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EXPLORING THE IMPACT OF BIG DATA ON BANKING PRACTICES IN HYDERABAD: A MODERN TRANSFORMATION

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ABSTRACT:
In the contemporary landscape of banking practices, the integration of Big Data (Big Data) has emerged as a transformative force, reshaping operations and customer interactions. This study delves into the specific context of Hyderabad, examining the influence of Big Data technologies on banking practices within the region. This research elucidates the multifaceted impacts of Big Data adoption in banking institutions, shedding light on both the opportunities and challenges presented. Drawing upon empirical data and qualitative insights, the study explores the adoption levels of Big Data technologies across various banking functions, including customer service, risk management, fraud detection, and personalized banking experiences. Additionally, it investigates the perceptions and attitudes of stakeholders, including bank executives, employees, and customers, towards Big Data-enabled banking solutions.The findings underscore the significant role of Big Data in enhancing operational efficiency, streamlining processes, and delivering tBig Datalored financial services to customers. Moreover, the study identifies key challenges such as data privacy concerns, regulatory compliance, and the need for upskilling employees to leverage Big Data technologies effectively. By offering a nuanced understanding of Big Data's influence on banking practices in Hyderabad, this research contributes valuable insights to both academic discourse and industry practitioners. It highlights the imperative for banking institutions to embrace Big Data-driven innovations strategically, fostering a symbiotic relationship between technology advancement and customer-centric banking experiences in the digital era.
Keywords : Big Data (Big Data),Banking Practices,Hyderabad,Digital ,Customer Service

INTRODUCTION:

In recent years, the Banking Sector has witnessed a profound transformation driven by technological advancements, with Big Data (Big Data) emerging as a pivotal catalyst reshaping traditional banking practices. The integration of Big Data technologies holds the promise of revolutionizing various aspects of banking operations, from enhancing customer experiences to optimizing internal processes. Within this evolving landscape, the city of Hyderabad stands as a dynamic hub of innovation and economic growth, offering a fertile ground for exploring the implications of Big Data adoption in the Banking Sector. The purpose of this study is to examine the influence of Big Data on banking practices in Hyderabad, India. By focusing on this specific geographical context, the research Big Datams to provide valuable insights into the dynamics of Big Data-driven transformation within the local banking industry. Hyderabad, known for its vibrant tech ecosystem and burgeoning financial services sector, offers a compelling setting to explore how Big Data technologies are shaping the strategies, operations, and customer interactions of banking institutions.AgBig Datanst the backdrop of rapid digitalization and evolving consumer preferences, understanding the impact of Big Data on banking practices in Hyderabad assumes paramount importance. This study seeks to elucidate the opportunities and challenges arising from Big Data adoption, as well as the implications for key stakeholders including banks, customers, regulators, and the broader ecosystem of financial services.TBanking Sectorough a combination of qualitative and quantitative methods, this research endeavors to analyze the extent of Big Data integration across different banking functions, assess stakeholder perceptions and attitudes towards Big Data-enabled solutions, and identify strategies for maximizing the benefits of Big Data while addressing associated risks and concerns. By shedding light on the complex interplay between Big Data and banking

practices in Hyderabad, this study Big Datams to inform industry stakeholders, policymakers, and academic researchers about the transformative potential of Big Data in shaping the future of banking in the region. Moreover, it seeks to contribute to the broader discourse on Big Data-driven innovation in the global banking landscape, offering valuable insights into emerging trends, best practices, and strategies for navigating the digital age of banking.

REVIEW OF LITERATURE:

The integration of Big Data (Big Data) in banking operations has revolutionized the industry, enabling banks to enhance efficiency, accuracy, and customer experiences (Vijay, 2019). By facilitating rapid information analysis and generating reliable data outputs, Big Data empowers employees to focus on high-level tasks, thereby streamlining banking processes. Big Data's capabilities extend to accessing and analyzing vast amounts of customer data, including detBig Dataled demographics and transaction records, tBanking Sectorough machine learning algorithms (Padmanabhan, 2021). This enables banks to gBig Datan deeper insights into customer behavior and preferences, leading to personalized services and targeted marketing strategies. Moreover, Big Data and Machine Learning (ML) have democratized financial services by enabling providers to leverage data analytics and create affordable solutions for underserved segments of society (Kumar, 2023). Such technologies have the potential to bridge gaps in financial inclusion by offering accessible and convenient banking solutions. Recent studies indicate a growing adoption of Big Data technologies among financial service providers, with approximately 32% already leveraging Big Data for predictive analytics and voice recognition (Agarwal, 2019). This trend reflects the industry's recognition of Big Data's transformative potential in enhancing customer experiences, managing risks, and driving innovation (Bopana, 2023). Public sector banks in India are actively exploring Big Data-driven initiatives to modernize their operations and enhance customer service (Adneto, 2023). Initiatives such as the implementation of NextGen Data Warehouse and collaborations with fintechs underscore the sector's commitment to embracing technological advancements.The integration of Big Data with platforms like the Unified Payments Interface (UPI) has played a pivotal role in transforming India's digital financial landscape (INDIABig Data, 2023). With UPI handling a significant portion of digital transactions, Big Data integration has further improved its efficiency and accessibility, facilitating financial inclusion initiatives. In line with this technological shift, leading financial institutions like the State Bank of India (SBI) have launched initiatives to nurture innovation and talent in Big Data (Baruah, 2020). Events such as the "Code For Bank" hackathon provide platforms for developers, startups, and students to contribute to the evolution of banking t Banking Sectorough Big Data-driven solutions.

SCOPE OF STUDY:

The scope of the study will encompass an analysis of the challenges and opportunities associated with Big Data adoption in banking practices, including data security concerns, ethical considerations, skill gaps, and the potential for innovation and growth.

STUDY OF OBJECTIVES :

1. Examine the extent to which Big Data technologies are currently adopted within the Banking Sector in Hyderabad
2. Investigate how Big Data technologies contribute to enhancing customer experiences in banking
3. Identify challenges associated with Big Data adoption in banking and analyze regulatory implications

RESEARCH AND METHODOLOGY:

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Gathering, evaluating, and interpreting precise insights for research purposes by means of established, proven methods is known as data gathering. "In this study, questionnBig Datares are used to gather data with 102 sample size .One technique to demonstrate a link between two category variables is using a chi-square statistic. In statistics, variables may be either numerical (countable) or non-numerical (categorical).

TABLE NO 1

Age wise classification of the respondents Knowledge on A.I Technology in Banking field:

AGE	NO OF RESPONDENT	PERCENTAGE
18-25	82	80.40%
26-35	13	12.70%
35-45	5	4.90%
ABOVE 45	2	2%
TOTAL	102	100%

Interpretation:

From the above table, it is interpreted that 80.40% of respondents are of age group18-25, 12.70% of them belong to age group 26-35 and 4.90% belong to the age group 36-45 and 2% belong to age group more then 45.

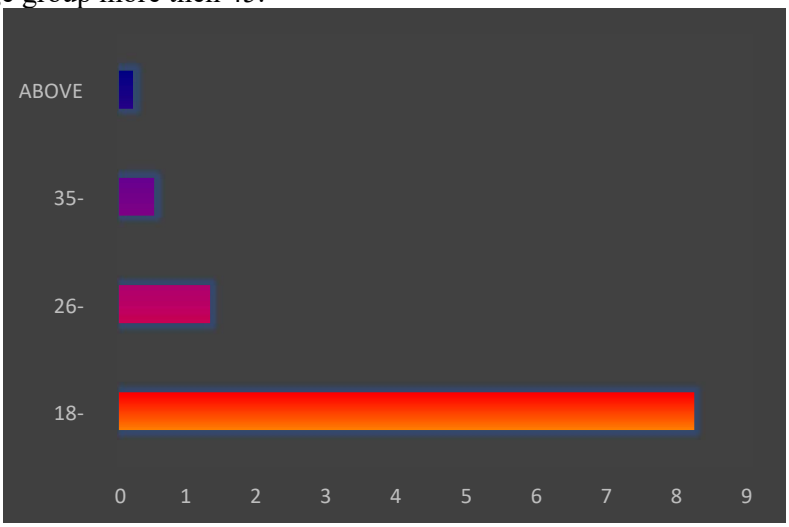

Fig 1: Age of the respondents Knowledge on A.I Technology in Banking field

Table No. 2:

Gender wise classification of respondents

GENDER	NO. OF RESPONDENCE	PERCENTAGE
MALE	87	85.30%
FEMALE	15	14.70%

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OTHER	0	0
TOTAL	102	100%

Interpretation:
From the above table, it is interpreted that 85.30% of respondents are of Male category and 14.70% of them belong to Female category. It is also to be noted thatnone of them have opted for the option prefer not to say.

Chart No. 2:
Chart representing Gender wise classification of respondents Big Data Influence on Banking Practices in Hyderabad

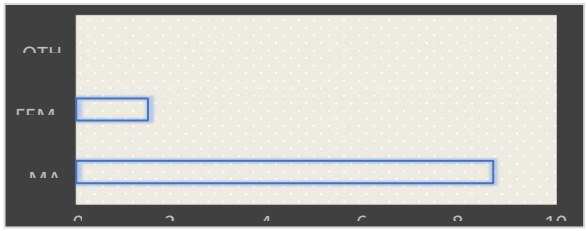

Fig 2: Gender of the respondents on A.I in Banking Sector

Inference:
Majority (85.30%) of the respondents of my questionnBig Datare are Male in Big Data Influence on Banking Practices in Hyderabad

Table No. 3:
Q. Marital status wise classification of the respondents A.I Intervention in Banking Sector.

OPTIONS	NO. OF RESPONDENCE	PERCENTAGE
MARRIED	16	15.70%
UNMARRIED	86	84.30%
TOTAL	102	100%

Interpretation:
From the above table, it can be interpreted that out of the option given 15.70% ofrespondents are married, 84.30% of respondents are unmarried in the respondents A.I Intervention in Banking Sector.

Chart No. 3:

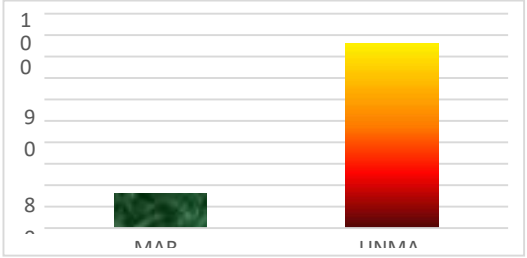

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Fig 3: Marital status of the respondents.

Inference:
Majority (84.30%) of respondents are unmarried of the respondents A.I Intervention in Banking Sector.

Table No. 4:
Q. Occupation of the respondents on Big Data Influence on Banking Practices in Hyderabad.

OPTIONS	NO. OF RESPONDENCE	PERCENTAGE
Student	41	40.20%
Employee	52	51.00%
Business	1	1%
Others	8	7.80%
TOTAL	102	100%

Interpretation: 41
From the above table, it can be interpreted that out of the option given 40.20% of respondents are students, 51.00% of respondents are employers, 1% of respondents are business person, 7.80% of the respondents are doing other works.

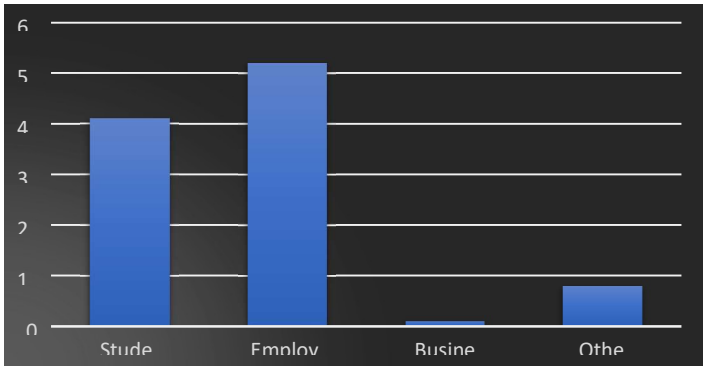

Chart No. 4 :
Fig 4: Occupation of the respondents on Big Data Influence on Banking Practices in Hyderabad.
Inference:
Majority (51.00%%) of respondents are EMPLOYEES

Table no. 5
Question based responses
Your organization embrace Big Data tech in Banking Sector functions

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OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
STRONGLY AGREE	24	23.50%
AGREE	58	56.90%
DISAGREE	4	3.90%
STRONGLY DISAGREE	1	1.00%
NOT SURE	15	14.7%
TOTAL	102	100%

Interpretation:
From the above table, it is interpreted that 23.50% of the respondents answer that they STRONGLY AGREE, 56.90% of the respondents answer they AGREE, 3.90%of the respondents answer that DISAGREE, 1.00% of the respondents answer andthe rest of the 14.7% of respondents answer that they are not sure.

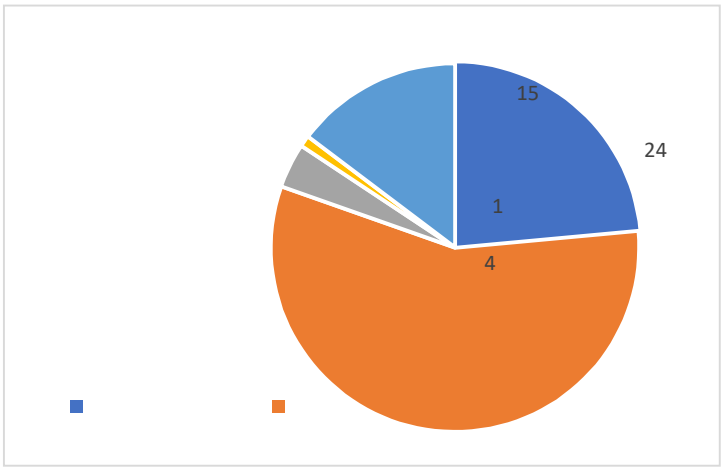

Fig 4.5: Your organization embrace Big Data tech in Banking Sector

Inference:
Majority 56.90% of respondent strongly agree that their organization embrace A.I technology in Banking Sector functions

Table No.6:
Question Based responses:
Based on your experience, which is more effective?

ANSWERS	NO. OF RESPONDENTS	PERCENTAGE
Answering queries manually	56	54.90%

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Big Data answering the queries	24	23.50%
Manually supervised Big Data led answering of queries	22	21.60%
TOTLA	102	100.00%

Interpretation:
From the above table, it is interpreted that 54.90% of the respondents are answering queries manually, 23.50% of the people are using Big Data answering the queries and 21.60% are manually supervised Big Data led answering of queries.

Chart No : 6:
Chart representing the response for the question. Based on your experience, which is more effective.

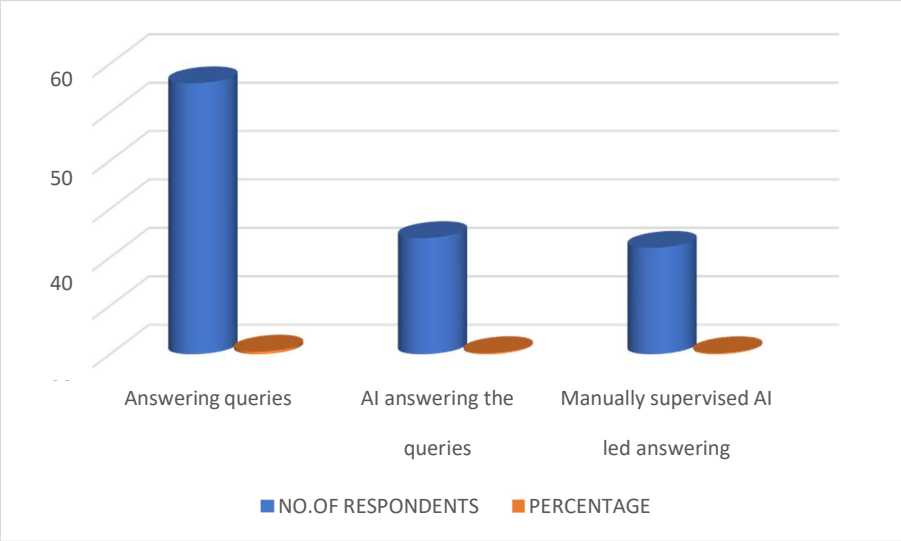

Fig : 6 WHICH IS MORE EFFECTIVE

Inference:
Majority percentage (54.90%) of the respondents of my questionnBig Datare are answeringqueries manually.

Table No. 7:
Does your organization use chatbots?

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
YES	80	78.40%
NO	22	21.60%

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TOTAL	102	100%

Interpretation:
From the above table, it is interpreted that 78.40% use chatbots in their organizationand 21.60% of respondents are not using them.

Chart No. 7:

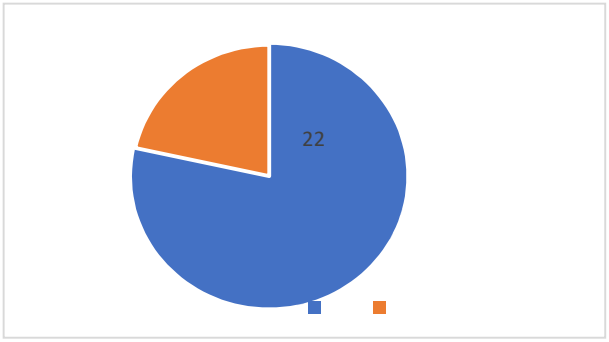

Fig 4.7: usage of chart bots

Inference:
Majority (78.40%) of the respondent tell 'yes', their organization use chatbots.

Table No. 8:
What percentage of your internal/external users uses chatbots?

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
1%-25%	13	12.70%
26%-50%	27	26.50%
51%-75%	41	40.20%
Above 75%	16	15.70%
NONE	5	4.90%
TOTAL	102	100%

Interpretation: From the above table, it is interpreted that 12.70% of the respondents have openioned that 1%-25% of their company use internal/ external chart bots, 26.50% of the respondents say that 26**%-50%** of their company use then, 40.20% of respondents say that only 51**%-75%** of chart bots are used**,** 15.70% of respondents say **Above 75%** are used and 4.90% of respondents say their company use none.

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Chart No. 8:

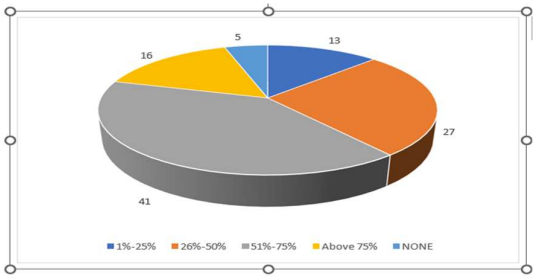

Fig 4.8: internal/external users use chatbots

Inference:

Majority (40.20%) of the respondents say that their company use chart bots.

Table No. 9:

Please rate your level of knowledge / awareness of Big Data value for the Banking Sector profession.

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
COMPLETELY COMFORTABLE.	51	50%
I HAVE A LITTLE KNOWELEDGE	44	43.10%
NOT COMFORTABLE	7	6.90%
TOTAL	102	100%

Interpretation:

From the above table, it is interpreted that 50% of people already know about this and 43.10% of respondents moderately know about this and 6.90% of respondentdoesn't know about this Big Data.

Chart No.9:

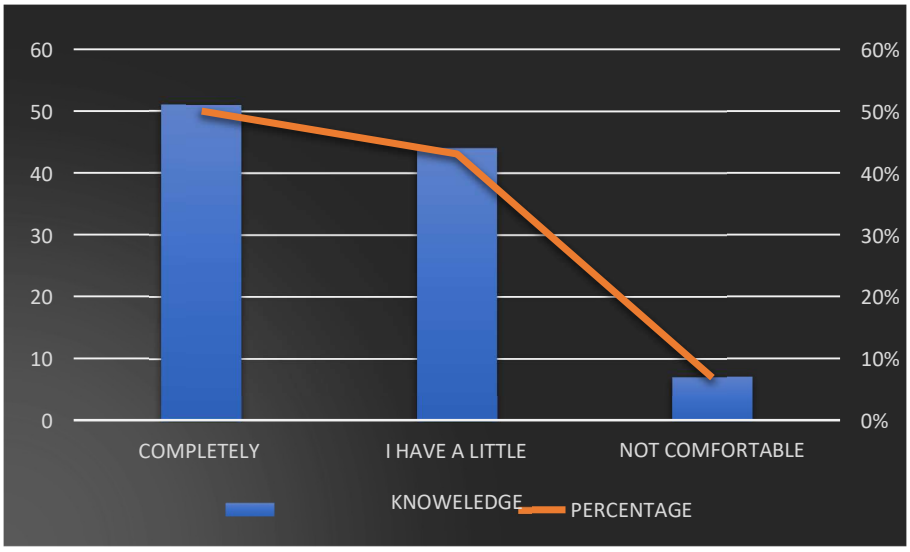

Chart No : 9: knowledge / awareness of Big Data.
Inference:
Majority (50%) of the respondents already knows about Big Data.

Table No. 10:
Rank the following Big Data technologies based on the extent of usage by yourorganizations, in feedback

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
STRONGLY AGREE	26	25.50%
AGREE	37	36.30%
NEUTRAL	33	32.40%
DISAGREE	4	3.80%
STRONGLY DISAGREE	2	2%
TOTAL	102	100%

Interpretation:
From the above table, it can be interpreted that 25.50% of respondents say they strongly agree, 36.30% of respondents are telling they agree, 32.40% of respondents are neutral, 3.80% and 2% of respondents disagree and strongly disagree.

Table No. 11
To what extent can applications of Big Data tech be effective in performancemanagement at your organization?

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
TO GREAT EXTENT	22	21.60%
TO SOME EXTENT	40	39.20%
NEUTRAL	38	37.20%
DISAGREE	2	2%
TOTAL	102	100%

Interpretation:
From the above table, it can be interpreted that 21.60% of respondents say that Big Data performs at great extent, 39.20% of them say that to some extent their organisationis using Big Data tech, 37.20% of respondents say they really don't know and 2% of respondents completely disagree with the statement.
Chart No. 11:

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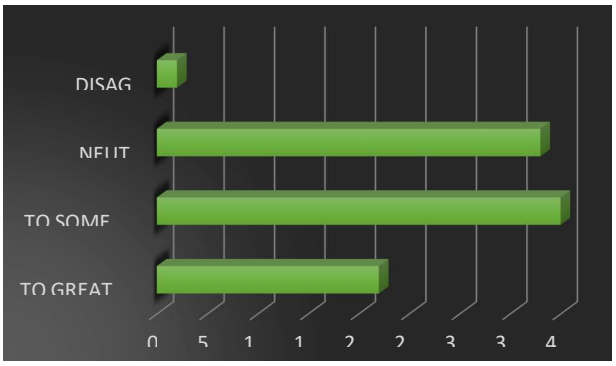

Fig 11: performance management of Big Data tech be effective

Inference:

Majority (39.20%) of respondents say that Big Data technology is used to only some extentin their organization.

Table No. 12

Which of the following is a limitation to Big Data being implemented at your enterprise(check all that apply)?

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
NOT ENOUGH TECHNICAL TALENT	40	39.20%
NOT ENOUGH DATA	47	46.10%
TOO BUSY WITH OTHER PROJECTS	44	43.10%
NO IDEA WHAT PROJECTS WE WOULD DO	37	36.30%
NO SUPPORT FROM SENIOR MANAGEMENT	27	26.50%
NO CLEAR OWNERSHIP IN THE CORPORATE HIERARCHY	22	21.60%

Interpretation:

From the above table it is stated that 39.20% tell they don't have enough technical talent in their enterprise, 46.10% of them tell that for working in Big Data there is no enoughdata, and 43.10% of respondents were busy with their other projects, 36.30% has no ides of what they do in their companies, 26.50% of them does not gets any support from their senior management and 21.60% state that no clear ownership in their corporate and thus leads to no usage od Big Data in their company.

Chart No. 12:

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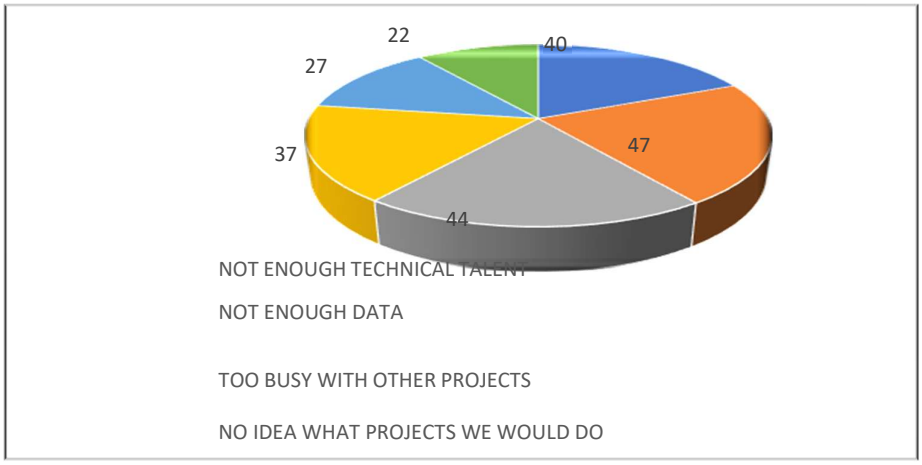

Fig 12: limitation to Big Data being implemented at your enterprise

Inference:
Majority (46.10%) of them state that they don't have enough data.

Table no.13
Over the next ten years, will Big Data and automation:

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
CAUSE MASSIVE UNEMPLOYMENT	24	23.50%
BE SOMEWHAT DISRUPTIVE TO EMPLOYMENT	41	40.20%
NOT NOTICIBLY IMPACT OVERALL EMPLOYMENT	22	21.60%
CREATE MORE JOBS THAN IT DESTROYS	15	14.70%
TOTAL	102	100%

Interpretation:
From the above table it is given that if Big Data advances in the next ten years (23.50%) ofthe people say that it will cause massive unemployment in every sector, 40.20% of people say that it might not cause that much damage and 21.60% of respondents say that it is not noticeably and 14.70% of people state that it might create more jobsin many sectors than it destroys.

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Chart no.13

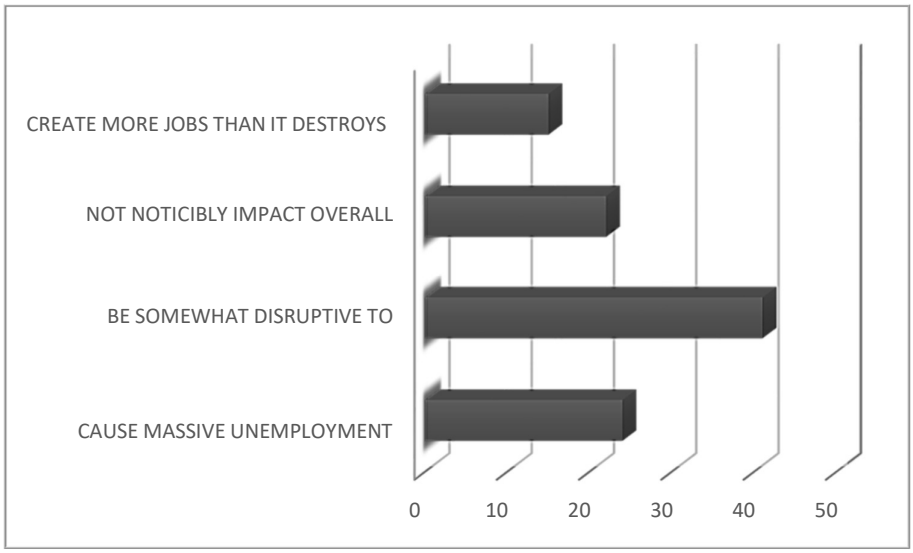

Fig 13 people's opinion on Big Data advancement.

Inference

Majority (40.20%) of people think that it does no cause that much change in day-to-day life.

Table no.14

Overall, do you think Big Data will be

OPTIONS	NO. OF RESPONDENTS	PERCENTAGE
A FORCE FOR GOOD	55	53.90%
A FORCE FOR EVIL	18	17.60%
ITS COMPLICATED	29	28.50%
TOTAL	102	100%

Interpretation:

From the given table it is obtBig Dataned that 53.90% of people believe that Big Data is a force of good and makes the job easy and 17.60% state that it is a force of evil and 28.50% does not have any idea whether it is good or bad.

Chart no.14

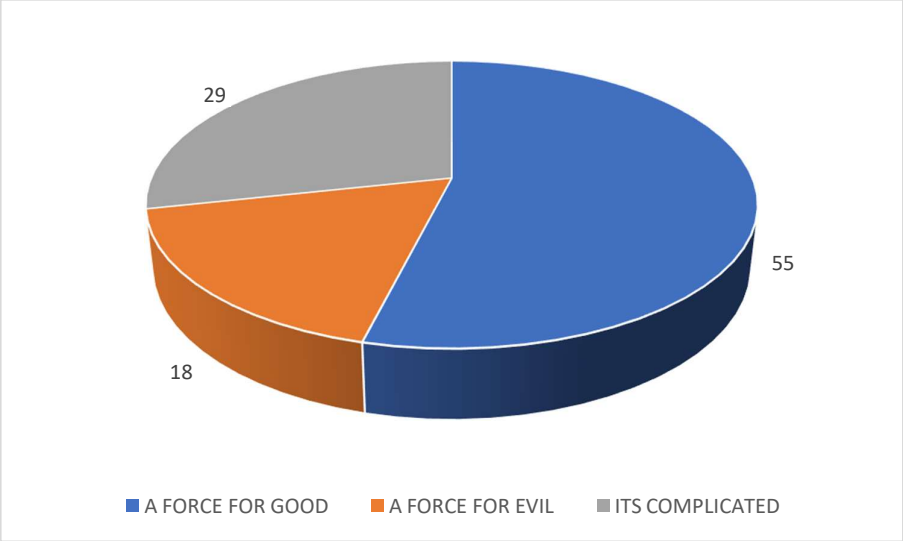

Fig 14 people's common opinion on Big Data.
Inference
Majority (53.90%) of respondents believe that it is a force for good.

STATISTICAL ANALYSIS (CHI SQUARE)

TEST1 (CHI SQUARE)
HO: There is no significant difference between age of the respondent and the level of knowledge/ awareness of Big Data value for Banking profession.
H1: There is significant relationship between age of the respondent and the level of knowledge/ awareness of Big Data value for Banking profession.
NULL HYPOTHESIS:
A null hypothesis is an initial statement clBig Dataming that there is no relationship between two measured events. A null hypothesis is a foundation of the scientific method, as scientists use experiments to accept or reject a null hypothesis based upon the relationship, or lack thereof, between two phenomena.

FINDING OF THE STUDY
Most of the people that filled out my survey were in the 18–25 age range (80.40%).
Male respondents accounted for 85.30 percent of the total.
Among those who participated in the poll, 84% are unattached.
The majority of survey takers have steady jobs.
In the banking sector, Big Data is supposedly used by over half of the respondents.
54.90% of those who responded to my survey are using a paper form.
Almost eighty-nine percent of those who took the survey sBig Datad they utilize chatbots.
Forty.20 percent of the respondents sBig Datad that their company uses graphic bots.
Among individuals that participated in the poll, 50% had heard of Big Data.

SUGESSIONS:

1. Big Data has been integrated into several banking operations inside firms, although there is still a delay. Companies need to investigate this delay if they want to be ready for future needs.
2. The majority of workers still think their questions are best handled by hand. Therefore, the researchers recommend that human assistance be included, even while Big Data is used to solve inquiries.
3. In order to save time efficiently, the researchers propose that Big Data can handle the fundamental talent acquisition task of screening.
4. Big Data may be used to teach staff in a consistent manner, allowing the firm to save costs by standardizing trBig Dataning and development". With regards to performance evaluation, an Big Data tool may be used to assess performance in order to lower the work's reputation.

CONCLUSION:

The global landscape is increasingly driven by technology, propelled by the forces of globalization, which necessitates that organizations remBig Datan abreast of advancements to mBig DatantBig Datan competitiveness. Particularly, the Banking Sector holds heightened importance in this digital age. As technology evolves, it offers opportunities to streamline processes traditionally performed by humans. It is imperative to thoroughly assess and understand the potential impact of technology, particularly Big Data (Big Data), on the Banking Sector. While Big Data remBig Datans a work in progress, its integration into banking functions in Hyderabad is crucial to leverage technological advancements and enhance operational efficiency. TBanking Sectorough the adoption of Big Data-powered solutions, banks in Hyderabad can enhance operational efficiency, improve customer experiences, and drive innovation in the delivery of financial services. The utilization of machine learning algorithms enables banks to analyze vast amounts of data, personalize banking experiences, and mitigate risks more effectively than traditional methods. However, while Big Data presents significant opportunities for the Banking Sector, it also poses challenges that need to be addressed. Concerns related to data privacy, regulatory compliance, and ethical considerations underscore the importance of responsible Big Data adoption and governance frameworks.Moving forward, it is imperative for banking institutions in Hyderabad to invest in robust infrastructure, talent development initiatives, and strategic partnerships to harness the full potential of Big Data technologies. Collaborations with fintech companies, academic institutions, and regulatory authorities can facilitate knowledge sharing and innovation in the Big Data-driven banking landscape.. By fostering a culture of innovation and agility, banks can position themselves as leaders in leveraging Big Data to deliver superior financial services and drive sustBig Datanable growth in Hyderabad's dynamic banking ecosystem.

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