors are Andersen, L.B., Jacobsen, C.B. and Bro, L. L. respectively who

Table 1. Most Prolific Authors in the Transformational Leadership Research Area

S No.	Author	Scopus Author ID	Year of 1st Publication	Total Publication	h-index	Total Citation	Current Affiliation	Country
1	Rowold, J.	23398835000	2012	16	21	481	Technische Universität Dortmund	Germany
2	Andersen, L.B.	7201948837	2014	15	26	310	Aarhus Universitet Aarhus	Denmark
3	Dartey Baah, K.	36496357900	2014	13	11	166	University of Ghana Business School, Accra	Ghana
4	Jacobsen, C.B.	55630840400	2015	12	15	306	Aarhus Universitet Aarhus	Denmark
5	Appelbaum, S.H.	7004864410	2012	9	29	87	John Molson School of Business, Montreal	Canada
6	Bro, L. L.	57190299287	2017	9	7	260	Crown Prince Frederik Center for Public Leadership	Denmark
7	Devos, G.	15833879100	2014	9	28	254	Universiteit Gent, Ghent	Belgium
8	Tafvelin, S.	55027037400	2014	9	14	169	UmeåUniversitet, Umea	Sweden
9	Berkovich, I.	36172428300	2016	8	15	156	Open University of Israel,	Israel
10	Furuoka, F.	24464870400	2020	8	17	99	Universiti Malaya, Kuala Lumpur	Malaysia

Source: Scopus Database

Table2: Most Productive Journals on Transformational Leadership Research with their most Cited Article

S No	Journal	TP (%)	Number of Citations	Cite Score	The most cited article	Times Cited	Publisher
1	Leadership and Organization Development Journal	132 (2.17)	2777	3.923	Ambidextrous leadership “and team innovation”	174	Emerald Group Holdings Ltd.
2	Sustainability (Switzerland)	101 (1.66)	1361	4.39	“The continuous mediating effects of GHRM on employees' green passion via transformational leadership and green creativity”	121	MDPI
3	Leadership Quarterly	58 (0.95)	5179	9.924	“Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust”	402	Elsevier Inc.
4	Educational Management Administration and Leadership	47 (0.79)	1140	3.44	A systematic review of studies on leadership models in educational research from 1980 to 2014	185	SAGE Publications Ltd
5	Journal of Business Ethics	42 (0.67)	2224	6.331	“The Determinants of Green Product Development Performance:Green Dynamic Capabilities, Green Transformational Leadership, and Green Creativity”	372	Springer Netherlands
6	Journal of Management Development	40 (0.66)	1002	16.82	A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation	186	Emerald Group Publishing Ltd.
7	Journal of Business Research	39 (0.62)	2373	10.969	“Transformational leadership influence on organizational performance through organizational learning and innovation”	499	Elsevier Inc.
8	Journal of Leadership and Organizational Studies	35 (0.57)	1169	4.8	“Leadership, commitment and culture: A meta, analysis”	122	SAGE Publications Inc.
9	International Journal of Leadership in Education	35 (0.57)	303	2.8	Evaluating the effect of transformational leadership on knowledge sharing using structural equation modelling: the case of Iraqi higher education”	38	Routledge
10	SAGE Open	33 (0.54)	374	1.6	“Transformational Leadership and Job Performance: The Mediating Role of Work Engagement”	77	SAGE Publications Inc.

Source: Scopus Database

all belonged from Denmark. The authors ranked 6th, 7th, 8th and 9th have more citations than Appelbaum, S.H. who have been ranked 5th in the list. Andersen, L.B. and Jacobsen, C.B. both are affiliated with the Aarhus Universitet, Aarhus, Denmark. Rowold, J. has 481 citations followed by Andersen, L.B. with 310 citations and Jacobsen, C.B. with 306 citations.

The top 10 journals that have published the most articles on transformational leadership over the past ten years are shown in Table 2. These ten journals have published nearly 9.23% (or 562 papers published out of 6,090) of the total number of articles published on transformational leadership. As a result, with 132 papers, or 2.17% of all publications, the Leadership and Organization Development Journal was the most productive journal on transformational leadership. Following Sustainability (Switzerland) (101, 1.66%), Leadership Quarterly (58, 0.95%), and Educational Management Administration and Leadership (47, 0.77%), it has the second-highest number of citations (2,777) among the top 10 journals. The findings also showed that six distinct publishers own six of the top ten most productive journals (Table 2).

Emerald Group Holdings Ltd. Published the top journal. Top 6 journal was also published

Figure 3. Most productive institutions in Transformational Leadership research

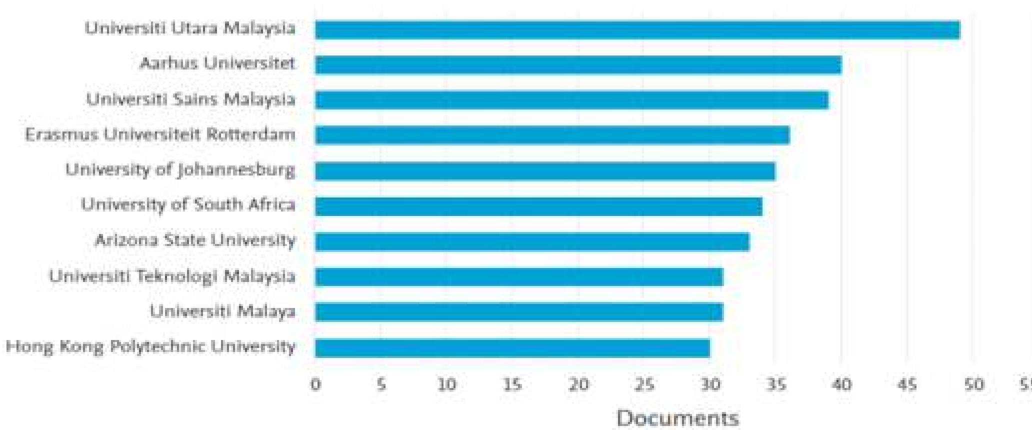
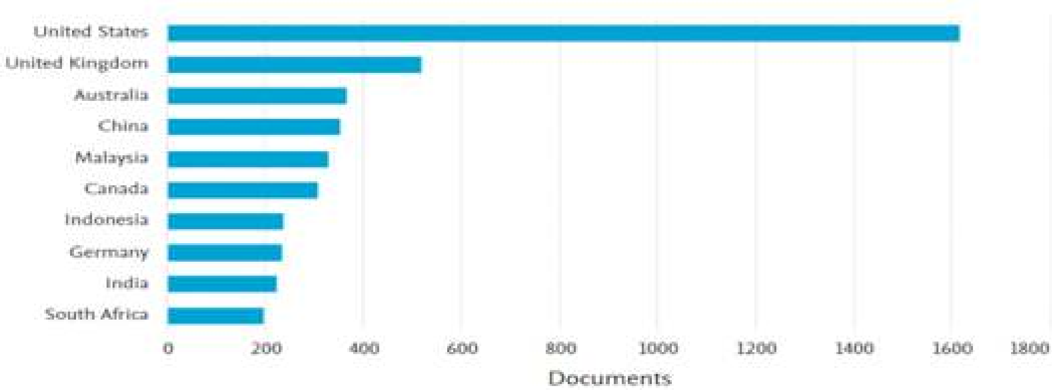


Figure 4. Most productive countries in Transformational Leadership research



Source: VosViewer

by Emerald Group Holdings Ltd. Top 4, top 8 and top 10 journals were published by SAGE Publications Ltd as shown in the above table. Top 3 and top 7 journals are owned by Elsevier Inc. And the remaining three journals are published by Routledge, Springer Netherlands.

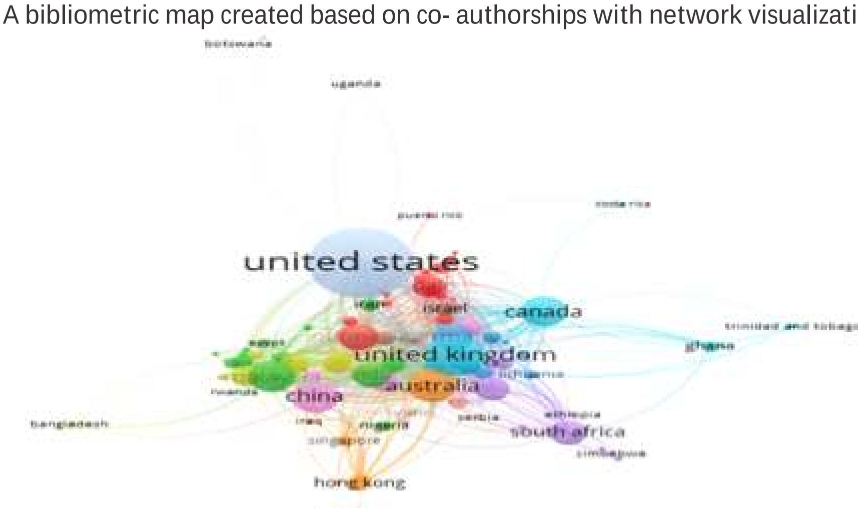
With 49 articles, Universiti Utara Malaysia was the university with the most in the category of transformational leadership publications. Moreover, with 40 publications, Aarhus Universitet came in second. Universiti Sains Malaysia ranked third with 39 articles on transformational leadership, the most of any university. These universities were followed by the University of Johannesburg with 35 publications and the Erasmus Universiteit Rotterdam with 36 articles.

The 6,090 papers in the transformational leadership research were produced by 130 countries and territories in total, with the top ten most productive and renowned countries and territories accounting for 71.63% (4,362 publications) of the total publications. In the realm of transformative leadership, the United States constituted the primary or most significant nation. With 1,614 publications, or around one-third of all publications, it has made the greatest contribution. Australia and the United Kingdom come next, with 516 and 364 publications created, respectively. China comes in second with 351 publications, while Malaysia came in fifth place with 326 publications. (Figure 4).

Most influential countries/ territories and their co- authorships

Figure 5 displays the allocation of nations and territories by geographical area. The stronger connection between the two countries is indicated by the thicker line in VOSviewer. Two countries' closeness in VOSviewer indicates their strong relationship. Throughout the past ten years, the field of transformational leadership has experienced remarkable growth. Using a bibliographic coupling analysis, Figure 5 illustrates the transformational leadership countries with the highest productivity. The outcomes align with the ones shown in Figure 4. With the most publications, the US was leading the world in transformative leadership. Furthermore, the co-authorship results indicated that, with 67

Figure 5: A bibliometric map created based on co- authorships with network visualization mode



Source: VosViewer

countries and territories linked, the UK was the most affiliated nation. The list was followed by US with 64 links and Australia 52 links.

Author Keywords

Prior to processing the analysis, the author keywords were re-labeled by making a thesaurus file. Following the modification of the complete keyword's information, the analysis produced 1000 author keywords (minimum five occurrences) split into 7 groups.

Terminology and Concept

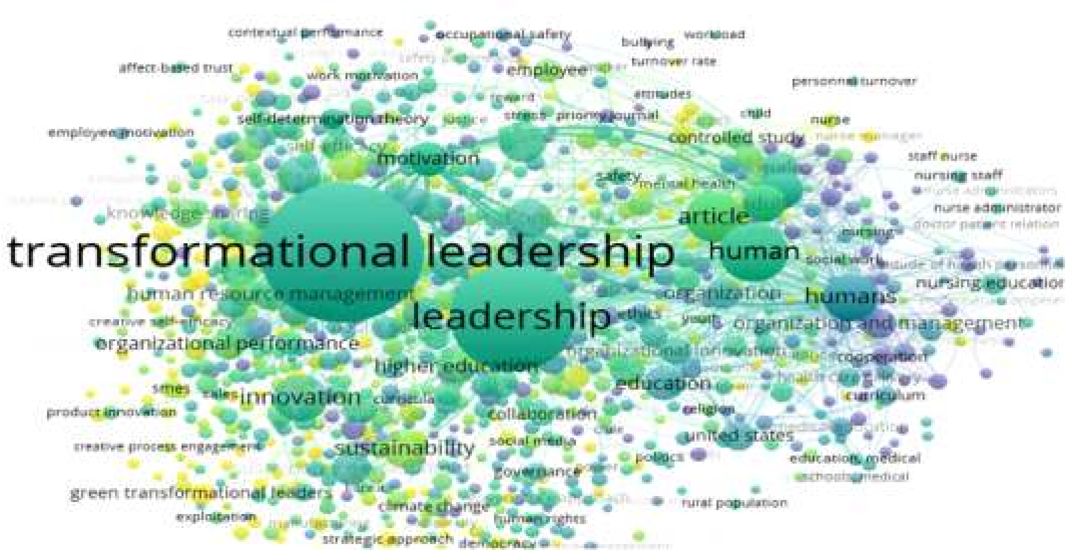
With 2,175 occurrences and 888 linkages to other terms, the author's co-occurrences study of keywords found that "transformational leadership" was the most often used keyword in earlier studies, as seen in Figure 6.

In this particular study, many keywords were used in conceptualizing the background of transformational leadership, for instance, “leadership” (1,190 occurrences), “human resource management” (91 occurrences), “organizational performance” (68 occurrences), “human experiment” (74 occurrences), “organizational commitment” (113 occurrences), “job satisfaction” (137 occurrences), “emotional intelligence” (77 occurrences), “knowledge sharing” (65 occurrences), “human” (296 occurrences), “organization” (71 occurrences), “work engagement” (81 occurrences), “organization and management” (72 occurrences).

Summary of Most Cited Publications

Table 3 shows the publications that covers the concept of transformational leadership field that are most influential which had the highest citations. The article “Industry 4.0: State of the art and future trends” had been declared as the most cited one with 1,548 times citations, followed by “Data science, predictive analytics,

Figure 6: A screenshot of the bibliometric map created based on author keywords co- occurrence with overlay visualization mode



Source: VosViewer

and big data: A revolution that will transform supply chain design and management" which also had higher citations (860 times). The major journals that were cited among the top 10 journals were Journal of Business Logistics, Journal of Management, Journal of Business Research etc. It could also be observed that job satisfaction, organizational performance, environmental performance, human resource management were mostly studied with transformational leadership.

Table 3. The top 10 most cited publications

S No.	Authors	Titles	Year	Journal	TC
1	"Xu, L.D., Xu, E.L., Li, L.	"Industry 4.0: State of the art and future trends"	2018	"International Journal of Production Research"	154 8
2	"Waller, M.A., Fawcett, S.E.	"Data science, predictive analytics, and big data: A revolution that will transform supply chain design and management"	2013	"Journal of Business Logistics"	860
3	"Knippenberg, D., Sitkin, S.B.	"A critical assessment of charismatic — transformational leadership research: Back to the drawing board?" "	2013	"Academy of Management Annals "	767
4	"Singh, S.K., Giudice, M.D., Chierici, R., Graziano, D.	"Green innovation and environmental performance: The role of green transformational leadership and green human resource management"	2020	„Technological Forecasting and Social Change"	533
5	"Hoch, J.E., Bommer, W.H., Dulebohn, J.H., Wu, D. "	"Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis"	2018	"Journal of Management"	517
6	"García - Morales, V.J., Jiménez - Barrionuevo, M.M., Gutiérrez - Gutiérrez, L.	"Transformational leadership influence on organizational performance through organizational learning and innovation"	2012	"Journal of Business Research"	499
7	"Robertson, J.L., Barling, J.	"Greening organizations through leaders' influence on employees' pro environmental behaviors"	2013	"Journal of Organizational Behavior"	475
8	"Shin, S.J., Kim, T. -Y., Lee, J. -Y., Bian, L.	„Cognitive team diversity and individual team member creativity: A cross level interaction"	2012	„Academy of Management Journal"	409

Source: Scopus Database

Discussion and Conclusion

This paper sought to locate and evaluate publications on transformational leadership. For this, the Scopus database was searched using the bibliometric analysis approach between 2012 and 2022. A systematic evaluation and analysis of the literature on transformational leadership from a global perspective was offered, based on 6,090 papers published between 2012 and 2022. VOSviewer software was used to evaluate and visualize various aspects of publications. The most important writers, journals, nations, institutions, and co-occurring authors have been highlighted in the study's tables and figures.

The results showed that, between 2012 and 2022, there was a ten-year trend of rising publication outputs and interest in transformational leadership research. It's expected that interest will keep growing in the future.

It has been established that between 2012 and 2022, the number of publications on transformational leadership grew steadily. Furthermore, Rowold, J., Andersen, L.B., Dartey-Baah, K., and Jacobsen, C.B. were the most prolific writers on transformational leadership.

The study founded the top journals in the field of transformational leadership. The top journals were Leadership and Organization Development Journal, Sustainability (Switzerland) and Leadership Quarterly.

The study also established the top ten papers with the highest citation counts in the subject of transformational leadership.

Implications

This study contributes to a better understanding of the direction that transformational leadership research is taking. Its goal is to make this topic's research more visible by showcasing its present features and providing a thorough and retrospective evaluation of publications. The search and bibliometric analysis produced some fascinating results that could direct and support academics in their future study on transformative leadership.

Limitations and Future Recommendations

The sample of Scopus accurately represented the transformational leadership field, future researchers are suggested to try other databases such as to get the bibliometric information on transformational leadership we can use science direct also.

The information collected for this study is limited from 2012 to 2022. It can also collect the information depending upon the other tendencies to gather more and conclude more as other researchers.

There is no guarantee that every noteworthy journal article is considered for the study; occasionally, "stray citations" may lead to the omission of crucial material.

References

Abramo, G., & D'Angelo, C. A. (2011). Evaluating research: from informed peer review to bibliometrics. Scientometrics, 87(3), 499-514.

Al-Husseini, S., &Elbeltagi, I. (2018). Evaluating the effect of transformational leadership on knowledge sharing using structural equation modelling: the case of Iraqi higher education. International Journal of Leadership in Education, 21(4), 506-517.

Andersen, L. B., Bjørnholt, B., Bro, L. L., & Holm-Petersen, C. (2018). Leadership and motivation: A qualitative study of transformational leadership and public service motivation. International Review of Administrative Sciences, 84(4), 675-691.

Andersen, L. B., Bjørnholt, B., Bro, L. L., & Holm-Petersen, C. (2018). Achieving high quality through transformational leadership: A qualitative multilevel analysis of transformational leadership and perceived professional quality. Public Personnel Management, 47(1), 51-72.

Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. The leadership quarterly, 6(2), 199-218.

Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. The leadership quarterly, 24(1), 270-283.

Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. The leadership quarterly, 24(1), 270-283.

Burns JM (1978) Leadership. Harper and Row, New York

Chen, Y. S., & Chang, C. H. (2013). The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity. Journal of business ethics, 116, 107-119.

Choudhri, A. F., Siddiqui, A., Khan, N. R., & Cohen, H. L. (2015). Understanding bibliometric parameters and analysis. Radiographics, 35(3), 736-746.

Dartey-Baah, K. (2015). Resilient leadership: A transformational-transactional leadership mix. Journal of Global Responsibility, 6(1), 99-112.

García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. Journal of business research, 65(7), 1040-1050.

García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. Journal of business research, 65(7), 1040-1050.

Gumus, S., Bellibas, M. S., Esen, M., & Gumus, E. (2018). A systematic review of studies on leadership models in educational research from 1980 to 2014. Educational Management Administration & Leadership, 46(1), 25-48.

Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. Journal of management, 44(2), 501-529.

Jackson, T. A., Meyer, J. P., & Wang, X. H. (2013). Leadership, commitment, and culture: A meta-analysis. Journal of Leadership & Organizational Studies, 20(1), 84-106.

Jacobsen, C. B., & Staniok, C. D. (2020). Sharing the fire? The moderating role of transformational leadership congruence on the relationship between managers' and employees' organizational commitment. International Public Management Journal, 23(4), 564-588.

Jia, J., Liu, H., Chin, T., & Hu, D. (2018). The continuous mediating effects of GHRM on employees' green passion via transformational leadership and green creativity. Sustainability, 10(9), 3237.

Lai, F. Y., Tang, H. C., Lu, S. C., Lee, Y. C., & Lin, C. C. (2020). Transformational leadership and job performance: The mediating role of work engagement. Sage Open, 10(1), 2158244019899085.

Lim, M. (2012). Clicks, cabs, and coffee houses: Social media and oppositional movements in Egypt, 2004–2011. Journal of communication, 62(2), 231-248.

Masa'deh, R. E., Obeidat, B. Y., &Tarhini, A. (2016). A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation modelling approach. Journal of Management Development, 35(5), 681-705.

Piccolo, R. F., Bono, J. E., Heinitz, K., Rowold, J., Duehr, E., & Judge, T. A. (2012). The relative impact of complementary leader behaviors: Which matter most?. The leadership quarterly, 23(3), 567-581.

Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. Journal of organizational behavior, 34(2), 176-194.

Sadif, M. R., Susita, D., &Purwohedi, U. (2023, February). A Bibliometric Analysis on Transformational Leadership. In Proceeding Medan International Conference on Economic and Business (Vol. 1, pp. 1504-1516).

Shin, S. J., Kim, T. Y., Lee, J. Y., & Bian, L. (2012). Cognitive team diversity and individual team member creativity: A cross-level interaction. Academy of management journal, 55(1), 197-212.

Singh, S. K., Del Giudice, M., Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. Technological forecasting and social change, 150, 119762.

Van Knippenberg, D., & Sitkin, S. B. (2013). A critical assessment of charismatic—transformational leadership research: Back to the drawing board?. The Academy of Management Annals, 7(1), 1-60.

Waller, M. A., & Fawcett, S. E. (2013). Data science, predictive analytics, and big data: a revolution that will transform supply chain design and management. Journal of Business Logistics, 34(2), 77-84.

Xu, L. D., Xu, E. L., & Li, L. (2018). Industry 4.0: state of the art and future trends. International journal of production research, 56(8), 2941-2962.

Zacher, H., & Rosing, K. (2015). Ambidextrous leadership and team innovation. Leadership & Organization Development Journal, 36(1), 54-68.

Status of Women Employees and Job Satisfaction of Women Working in Corporate Sector

Dr Sugandha Kohli Kaang *

Abstract

The present paper examines the level of job satisfaction working in the corporate sector in the region of Gurgaon and Chandigarh. The major findings of the study are that women are entering the corporate sector in high numbers however their proportion is still less vis a vis their male counterparts. In the present study, majority of the women were found to be dissatisfied with their present jobs. There were many reasons for dissatisfaction among the respondents. Out of which mainly were heavy work load, long working hours, biased promotion policies and unequal pay. Further, it was observed that unseen barriers are quite prevalent in the corporate world due to which women are not able to reach at the top managerial positions. These barriers are prevalent due to the misconceptions created in respect of the ability and potential of women employees. This patriarchal mindset of the people working in corporate sector is the major hindrance in their growth and progress.

Keywords: *Job Satisfaction, Promotion Policies, Women Employees.*

Introduction

The extent of Job Satisfaction is an important aspect of women's experience in the corporate world. It is defined as individual's feeling of satisfaction in the job which gives impetus to work and provides motivation towards work. It cannot be seen but can be inferred. Satisfaction not only comes with mere earnings but also comes with other fringe benefits such as healthy working conditions, cooperative attitude of super-ordinates and colleagues, promotional policies and flexibility of the job etc. People's level of job satisfaction is the result of their job tasks, the characteristics of the job setting in which they work and the individual differences in values and needs.

The objective of the present paper is to study the level of Job Satisfaction of the women working in the corporate sector and the kind of relationship they share with their superiors, colleagues and subordinates. It attempts to examine job satisfaction by looking into various variables such as the recruitment policies of the company, their promotional avenues, maternity benefits, emoluments, hours of work and kind of job tasks which has

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further helped us to decipher the level of job satisfaction among the respondents. An attempt has been made to understand if women employees were satisfied with their work and the organisation and further the kind of obstacles they were encountering.

Purposive sampling was used for the purpose of this research. The unit of analysis was women holding top, middle and lower level positions in the corporate sector. Both quantitative and qualitative data were used in data collection. Quantitative data were collected through Interview Schedule. A total sample of 240 respondents from 20 MNCs, IT companies and Private Banks working at the top, middle and lower level positions were taken for quantitative data from Chandigarh Capital Region and Gurgaon.

An attempt was to study job satisfaction of the respondents by asking whether they were satisfied at their workplace or not. It is presented in Table 1.

The data in the table clearly shows that more than three-fifth of the respondents were not satisfied with their jobs and around 37 percent of women employees were satisfied with their jobs. Dissatisfaction with job could be due to number of reasons. Therefore, the respondents were asked to state the reasons for their dissatisfaction and satisfaction with their job.

Factors affecting Job Dissatisfaction

Table 2 states the reasons of respondents showing their reasons of dissatisfaction with their job

Around one-third of them respondents complained that the working hours were too long which inflicted lot of pressure on them

Table 1: Distribution of Respondents on the Basis of Satisfaction with their Work

Job satisfaction	Frequency	Percentage
Yes	90	37.5
No	150	62.5
Total	240	100

Table 2: Distribution of Respondents showing Reasons for Job Dissatisfaction

Reasons for dissatisfaction	Frequency	Percentage
Heavy Work Load	29	19.3
Long Working Hours	49	32.7
Discrimination in Salary	32	21.4
Promotion not on Merit and biased promotion policies	30	20
Other reasons	10	6.6
Total	150	100

Table 3: Distribution of Respondents showing Reasons for Satisfaction with their Jobs

Reasons	Frequency	Percentage
Supporting Staff	15	16.6
Flexible working conditions	25	27.7
Better wages	40	44.4
Others	10	11.3
Total	90	100

and drained them. Around 21 percent of the respondents stated due to disparity in wages they felt discriminated and dissatisfied. Further, they discussed that due to the above reasons men employee were occupying better positions in the companies and were taking better salaries and incentives than women employees. Therefore, this disparity in salaries made them feel frustrated and exploited at the hands of the companies.. Around one-fifth of the respondents were unsatisfied due to the gender biased promotion policies adopted by their companies. The respondents felt that promotion was not on merit. They were of the view that despite the fact that they were equally competent but most of the times promotions were given to men employees and further men were preferred for top level positions.

Another 19 percent of the respondents were also of the view that heavy work load contributed to dissatisfaction. Further, they said that they encountered role conflict as they had to balance home affairs as well as job responsibilities. Thus, strenuous working hours and heavy work load made them unsatisfied in their job. Around 6 percent of the respondents stated other reasons for their dissatisfaction with their job. The analysis show that there were varied reasons for job distribution.

Factors Affecting Job Satisfaction

It is very natural that until and unless an employee is not satisfied with her job in the company, she will not be in a position to do justice with that work which will further lead to non-performance, inefficiency in the work which will ultimately be detrimental for the company as well as for the employee. There are many factors on the bases of which an employee attains satisfaction in respect to his/her work and absence of any such factor will lead to dissatisfaction. Table 3 shows distribution of respondents showing reasons for their being satisfied with their work.

It can be deciphered from the above table that around 45 percent of the respondents stated that because of adequate wages they were satisfied with their job. Therefore, from the above table, it can be inferred that more than half of the respondents were not satisfied with their salaries or remuneration and other factors were playing a major role in bringing their satisfaction. This is quite unfortunate in the present time, despite being competent, skilled and talented women employees are facing wage disparity.

Around 28 percent of the respondents were with the view that flexible working condition was the reason for their being satisfied with their jobs. It is observed that organization or company. which have strict working environment creates a sense of suffocation for women employees due to which employees tend to change their jobs. Around 16 percent of the respondents stated support and cooperation of the staff to be the reason for their satisfied with their job.

Around 11 percent of the respondents stated other miscellaneous reasons for their job satisfaction. This situation reveals that more than half of the respondents were satisfied with their jobs for reasons other than wage and remuneration.

Measures of Job Satisfaction

The respondents were asked to state their opinions on various statements relating to job satisfaction. The response categories were ranged from strongly agree to strongly degree on a five-point scale. This helped in knowing what factors play in determining the satisfaction level of respondents in respect to their work. Table 4 shows the responses to the various statements relating to their work.

The respondents were asked if they felt that the recruitment policy of the company gave fair chance to fairer sex. It was revealed that around 42 percent of the respondents disagreed and 13 percent of the respondents strongly disagreed to this and felt there was discrimination right from the recruitment level between the both sexes. Few of the respondents i.e. 6 percent strongly agreed that their company gave equal chances to both the sexes and 13 percent also agreed to this statement and found equality at the entry level. It can be observed from the above table that women were facing discrimination even in corporate sector despite having required skill, education, knowledge and competency and they do not get entry in this sector easily as compared to men. Further, this discrimination is seen at all the levels of the company but it is seen to be more at higher levels.

The respondents were further asked to give their opinion if they felt there were less promotional avenues for women in the corporate sector. Around two-fifth of the respondents agreed and around 18 percentage of the respondents strongly agreed to this statement and felt this because they were given less opportunities of promotion due to their gender which led to less number women holding higher positions. However, around 22 percent disagreed and 4 percent strongly disagreed to this statement and felt equality in the companies and felt deserving women bagged promotions and reached upper echelons in the corporate sector. Discrimination at the time of promotions was quite frustrating for the respondents and they remained professionally unsatisfied despite giving their best to their companies

The respondents were also asked if they felt insecurity for their jobs during their maternity phase or sick period. 22 percent of the respondents strongly agreed and 28 percent of the respondents simply agreed that women workers feel insecurity in their job during their maternity or sick phase. Further, 14 percent of the respondents disagreed and 12 percent of the respondents strongly disagreed and found adequate security in respect to their jobs.

Respondents were further asked to give their opinions on whether they felt women employees encountered difficulties during their transfer. It was revealed that around 40 percent of the respondents agreed and one-fifth strongly agreed that they experienced lot of trouble during transfers. Whereas one-fifth

Table 4: Distribution of Respondents by their Opinion on Job Satisfaction

Statements/responses	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Total
Recruitment policy of the company gives fair chance to fairer sex	16 (6.7%)	32(13.3%)	58(24.2%)	101(42.1%)	33(13.7%)	240(100%)
There are less promotional avenues for women in the corporate sector	44 (18.3%)	98 (40.8%)	34(14.2%)	54 (22.5%)	10 (4.2%)	240 (100%)
Women in corporate sector feel less job security during maternity or sick leave period.	55 (22.9%)	68 (28.3%)	54(22.5%)	34(14.2%)	29(12.1%)	240(100%)
Women in corporate sector feel problems during transfer	50(20.8%)	99(41.3%)	47(19.6%)	32(13.3%)	12(5%)	240 (100%)
The emoluments of female in corporate sector are less than that of male	25 (10.4%)	108 (45%)	54(22.5%)	33(13.8%)	20(8.3%)	240(100%)
Welfare activities for women in corporate sector are adequate and job provides me with medical incentives	6 (2.5%)	56(23.3%)	36 (15%)	114 (47.5%)	28 (11.7%)	240 (100%)
The hours of work are satisfactory and I am adequately paid accordingly.	13 (5.4%)	46 (19.2%)	46(19.2%)	89 (37.1%)	46 (19.1%)	240 (100%)
I am satisfied with job tasks assigned to me	20 (8.3%)	28 (11.7%)	56(23.3%)	106 (44.2%)	30 (12.5%)	240 (100%)

of respondents simply disagreed and 5 percent of the respondents strongly disagreed and opined their company was very cooperative in every way. It was further found that the respondents who reported to have problems during transfer were mostly married and for their families the job of their spouses were more valuable than theirs. Some of the respondents reported that even if they were getting lucrative packages and good profile, their families asked them to refuse transfers especially too far off places because they believed that such opportunities could lead to exploitation and were unsafe for them. Some other respondents who were married and had children said that they refused the offers of transfer as they had children and it was difficult to relocate themselves with kids as it would cause disturbance in their education. It was a handful of single unmarried ambitious women who accepted transfers as it gave them more opportunities to grow.

Further, the respondents were asked if they felt that the emoluments of females in corporate sector were less than that of male employees. Majority of the respondents felt income disparity in comparison to male employees. It was found that 10 percent of the respondents strongly agreed and more than two-fifth simply agreed that salaries of female employees were less in corporate sector in comparison to men whereas 13 percent of the respondents disagreed and 8 percent strongly disagreed to this statement. It was further reported by respondents that the corporate sector gave higher emoluments to males because it felt that males can be a resource for a long period whereas females are compelled to leave or sacrifice their careers midterm because of their familial responsibilities.

The respondents were also asked if the welfare activities for women in the corporate sector were adequate and further if the jobs provided them with medical incentives. Around 47 percent of the respondents disagreed and around 11 percent strongly disagreed that their job did not provide them with adequate welfare activities and other medical incentives. Around 23 percent agreed and 2 percent of the employees strongly agreed to this statement and were satisfied that their companies were very supportive and felt their jobs provided them with adequate amenities for their welfare.

The respondents were also asked if their hours of work were satisfactory and if they were paid accordingly. Around 37 percent of the respondents disagreed and 19 percent of the respondents strongly disagreed and felt the hours of work were too stretched and they had to work overtime also. However, around 5 percent of the respondents agreed and around 19 percent strongly agreed to this statement and they felt that they encountered no problems and their hours of work were satisfactory and were paid as per their work and worth. One of the respondents working in an consultancy company in Gurgaon said that she had to work for 10-12 hours a day and over that travelling to workplace and then back home took her atleast an hour daily which made her completely drained and tired. She even said that due to this daily exhaustive and tedious job schedule she was unable to manage her social and domestic life which was very frustrating and annoying.

It was also asked if they were satisfied with the job tasks and targets assigned to them. It was found that around 44 percent of the respondents disagreed and 12 percent strongly disagreed to this statement. Further only 8 percent agreed and 11 percent strongly agreed and felt they were satisfied with the job tasks assigned to them which shows that majority of respondents felt that they were not satisfied with jobs and were not able to complete the targets.

It is further inferred from the above study that majority of the respondents are found to be dissatisfied with their present jobs. There are many reasons for dissatisfaction among the respondents. Out of which mainly are heavy work load, long working hours, biased promotion policies and unequal pay. On the other hand, some respondents were found to be satisfied with their work for the reasons such as flexible working hours, cooperative staff and healthy working conditions. Further, during the discussions it came to light that some respondents were forcefully holding to their jobs due to some family pressure and other personal and domestic responsibilities. Further, it is observed that unseen barriers are quite prevalent in the corporate world due to which women are not able to reach at the top managerial positions. These barriers are prevalent due to the misconceptions created in respect of the ability and potential of women employees. This patriarchal mindset of the people working in corporate sector is the major hindrance in their growth and progress. Women are discriminated, sexually harassed, exploited in corporate sector which comprises of most educated and intellectual class of people. It is of no doubt that women are entering the corporate sector but till the time they are not treated equally and given adequate opportunities, they will not able to perform at their best. It is not only detrimental for women worker but also for their companies. A big question mark is on gender neutral and fair policies in the corporate sector and calls for immediate attention of policy makers and government to take steps for putting an end to gender discrimination and bringing job satisfaction.

References

Hazarika, Anjali (2017) Walk the Talk: Women, Work, Equity, Effectiveness. United States: Sage Publications.

Giddens, Anthony (2009) Sociology. New Delhi: Wiley India Private Ltd.

Gjerde, K.A.P. (2002) 'The Existence of Gender-Specific Promotion Standards in the U.S', Managerial and Decision Economics, 23:447-459.

Gottfried, Heidi (2013) Gender, Work and Economy-Unpacking the Global Economy. Maiden, USA: Polity Press.

Kulkarni, Nirzar amd Bakhare, Ruhi (2011) 'Women Leadership in Indian Corporate: Analyzing Social Perceptions', International journal of Multidisciplinary Research,1(4) :113-128.

Kumari, Ranjana (1998) Gender, Work and Power Relations. New Delhi: Har-Anand Publications Private Limited.

Miari, Mahmoud (1996), 'Work Satisfaction and Gender', International Review of Modern Sociology, 26: 67-80.

Miller, J.G. and Wheeler, K.G. (1992) 'Unraveling the Mysteries of Gender Differences in intentions to leave the organizations', Journal of Organizational Behaviour, 13(5):465-478.

Rajesh Saundarya, Karthik and Rakesh Anju (2013), 'Corporate Sector role in the enablement of Women's career in India: An empirical Study', Standard International Journals, 5(1):101-110.

Reports and Newspapers

Census of India (2011) Work Participation Report. New Delhi:Registrar General and Census Commissioner, India.

Dikshit, Sandeep (2019, 19 April).Women on Board. The Tribune spectrum p.4.Retrieved from http://www.tribuneindia.com/news/spectrum/women-on-board/68207.html

International Labour Organization (2016). Women at Work Report. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_457317.pdf.

Effect Of Online (Social) Media Influencers on Consumer Purchase Intent: A Young Generation Perspective

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Introduction

The growing use of online (social) media and mobile technologies made it easy for people to generate content and share details about their personal lives online. This has created an environment that has contributed to the rise of online (social) media influencers, a community of operators who attained a level of notoriety similar to that of celebrities in the online world. With the decreasing efficacy of conventional advertising strategies, more professionals have realised in recent years the importance of online (social) media influencers in promoting awareness of brand and sparking buyer dialogues (Lou et. al.,2021). In recent times, a increasing number of professionals acknowledged the significance of online (social) media influencers in augmenting brand recognition and adopting consumer dialogues, mainly considering their diminished efficacy of conventional marketing strategies (Baker 2021)

According to most marketers, Instagram is the utmost significant online (social) media platform around 89% for influencers & influencer marketing, with YouTube coming in second with 70% and Facebook in third place with 45%, with Twitter coming in around 33%. LinkedIn nearby to 19% and Pinterest is 15% are examples (Bailis, 2021). On different digital platforms, online (social) media influencers can generate content in a variation of formats, like photographs, quick (reels/Short) videos, and vlogs. They can also confer a variety of themes, from day to day life to expert advice, and certainly include marketing content in the posts. (Lou et. al., 2021).

In India, Instagram may be one of the maximum used online (social) media platform as per 2023 media statistics report, with around 74.70% of the nation's internet users using it. There are 516.92 million active users of Instagram in India. A significant portion of the user base of Instagram is made up of teenagers in particular. With 492.70 million active users, Facebook is the next greatest visited platform in the India, around 71.20% of

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online users are members on the online (social) media site. A few other well-known social media platforms in India are Moj (29.50% penetration), a community for short videos indigenous to the country, Pinterest (29% penetration), LinkedIn (35.7%), and Twitter (42.90% penetration). (Social Media Statistic, 2023)

Social Media

Online (Social) media platforms are amongst the greatest widespread data (information) sources in the world. Many people have registered accounts on the social networking sites as it is low-priced, ease to access, simpler and more effective to blowout information (data). A greater search for information (data) is naturally the overall response to important events, it may be natural calamities, viruses, celebs & sport events, etc. (González-Padilla et.al, 2020)

Around 70% of online grown-ups nearly use a social networking platform for many reasons, as the acceptance of online (social) media sites has been increasing for last few years. Users may have many accounts on multiple social networking platforms, and the check of these accounts on regular basis are done by the users throughout a day (Wang et.al, 2015).

Even though not every social media platform is made expressly to encourage user interaction, this is perhaps one of the most obvious things that all social media platforms have in general. These online (social) media platforms, also called as online communities, are important because people normally do not differentiate between actual and virtual friends as long as they get support and act as a part of a group of individuals who share their interests. By sharing significant life milestones via status updates, pictures, and other media, the SM fosters stronger ties while also enhancing their in-person interactions (Aichner et.al.,2021).

Young people have a difficult time presenting themselves in their peer groups. When they speak up for themselves and receive support from their peers, their self-esteem increases. Social media plays a crucial role in their ability to sustain relationships in their peer groups. Social media has become an important tool for maintaining personal networks, which is why the sociology of information has focused so much on social media. (Choi, 2015)

Influential Media

Mass media is considered to be an influential media among youngsters. The mass media is a distinctive aspect of contemporary society; as social interactions and actions have grown more complex and large-scale, technological advancements have kept pace, personal income and living standards have increased, and certain conventional forms of authority and control have begun to decrease, all of these trends have coincided with the growth of the mass media. It is a most basic & contentious form of the fact that everybody with all different kind of mass media networks can have an effect on a viewer's follower's attitude, views, perceptions of social communities. Leading theorists have frequently discussed the impact of the media on the public and its traditional framework. The mass media must have an effect; nevertheless it does so in a variation of elusive ways. (Deragon, 2008)

The media is a major player in the formation of public opinion. Mass media provide an interpretation of events rather than just facts and information, giving people a means of understanding their significance. Media determines the proportional priority assigned to different topics through its ability to portray reality from its own perspective—a process known as "agenda-setting. Usually summarised in the remark "Maybe the media doesn't tell you what to think, but what to think about," is the agenda-setting theory. Opinions, attitudes, and behaviours of mass media users are considerably moulded by their coverage to and usage of the media. Mass media coverage is the regularity of communications or media content that public are open to and the range to which they recollect that knowledge. The mass media is a important source of data that blowouts knowledge and guide people, which affects people's beliefs and actions. It helps public to communicate with each other and gives them vision into a variety of global, societal, and environmental matters. It is crucial for a check into the variables that affect how the public views news from the media and relationship of variables with outlooks towards news from the mass media and selfless behaviour. Attitudes and perceptions affect people's behaviour (Liao, 2023)

Social Influencer

Influencer celebrities are individuals who have built up a sizable fan base and are recognised as reliable tastemakers in one or more sectors. Customers tend to identify more with these famous people and emulate them more than old-fashioned celebs since they are observed as more approachable as well as honest. (Johnson et al., 2022)

Scholars have recently drawn attention to the importance of conducting more research in the field of influencers and influencer marketing (Taylor, 2020). Additionally, industry research indicates that influencer marketing is a significant and expanding phenomena.

The reason influencers are perceived as so attractive in the first place is because they look like their audiences. They're usually perceived as "the boy or girl next door," which makes it easy to relate to them. But when it comes to the appeal of influencers, there are undoubtedly other elements at effect. Youngster may be affected by social media influencers in both positive and harmful ways. Influencers who smoke, drink, or even commit crimes can be a bad example for young people, but they can also inspire them to live healthier, more moral lives. Influencer content might also affect the materialism, mental health, and physical fulfilment of youngsters.

Because social media influencers are thought to have an effect on their audiences, third parties also use them for their own commercial ends. Take an example; influencers get paid from the brands for promoting their products in the content generated. Likewise, governments or non-governmental institutes look for the influencers to help promote socially or ecologically conscientious behaviour in youth. Despite the growing popularity of influencer marketing, little is known about the psychological mechanisms at play and the reasons behind influencers' persuasiveness when it comes to minors, either theoretically or empirically.

Some social media stars belong to Generation Z and are themselves underage. As more large companies engage in sponsored partnerships, an increasing number of teenage and child influencers—along with their parents—are trying to make a profit. Important philosophical, ethical, and legal questions are brought up by this.

Consumer Behaviour

In their capacity as consumers of goods and services, the majority of people heavily utilise online (social) media and digital marketing to share experiences with others & to find out more information about the products they have used. As a result, this adapts to the marketers' basic shift by utilising digital marketing platforms more frequently. Approximately two thirds of global spending was predicted to go towards digital channel streaming of commercials. As a result, a lot more consumer marketing will be done in digital spaces in the prospect, mainly on online (social) media and mobile devices (Alghizzawi, 2019).

The rise of online (social) media has generated fresh avenues for searching and acquiring facts about the wide range of goods and services presented on the market. Customers may now swiftly and easily communicate with each other and debate brands thanks to it. Visitors are gradually in control and influence of consumer outlooks in digital settings, and it has an effect on offline belief also. Because marketers have slight control over the content, scheduling, or frequency of consumer virtual chats, online (social) media has empowered consumers (Voramontri et.al., 2019).

Purchase Intention

The potential to purchase a product combined with consumer interest is known as purchase intention (Doh et.al.,2009). These days, prospective customers are becoming wiser when it comes to constructing the decisions for their online reading. It is less important to know where the consumer is living or what they do; everybody has access to the internet might reach over digital marketing. Social media platforms are among the many online tools used in marketing. Social media represents a shift in the media landscape, offering and distributing information to users (Erlangga,2021)

Young Generations Perspective

Young people utilise social media platforms in part to obtain social support from their peer groups. Since their profile pages define the user's appearance, they take a lot of effort to create. Extremely vulnerable to outside observers, the younger generation places a great importance on what other people think of their social media images. They consider themselves to be an object of admiration and a source of attention for others, hence this can be regarded as an imaginary audience behaviour. (Choi,2015)

Gen Z, or the generation born between 1997 and 2012, is a young age group that was raised up in an era when online (social) media, new generation phones, and the internet were ordinary. In addition, Gen Z—the largest generation in history—is rapidly establishing itself as a major force in the global economy. Millennials and Generation Z are not the same consumers that our parents and grandparents were. Millennials in particular are 25% more likely than any other generation to interact with brands through internet content. They want a relationship, and for this generation, that relationship is mainly virtual, with the businesses they trade with.

Not only is Gen Z distinct from previous contemporary generations due to the social system in which they were raised, but they also have different spending habits than other generations. Gen Z's views on consumption are frequently significantly different from other generations because of their experiences growing up primarily online and maturing distant during a pandemic. To a Morning Consult survey from 2022, around 38% of Gen Zers indicated they devote added time on online (social) media than that, with another 54% of them says their usage is at least four hours every day. Some social media applications are used extensively by users such as Instagram, TikTok, Snapchat, and YouTube. (Alves, 2023)

Objective RQ1: To find out young generations' interpretation of social media content

The most significant relationship for the younger generation is with their peer group; in this case, the collective soul—which has a tendency to take over the individual mind—matters. The younger generation uses social media to communicate more and more in an attempt to stay in touch with their peer groups after high school or college, which satisfies their need to blend in with the crowd. Due to institutional limitations present in universities and colleges, this social power could react differently (Choi,2015).

Compared to previous generations, Gen Z is significantly less brand loyal. Frequently the Content from online (social) media home pages assisted to Gen Z, for example Instagram has discover tab, YouTube has recommended page. A more accurate measure of success may be the visibility and interaction of individual posts rather than the total number of followers on a certain profile (Alves, 2023).

Younger readers will be drawn to postings and conversations that focus on people rather than goods and profits. firms who utilise social media marketing and video marketing to promote their products have a 30% higher chance of attracting the interest of Millennials and other younger generations. They also have distinct tastes in audiovisual content. They

frequently have a preference for videos that highlight community service projects and events that they themselves can take part in. Put differently, people are searching social media for engagement and integrity.

Rather than only sharing material that promotes goods or services, consider making videos that showcase Matters' core beliefs and carefully choosing content from other influencers and artists that also reflects these values. These are the same kinds of articles that foster connections between Millennials and Generation Z, and they can facilitate connections between marketers and them as well (Fletcher, 2022).

Objective RQ2: To examine effect of online (social) media influencers on purchase decision

Emphasise users and influencers who have already posted about a product or service. Reshare their posts on the company's social media accounts. This is similar to a contemporary testimonial, and younger buyers are likely to find authenticity and trustworthiness to this kind of content than in traditional marketing.

Research indicates that younger consumers have high standards for the social media presence of the brands they choose. They seek for pertinent information, a sense of being acknowledged, and significant interaction, support, and communication. But it will take constant work and unwavering dedication to live up to their expectations. Young audiences are dynamic and constantly changing. And in order to do that, marketers will need to continuously monitor their changing demands, especially through the collection, evaluation, and application of data analytics (Fletcher,2022).

Today's consumers have short attention spans, and an increasing number of screens and devices compete for their attention. As a result, marketers must work hard to stand out from the crowd. Since marketers now know that an emotional connection has a considerably higher likelihood of generating customer engagement, brand tales are growing in popularity. However many organizations have their own Insta webpage, sellers are learning that pleasing the influencers can conclude in customers feeling attached (associated) with the brand. The brands are now leveraging influencer well-defined as "everyday people" who control a significant follower base on online (social) media to communicate with audiences (Chopra et.al., 2020)

Customers on social media. In the past, after learning about a product and seeing several TV advertisements, consumers may go shopping the following week and ultimately purchase the item. This procedure now has a minute time limit (Barysevich,2020) .

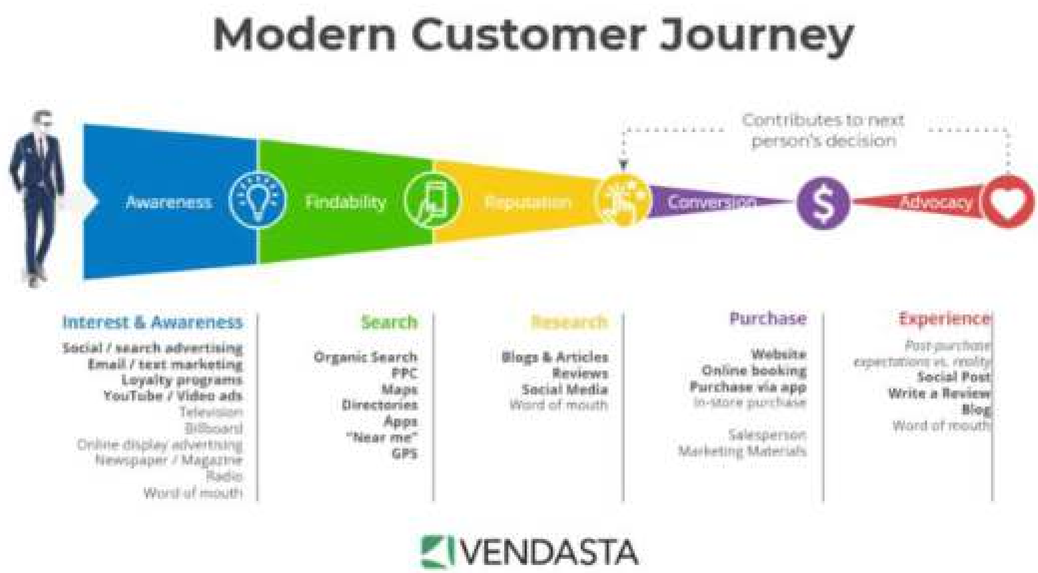

Image 01: Source: Search Engine Watch

Online (Social) media operators who have good-sized, dedicated followers that have similar interests are popular as influencers. Followers are trusted and interested in influencer's opinion for them. Subject specialist are Micro-Influencers, they are specific to their content they want to deliver and are operational in convincing the targets. Organization who sells customised or specialised product for them it is a best way to reach out to their audience by taking help of influencers. It is more likely that Gen Z and Millennials will be impacted; nearly 84% of millennials, user created content from unknown content creators influences their purchasing intentions somewhat. (Barysevich, 2020) .

Conclusion

Due to the rising significance of influencers and the widespread appeal of online (social) media influencers, a variety of well-known products and services (brands) have begun using these influencers to promote their products in an effort to persuade customers to

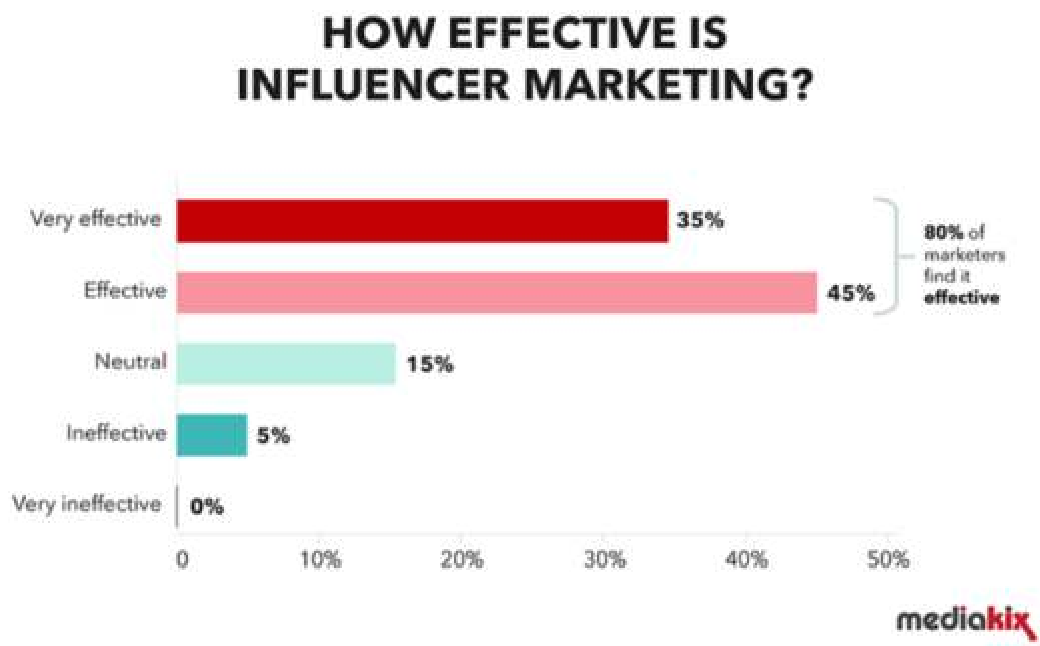

Image 02: Source: Search Engine Watch

act in certain behaviour. (e.g., establishing constructive brand outlooks and boosting buying a brand). It is difficult to understand consumers mind set, cause of unpredictability in use of online (Social) media. It is complicated to know the component that helps consumers while making a purchase decision for a brand to which online (social) media influencers promotes. The reason for inconsistency in decision making of consumers over online (social) media is unsolved puzzle for many marketers. (Joshi et.al., 2023)

References

Aichner, T., Grünfelder, M., Maurer, O., & Jegeni, D. (2021). Twenty-Five Years of Social Media: A Review of Social Media Applications and Definitions from 1994 to 2019. Cyberpsychology, behavior and social networking, 24(4), 215–222. https://doi.org/10.1089/cyber.2020.0134

Alghizzawi, Mahmoud. (2019). The role of digital marketing in consumer behavior: A survey. 3,. 24-31.

Alves C. (2023 June 06). How Gen Z Are Using Social Media {Web log post}. https://www.searchenginejournal.com/social-media-gen-z/485152/

Baker, K. (2021). What will influencer marketing look like in 2021? HubSpot. https://blog. hubspot.com/marketing/how-to-work-with-influencers?toc-variant-b=

Bailis, R. (2021). The state of influencer marketing: 10 Influencer marketing statistics to inform where you invest. Big Commerce. https://www.bigcommerce.com/blog/influencer-marketing-statistics/#what-makes-a-quality-influencer 6. Barysevich A., (2020 November 20). How social media influence 71% consumer buying decisions {Web log post}. https://www.search enginewatch.com/2020/11/20/how-social-media-influence-71-consumer-buying-decisions/

Choi H. (2015). The young generation and their social media. Imaginaire inconscient - Traduction anglaise Sociétés. 129. 105. 10.3917/soc.129.0105.

Chopra A., Avhad V. & Jaju, (2020). Influencer Marketing: An Exploratory Study to Identify Antecedents of Consumer Behavior of Millennial. Business Perspectives and Research. 9. 227853372092348. 10.1177/2278533720923486.

Deragon J. (2008 February 28) What is The Influence of Media? {Web log post}. https://www.socialmediatoday.com/content/what-influence-media

Doh, S. J., & Hwang, J. S. (2009). How consumers evaluate eWOM (electronic word-of-mouth) messages. Cyber Psychology & Behavior, 12(2), 193-197.

Erlangga, Heri. (2021). Effect Of Digital Marketing And Social Media On Purchase Intention Of Smes Food Products. Turkish Journal of Computer and Mathematics Education (TURCOMAT). 12. 3672-3678. 10.17762/turcomat.v12i3.1648.

Fletcher C.,(2021 July 21) Using Social Media Marketing to Appeal to Younger Generations. {Web log post}. https://www.spiralytics.com/blog/using-social-media-marketing-to-appeal-to-younger-generations/

González-Padilla, D. A., & Tortolero-Blanco, L. (2020). Social media influence in the COVID-19 Pandemic. International braz j urol : official journal of the Brazilian Society of Urology, 46(suppl.1), 120–124. https://doi.org/10.1590/S1677-5538.IBJU.2020.S121

Johnson C.P. & Christian S. (2022). Making use of digital methods to study influencer marketing. 10.4324/9781003134176-2.

Joshi, Y., Lim, W.M., Jagani, K. et al. Social media influencer marketing: foundations, trends, and ways forward. Electron Commer Res (2023). https://doi.org/10.1007/s10660-023-09719-z

Khalid, Nur & Jayasainan, Sheila Yvonne & Hassim, Nurzihan. (2018). Social media influencers - shaping consumption culture among Malaysian youth. SHS Web of Conferences. 53. 02008. 10.1051/shsconf/20185302008.

Lou, Chen & Chee, Tiffany & Zhou, Xuan. (2022). Reviewing the Commercial and Social Impact of Social Media Influencers. 10.4324/9781003134176-5. 18. Lajnef, K. The effect of social media influencers' on teenagers Behavior: an empirical study using cognitive map technique. Curr Psychol 42, 19364–19377 (2023). https://doi.org/10.1007/s12144-023-04273-1

Lim W.M and Rasul Tareq (2022) Customer engagement and social media: Revisiting the past to inform the future, Journal of Business Research, Volume 148, Pages 325-342, https://doi.org/10.1016/j.jbusres.2022.04.068.

Liao C-H.(2023). Exploring the Influence of Public Perception of Mass Media Usage and Attitudes towards Mass Media News on Altruistic Behavior. Behavioral Sciences.; 13(8):621. https://doi.org/10.3390/bs13080621

Radwan, A. F., Mousa, S. A., Mohamed, M., & Youssef, E. Y. M. (2021). Impact of Social Media Influencer Marketing on Youth Purchase Intentions in UAE. Media Watch, 12(3), 422-439. https://doi.org/10.15655/mw_2021_v12i3_165405

Social Media Statistics (2023), https://www.theglobalstatistics.com/india-social-media-statistics/?expand_article=1 {Web log post}.

Taylor C. R. (2020). The urgent need for more research on influencer marketing. International Journal of Advertising, 39(7), 889–891, DOI: 10.1080/02650487.2020.1822104

Voramontri, Duangruthai & Klieb, Leslie. (2019). Impact of social media on consumer behaviour. International Journal of Information and Decision Sciences. 11. 209. 10.1504/IJIDS.2019.101994.

Wong B. and Jain A. (2023), Top Social Media Statistics And Trends Of 2023, {Web log post}. https://www.forbes.com/advisor/in/business/social-media-statistics/

Bridging Digital Divide Among Demographics: Need, Barriers and Ways

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Abstract

With the help of service delivery through mobile phones and other electronic devices using internet, there is a reduction in the fatigue of customers. And this is a positive note in digitalization of public electronic service delivery system. But the spread of information and communication technology and digital transformation across the world has given birth to digital divide especially in developing and developed countries. The unequal distribution of income, age disparity, gender differences and differing educational background are the bases on which the gap is widening. Digital competency is a necessity. For bridging the gap, no one can afford to be left behind. Present study is an attempt to understand the need and challenges faced in eliminating digital divide and the possible ways to handle the problem.

Keywords: *Digital divide, Socio-demographic, determinants.*

Introduction

Digital initiatives serve as a boon to an economy only when people are aware about what is happening around them. Creation of knowledge economy and digitally empowered society is the vision of digital transformation. An important tool recognized by international agencies and governments for national integration is Information and communication technology as it is capable of providing larger access to various services. It further creates economic opportunities for all the sections of the society. Digital divide is the result of innovations in information and communication technology. The gap can be understood as an unequal access and use of ICT. Research in the past(Cruz-Jesus et al., 2016) have addressed the fact that digital inequalities exist within a country and the reason could be socio economic imbalances. Digital divide can be viewed from different scholars' view points and one of the views on digital divide is the gap in terms of age, occupation, gender, culture and attitude. Many researchers (Mwim, 2005) have found a significant impact of age on ICT usage and other relationships like positive relation between gender (male) and ICT usage. However, researchers have also raised a

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concern that different underlying views must be taken into account as digital divide has crossed the technological access stage. It is important to understand the relation between demographics and digital divide as these factors have the potential to predict probability of people accessing and using the internet(Estacio et al., 2019).

Many new terminologies like digital inclusion, e-inclusion have emerged and their presence is quite visible through literature. However, the basic problem of digital divide is deepening day by day as new inequality emerges while controlling existing problems. Highlighting the advancement of digital technology is at the risk of obsolescence as the rate of production of scholarly work on digital divide is slow in comparison to rate of change of technology. So discussion on nature of digital divide along with the solution to the problem is a must. Researchers (Mubarak et al., 2020) have even suggested that the concept of bridging the digital divide must be reconsidered. Moreover, digital divide serves as a significant indicator for checking development of any nation. As values equal to or near to zero would mean extensive use of technological applications and digital devices by people(Sharma, 2018). Not every individual gets equal opportunity from digital revolution. To curb this problem digital divide must be constantly monitored and advancement in the digital divide concept is required as the concept has a lot of potential which cannot be harnessed unless explored from different perspectives (Lythreatis et al., 2022). In some countries there has been a saturation in adoption of digital communication in some areas. so the focus should be on other areas or underserved areas and bridging of digital divide as socio economic disparities could further deepen if the existing gap of digital divide is ignored (Asrani, 2022). Addressing the existing digital disparity is of utmost importance as the inequality has the potential to intensify existing inequalities. A study (Spanakis et al., 2021) further suggested the study of socio-demographic and health factors must be undertaken to see the differential affect of digital divide among people. Another highlight of the study was the suggestion regarding addressing the physical and mental health needs of people with barriers and facilitators of digital disparity. It is important to study digital divide especially with respect to demographies as demographics have the potential to explain variation in ICT usage capabilities among people (Shair et al., 2022).

It can be noted that if proper enabling conditions are put in place, information and communication technology continue to hold the promise of enormous innovation and digital opportunities (Cruz-Jesus et al., 2016). It is important to address the problem of digital divide as information and communication technology has the potential to offer benefits to changing lifestyles, human relationships and economies. As the possession of digital devices are greatly impacted by existing inequalities like differences in socioeconomic background and demographics(Agrawal & Asrani, 2018).

Literature Review

Literature review and its advanced forms have been a major contributor in analysing the progress of any discipline and that can be further useful in addressing key issues. The review is based upon the methodology proposed by (Titah & Barki, 2011). (1) Google Scholar. Taylor and Francis. Emrald and Springer databases were the main source for literature review. (2) The search mainly focussed upon studies on digital divide. Search strategy used was "digital divide AND demographics" OR "digital disparity OR" digital inequality" "AND "factors". (3) Targeted search included studies published in Journals and conference papers and books. (4) Studies were screened in the following manner. First on the basis of title, then on the basis of abstract and finally with the help of full text reading, the review was conducted.

Ultimately, using the following procedure, the papers were content analysed: Initially themes were inferned by reading the articles and then with the help of full text reading, themes were confirmed and literature review was conducted accordingly.

The themes identified are:

1. Need
2. Barriers
3. Ways

Need

Some researchers (Frohlich, 2011) were of the view that differences in lifestyle and technology use among heterogeneous population cannot be ignored. A common approach to enhance peoples' life cannot be adopted Findings from study by researchers(Mubarak et al., 2020) suggested that the issue digital divide must be focused upon as the same cannot be completely eradicated but could be controlled to a larger extent. A study in Canada by researchers(Koch, 2022) discussed that the issue of digital divide gathered media attention especially during covid-19 pandemic as the challenges posed by the issue were quite apparent during that period and could be judged on aspects like urban rural inequality and lack of access to onhne education. Some Popova et al., 2020) researchers were of the view that the increasing degradation of quality of human resource was both cause as well as consequence of digital divide. Researchers even highlighted the difference in the level of development of rural areas and cities and further pointed out that the difference was due to digital inequality. A study on digital divide by(Alkureishi et al., 2021) in medical seiences claimed that digital divide had far reaching impact and that too spread across various sectors like education, healthcare, employment and personal economic stability Researchers further suggested to address the problem responsibly. Findings from literature summarized by researchers (Lythreatis et al., 2022) showed that sociodemographic and socioeconomic were few among the many factors that could affect digital divide and the link between education and digital divide found to be significant in many studies. Some researchers (Estacio et al., 2019) conducted a health literacy survey and found that socio-demographic characteristics like age, gender and education were the strong predictors of digital access and the use of internet. Findings of a study conducted in India by researchers (Asrani, 2022) had confirmed that employability of an individual was greatly influenced by variation in digital skills and further variation in skills were the result of differences in ICT access. And all this had the potential to move people towards digital exclusion. Another study in India conducted by researchers (Dasgupta Tapashi, 2018) confirmed gender to be significant factor impacting access and use of internet and further mentioned differences in socioeconomic background as the reason of differences between males and females. The study further highlighted education and geographic location as determinants of internet use. The differences between rural and urban areas were not only account of internet usage but connectivity was another highlight of those areas. A study conducted in health sector by researchers (Spanakis et al., 2021) suggested that compounding of inequalities would be the significant outcome of digital exclusion.

Barriers

Findings from a study by researchers (Frohlich, 2011) have revealed a stronger positive correlation between less socially engaged people and digital exclusion. A study on digital inclusion and challenges by researchers (Jamil, 2021) showed that urban rural digital inequality and cultural differences were the main factors of existence of digital divide. Some researchers(Li & Ranieri, 2013) conducted study in schools of China and concluded that people don't consider ICT as learning tool, as the use of internet for leisure activities was more as compared to study purposes among most of the participants. Some researchers(Mubarak et al., 2020) were of the view that income and education were the main indicators of ICT adoption but poverty remains a challenge for achieving success. Researchers(Koch, 2022) conducted a study in Canada and concluded that there are three levels of digital divide where level one talked about access inequality, level two talked about skills inequality and level three talked about inequality in beneficial outcomes. A major problem identified by researchers was that studies failed establish inter-linkages among different levels of digital divide as socio economic status and educational level found to be strongly correlated which further showed a strong linkage between first level and second level digital divide. A study conducted in Canada by researchers (Koch, 2022) revealed that the key challenges faced by Canadian government while reducing digital disparity was a larger focus on first level digital divide. As the study further mentioned that strategy of increasing connectivity would be perceived as stemming of digital divide from lack of infrastructure in rural areas however, digital divide was also a problem in urban area. Some of the barriers mentioned by researchers (Estacio et al., 2019) in their study were complex digital system, health or medical constraints and financial constraints. Some researchers(Spanakis et al., 2021) were of the view that the digital divide got amplified when certain issues were ignored in design and implementation phase and the issues were- access, acceptance and use. The study further highlighted the synergie effect of certain factors behind digital divide and how those factors caused hinderance in achieving digital equality. For example, practice and improvement were greatly impacted by lack of access to internet and motivation to engage was significantly impacted by complexity of internet. A study by (Potnis, 2016) conducted on barriers owning to electronic gadgets concluded micro level barriers and macro level barriers and those were socio cultural, economic, demographic. psychological and geographic barriers.

Ways

A group of researchers (Frohlich, 2011) suggested that to narrow the digital divide gap, one method that can be used is to make poor rich and this can be achieved through increasing access to existing technology, introducing training programs and better designing of plans. Findings from a study in Pakistan conducted by (Jamil, 2021) suggested that a focused research, appropriate allocation of funds and proper policy evaluation are some of the ways of enhancing digital inclusion. Findings from a study by researchers

(Mubarak et al., 2020) suggested that free access or provision of ICT enhanced education at insignificant cost to larger set of population could be the solution for including millions of masses which otherwise would have left behind due to poverty. Some researchers (Koch, 2022) were of the view that attention must be paid to second and third level digital divide and the study further concluded that education must not be used as a product as the availability depends upon the internet connection as well as the speed of internet. To bridge digital divide, education as a tool must be incorporated in every strategy. Some researchers (Popova et al., 2020) were of the view that adaptive training programs would help in the process of digital transformation. They further pointed out the importance of measurement of degree of adaptation as a response to introduction of digital aspects in economy and concluded that improvement in the quality of life could be considered as an indicator of measuring effectiveness of any digital program. Findings from a study by researchers (Bornman, 2016) in Africa suggested that making infrastructure available would be an insufficient step to transform the economy rather development of broad sectors of economy would work. A study in India by (Sharma, 2018) emphasized on the importance of information centers and libraries as these places serve all people without differentiating on bases like age, gender, education, caste and social status. The centers could help in fulfilling the objectives with respect to initiatives taken by government by organizing orientation programs in both rural as well as urban areas. A study in health sector by (Alkureishi et al., 2021) proposed solution to bridge digital divide which included assessing technology needs of a community, facilitating technological access, resource awareness and literacy training. Another study conducted on health information seeking behavior of respondents by researchers(Estacio et al., 2019) suggested that digital skills must be developed among individuals to make efficient use of technology so that hard to reach communities could be targeted. Some researchers(Asrani, 2022) even suggested that in order to reach non favorable demographics of digital divide, intervention of infrastructure equipped common service centers possessed with trained staff could help people not having ICT use capabilities. Findings from a study conducted in India by researchers(Agrawal & Asrani, 2018) suggested that socio conomic econ differences as significant contributor of digital disparity but the differences must be seen considering characteristics of early and late adopters.

Conclusion and Research Implications

The paper shows various perspectives on digital divide and the views regarded significant by researchers have been mentioned in the paper. Understanding of different authors have given a avicon digital disparity, need to address the divide, barriers faced by people and solutions to overcome problems. An extensive literature review on digital divide and demographics in selected journals, conference proceedings and book chapters published between 2013 and 2022 helped in identification of need of addressing the topic as people have different lifestyles and so is their technological use. The cause and effect of digital divide is the consistent decrease in the quality of human resource. Digital divide has an impact on all the sectors of economy and it cannot be eliminated totally from the society but can only be reduced. But there are some barriers faced while encountering every problem and the significant ones are socially less engaging behaviour of the people, not considering ICT as learning tool. ignoring interlinkages among different levels of digital divide, not addressing issues like access, acceptance & usage of technology in design and implementation phase of strategy and lastly the synergic effect of certain factors behind digital divide. Every problem has a solution and the paper attempts to summarise some ways of bridging digital divide and those are sound policy, increased access to ICT, education, training programs. considering libraries as centres of fostering digital literacy and not ignoring the characteristics of early and late adopters in accepting any innovation. In the developing world, if inequalities are not addressed, digital divide cannot be bridged. The study provides significant implications for research. First the study extends the literature on digital divide and especially among demographics by incorporating need, barriers in reducing disparity and possible ways of overcoming the problem.

The study also provides implications for practitioners like government agencies as they need to adopt some measures which can decrease the inequality rate and the same can be handled by focussing on barriers and alternative ways of handling the issue of digital divide.

Limitations and Future Directions

The results of the study are based on secondary data analysis but for the generalisability of results quantitative approach can be followed. Secondly the number of articles reviewed were less, future researchers can study more articles. Lastly the database used for information search was Scopus only, so future researchers can also consider other databases like web of science.

References

Agrawal, A., & Asrani, C. (2018). Volume 38, Issue 4 Digital divide among the Indian households: extent and correlates Submission Number: EB-18-00345 Digital divide among the Indian households extent and. Economics Bullettin, 38(4), 1-24.

Alkurcishi, M. A., Choo, Z. Y., Rahman, A., Ho, K., Benning- Shoth, J., Lenti, G., Sánchez, I V., Zhu, M., Shah, S. D., & Lee, W. W. (2021). Digitally Disconnected: Qualitative Study of Patient Perspectives on the Digital Divide and Potential Solutions. JMIR Human Factors, 8(4), https://doi.org/10.2196/33364

Asrani, C. (2022). Spanning the digital divide in India: Barriers to ICT adoption and usage. Journal of Public Affairs, 22(4). https://doi.org/10.1002/pa.2598

Boraman, E. (2016). Information society and digital divide in South Africa: results of longitudinal surveys. Information Communication and Society, 19(2), 264- 278. https://doi.org/10.1080/1369118X.2015.1065285

Cruz-Jesus, F., Vicente, M. R., Bacao, F., & Oliveira, T. (2016). The education-related digital divide: An analysis for the EU-28. Computers in Human Behavior, 56, 72-82. https://doi.org/10.1016/j.chb.2015.11.027

Dasgupta Tapashi, (2018). A Study on Aspects of India"s Digital Divide. RESEARCH REVIEW International Journal of Multi-disciplinary, 3(11), 689-693.

Estacio, E. V, Whittle, R. & Protheroc, J. (2019). The digital divide: Examining socio-demographic factors associated with health literacy, access and use of internet to seek health information. Journal of Health Psychology, 24(12), 1668-1675. https://doi.org/10.1177/1359105317695429

Frohlich, D. M., Smith, K., Blum-Ross, A., Egglestone, P., Mills, J., Smith, S., & Blythe, M. (2011). Crossing the digital divide in the other direction: community-centred design on the Bespoke project. Session 24- Community and Collectives, 164

Jamil, S. (2021). From digital divide to digital inclusion: Challenges for wide-ranging digitalization in Pakistan. Telecommunications Policy, 4.5(8), 102206.

Koch, K. (2022), Revue canadienne des sciences régionales The Territorial and Socio-Economic Characteristics of the Digital Divide in Canada THE TERRITORIAL AND SOCIO-.

Li, Y., & Ranieri, M. (2013). Educational and social correlates of the digital divide for rural and urban children: A study on primary school students in a provincial city of China. Computers and Education, 60(1), 197- 209. https://doi.org/10.1016/j.compedu 2012.08.001

Lythreatis, S., Singh, S. K. & El-Kassar. A. N. (2022). The digital divide: A review and future research agenda. Technological Forecasting and Social Change, 175, 121359.

Mubarak, F., Suomi, R., & Kantola, S. P. (2020) Confirming the links between socio-economic variables and digitalization worldwide: the unsettled dehate on digital divide. Journal of Information, Communication and Ethics in Society, 18(3), 415-430. https://doi.org/10.1108/JICES-02-2019-0021

Mwim. E. N. (2005). Viens of Digital Divide A Literature Review Keywords. 1-18.

Popova, A. L. Nuttunen, P. A. Kanavisev, M. V., & Serditov, V. A. (2020). The impact of the digital divide on the development of socio-economic systems. IOP Conference Series: Earth and Environmental Science, 433(1). https://doi.org/10.1088/1755- 1315/433/1/012022

Potnis, D. (2016). Inequalities creating economic barriers to owning mobile phones in India: Factors responsible for the gender digital divide. Information Development, 32(5), 1332-1342. https://doi. org/10.1177/0266666915605163

Shair, W., Waheed. A. Kamran, M. M., & Kuba, N. (2022). Digital Divide in Pakistan: Barriers to ICT Usage among the Individuals of Pakistan. Journal of Economic Impact, 4(3), 196-204. https://doi.org/10.52223/jei4032206

Sharma, N. (2018). Challenges and Barriers to Bridging Digital Divide. Library Waves - A Biannual Peer Reviewed Journal, 3(Issue 2), 137-144. http:// librarywaves.com/index.php/lw/article/view/65

Spanakis, P., Peckham, E., Mathers, A., Shiers, D., & Gilbody, S. (2021). The digital divide: Amplifying health inequalities for people with severe mental illness in the time of COVID-19. British Journal of Psychiatry, 219(4), 529-531. https://doi.org/10.1192/bjp.2021.56

Titah, R., & Barki, H. (2011). E-Government Adoption and Acceptance. International Journal of Electronic Government Research, 2(3), 23-57. https://doi. org/10.4018/ jegr. 2006070102

Understanding Efficacy of Literature Retrieval on Robo-advisory in Finance Sector: Exploring Performance Metrics

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Payal Gupta **

Abstract

Objective: Aim is to evaluate and compare performance of Scopus and Web of Science database in retrieving literature for Robo-advisory in finance sector.

Methodology: Five systematic literature reviews and bibliometric analysis on the theme Robo-advisory were selected. References of these 5 SLR were considered and a corpus of 137 most relevant documents were identified. From titles of 137 documents, most commonly used keywords were identified and search query "Robo-advi" was formulated. Precision, Recall and F1 measure were calculated after executing the query on Scopus and Web of Science databases.*

Results: Higher recall of 75.2% was exhibited for the query by Scopus as compared to 34.31% by Web of Science. Thus, Scopus is more effective in capturing relevant literature on the theme. The precision of query executed on Scopus was 65.71% as compared to 61.98% in Web of Science. Thus, implying that a large proportion of information retrieved from Scopus is relevant to search query thereby indicating a higher level of accuracy by Scopus. From the results of F1 score, Scopus has a better balance between precision and recall. Thereby concluding that Scopus is more effective in information retrieval as it retrieves lesser number of irrelevant documents.

Contribution: It offers valuable insights into the effectiveness of information retrieval from these databases on the theme under study. Researchers can make more informed decisions about selecting database for literature review and bibliometric analysis.

Keywords: *Retrieval, Precision, Recall, Robo-advisory, Systematic Literature Review (SLR)*

Introduction

Information Retrieval is a systematic process used to extract relevant documents from the web according to users' requirements specified using keywords and operators through query. Systematic literature reviews (SLRs) and Bibliometric Analysis (BA) have

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gained prominence among researchers in recent years. SLRs offer a thorough and objective synthesis of existing literature and BA assists in understanding significance of research conducted by using quantitative methods to evaluate bibliographic data. Researchers often face the challenge of choosing appropriate bibliographic DBs for conducting SLRs and BA. Scopus and Web of Science are the most popular DBs used by researchers to retrieve literature (Pranckute, 2021). Scopus was launched by Elsevier in 2004 and Web of Science was launched in 1997 by Clarivate. Both these DBs offer extensive coverage of scientific literature, including journals, conference proceedings, book chapters etc. across various disciplines. Another challenge faced by researchers is the retrieval of relevant information. Researchers face difficulty in effectively and precisely identifying relevant literature for conducting SLRs and BA. Success of SLRs and BA depends largely on efficiency and accuracy of the information retrieved from these databases (DBs). Plethora of studies have been conducted to compare these DBs. A comparative analysis of DBs- AGRICOLA, AGRIS, BIOSIS, CAB Direct, FSTA, Google Scholar, Scopus, and Web of Science has been performed on the theme agricultural information by Ritchie et al. (2019). A comparison of DBs- Cinhal, PubMed, Web of Science and Scopus in the retrieval of documents on the theme telemedicine has been conducted by Ahmadi et al. (2015). Some studies have focussed on comparison of journal coverage of Scopus and Web of Science (Mongeon & Paul-Hus, 2016; Singh et al., 2021)namely for research evaluation. Most bibliometric analyses have in common their data sources: Thomson Reuters' Web of Science (WoS. But there is dearth of research on comparison of DBs on the basis of information retrieval performance metrics- Precision and Recall and F1 score.

Precision is defined as proportion of relevant items retrieved to all items retrieved. It is a measure of specificity implying that whether a database is capable of excluding non-relevant items (Buckland & Gey, 1994; Gusenbauer & Haddaway, 2020) Measuring precision involves judgement on the part of researcher to identify relevant documents. Recall is defined as proportion of number of relevant items retrieved to all relevant items. It is a measure of sensitivity (Gusenbauer & Haddaway, 2020)validity, and explanatory power. Yet, the search systems allowing access to this evidence provide varying levels of precision, recall, and reproducibility and also demand different levels of effort. To date, it remains unclear which search systems are most appropriate for evidence synthesis and why. Advice on which search engines and bibliographic databases to choose for systematic searches is limited and lacking systematic, empirical performance assessments. This study investigates and compares the systematic search qualities of 28 widely used academic search systems, including Google Scholar, PubMed, and Web of Science. A novel, query-based method tests how well users are able to interact and retrieve records with each system. The study is the first to show the extent to which search systems can effectively and efficiently perform (Boolean or effectiveness (Walters et al., 2009) of a database. F1 Score is defined as harmonic mean of precision and recall. This score combines precision and recall into a single value thereby balancing the two metrics.

Robo-advisors provide advice to investors through the use of algorithms. Robo-advisors are an innovative FinTech product. Various SLRs and BA are available on this theme but there is paucity of research on comparison of these DBs in context of Robo-advisory literature. The present study is an effort to perform comparative analysis of performance of Scopus and Web of Science DBs in relevance to the literature retrieval on theme: Robo-advisory in finance sector. Information retrieval metrics such as Precision, Recall and F1 score are calculated to compare search performance of Scopus and Web of Science.

Organisation of paper is as follows. Section 2 and 3 presents review of literature and objectives of the study. Section 4 highlights the methodology followed. Section 4 presents results of analysis. Conclusion, limitations and future research avenues are discussed in Section 5.

Literature Review

Literature on Comparison of DBs

A comparative analysis of three DBs- Scopus, Web of Science and Dimensions regarding their journal coverage was conducted by Singh et al. (2021). Results highlighted that there is a wide variation in the journal coverage of these three DBs. Dimension database has an exhaustive coverage as compared to other DBs. Though Scopus was launched much after the launch of Web of Science, but it has made significant strides and has 'proven itself to be more effective than Web of Science. Scopus facilitates ease of navigation to users (Pranckutė, 2021).

Zhu & Liu (2020) highlighted that majority of researchers use Scopus and Web of Science. Visser et al., (2021) posits that large number of documents that have significant number of citations and references are covered by Scopus but they are not available in Web of Science. All journal articles covered by Web of Science are covered by Scopus.

A study was carried to select most appropriate database for literature search on theme telemedicine by comparing the performance of DBs- Cinhal, PubMed, Web of Science and Scopus by Ahmadi et al. (2015). Researchers concluded that the best database to conduct research on telemedicine is PubMed followed by Scopus and Web of Science. Evaluation of google scholar's performance on the theme later life migration was conducted by Walters et al. (2009). Results highlighted that Google Scholar has better precision and recall as compared to other DBs such as 'Academic Search Elite, AgeLine, ArticleFirst, EconLit, GEOBASE, MEDLINE, PAIS International, POPLINE, Social Sciences Abstracts, Social Sciences Citation Index (SSCI), and SocINDEX'

Literature on Systematic Literature Reviews and Bibliometric Analysis on Robo-advisors

Comprehensive SLRs and BA have been conducted to study the research contribution on the theme: Robo-advisory. Table 1 presents summary of SLRs and BA on theme Robo-advisory.

Objectives of the Study

1. To assess performance of Scopus and Web of Science database in retrieving literature for Robo-Advisory in finance sector.
2. To compare the efficacy of Scopus and Web of Science database in retrieving literature for Robo-Advisory in finance sector.
3. To suggest database for conducting literature review and bibliometric analysis on Robo-Advisory in the finance sector.

Table 1: Summary of SLRs and BA on Robo-advisory

Author	Objective	Database Used	Query executed on
Wagner (2024)	To find determinants of conventional and digital advisory.	Scopus IEEE SSRN	March 2022
Fahruri et al. (2024)	To understand research contribution on adoption of Robo-advisors	Scopus	Jan 25, 2023
Rico-Pérez et al. (2022)	To perform bibliometric analysis on Robo-advisors	Scopus Web of Science	May 21, 2022
Darskuviene & Lisauskiene (2021)	To study impact of Robo-advisors on behavioural biases of investors.	Google Scholar, Web of Science, Science Direct, Springer Link and Taylor &- Francis databases	2021
Manaf et al. (2023)	To analyse research on adoption of Robo-advisors.	Scopus Web of Science Science Direct	Feb, 2023

Source: Author's own compilation from extant literature

Methodology

The current study aims to compare the performance of two DBs- Scopus and Web of Science in relevance to availability of literature on theme of Robo-advisory in finance sector. Following steps have been performed:

Step 1: Formation of Corpus:

5 SLRs and BA on Robo-advisors were found from the literature. From the references of these 5 SLRs and BA, 137 documents relevant to the theme were identified. These 137 documents formed the corpus of the study.

Step 2: Identifying keywords:

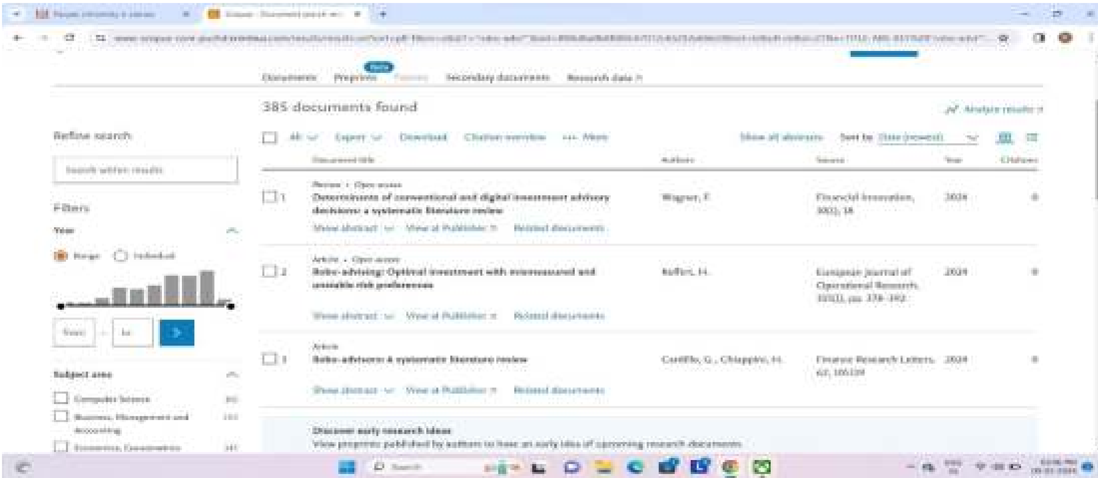
Most commonly used keywords were identified from title of documents available in the corpus. Table 2 presents the keywords and their frequency. It is evident from Table 2 that keyword "Robo-advisors" was found in 60 titles (44% of the total documents) followed by the keyword 'Robo-advisors" that appears 27 times. It is worth nothing that all these keywords are slight variation of the keyword Robo-advisors. Using these keywords, a search query "Robo-advi*" is formulated (Wild card character asterisk (*) represents one or more characters in a search query. Hence inclusion of * in the search query, retrieves relevant documents closely associated with the theme Robo-advisory).

Table 2: Number and Percentage of appearance of keywords among 137 documents

Keywords	Number of times appeared	Percentage of appearance of keywords among 137 documents
Robo-advisors	60	43.79%
Robo-advisor	27	19.70%
Robo-advisory	15	10.94%
Robo-advice	09	6.56%
Robo-advising	07	5.10%

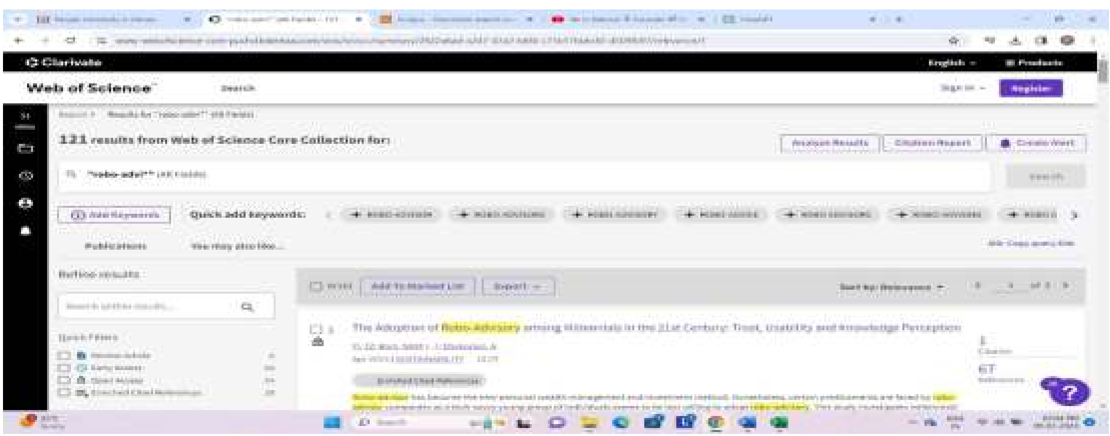
Source: Author's own compilation

Fig. 1. Snapshot of 385 results retrieved from the query executed on Scopus



Source: Scopus

Fig. 2. Snapshot of 121 results retrieved from the query executed on Web of Science



Source: Web of Science

Step 3a: Execution of query on Scopus

The query "robo-advi*" was executed on Scopus on 09/03/2024 to search from Title, Abstract and Keywords. A total of 385 documents were retrieved. Figure 1 represents the snapshot of 385 results retrieved from the query executed on Scopus.

Step 3b: Executing the query on Web of Science

The query "robo-advi*" was executed on Web of Science on 09/03/2024. A total of 121 documents were retrieved. Figure 2 represents the snapshot of 121 results retrieved from the query executed on Web of Science.

Step 4: Calculation of Precision, Recall and F1 Score

To compare the performance of Scopus and Web of Science for information retrieval on the theme "Robo-advisory", the query was executed. From the results retrieved, the performance metrics-Precision, Recall and F1 Score were calculated. Table 3 presents

Table 3: Definition of Performance metrics for Information Retrieval

Performance metrics for Information Retrieval	Definition	Source
Precision	Precision is defined as proportion of relevant items retrieved to all items retrieved. It is a measure of specificity implying that whether a database is capable of excluding non-relevant items.	(Buckland & Gey, 1994; Gusenbauer & Haddaway, 2020)
Recall	Recall is defined as proportion of number of relevant items retrieved to all relevant items. It is a measure of sensitivity.	(Gusenbauer & Haddaway, 2020; Walters et al., 2009)
F1 Score	F1 Score is defined as harmonic mean of precision and recall.	(McSherry & Najork, 2009)

Source: Author's own compilation from extant literature

definition of these performance metrics.

Findings

Documents Retrieved

Scopus retrieved total of 385 documents and Web of Science retrieved 121 documents. The number of documents retrieved by Scopus is 3.18 times more than that of Web of Science. From a corpus of 137 documents, Scopus retrieves 103 documents and 47 were retrieved by Web of Science. Thus, Scopus retrieved larger proportion of documents as compared to Web of Science.

Performance of database regarding retrieval of relevant information is analysed using information retrieval performance metrics- Precision and Recall and F1 score.

Calculation of Precision

Precision is defined as number of relevant items retrieved to total items retrieved. It is calculated using following formula:

$$\text{Precision} = \frac{\text{No. of relevant documents retrieved}}{\text{All documents retrieved}}$$

Precision of Scopus

No. of relevant items retrieved= 253

All documents retrieved= 385

Precision= 253/385= 65.71%

Precision of Web of Science

No. of relevant items retrieved= 75

All documents retrieved= 121

Precision= 75/121= 61.98%

Interpretation

Results indicate that Scopus has a higher precision as compared to Web of Science. Thus, Scopus returned more relevant results for the search query on Robo-advisory.

5.3 Calculation of Recall

Recall is defined as number of relevant items retrieved to all relevant items in the corpus. It is calculated by following formula:

$$\text{Recall} = \frac{\text{No. of relevant documents retrieved}}{\text{All relevant documents}}$$

Recall of Scopus

Total records retrieved out of corpus of 137 documents is 103.

No. of relevant documents retrieved= 103

All relevant documents=137

Recall = 103 / 137= 75.18%

Recall of Web of Science

Total records retrieved out of corpus of 137 documents is 47.

No. of relevant documents retrieved= 47

All relevant documents = 137

Recall= 47 / 137= 34.30%

Interpretation

Results indicate that Scopus has a relatively high recall rate for search query implying that Scopus is more effective at retrieving relevant documents from the corpus as compared to Web of Science. Scopus is able to capture a higher proportion of the relevant documents, making it potentially more comprehensive for the search query.

Calculation of F1 Score

F1 measure is defined as harmonic mean of precision and recall. This score combines precision and recall into a single value thereby balancing the two metrics. It gives an overall measure of effectiveness of search query. It is calculated by following formula:

$$\text{F1 Score} = 2^* \frac{\text{Precision}^* \text{ Recall}}{\text{Precision} + \text{Recall}}$$

F1 Score of Scopus

Precision of Scopus= 65.71 %

Recall of Scopus= 75.18%

$$\text{F1 Score (Scopus)} = 2^* \frac{0.6571^* \, 0.752}{0.6571 + 0.752} = 0.7011$$

F1 Score of Web of Science

Precision of Web of Science= 61.98%

Recall of Web of Science= 34.30%

$$\text{F1 Score (WOS)} = 2^* \frac{0.6198^* 0.3431}{0.6198 + 0.3431} = 0.4412$$

Interpretation

Higher F1 score for Scopus indicates that it has a better balance between precision and recall as compared to Web of Science. This means that Scopus is more effective at retrieving relevant documents while also minimizing the number of irrelevant documents retrieved, compared to Web of Science.

Conclusions, Limitations and Future Research Directions

Information retrieval plays a crucial role in conducting SLRs and BA. The quality of the documents retrieved from DBs affects the effectiveness of SLRs and BA. It provides researchers with a comprehensive understanding of the existing literature on a particular field. The current study aims to perform a comparative analysis of performance of Scopus and Web of Science DBs in retrieving relevant documents on theme Robo-advisory financial services. Precision, Recall and F1 Score of Scopus is higher than Web of Science highlighting that Scopus outperforms Web of Science in terms of effectiveness in retrieval of relevant documents. These results suggest that researchers and practitioners in the field of Robo-advisory may benefit more from using Scopus for literature search in conducting SLRs and BA.

However, the study suffers from some limitations. Since, the performance of database varies from one field to another (Walters et al., 2009), the limitation of this study is that these results are applicable in the context of extracting literature on the theme Robo-advisory and cannot be generalized to other themes. Another limitation is that search performance of only two DBs- Scopus and Web of Science has been analysed and compared. Future studies can focus on conducting a comparative analysis of other databases such as Google Scholar, Jstor, EBSCOhost etc. in retrieving literature on Robo-advisory financial services. The effectiveness of each database varies depending on the specific search query used. Future research can explore the impact of different search queries on database performance. The study is limited by timeframe of the literature included. Search query was executed on 09th March, 2024. Robo-advisory is a rapidly evolving field, and newer publications may have different indexing status that could impact database performance.

References

Ahmadi, M., Sarabi, R. E., Orak, R. J., & Bahaadinbeigy, K. (2015). Information retrieval in telemedicine: A comparative study on bibliographic databases. Acta Informatica Medica, 23(3), 172–176. https://doi.org/10.5455/aim.2015.23.172-176

Buckland, M., & Gey, F. (1994). The relationship between Recall and Precision. Journal of the Association for Information Science and Technology, 45(1), 12–19. https://doi.org/ 10.1002/(SICI)1097-4571 (199401) 45:1<12::AID-ASI2>3.0.CO;2-L

Darskuviene, V., & Lisauskiene, N. (2021). Linking the Robo-advisors Phenomenon and Behavioural Biases in Investment Management: An Interdisciplinary Literature Review and Research Agenda. Organizations and Markets in Emerging Economies, 12(2), 459–477. https://doi.org/10.15388/ omee. 2021.12.65

Fahruri, A., Rusmanto, T., Warganegara, D. L., & Tjhin, V. U. (2024). Mapping the Research Landscape of Robo Advisor Adoption: A Bibliometric Analysis. Journal of System and Management Sciences, 14(1), 27–49. https://doi.org/10.33168/JSMS.2024.0103

Gusenbauer, M., & Haddaway, N. R. (2020). Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. Research Synthesis Methods, 11(2), 181–217. https://doi. org/10.1002/jrsm.1378

Manaf, S. M., Ismail, M. K. A., & Zakaria, S. (2023). Systematic Literature Review on Robo-Advisery Adoption towards Young People. Environment- Behaviour Proceedings Journal, 8(SI15), 3–9. https:// doi.org/ 10.21834/e-bpj.v8isi15.5086

McSherry, F., & Najork, M. (2009). Computing Information Retrieval Performance Measures Efficiently in the Presence of Tied Scores. Advances in Information Retrieval., 11(3), 365–373. https://doi. org/10.1163/ 156854109X446962

Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. Scientometrics, 106(1), 213–228. https://doi. org/10.1007/s11192-015-1765-5

Pranckutė, R. (2021). Web of Science (WoS) and Scopus: the titans of bibliographic information in today's academic world. Publications, 9(12). https://doi. org/10.3390/publications9010012

Rico-Pérez, H., Arenas-Parra, M., & Quiroga-Garcia, R. (2022). Scientific Development of Robo-Advisor: A Bibliometric Analysis. Review of Economics and Finance, 20, 776–786. https://doi.org/10.55365/1923.x2022.20.87

Ritchie, S. M., Banyas, K. M., & Sevin, C. (2019). A Comparison of selected bibliographic database search retrieval for agricultural information. Issues in Science and Technology Librarianship, 2019(93). https://doi.org/10.29173/istl48

Singh, V. K., Singh, P., Karmakar, M., Leta, J., & Mayr, P. (2021). The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. Scientometrics, 126(6), 5113–5142. https://doi. org/10.1007/s11192-021-03948-5

Visser, M., van Eck, N. J., & Waltman, L. (2021). Large-scale comparison of bibliographic data sources: Scopus, web of science, dimensions, crossref, and microsoft academic. Quantitative Science Studies, 2(1), 20–41. https://doi.org/10.1162/ qss_a_00112

Wagner, F. (2024). Determinants of conventional and digital investment advisory decisions: a systematic literature review. Financial Innovation, 10(1). https://doi.org/10.1186/s40854-023-00538-7

Walters, W. H., Walters, W. H., & Walters, W. H. (2009). Google Scholar Search Performance: Comparative Recall and Precision. Libraries and the Academy, 9(1), 5–24. https://doi.org/https://doi.org/10.1353/pla.0.0034 For

Zhu, J., & Liu, W. (2020). A tale of two databases: the use of Web of Science and Scopus in academic papers. Scientometrics, 123(1), 321–335. https://doi. org/10.1007/s11192-020-03387-8

Marketing Opportunities In The Digital Economy

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Anand Abhishek **

Abstract

Introduction: The Digital Economy refers to a collection of economic and commercial activities that utilize digital technologies and electronic communications. This type of economy typically includes various sectors and activities such as e-commerce, digital marketing, digital financial services, digital content production, software, computer games, cloud services etc.

Focus of Research: This abstract provides a concise overview of the research paper on "Marketing Opportunities in the Digital Economy." The paper explores the various marketing opportunities that have emerged in the digital economy, driven by advancements in technology and the increasing reliance on digital platforms.

It analyzes the strategies and techniques employed by businesses to reach and engage with their target audience in this digital landscape. The abstract also highlights the impact of the digital economy on consumer behavior and the implications for marketers. The findings of this research offer valuable insights for businesses seeking to capitalize on the marketing opportunities presented by the digital economy.

Objective: The objective of this research paper is to explore and analyze the various marketing strategies and techniques that have emerged in the digital economy. The paper aims to identify the benefits and challenges of digital marketing, understand the impact of the digital economy on consumer behavior, and provide insights and recommendations for businesses seeking to capitalize on the marketing opportunities in the digital landscape.

Learnings: The learnings from this study will contribute to a deeper understanding of examining the digital economy and its impact on businesses and users, as well as evaluating the opportunities for easy and fast access to products and services that can lead to increased efficiency and productivity. It will provide businesses with actionable insights to optimize their digital marketing strategies and enhance their ability to attract and retain customers in the digital age.

Keywords: *Digital economy, medical tourism, Innovation, Digital technologies, Blockchain.*

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Introduction

The Digital Economy refers to a collection of economic and commercial activities that utilize digital technologies and electronic communications. This type of economy typically includes various sectors and activities such as e-commerce, digital marketing, digital financial services, digital content production, software, computer games, cloud services etc. In the Digital Economy, economic and commercial activities are conducted based on digital technologies and electronic communications, resulting in a strong shift towards online and digital business interactions. This new economy has been recognized as a primary driver of economic growth and development in some countries, and due to the special importance of digital technologies, it is experiencing growth and expansion. As a result, the Digital Economy offers users and businesses the opportunity to access services and products easily and quickly and to generally experience better user experiences.

The Digital Economy is constantly evolving and has significant impacts on various economic, social, and cultural fields. The Digital Economy encompasses economic and commercial activities that utilize digital technologies and electronic communications. This article will examine the challenges and opportunities of the Digital Economy in the new economy. As digital technologies and electronic communications continue to transform the way we conduct economic and commercial activities, the Digital Economy has emerged as a powerful force for driving growth and development. With its constant evolution and significant impact on various fields, the Digital Economy is a new and innovative economy that is leading the global economy toward digitalization.

Objective of Study

The objective of this research is to examine the digital economy and its impact on businesses and users. Specifically, we aim to evaluate the opportunity for easy and quick access to products and services that lead to increased efficiency and productivity. The digital economy has significant impacts on various economic, social, and cultural fields, including changes in the way people work and interact with each other, promoting more flexible and remote work arrangements, and increasing global connectivity. Additionally, the digital economy has impacted education, healthcare, entertainment, and other sectors. This research seeks to contribute to the understanding of the digital economy's role in driving global digitization and its potential for economic growth and development.

Materials and Methodology

Various resources and methodologies exist for researching the digital economy and its associated challenges. To gather insights into this domain, one can consult a range of reference materials including books, scholarly articles, business reports, interviews, government publications, and other relevant sources. For a more focused examination of the digital economy within a specific country, primary research in the form of interviews with experts, industry professionals, and consumers can be undertaken. Such an approach is considered foundational in social science research. Additionally, data analysis serves as a key method in many studies, employing statistical techniques and specialized software to interpret collected data and derive insights pertaining to the digital economy. Typically, a blend of reference materials, primary research, and analytical methods is employed to conduct comprehensive research, with the gathered data serving as the basis for achieving research objectives.

In the context of the digital economy, tourism emerges as a pivotal sector with significant implications for economic development. The integration of digital technologies, such as online booking systems, electronic payment platforms, and hospitality management software, has the potential to enhance the tourist experience while reducing operational expenses in the tourism industry. Furthermore, the adoption of technologies like virtual and augmented reality holds promise for attracting more tourists, thereby stimulating economic growth. Noteworthy statistics pertaining to economic expansion and tourism within the digital economy include data from the World Tourism Organization (WTO) indicating that in 2019, international tourism reached 1.4 billion travelers worldwide, generating over $1.56 trillion in revenue. Recent surveys underscore the positive impact of online reservation platforms on enhancing the tourist experience and bolstering the revenue streams of tourism enterprises. Despite challenges posed by the COVID-19 pandemic and resultant travel restrictions in 2020, certain segments of the tourism industry managed to thrive by leveraging digital solutions to offer online services and implement strategic operational measures.

Case Study and Findings

The growth of the tourism industry is a crucial component of economic growth, and the incorporation of digital technologies in the tourism industry has the potential to enhance the tourist experience and reduce operating costs.

Table 1 displays the percentage growth of the tourism industry and economic growth in countries such as the USA, China, Germany, Japan, and the UK. It shows a comparison of the percentage growth of the tourism industry and economic growth in countries that have utilized digital technologies to promote tourism. In terms of economic growth and tourism in the digital economy, China ranks higher than other countries, with a 6.5% economic growth and a 33% growth in the tourism industry. The United States ranks second with a 6.4% economic growth and a 25% growth in the tourism industry. These data indicate that the tourism industry in the digital economy has immense potential for economic growth and job creation.

Based on economic growth and the growth of the tourism industry, the countries can be divided into two categories: "high growth" and

Table 1: Growth of the tourism industry and Economic growth in various countries with digital economic tourism.

Country	Economic growth (%)	Growth of the Tourism Industry (%)
China	6.4	34.0
America	6.3	26.0
Japan	2.9	21.0
Brazil	4.2	23.0
England	4.2	16.0
Germany	3.7	21.0

Table 2: Economic and Tourism Growth Comparison Across Countries.

Country	Tourism Industry Growth (%)	Economic Growth (%)
USA	24.0	6.5
China	32.0	6.4
Germany	18.6	4.1
Japan	12.4	2.9
Afghanistan	3.1	0.0
Haiti	1.6	0.6

Table 3: Comparison of Economic Growth and Tourism Industry Growth in Various Countries.

Country	Economic Growth (%)	Growth Tourism Industry (%)
Bhutan	7.6	10.8
Qatar	2.2	8.2
UAE	1.4	6.2
China	8.3	5.1
Bahrain	4.2	4.5

"low growth" for economic growth, and "thriving tourism industry" and "low growth tourism industry" for the growth of the tourism industry. Combining these two categories results in four categories: "high growth and prosperous tourism industry", "high growth and less prosperous tourism industry", "low growth and prosperous tourism industry", and "low growth and less prosperous tourism industry". However, it is important to note that the data can be categorized based on various variables, and the categories used may vary depending on the subject and desired data. The data provided in 2021 regarding economic growth and the growth of the tourism industry highlight the potential for growth and development in the digital economy (see Table 2 and Table 3).

The data provided highlights that the countries in question did not experience significant economic growth in 2021, and the growth of their tourism industry was comparatively lower than in other countries. The data pertains to the economic growth and growth of the tourism industry in 2021.

Economic Growth and Tourism Industry: A Comparative Analysis

The data indicates that certain countries experienced significant economic growth in 2021 and their tourism industry also exhibited higher growth rates compared to other countries. Further details regarding the economic growth of countries categorized as "high growth and thriving tourism industry" and "high growth and low tourism industry" are presented below.

The economic growth data pertains to the year 2021. Countries such as Bhutan, Qatar, and the United Arab Emirates demonstrated high economic growth rates in 2021 and their tourism industry is thriving. Conversely, less prosperous countries such as Afghanistan, Haiti, the Cook Islands, and Liberia had lower economic growth rates and their tourism industry been also less prosperous. It is important to note that these categories are based on specific criteria, and the data can be categorized differently based on various factors. Nonetheless, the data presented provide valuable insights into the economic growth and tourism industry growth in various countries.

The tourism industry is predicted to experience significant growth in the coming years due to the increasing global demand for tourism services. Despite the impacts of the COVID-19 pandemic in 2020 and 2021, the tourism industry remains of great importance, and many countries are striving to enhance their tourism services to attract more visitors. With the previous complexities of pre-COVID-19 life, many individuals are seeking outdoor tourism activities and have a desire to travel both domestically and in groups. Providing the highest level of safety for travelers has become a priority for hotels, entertainment centers, and other tourism-related industries, leading to the adoption of new technologies and innovations to improve their facilities.

Additionally, the tourism industry is expected to embrace the digital world and offer tourism services online, such as virtual tours and online tourist guides. The tourism industry's growth is expected to be driven by the increasing demand for travel and sightseeing, the provision of new and diverse tourism services, and a focus on improving facilities and services. However, as with all economic sectors, domestic and international political and economic changes may also affect the tourism industry's growth process.

The Role of New Technologies in Enhancing the Tourist Experience

Emerging technologies are playing an increasingly pivotal role in enriching the tourist journey, with many tourism sectors embracing these innovations to elevate the overall travel experience. Among these advancements are virtual and augmented reality, the Internet of Things (IoT), robotics and artificial intelligence (AI), and electronic payment systems.

Virtual and augmented reality technologies offer tourists the opportunity to preview destinations through immersive images and videos prior to embarking on their journeys. Augmented reality further supplements this experience by furnishing tourists with contextual information about their surroundings and available amenities. Meanwhile, IoT facilitates the management and oversight of amenities within hotels and tourist hubs, while robotics and AI contribute to tasks such as guest reception, room maintenance, and tour guidance. Electronic payment systems emerge as another invaluable tool for travelers, streamlining transactions and obviating the need for physical currency.

Of these technologies, virtual and augmented reality have gained particular prominence within the tourism sector. Virtual reality enables users to delve into entirely digital 3D environments via specialized glasses, whereas augmented reality enriches real-world settings by overlaying virtual data onto physical landscapes, accessible through mobile devices. Leveraging these technologies empowers tourists to engage with and glean insights into destinations prior to their visits, thus empowering them to make well-informed travel choices. Conversely, IoT interconnects disparate objects via the internet to facilitate data exchange, a capability that holds immense promise for enhancing tourist services and experiences.

7. Top of Form

8. Bottom of Form

Fig. 1 illustrates the various technologies that are transforming the tourism industry and enhancing the overall tourist experience.

Fig. 2 and Fig. 3 depicts the various technologies enhancing the tourism systems and provides an overview of the various applications of technology in the tourism industry respectively. These technologies are revolutionizing the way tourism services are provided and experienced by tourists.

The Role of IOT, AI, And AR in Enhancing the Tourist Experience and Systems

These technologies have immense potential to improve the tourist experience and enhance the performance of tourism systems. They can help reduce costs, increase efficiency and productivity, and intelligently utilize available resources and facilities to provide high-quality services to tourists.

- The IoT can be utilized in hotels to better

Fig. 1: Technologies enhancing the tourist experience

Fig. 2: Schematic of technologies enhancing tourism systems

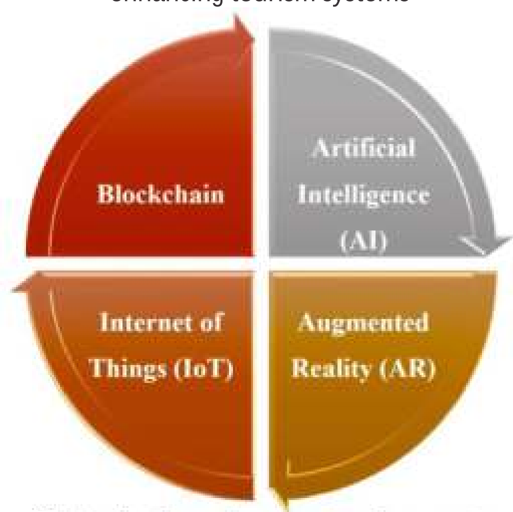
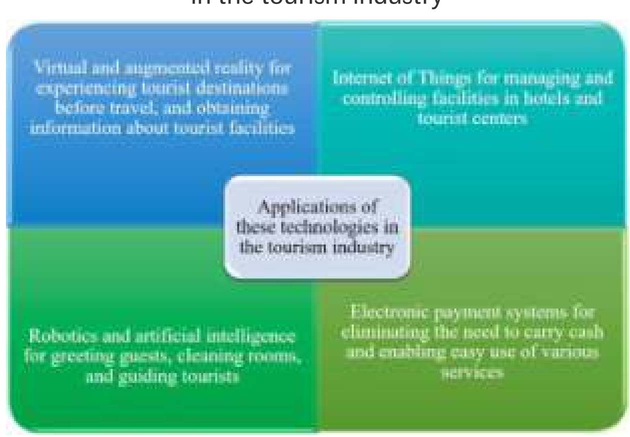


Fig. 3. Applications of these technologies in the tourism industry



control and manage facilities, whereby smart systems can remotely adjust the temperature of the room, turn lights on and off automatically, and even control electronic devices. The use of IoT in the tourism industry can reduce costs and improve the quality of service, as well as enable the intelligent utilization of available facilities and resources to enhance the tourist experience.

- AI is another technology that can improve the tourist experience and enhance the performance of tourism systems. AI systems can learn from data and provide intelligent answers to user questions and needs. AI can be used in hotel reservation sites to automatically answer user questions or allocate tours to customers in tour reservation systems. The use of AI can improve the efficiency and productivity of tourism systems by intelligently utilizing available resources and facilities.
- In the tourism industry, AR can enhance the tourist experience and increase the attractiveness of tourist destinations. In museums and historical places, visitors can scan AR tags with their smartphones to access detailed information and live images of historical sites.

Fig. 4 highlights the various benefits of using augmented reality (AR) in the tourism industry. By using AR, tourism businesses can differentiate themselves from competitors and offer unique experiences to tourists. This can help to increase customer satisfaction and loyalty, leading to repeat business and positive word-of-mouth marketing.

Fig. 5 showcases the various applications of digital technologies in the tourism industry, specifically Augmented Reality (AR), Artificial Intelligence (AI), Internet of Things (IoT), and Blockchain.

Therefore, the use of digital technologies, particularly blockchain, in the tourism

Fig. 4: Benefits of Augmented Reality in the Tourism Industry.

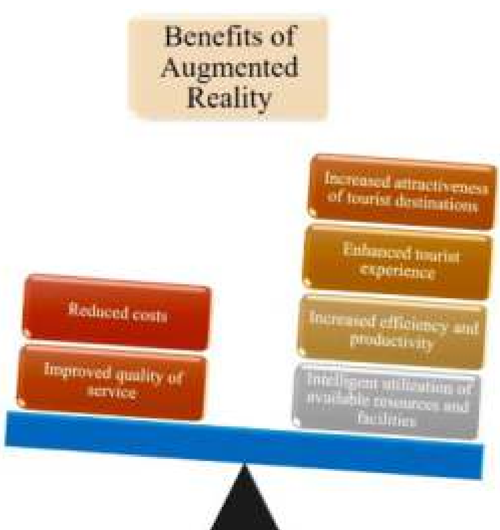
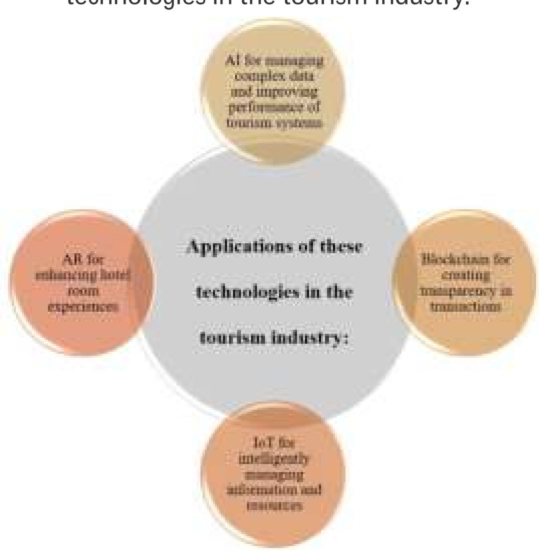


Fig. 5: Applications of AR, AI, IoT, and Blockchain (for creating transparency in transactions, preventing fraud and misuse of information) technologies in the tourism industry.



industry has the potential to improve the economy and economic growth of countries.

Tourism Industry Through Digital Technologies and Blockchain

Blockchain technology holds the potential to revolutionize the tourism sector by fostering transparency in transactions, thwarting fraudulent activities and data misuse, enhancing transaction efficiency and velocity, and trimming transaction expenses. Furthermore, the integration of digital innovations such as artificial intelligence (AI), augmented reality, the Internet of Things (IoT), electronic payment systems, and data analytics in tourism operations can bolster system efficacy and output while enriching the tourist experience. These technological advancements promise immersive and captivating experiences for travelers, streamline tourism infrastructure planning, and inform optimal strategies for attracting visitors.

In our nation, the adoption of digital technologies within the tourism domain is on the rise, poised to amplify system performance and efficiency and elevate the tourist journey. Electronic payment platforms, online booking systems, tourist information databases, and social media networks represent a selection of digital tools presently deployed in the tourism sector. As digital technologies continue to evolve, their expanded application in tourism is anticipated to be instrumental in shaping the industry's trajectory. Social media platforms are particularly esteemed as potent marketing instruments within our national tourism landscape. Given the widespread usage of social media platforms, they serve as effective communication and marketing conduits for tourism enterprises and organizations, facilitating engagement with target demographics and enticing visitors through captivating content and visuals.

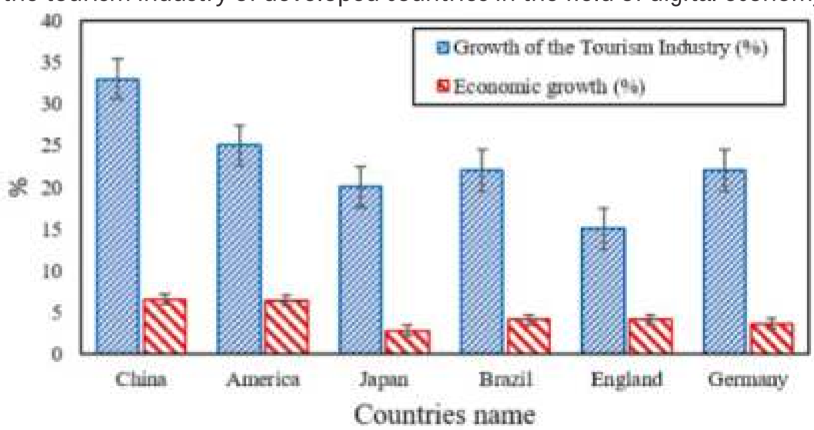
Many local tourism enterprises leverage social media platforms for promotional endeavors, disseminating practical information, discounts, and exclusive deals to their intended audience to bolster their market presence. Social media platforms also serve as channels for direct communication between tourists and tourism entities, augmenting service delivery to travelers. Through targeted advertising on social media platforms, tourism enterprises can refine their outreach efforts, tailoring advertisements to specific demographics and optimizing advertising efficacy. This targeted approach to social media advertising can yield substantial increases in sales and reservations, bolstering revenue streams for tourism establishments. Given its cost-effectiveness compared to traditional media channels, social media advertising emerges as a preferred marketing avenue for many local tourism businesses, offering a cost-efficient means of digital marketing and advertising. Particularly beneficial for small-scale enterprises, social media advertising levels the playing field, enabling smaller entities to vie for market share against larger competitors by leveraging wider audience reach with modest budgets and maximizing advertising returns.

Table 4 shows the impact of various digital technologies on the tourism industry, including social media, AI, augmented reality, the IoTs, and blockchain. The digital economy refers to the utilization of digital technologies and electronic communications in economic processes. In the tourism sector, the use of digital technologies can enhance the performance and quality of tourism-related services. Additionally, tourism can contribute to the economic growth and development of

Table 4: The impact of digital technologies on the tourism industry.

Digital Technology	Impact on Tourism Industry
Social media	Increased marketing reach
AI	Improved customer service
Augmented reality	Enhanced tourist experience
Augmented reality	Enhanced tourist experience
IoTs	Efficient resource usage
Blockchain	Secure transactions

Fig. 6: Comparison of the general economic situation and the economy of the tourism industry of developed countries in the field of digital economy



countries by generating significant revenue through the attraction of tourists.

Fig. 6 shows a comparison of the general economic situation and the economy of the tourism industry of six developed countries in the field of digital economy. It reflects the growth rates of the tourism industry and the corresponding economic growth rates for each country.

According to the data, China experienced the highest growth rate in the tourism industry with 33%, accompanied by a relatively high economic growth rate of 6.5%. The United States also demonstrated a significant growth rate in the tourism industry with 25%, accompanied by an economic growth rate of 6.4%. Meanwhile, Japan, Brazil, and Germany experienced growth rates of 20%, 22%, and 22%, respectively, in their tourism industry, with corresponding economic growth rates of 2.8%, 4.1%, and 3.6% respectively. Finally, England had the lowest growth rate in the tourism industry with 15%, accompanied by an economic growth rate of 4.1%.

This revenue can be utilized for further economic development and the improvement of living conditions. Furthermore, as the tourism industry is indirectly related to other industries, its development can create job opportunities and foster the growth of various industries, leading to additional economic benefits.

The development of various industries, job creation, increased production and trade, growth of economic sectors, and attraction of new investments are among the factors that can contribute to economic improvement. In the tourism sector, attracting tourists and creating job opportunities can also contribute to economic improvement.

In summary, the integration of digital technologies and the tourism industry offers numerous opportunities for improving economic processes, enhancing the quality of tourism-related services, and contributing to the economic growth and development of countries.

Role of the Digital Economy, Innovation, and Blockchain on The Growth of the Tourism Industry

Tourism encompasses a wide range of activities, such as leisure trips, family vacations, historical and cultural trips, and business trips. The concept of economy involves the production, distribution, and consumption of goods and services, both domestically and internationally, as well as investment, taxation, and budgeting.

Blockchain is a secure technology for storing and managing information, which can also be utilized for money transfer, supply chain management, and information security.

Innovation refers to the introduction of new ideas, technologies, processes, and changes in products and services that bring about improvement and transformation in the economy and industry.

In the tourism industry, digital technologies, the digital economy, and innovation, including blockchain, play a crucial role in enhancing performance and growth. As digitization, the digital economy, and innovation are interconnected in various economic sectors, including tourism, companies can utilize digital technologies to easily communicate with their target audience, provide useful information, and offer their services and products online.

The digital economy is also considered a new approach in the tourism industry, offering superior performance over traditional methods. Blockchain technology can enhance the security and transparency of transactions, improve information management, and foster trust and confidence among customers. Digital technologies, the digital economy, and innovation, including blockchain, are essential for improving the performance and growth of the tourism industry.

Impact of Digital Technologies on the Global Tourism Industry

According to statistics from the WTO, the number of global travelers visiting tourist destinations in 2019 reached 1.4 billion, which represents a 4.4% increase from the previous year. Furthermore, it was reported that 75% of hotel reservations worldwide were made online in 2019.

In the digital era, various technologies, such as augmented reality, AI, and blockchain, are being increasingly utilized in the tourism industry. Some hotels use augmented reality to provide an immersive experience for travelers, whereas some airlines adopt AI to enhance performance and deliver superior services to passengers.

More than 80% of hotel reservations in the United States are made online through various websites and applications. In China, blockchain is used as a strategic technology in the tourism industry one of China's largest tourism companies, using blockchain to manage and secure traveler information. In Europe, innovative technologies such as augmented reality and AI are also being utilized in the tourism industry, with some hotels offering augmented reality experiences and some airlines using AI to improve performance and service quality. In African countries, various technologies such as mobile payment and online reservation systems are rapidly growing and developing. The digital economy includes various technologies such as the Internet, social networks, applications, and websites, which are used for managing and transferring information and services. Blockchain technology is another technology that has found many uses in various economic fields in recent years, such as managing international money transfers, supply chains, information security, and creating digital currencies.

Additionally, blockchain can be used as a suitable solution for managing insurance and payment of damages, improving the quality of insurance services, and reducing costs associated with this industry. By utilizing blockchain's transparency and security features, it can be a significant technology in the economic field, particularly for digital currencies and international money transfers, and can be utilized to decrease payment and money transfer costs.

Moreover, blockchain technology is a suitable solution for supply chain management, enhancing product quality, and reducing production costs. The global economy has been significantly affected by the recent progress made towards reaching carbon emission peaks and achieving carbon neutrality. It has been inferred that the utilization of digital technologies and the implementation of a structural upgrade in energy systems can provide benefits to enterprises, which in turn is expected to enhance the overall societal efforts towards reducing carbon emissions in various industries. Additionally, the emergence of the fourth industrial revolution poses considerable opportunities and challenges to society, necessitating suitable responses from governments to facilitate this transformation. This technology enables all information related to the supply chain to be transparent and accessible. Furthermore, blockchain is a safe and transparent technology that can be utilized to maintain information security in the economy, including managing banking services, medical data, and personal information.

In conclusion, blockchain technology can be utilized as an effective solution for managing insurance claims and payments, improving the quality of insurance services, and reducing costs in the industry. However, this is only one of many applications of blockchain in the economic field, and there are still other applications that can be developed. Blockchain can be utilized for managing investments in the stock market and financial markets, as well as for tax management and international taxes, where blockchain's transparency and accuracy can improve the quality of tax management and reduce related costs.

Additionally, blockchain can be a suitable solution for managing and predicting risks related to international trade, which can improve the quality of international trade and reduce the costs of risk management. Blockchain technology is a significant technology in the economic field, and it can be used for financial management, banking service management, supply chain management, insurance management, compensation, and many other applications in this field. The economy encompasses various economic concepts, such as the production, distribution, and consumption of goods and services, economic growth, inflation, and unemployment. The researchers address various topics in the IoT field, including the design of low noise amplifiers for IoT sensors, the comparison of low and high resolution infrared cameras for IoT smart city applications, the development of a smart hydroponic and aeroponic system for indoor greenhouse cultivation, the review of enabling technologies for the Internet of Medical Things (IoMT) ecosystem, the presentation of a smart application for house condition survey, and the discussion of the challenges and opportunities of Industry 4.0 in the construction industry.

Conclusion

Blockchain technology is a powerful tool in various economic industries, including financial management, banking services, supply chain management, insurance, and compensation. With the continuous development of blockchain technology, newer and more creative applications are emerging, particularly in the tourism and digital economy sectors.

In the tourism industry, blockchain can be used for reservation management, payment, and travel expenses to improve service quality, reduce costs, and increase security and privacy. Blockchain technology can also be effective in reducing fraud in the tourism industry, which can lead to increased trust among travelers. By using digital signatures and the trust network of blockchain, tourism transactions and information can be safely and reliably registered and managed.

The digital economy, as a new and innovative economy, uses digital technologies and electronic communications to conduct economic and business activities. This type of economy usually includes a wide range of sectors, such as e-commerce, digital marketing, digital financial services, software development, computer games, and cloud services, among others. The use of digital technologies and electronic communications in these sectors has led to a significant shift towards online business interactions, faster processing, and digitalization, which has improved user experiences and made access to services and products easier.

The digital economy is recognized as the main driver of economic growth and development in many advanced countries and continues to develop continuously due to the special importance of digital technologies and their impact on economic and business activities. Therefore, in this descriptive research, we focused on examining the digital economy and its impact on businesses and users, as well as evaluating the opportunities for easy and fast access to products and services that can lead to increased efficiency and productivity.

In addition, the digital economy has significant impacts on various economic, social, and cultural areas, such as changing the way people work and interact with each other, promoting more flexible and remote working arrangements, and increasing global connectivity. Furthermore, the digital economy has also had an impact on education, healthcare, and entertainment, among other sectors. The advancement of technology and electronic communications has pushed the global economy towards digitalization. The role of the digital economy in promoting global digitalization is crucial, and it is expected that its impact will continue to increase in the future.

References

B. Guo, Y. Wang, H. Zhang, C. Liang, Y. Feng, F.

Hu. Economic Modelling, 120 (2023), Article 106194. Impact of the digital economy on high-quality urban economic development: Evidence from Chinese cities.

Z. Zheng, S. Xie, H. Dai, X. Chen, H. Wang. IEEE Int Congress Big Data (2017), pp. 557-564. An overview of blockchain technology: Architecture, consensus, and future trends.

Y. Zhang, Y. Wen, J. Huang. J Hosp Tour Technol, 10 (4) (2019), pp. 572-599. Blockchain technology application in tourism industry: A systematic review.

D. Buhalis, B. Neuhofer. J Travel Res (2020). COVID-19 and tourism: Impacts and implications for advancing and resetting industry and research.

L.D. Xu, E.L. Xu, L. Li. Int J Prod Res, 56 (8) (2018), pp. 2941-2962. Industry 4.0: state of the art and future trends.

M. Swan. IEEE Technol Soc Mag, 36 (2) (2017), pp. 41-52. Blockchain thinking: The brain as a decentralized autonomous corporation.

H. Mousannif, H. Al Moatassime, H. Khaloufi. IEEE Access, 7 (2019), pp. 46121-46134. Blockchain technology for IoT security: A systematic literature review.

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Peer-Review Process for *Gyan Management* (ISSN: 0974:7621)

Gyan Management, published by Gian Jyoti Institute of Management and Technology (GJIMT), is committed to maintaining high academic and scholarly standards. To ensure the quality and integrity of the articles published, the journal employs a rigorous peer-review process. This process involves an evaluation by experts in the relevant field, ensuring that all manuscripts meet the journal's standards for originality, significance, and clarity.

Peer-Review Process:

1. **Initial Submission:**
   - Upon submission, the manuscript is initially reviewed by the Managing Editor to ensure it meets the basic requirements of the journal, including adherence to formatting guidelines and relevance to the journal's scope.
   - Manuscripts that do not meet these criteria are returned to the authors with recommendations for revision.
2. **Assignment to Reviewers:**
   - Manuscripts that pass the initial review are assigned to at least two independent peer reviewers who are experts in the relevant field.
   - Reviewers are selected based on their expertise, experience, and lack of any conflict of interest with the authors.
3. **Double-Blind Review:**
   - *Gyan Management* follows a double-blind peer review process, where both the reviewers and the authors remain anonymous to each other throughout the review process.
   - This helps in providing unbiased feedback and maintaining the integrity of the review process.
4. **Review Guidelines and Criteria:**
   - Reviewers evaluate the manuscript based on the following criteria:
     - **Originality:** The paper should present original research, theories, or analysis that contributes new knowledge or perspectives to the field.
     - **Relevance:** The content should be relevant to the field of management and contribute to the ongoing scholarly conversation.
     - **Methodology:** The research design, data collection, and analysis methods should be appropriate, rigorous, and clearly described.

- **Clarity:** The manuscript should be well-written, logically structured, and free from technical errors. The arguments should be coherent and well-supported by evidence.
- **Significance:** The manuscript should have significant implications for theory, practice, or policy in the field of management.
- **Ethical Considerations:** The research should adhere to ethical standards, including proper citation, no plagiarism, and consideration of research subjects.

5. **Reviewer's Recommendations:**
   - After evaluating the manuscript, reviewers provide one of the following recommendations:
     - **Accept:** The manuscript is suitable for publication with no or minor revisions.
     - **Minor Revisions:** The manuscript requires some revisions but is fundamentally sound.
     - **Major Revisions:** The manuscript has potential but requires substantial changes before it can be reconsidered.
     - **Reject:** The manuscript does not meet the journal's standards and is not suitable for publication.
6. **Author Revisions:**
   - Authors are provided with reviewers' comments and are required to revise their manuscripts accordingly. They must also provide a response letter detailing how each comment has been addressed.
   - Revised manuscripts are typically sent back to the original reviewers for a second round of evaluation.
7. **Final Decision:**
   - Based on the reviewers' feedback and the authors' revisions, the Managing Editor and the Editorial Board make the final decision on the manuscript's acceptance.
   - Authors are notified of the decision, and if accepted, the manuscript proceeds to the production stage.

Call for Papers

Gyan Management (ISSN: 0974-7621)

Theme: Emerging Trends in Business Management and Technology

The Editorial Board of *Gyan Management* invites scholars, researchers, and industry practitioners to submit original research papers, review articles, case studies, and theoretical contributions for the upcoming issue. We are seeking papers that explore various aspects of business management and technology, particularly those that offer innovative insights and practical solutions to contemporary challenges.

Scope and Topics

We welcome submissions on a broad range of topics including, but not limited to:

- **Business Management**
  - Leadership and Organizational Behavior
  - Strategic Management
  - Human Resource Management
  - Marketing Strategies
  - Entrepreneurship and Start-ups
  - Financial Management and Corporate Governance
  - Operations and Supply Chain Management
  - Sustainability and Corporate Social Responsibility
- **Technology**
  - Digital Transformation in Business
  - Innovation and Technology Management
  - Information Systems and Business Analytics
  - E-commerce and Digital Marketing
  - Cybersecurity in Business
  - Artificial Intelligence and Machine Learning Applications
  - Blockchain and Fintech
  - Emerging Technologies and Business Models

Submissions that integrate cross-disciplinary approaches, explore emerging trends, or offer novel methodologies are strongly encouraged.

Submission Guidelines

- **Manuscript Format**: Submissions should adhere to the journal's author guidelines, available on our website.
- **Length**: Manuscripts should not exceed 8,000 words, including references, tables, and figures.
- **Citation Style**: Please use APA (7th edition) for all references and citations.

- **Language**: Manuscripts should be written in English, ensuring clarity and academic rigor.

Important Dates

- **Submission Deadline**: September 30 2024
- **Notification of Acceptance**: December 1, 2024
- **Publication Date**: January 1 2025

Submission Process

Authors are requested to submit their manuscripts through our online submission portal at https://www.gjimt.ac.in/gyan-management-online-paper-submission/or via email to journal.gjimt@gmail.com. Please ensure your submission includes:

- **Title Page**: Title of the paper, author(s) name(s), affiliation(s), and contact details.
- **Abstract**: A concise summary of the research, not exceeding 250 words.
- **Keywords**: List 3-5 keywords relevant to your paper.

Peer Review Process

All submissions will undergo a rigorous double-blind peer review process to ensure the highest standards of quality and relevance. Authors may be required to revise their manuscripts based on feedback from reviewers.

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There is no publication fee for this issue of *Gyan Management*. We are committed to providing open access to quality research without financial barriers.

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We look forward to your valuable contributions and to advancing the discourse in business management and technology through *Gyan Management*.

Dr. Aneet Bedi
Editor-in-Chief
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Author Guidelines

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- **Format**: Manuscripts should be submitted in Microsoft Word (.doc or .docx) format. The text should be double-spaced with 1-inch margins on all sides. Use a standard 12-point font, preferably Times New Roman.
- **Length**: The manuscript should not exceed 8,000 words, including abstract, references, and appendices.
- **Title Page**: The title page should include:
  - The title of the paper (no more than 15 words)
  - Full names of all authors
  - Affiliations and contact information (email, phone, address) of all authors
  - Corresponding author clearly indicated
- **Abstract**: An abstract of 150-250 words should summarize the research, including the objectives, methodology, results, and conclusion.
- **Keywords**: Include 4-6 keywords relevant to the content of the manuscript.

2. Manuscript Structure

- **Introduction**: Clearly state the problem, the purpose of the research, and its significance.
- **Literature Review**: Summarize relevant research, identifying gaps the current study addresses.
- **Methodology**: Provide a detailed explanation of the research design, data collection, and analysis methods.
- **Results**: Present findings clearly, using tables and figures as necessary.
- **Discussion**: Interpret the results in the context of the existing literature.
- **Conclusion**: Summarize the key findings, implications, and suggestions for future research.
- **References**: Use APA (7th edition) for in-text citations and the reference list. Ensure that all references cited in the text are included in the reference list and vice versa.
- **Appendices**: Include any supplementary material, such as detailed tables or figures, that supports the main text.

3. Tables and Figures

- **Tables**: Tables should be included in the text near where they are referenced. They should be numbered consecutively (Table 1, Table 2, etc.) and have a brief title.
- **Figures**: Figures should also be numbered consecutively (Figure 1, Figure 2, etc.) and should include a caption. Ensure that all figures are of high resolution (at least 300 dpi).
- **Permissions**: Authors are responsible for obtaining permission to reproduce any material from other sources.

4. Ethical Considerations

- **Originality**: Manuscripts must be original and not under consideration or published elsewhere. Plagiarism will not be tolerated.
- **Conflicts of Interest**: Authors must disclose any potential conflicts of interest that could influence the research or interpretations of the findings.
- **Data Availability**: Authors should be prepared to provide the data supporting the findings if requested.

5. Peer Review Process

- All manuscripts are subject to a double-blind peer review process. Authors should ensure that their manuscripts do not include any information that could reveal their identity.
- **Review Timeline**: Authors can expect an initial decision within 8-12 weeks of submission.

6. Copyright and Licensing

- Upon acceptance, authors will be required to sign a copyright transfer agreement, transferring the copyright of the manuscript to Gyan Management. The journal will then have the right to publish and distribute the manuscript in all forms and media.
- Authors retain the right to use their published articles in their future work, provided proper citation is given to the original publication.

7. Submission Checklist

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- The manuscript follows the required format and structure.
- The abstract and keywords are included.
- All authors' details are provided on the title page.
- References are properly cited and formatted.
- Permissions for any reproduced material are obtained.

- Potential conflicts of interest are disclosed.

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9. Contact Information

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1. Originality and Contribution to the Field

- **Innovation**: Does the manuscript present original research, ideas, or perspectives that significantly advance knowledge in the field?
- **Contribution**: How valuable is the research to the field? Does it fill a gap in the existing literature or offer new insights?

2. Relevance to the Journal's Scope

- **Alignment**: Does the manuscript fit within the scope of the journal? Is the topic relevant to the journal's readership and aligned with its aims and objectives?

3. Clarity and Quality of Writing

- **Readability**: Is the manuscript well-written, clear, and concise? Are the arguments presented in a logical and coherent manner?
- **Language Quality**: Is the manuscript free from grammatical errors, typos, and awkward phrasing? Does it adhere to the language standards of the journal?

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- **Approach**: Are the research methods appropriate and sound for the study's objectives? Does the manuscript provide a clear and detailed explanation of the methodology?
- **Validity and Reliability**: Are the research findings supported by the data? Are the methods reliable and valid for the research question?

5. Data Analysis and Interpretation

- **Analysis**: Is the data analysis thorough and appropriate for the research design? Are the statistical or analytical methods used correctly?
- **Interpretation**: Are the conclusions drawn from the analysis logical and well-supported by the data? Does the interpretation consider limitations and alternative explanations?

6. Ethical Considerations

- **Ethics**: Does the research adhere to ethical standards, including informed consent, confidentiality, and the avoidance of plagiarism?
- **Conflicts of Interest**: Are any conflicts of interest disclosed? Is the research conducted with transparency and integrity?

7. Structure and Organization

- **Format**: Does the manuscript follow the required format and structure as outlined in the author guidelines?
- **Organization**: Is the manuscript logically organized with clear sections (e.g., introduction, literature review, methodology, results, discussion, conclusion)?

8. Quality of References

- **Relevance**: Are the references appropriate and up-to-date? Do they effectively support the arguments and context provided in the manuscript?
- **Citation Style**: Are the references formatted correctly according to the journal's citation style?

9. Use of Tables, Figures, and Illustrations

- **Relevance**: Are tables, figures, and illustrations used effectively to complement the text? Do they enhance the understanding of the research findings?
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10. Impact and Implications

- **Impact**: What is the potential impact of the research on the field? Does it have implications for future research, policy, or practice?
- **Generalizability**: Are the findings generalizable beyond the immediate context of the study?

11. Reviewer's Overall Recommendation

- **Recommendation**: Based on the evaluation criteria, should the manuscript be accepted, revised, or rejected? Reviewers should provide a clear and justified recommendation.

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- **Feedback**: What specific revisions or improvements could enhance the manuscript? Reviewers should provide constructive feedback to help the authors improve their work.

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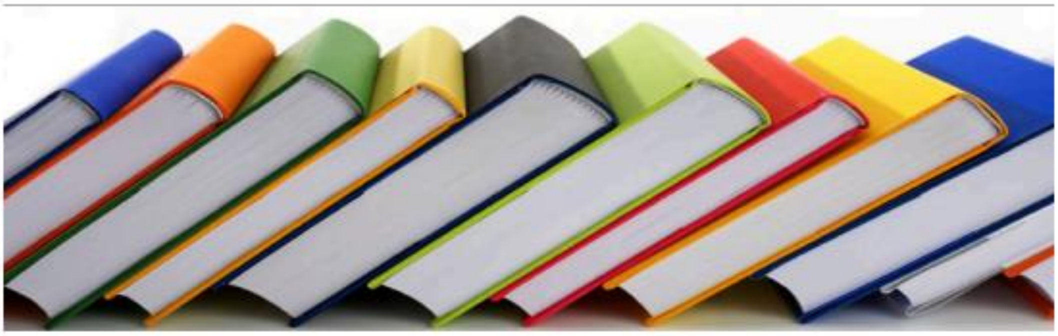

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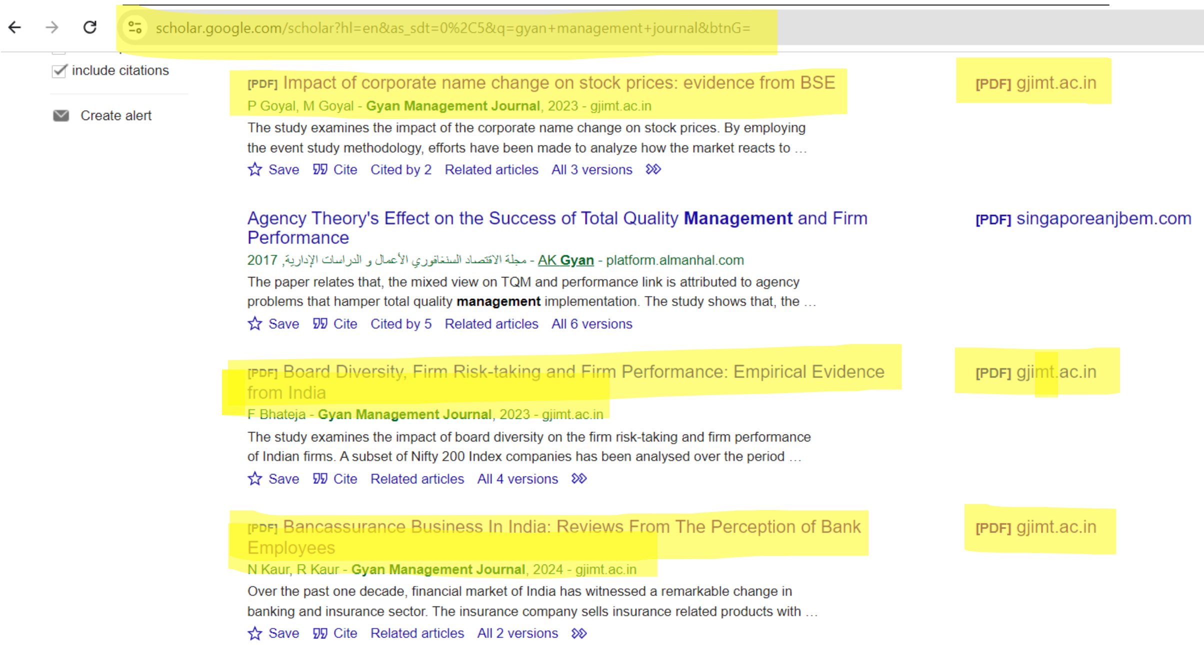

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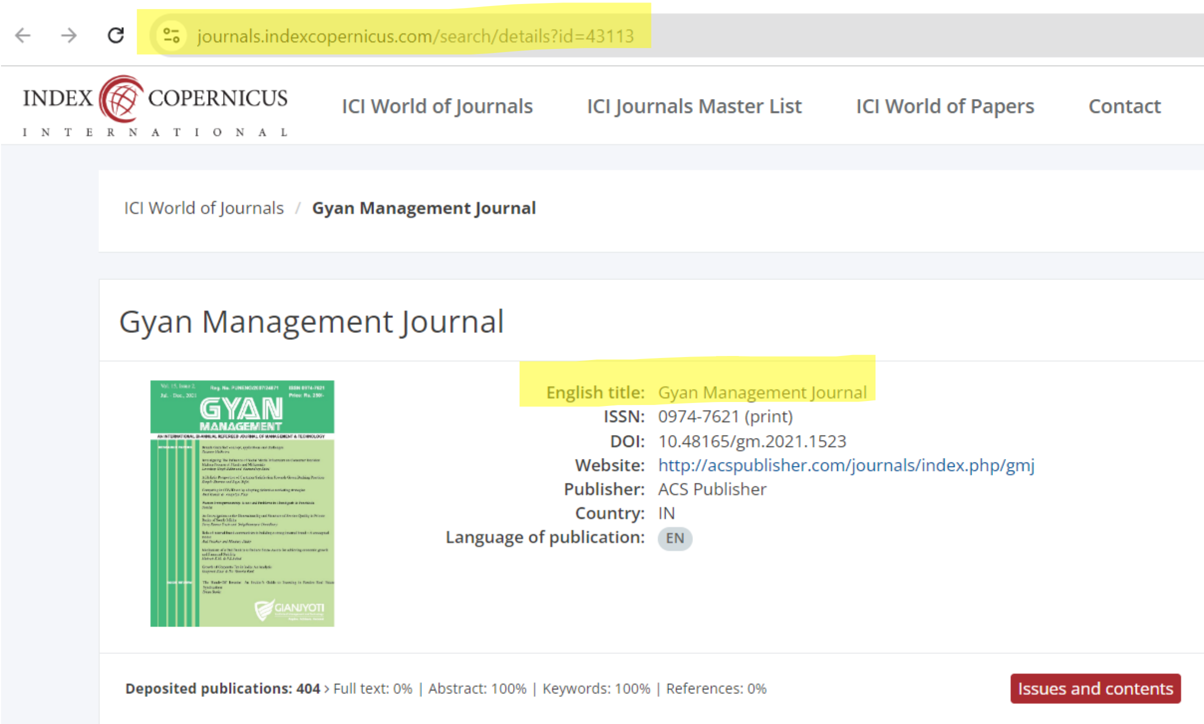

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Statistics on Article Submissions, Acceptance Rates, and Readership Demographics

Article Submissions and Acceptance Rates:

- **Submission Volume:** Approximately 14-15 papers are received for each issue of the journal.
- **Acceptance Rate:** Out of these submissions, approximately 11-12 papers are published per issue. This includes a diverse range of content such as research articles, case studies, and book reviews.
- **Types of Publications:** In addition to research articles, the journal features case studies and book reviews, ensuring a comprehensive coverage of relevant topics.

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- **Primary Audience:** The primary readership comprises institutions with which a journal exchange agreement has been established. Under this agreement, the journal is exchanged with other institutional publications.
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			Amount paid for journals printing vide invoice no 141				
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			Dr Printing & Stationery			6,136.00	6,032.00 Cr
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21-01-2022	Jrnl		Cr Axis Bank 917010047654066		6,032.00		
			Amount paid for journals printing vide invoice no 310				
21-02-2022	Jrnl		Cr TDS Payable		350.00		350.00 Dr
			Dr Printing & Stationery			20,650.00	20,300.00 Cr
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			Amount paid for journals printing vide invoice no 344 ref no 663606772				
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