International Journal of Management, IT & Engineering
Vol. 14 Issue 03, March 2024,
ISSN: 2249-0558 Impact Factor: 7.119
Journal Homepage: http://www.ijmra.us, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gate as well as in Cabell's Directories of Publishing Opportunities, U.S.A

ASSESSING THE IMPACT OF TRANSPARENT AI SYSTEMS IN ENHANCING USER TRUST AND PRIVACY

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Abstract: The study is about the impact of transparent systems to enhance users' trust and privacy, and this consent is very important in the era of technology. Trust is a big factor when utilizing AI, and it is risky to develop trust as the privacy concern is there in the technology. In that factor, the study has focused on finding the impact of the transparent AI system in developing privacy and trust. Different kinds of literature pieces are also reviewed to gain knowledge about the subject matter. Moreover, a proper methodology is engaged to develop the study which has been followed by the result and discussion to meet the aim and objectives of the research.

Keywords: Transparent AI, Programming, Human Trust, Machine Learning

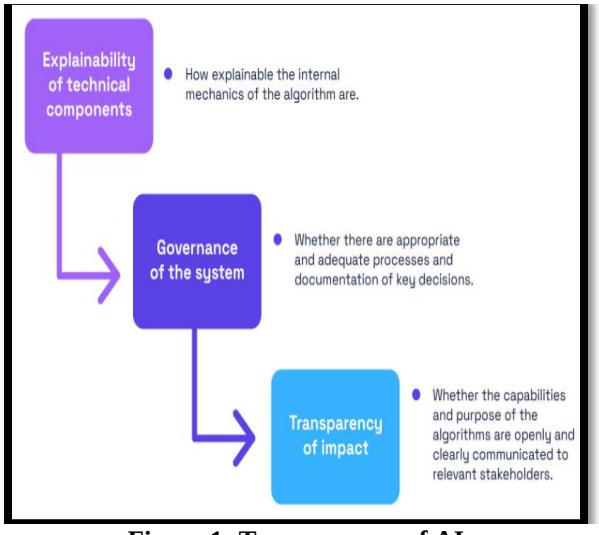

Figure 1: Transparency of AI

(Source: Influenced by 2)

Transparent AI yields multiple business advantages. Efficient deployment of algorithms is ensured by cataloguing all systems in use, preventing overcomplicating simple tasks with unnecessary complexity. Transparent AI enables us to comprehend the reasoning behind the algorithmic decision. If the AI assistant does not follow the user programming request or flags unusual activities, it will automatically explain the circumstances.

I. INTRODUCTION

Today's competitive market dimension in business and technology heavily relies on Artificial Intelligence (AI) expertise, resulting in significant outcomes in recent times. While AI brings great benefits, many users remain concerned about how their data is used behind the scenes. To an extent, AI is limited to a certain level and needs to be fully functional to achieve its potential, aligning with the user's trust and privacy concerns. Transparent AI practically addresses notable cons while operating AI is explainable and manages accountability by fixing those [1].

II. BACKGROUND

Currently, utilization of the AI system has effectively overcome any challenges or issues regarding privacy and trust in AI. With the development of technology, the building of AI systems has become efficient, and this factor has led to the development of clear decision-making processes and other activities in several areas. The characteristics of traditional AI algorithms are explored with the formulation of transparent AI systems. It is done by providing a deeper understanding of how the systems occur for particular guidance or determinations [3].

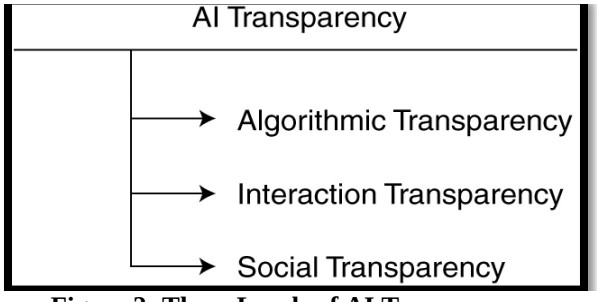

Figure 2: Three Levels of AI Transparency

(Source: Influenced by 4)

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AI transparency includes the transparency in different areas and those are algorithm transparency, interaction transparency and social transparency. Transparent systems make it possible to audit data practices and algorithmic decisions. As the utilization of models of AI is expanding and evolving, the approach of transparency is increasing significantly. In that aspect the developers of AI are also conscious about the clarity, security and transparency [5]. Transparency in AI considers the high ability to provide insights into the activities of a model of AI. There are set of facet in AI transparency and those can be development transparency, data transparency, model transparency, impact transparency and security transparency.

Most of the organisations have already begun implementing aspects of transparent AI. Modern voice assistants, including Alexa and Siri, now provide short explanations for some of their responses [6]. Users can also check their history logs to understand past interactions and take action according to the usage results. However, more robust explanations and control options are still needed for people to understand and trust these systems truly.

Transparency, an essential aspect of facial recognition technology, especially when dealing with photos and video recognition in biometric data, becomes highly sensitive. Highlighting the posture of ethical use of such systems, optional boxes for concern agreements need to be developed for a strict privacy approach [7]. These measures have become essential to safeguard personal privacy and maintain the trust of individuals using facial recognition technology.

III. RESEARCH AIMS

The research work's primary aim is to evaluate the significant impact of transparent AI systems on users' trust and privacy considerations, along with developing security concerns.

IV. RESEARCH OBJECTIVES

- To identify the critical factors that influence user trust in AI systems with levels of transparency
- To evaluate how transparency in AI systems affects user privacy and the sharing of personal information.
- To comprehend the aspect of transparency in AI systems on user acceptance of AI-based products and services.
- To explore the significance of transparency in AI systems on user behaviour and decision-making.
- To examine the challenges towards user satisfaction in transparent AI systems
- To investigate the impact of transparency in AI systems on user expectations and attitudes towards AI.

V. LITERATURE REVIEW

Critical Factors That Influence User's Trust Level in AI System

Human trust in AI is higher for tasks involving objective calculation, persisting even after observing mistakes. Trust diminishes in tasks requiring social and emotional intelligence. Both adaptive and adaptable allocation contribute to optimal task division based on difficulty. The critical factor in building trust is the accuracy of the AI system, ensuring users are confident in its ability to deliver precise results and advice [8].

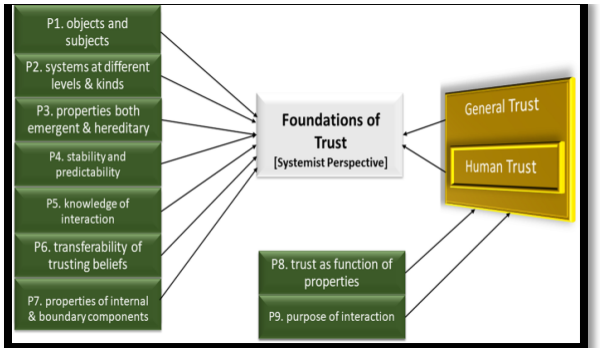

Figure 3: Framework of Trust in Artificial Intelligence

(Source: Influenced by 9)

As Figure 3 suggests, human trust in the technical advancement of AI functions has specific properties. It includes stability, objectives, knowledge of interaction, and predictability that

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denote the control users have over the system, which is crucial. Users should feel like they are in charge of the system and can customize it to suit their needs. The framework conceptualizes trust in AI as a systemic interaction issue, employing systems thinking and general systems theory. Trust is a significant issue or challenge to be measured in AI. Trust depends on different circumstances while developing AI systems and their trustworthiness [10]. Evaluating trust is an essential aspect of any AI-infused decision-making.

AI has characterized the new generation engaged with technology by interacting with the environment and stimulating human intelligence. In that aspect, integrating AI or other elements in any organization can succeed in developing the users' trust [11]. Trust is one of the crucial components of people's interaction with AI. Disuse or abuse of the technology can increase AI users' trust issues.

Characteristics of AI Affecting Data Privacy and Sharing

Data privacy and sharing are crucial factors that are sometimes affected by the utilization of AI. Explainable AI methods, such as interpretable Machine Learning models and attention mechanisms, contribute to the comprehensibility of AI decision processes.

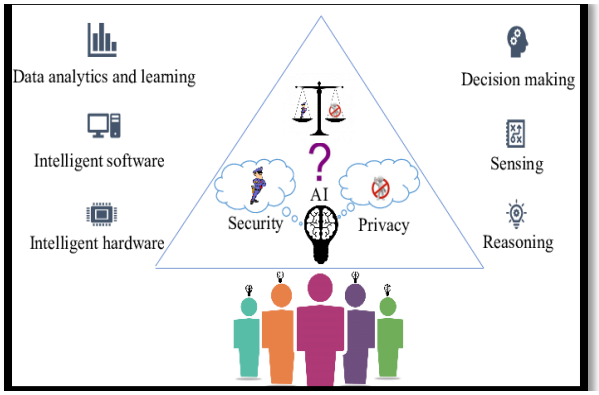

Figure 4: Illustration of Data Privacy Dilemma in AI

(Source: 12)

With the advancement in AI technology, there is an increased ability to collect, analyze, and use personal data on a massive scale. It raises concerns about data privacy and security and the potential for data misuse. One of the biggest challenges is more transparency around how personal data is collected, shared, and used [13]. It can lead to losing control over one's personal information and a lack of understanding of its use.

AI technologies have seamlessly integrated into our daily lives, and once AI proves its functionality, it transitions from being labelled as such to becoming mainstream computing. Consequently, developing organizations prioritize data security and implement strategies to manage diverse data types, but they need to be more secure as the aspect of breaching and piracy is evident. On the other hand, regulatory frameworks such as the European Union's General Data Protection Requirements (GDPR) and the United States California Consumer Privacy Act (CCPA) standardize significant internal and external characteristics that elevate the personal data and privacy protection strategy [14]. Stringent data privacy regulations emerge as practical solutions to address these concerns. As conventional Machine Learning systems show their limitations, there is a growing need for secure and innovative data collection methods. It emphasizes the ongoing evolution of AI technologies and the importance of robust data governance to protect privacy and security.

Acceptance of Transparent AI-based Products and Services to Users

Though concerned with certain inconveniences of sensitive data left in multiple portals, people still adopt the practicality of AI in their daily usage. As Artificial Intelligence (AI) becomes more ubiquitous, it's about more than just how accurate it is. Today's users are more prone to platforms' prior prioritized ethical considerations and user understanding. The usability of performance and performance metrics support the aspect of transparency becoming a fundamental criterion for evaluating and adopting AI systems across industries [15]. Consequently, in this AI-driven world, organizations prioritize traditional AI systems.

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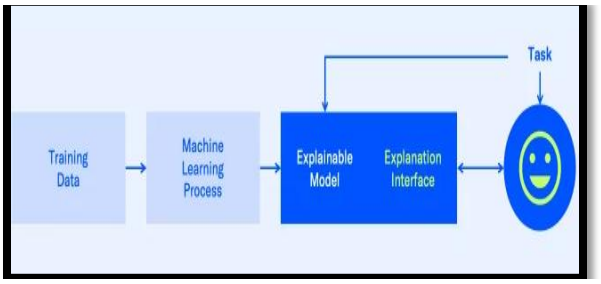

Figure 5: Increasing Acceptance of AI Solutions
(Source: Influenced by 16)

The European Union's proposed AI Act introduces explicit and verifiable criteria for implementing AI systems, making regulatory compliance a crucial precondition for market entry. Consequently, companies adopting Explainable AI (XAI) solutions and resilient Machine Learning workflows gain a substantial competitive edge. By safeguarding individual rights and freedoms, the Act helps to set verifiable standards for AI systems. It provides organizations, followed by the users associated with it, an opportunity to foster trust and acceptance of AI solutions across diverse industries [17].

Challenging Aspects of Transparent AI for Users

Figure 6: Critical Challenges of AI
(Source: 18)

Vulnerability Concern: Transparent AI systems may face vulnerabilities, exposing them to potential breaches and cyber threats. Users may express dissatisfaction due to concerns about the security of their sensitive information and the potential misuse of AI technologies. They need to understand the operational method of the AI system operating along with its functional behavior [19]. Moreover, AI systems can be complex and opaque, making it difficult for certain groups of users with its modern UI and capabilities.

Expensive Programming Cost: Innovative programming requires highly skilled software engineers, which could be expensive for specific organisations. Managing users' data carefully over a long-term period requires a complex process for AI programming as significant decisions are made based on that data [20]. It requires the AI system to be transparent and authentic, which requires more budget.

Bias in the AI module: A significant bias can be seen if the AI model's data structure needs better managed. It can prevent AI from being more transparent, resulting in users' dissatisfaction as AI systems can make errors from poor datasets [21]. Users, if able to understand why those errors occurred and how to correct them, would provide a reasoning mechanism with a productive vision of human coordination.

Surveillance and Privacy: Users might express dissatisfaction when transparent AI systems are associated with exploitative surveillance practices. Their consent and concept of data breaching need to be sustained psychologically if the portal they are associated with is reputed and legally registered.

Investigation of the Influence of AI Transparency on User Expectations and Attitudes Towards AI

AI transparency enlightens the human perspectives of interpersonal adversity and the concept of trust in machine languages, which often raises questions regarding the stability of human-machine bonding. Explored in organizational context, the social psychology, interpersonal reliance hinges on the party's competence and benevolent intentions. When implicated in the practical aspect of qualitative activities, AI's transparency goes beyond mere model outputs as it encompasses the explainability process with broader instances [22]. As the continuity path of advancement of AI grows, the transparency in the system result generation gets better.

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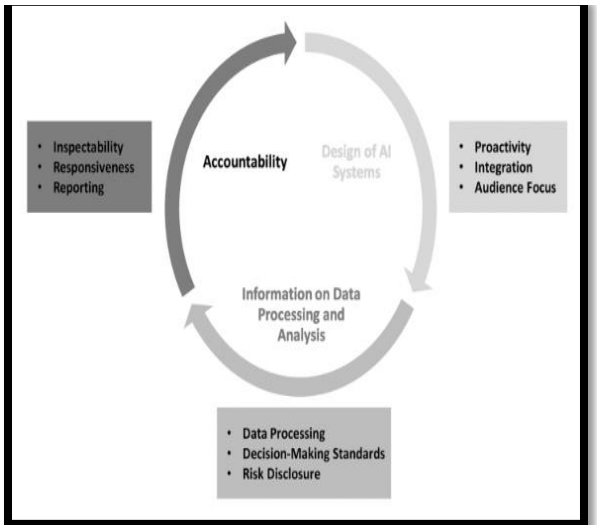

Figure 7: Transparency by Design for Artificial Intelligence

(Source: Influenced by 23)

Figure 7 reflects the transparency model for AI that poses dimensional characteristics. Accountability denotes the critical area of responsiveness and reporting of several functions designed for users. Another crucial program of data processing analysis forms a pre-recognized dataset and evolves into results denoting decision-making standards while mitigating the possibilities of online risk. Audiences' core area of focus thus gets integrated through the proactive concern of AI systems. These principles precisely describe the responsibilities of system designers, particularly technical personnel with knowledge of AI programming and organizational stakeholders, in incorporating transparency into AI system development [24].

The framework encompasses three key aspects: epistemic concerns regarding the pure quality supporting system decisions, normative relations regarding the potentiality of biased outcomes, and the traceability of decisions. The risks stemming from opaque algorithms far outweigh any potential benefits of explainable algorithms, especially in safety-critical domains. For example, Bitcoin users often rely on algorithmic calculations for their strategies [25]. It presents the human understandings and their conveyance to instill firmness in usage patterns. In the context of user expectations and attitudes towards AI, one should be motivated to assess the data-controlling AI perseverance conscientiously. This process can determine the transparency of the decision-making process to align with consumers' expectations for trustworthy and comprehensible AI systems.

VI. METHODOLOGY

This research follows the secondary qualitative data collection method, making the study more explainable and discursive. The research methodology for investigating the impact of transparent AI systems would be effective in secondary qualitative analysis through articles and journals [26]. Pre-researched books and periodicals have shaped the critical points of the characteristics of AI, and this research focused on certain qualities that need to be developed further.

This method synthesizes existing knowledge, insights, and empirical findings. Evaluating various scholarly articles and journals provides a comprehensive understanding of the research category. The content of this research work can vary from perceiving the correct pattern to the legit implementation of the methods collected, challenges, and successes of transparent AI in various contexts.

Researchers would only be able to solve every corner of ever-evolving technical intelligence with limited research, word of mouth, and contact with some organizations with technical implications [27]. The secondary method gives the freedom to go into depth into AI's problems, strategies, and evolution stages. Then, it can make proper analysis to get into specific decision-making processes.

The tactical method identifies emergent plots and explores diverse perspectives to shed light on the impact of transparent AI systems on user trust and privacy.

VII. RESULTS AND DISCUSSION

AI-specific guides to the unique characteristics and capabilities of Artificial Intelligence (AI) systems that influence the level of

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trust and the data-sharing process. It is related to faith and data sharing through transparency, accountability, and data privacy. AI's rich proportion of functional specificity portrays the specific capacities of its functional perspectives of modules.

Integrating AI into established workflows and systems is imperative for automating essential processes in domains like customer service, supply chain, and cybersecurity. Significantly, managing the data and AI lifecycle effectively is crucial in enhancing data accessibility, enforcing governance, reducing costs, and expediting the deployment of high-quality models [28].

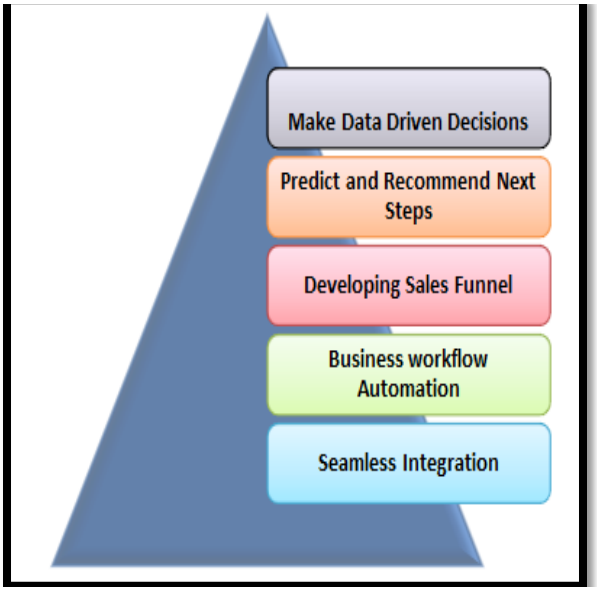

Figure 8: Business Perspectives of AI through User Integration

(Source: Self-created)

Figure 8 deals with the curriculum projection in business development through transparent programming features, enabling trust in the user's mind and reflecting a strategic decision path. AI's implication in the business aspect of forecasting market values and generating production according to demand enables business organizations to have smoother practices with automation. Implementing an open transmission approach, fostering approaches, and employee acceptance of integrated technology helps mitigate resistance concerns [29]. Within business operations, decision-making and information processing emerge as critical facets.

IBM Watson governance, for example, stands out as an illustrative solution, empowering clients to establish trustworthy and explainable AI workflows. The governance capabilities of AI, such as comprehensive model management throughout the AI lifecycle, contribute to fostering responsible and efficient AI practices in various operational contexts.

Salesforce Artificial Intelligence

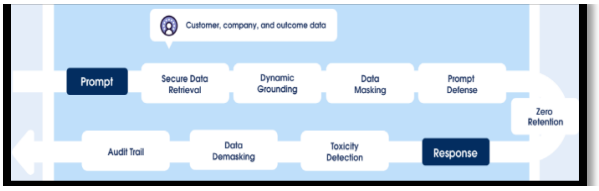

Figure 9: Einstein Trust Layer

(Source: Influenced by 30)

The seamless integration of Einstein AI-powered functionality into Salesforce stands out for its user-friendly implementation, requiring minimal programming effort. This transparent and efficient AI usage in business ensures satisfied adoption, enhancing overall operational efficiency and strategic decision-making processes. Embedded seamlessly in the Salesforce application, the advancement of Einstein Copilot stands as a dependable concern of generative AI-powered concepts. It benefitted both business firms' and customers' smooth interactive notions [31]. With the proper ability to regulate the tasks through a pre-built program, it dynamically grounds AI prompts with the requisite data, ensuring reliability.

The trust layer additionally secures sensitive customer data related to humans, empowering businesses to prioritize data integrity [32]. AI pilot's functionality prevents inappropriate content dissemination as it optimizes the scanning mechanism that assesses the generalized attributes of every prompt and output.

Stages for AI Opportunities into Action

Transparent AI sustains the digital labour aspects and maintains the application's and online portals' accuracy, augments security teams, cultivating user trust and credibility in real-life scenarios, and resolve the duties of actively streamlining the capabilities of particular organizational programs. Enhanced observability

empowers the users in their daily usage of AI, ensuring accuracy and efficiency and reducing the stress of engaging with potential risks.

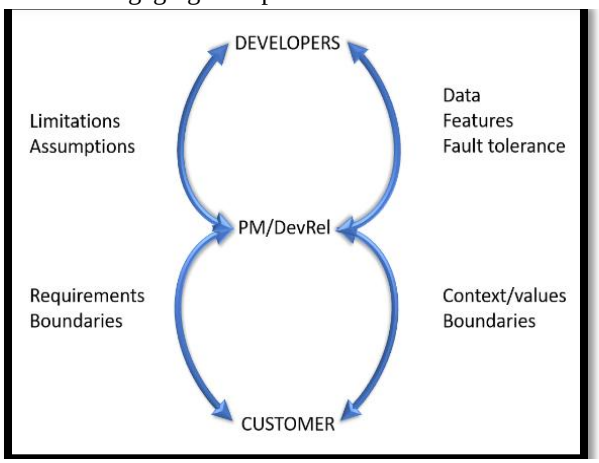

Figure 10: AI Development Communication Cycle
(Source: Influenced by 33)

The Developer's Approach to reaching certain limitations of boundaries and designing the data features as per the contextual values requires different layers of Product Management and Developer Relations. The system's transparency in the daily operations of familiar people heavily relies on practical optimization. It establishes the firm ground for trust and credibility in fostering positive user perceptions and sustained engagement.

In contrast to opaque "black box" systems, transparent models enhance interpretability [34]. It not only safeguards organizations from accusations of negligence or malicious intent but also facilitates swift issue resolution. Transparency fosters accountability, enabling prompt and appropriate action in the face of automated systems' adverse outcomes and reinforcing responsible and ethical business practices.

AI's role in augmenting security teams' aids in threat detection and mitigation, reducing overall risk. These tangible benefits of the real-life processing of relating the AI prospect are experienced through the reinforcements of user confidence.

VIII. CONCLUSION

The assessment on "assessing the impact of transparent AI system in enhancing use trust and privacy" is crucial for the contemporary age of technical advancement. Developers are much more responsible for safeguarding the process of transparent AI. Through the engagement of transparent AI, the trust of the users can be significantly developed.

The aims and objectives of the assignment are to create the work effectively/several pieces of published works are reviewed to gain knowledge about transparent AI for developing the users' trust.

The secondary method is utilized for this research to gain a vast range of data to analyze them. The result and discussion part of the assessment presents the outcomes of the collected data and discusses them to meet the aims and objectives of the research.

However, it has been found that the potentiality of transparent AI is effective for developing more trust and privacy in the future.

References

[1] Arrieta, A. B., Díaz-Rodríguez, N., Del Ser, J., Bennetot, A., Tabik, S., Barbado, A., ... & Herrera, F. (2020). Explainable Artificial Intelligence (XAI): Concepts, taxonomies, opportunities and challenges toward responsible AI. *Information fusion*, *58*, 82-115.Retrieved on: 11th January, 2024, from: https://arxiv.org/pdf/1910.10045

[2] Airlie Hilliard (2023), What is AI Transparency? Retrieved on: 11th January, 2024, from: https://www.holisticai.com/blog/ai-transparency

[3] Kim, B., Park, J., & Suh, J. (2020). Transparency and accountability in AI decision support: Explaining and visualizing convolutional neural networks for text information. *Decision Support Systems*, *134*, 113302. Retrieved on: 11th January, 2024, from: https://repository.arizona.edu/bitstream/handle/10150/641805/Transparency_and_accoun

tability_in_AI_decision_support.pdf?sequence=1

[4] Kashyap, H. & Fredrik H.,, (2023). Three Levels of AI Transparency Stefan Larsson,on: 11th January, 2024, from: https://www.computer.org/csdl/magazine/co/2023/02/10042109/1KEtiiUduvK

[5] Brill, T. M., Munoz, L., & Miller, R. J. (2022). Siri, Alexa, and other digital assistants: a study of customer satisfaction with artificial intelligence applications. In *The Role of Smart Technologies in Decision Making* (pp. 35-70). Routledge. Retrieved on: 11th January, 2024, from: https://udallas-ir.tdl.org/bitstream/handle/20.500.14026/1466/Brill__T._M.__2018_._Siri__Alexa__and_Other_Digital_Assistants_A_Study_of_Customer_Satisfaction_with_Artificial_Intelligence_Applications.pdf?sequence=1&isAllowed=y

[6] Ivanova, Y. (2020). The data protection impact assessment as a tool to enforce Non-discriminatory AI. In *Privacy Technologies and Policy: 8th Annual Privacy Forum, APF 2020, Lisbon, Portugal, October 22–23, 2020, Proceedings 8* (pp. 3-24). Springer International Publishing. Retrieved on: 11th January, 2024, from: https://www.researchgate.net/profile/Yordanka-Ivanova-3/publication/341590715_The_Data_Protection_Impact_Assessment_as_a_Tool_to_Enforce_Non-Discriminatory_AI/links/5eecebf4458515814a6b512c/The-Data-Protection-Impact-Assessment-as-a-Tool-to-Enforce-Non-Discriminatory-AI.pdf

[7] Gupta, R., Tanwar, S., Al-Turjman, F., Italiya, P., Nauman, A., & Kim, S. W. (2020). Smart contract privacy protection using AI in cyber-physical systems: tools, techniques and challenges. *IEEE access*, *8*, 24746-24772.Retrieved on: 11th January, 2024, from: https://ieeexplore.ieee.org/iel7/6287639/6514899/08976143.pdf

[8] Zhang, K., Liu, X., Shen, J., Li, Z., Sang, Y., Wu, X., ... & Wang, G. (2020). Clinically applicable AI system for accurate diagnosis, quantitative measurements, and prognosis of COVID-19 pneumonia using computed tomography. *Cell*, *181*(6), 1423-1433.Retrieved on: 11th January, 2024, from: https://www.cell.com/cell/pdf/S0092-8674(20)30551-1.pdf

[9] Roman Lukyanenko, Wolfgang Maass & Veda C. Storey (2022). Trust in artificial intelligence: From a Foundational Trust Framework to emerging research opportunities Retrieved on: 11th January, 2024, from: https://link.springer.com/article/10.1007/s12525-022-00605-4

[10] Brundage, M., Avin, S., Wang, J., Belfield, H., Krueger, G., Hadfield, G., ... & Anderljung, M. (2020). Toward trustworthy AI development: mechanisms for supporting verifiable claims. *arXiv preprint arXiv:2004.07213*. Retrieved on: 11th January, 2024, from: https://arxiv.org/pdf/2004.07213.pdf &hellip

[11] Labajová, L. (2023). The state of AI: Exploring the perceptions, credibility, and trustworthiness of the users towards AI-Generated Content. Retrieved on: 11th January, 2024, from: https://www.diva-portal.org/smash/get/diva2:1772553/FULLTEXT02

[12] Saraju P. Mohanty, (2020), January, 2024, from: https://www.researchgate.net/figure/An-exemplary-illustration-of-data-and-privacy-dilemma-in-AI_fig1_341083165/actions#reference

[13] Nassar, A., & Kamal, M. (2021). Ethical Dilemmas in AI-Powered Decision-Making: A Deep Dive into Big Data-Driven Ethical Considerations. *International Journal of Responsible Artificial Intelligence*, *11*(8), 1-11.Retrieved on: 11th January, 2024, from: https://neuralslate.com/index.php/Journal-of-Responsible-AI/article/download/43/28

[14] Blanke, J. M. (2020). Protection for 'Inferences drawn': A comparison between the general data protection regulation and the california consumer privacy act. *Global Privacy Law*

Review, *1*(2).Retrieved on: 11th January, 2024, from: http://ssbea.mercer.edu/blanke/GPLR%20Blanke%20Inferences%20Drawn.pdf

[15] Das, D., & Chernova, S. (2020, March). Leveraging rationales to improve human task performance. In *Proceedings of the 25th International Conference on Intelligent User Interfaces* (pp. 510-518). Retrieved on: 11th January, 2024, from: https://dl.acm.org/doi/pdf/10.1145/3377325.3377512

[16] Michaela Jungwirth (2023), Increasing acceptance in AI solutions: The importance of explainability and trust. Retrieved on: 11th January, 2024, from: https://www.cloudflight.io/en/blog/increasing-acceptance-in-ai-solutions-the-importance-of-explainability-and-trust/

[17] Jacovi, A., Marasović, A., Miller, T., & Goldberg, Y. (2021, March). Formalizing trust in artificial intelligence: Prerequisites, causes and goals of human trust in AI. In *Proceedings of the 2021 ACM conference on fairness, accountability, and transparency* (pp. 624-635). Retrieved on: 11th January, 2024, from: https://arxiv.org/pdf/2010.07487

[18] Junaid Qadir (2022). Challenges and Downsides Associated with AI. Retrieved on: 11th January, 2024, from: DOI:10.1108/JICES-06-2021-0059

[19] Santoro, A., Lampinen, A., Mathewson, K., Lillicrap, T., & Raposo, D. (2021). Symbolic behaviour in artificial intelligence. *arXiv preprint arXiv:2102.03406*. Retrieved on: 11th January, 2024, from: https://arxiv.org/pdf/2102.03406

[20] Sun, W., Bocchini, P., & Davison, B. D. (2020). Applications of artificial intelligence for disaster management. *Natural Hazards*, *103*(3), 2631-2689. Retrieved on: 11th January, 2024, from: https://drive.google.com/file/d/1AFBYmvF11B96jcDbnlQUc8lW1C7Q9NDq/view

[21] Kaur, J (2023). Transparent AI Challenges and Its Solutions Retrieved on: 11th January, 2024, from: https://www.xenonstack.com/insights/transparent-ai-challenges

[22] Balasubramaniam, N., Kauppinen, M., Hiekkanen, K., & Kujala, S. (2022, March). Transparency and explainability of AI systems: ethical guidelines in practice. In *International Working Conference on Requirements Engineering: Foundation for Software Quality* (pp. 3-18). Cham: Springer International Publishing. Retrieved on: 11th January, 2024, from: https://acris.aalto.fi/ws/portalfiles/portal/82273752/SCI_Balasubramaniam_Transparency_and_Explainability_of_AI_Systems.pdf

[23] Felzmann, H., Fosch-Villaronga, E., Lutz, C. (2020). Towards Transparency by Design for Artificial Intelligence. *Sci Eng Ethics* **26**, 3333–3361 (2020). Retrieved on: 11th January, 2024, fromhttps://doi.org/10.1007/s11948-020-00276-4

[24]Jaiswal, A., Arun, C. J., & Varma, A. (2022). Rebooting employees: Upskilling for artificial intelligence in multinational corporations. *The International Journal of Human Resource Management*, *33*(6), 1179-1208. Retrieved on: 11th January, 2024, from: https://www.tandfonline.com/doi/pdf/10.1080/09585192.2021.1891114

[25]Shah, R. S., Bhatia, A., Gandhi, A., & Mathur, S. (2021). Bitcoin data analytics: Scalable techniques for transaction clustering and embedding generation. In *2021 international conference on communication systems & NETworkS (COMSNETS)* (pp. 1-6). IEEE. Retrieved on: 11th January, 2024, from: https://raj-sanjay-shah.github.io/assets/pdf/Bitcoin_Data_Analytics__Scalable_techniques_for_transaction_clustering_and_embedding_generation.pdf

[26] Lochmiller, C. R. (2021). Conducting thematic analysis with qualitative data. *The Qualitative Report*, *26*(6), 2029-2044. Retrieved on: 11th January, 2024, from:

https://pdfs.semanticscholar.org/e8eb/90dd8b21ae34045c78287df44956bffaf66d.pdf

[27] Vereschak, O., Bailly, G., & Caramiaux, B. (2021). How to evaluate trust in AI-assisted decision making? A survey of empirical methodologies. *Proceedings of the ACM on Human-Computer Interaction*, *5*(CSCW2), 1-39. Retrieved on: 11th January, 2024, from: https://hal.sorbonne-universite.fr/hal-03280969/document

[28] Nguyen, D. C., Cheng, P., Ding, M., Lopez-Perez, D., Pathirana, P. N., Li, J., ... & Poor, H. V. (2020). Enabling AI in future wireless networks: A data life cycle perspective. *IEEE Communications Surveys & Tutorials*, *23*(1), 553-595. Retrieved on: 11th January, 2024, from: https://ieeexplore.ieee.org/ielaam/9739/9361471/9200330-aam.pdf

[29] Patriciello, N., Lagen, S., Bojović, B., & Giupponi, L. (2020). NR-U and IEEE 802.11 technologies coexistence in unlicensed mmWave spectrum: Models and evaluation. *IEEE access*, *8*, 71254-71271.Retrieved on: 11th January, 2024, from: https://ieeexplore.ieee.org/iel7/6287639/8948470/09064509.pdf

[30] Salesforce, (2024). Salesforce Artificial Intelligence Retrieved on: 11th January, 2024, from: https://www.salesforce.com/products/einstein-ai-solutions/

[31] Parnin, C., Soares, G., Pandita, R., Gulwani, S., Rich, J., & Henley, A. Z. (2023). Building Your Own Product Copilot: Challenges, Opportunities, and Needs. *arXiv preprint arXiv:2312.14231*. Retrieved on: 11th January, 2024, from: https://arxiv.org/pdf/2312.14231

[32] Parmar, D. (2023). Enhancing Customer Relationship Management with Salesforce Einstein GPT. Retrieved on: 11th January, 2024, from: https://www.theseus.fi/bitstream/handle/10024/812434/Parmar_Dipal.pdf?sequence=2

[33] Masheika Allgood, (2020) How to Ensure the AI You Are Designing is Fit for its Purpose. Retrieved on: 11th January, 2024, from: https://pub.towardsai.net/how-to-ensure-the-ai-you-are-designing-is-fit-for-its-purpose-part-1-48660f03a822

[34] Zhou, Y. (2023). *Techniques for Interpretability and Transparency of Black-Box Models* (Doctoral dissertation, Massachusetts Institute of Technology).Retrieved on: 11th January, 2024, from: https://dspace.mit.edu/bitstream/handle/1721.1/150171/Zhou-yilun-PhD-EECS-2022-thesis.pdf?sequence=1&isAllowed=y