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Assessment of role of the Artificial Intelligence and Machine Learning in Business Enterprises

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ABSTRACT

AI and ML in practice are discussed in this paper to analyse how these technologies affect business operations in various industries. Artificial Intelligence and Machine Learning, concepts which for a long time were a part of theory only, are now essential to develop organizational performance and minimize the burden of various tasks as well as optimize decision making. In the present paper, reviewing a vast amount of the relevant literature, the author explains the advantages of AI and ML, including higher productivity, lower costs, and higher customer satisfaction; at the same time, the listed disadvantages, including poor data quality, adaptation of employees, and ethical issues, are also mentioned. It covers industries such as finance, healthcare, retail, manufacturing, and many others to demonstrate how AI & ML disrupt conventional approaches and unveil innovative sources of competitiveness. The paper also covers the future of AI and focuses on existing hurdles that inhibit the utilization of these technologies in businesses.

Keywords : Artificial intelligence (AI), Business, Machine Learning (ML), Enterprise

I. INTRODUCTION

In the modern world and constantly growing high-velocity environment, both AI and Machine Learning are the key transformative drivers throughout industries. Many of these technologies were previously the subject of purely theoretical works or very limited testing in real-world situations, but they are now becoming essential to the very foundation of companies in many industries around the world. This is how and where they are changing how firms are structured and how they reach their decisions, and interact with their customers.

AI and in particular, Machine Learning, provides organisations with the ability to extract significant amounts of data, process it and derive invaluable information from the resulting patterns in order to make better data-driven decisions. In the modern world where data is one of the critical success factors, managing this data and making use of it quickly becomes one of the essential factors for those companies that are willing to stand out from the competition. The primary reason for that is that AI and ML are not just improving and optimizing the evergreen conventional business activities but are opening up new areas of possibility that could only have been dreamed of before [1].

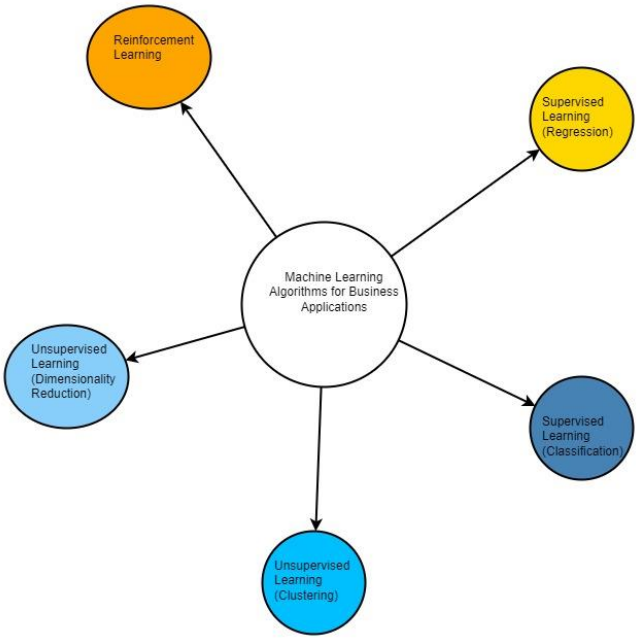

Fig. 1 : Role of Machine learning in business applications

Figure 1 illustrates different machine learning types of algorithms often used for business purposes. In the center, it focuses on ‘‘Machine Learning Algorithms for Business Applications’’ as the primary subject. Growing from this concept stem five major categories of machine learning which are here depicted by colored circles. They are Reinforcement Learning (RL) (orange), Supervised Learning – Regression (yellow), Supervised Learning – Classification (blue), Unsupervised Learning – Clustering (light blue) and Unsupervised Learning – Dimensionality Reduction (light blue tint). All of these categories are related back to the central idea showing how different methods are employed in machine learning to solve different business problems like classification, clustering, regression and decision making via reinforcement. The diagram generalizes and structurizes the algorithms to allow for a vision of how they are applied in business solutions.

These technologies are fast improving in the sense that they are easing the repetitious, mundane work that used to be done by human beings. At the same time, it is increasing operational effectiveness, reducing expenditures, and delivering the core of highly targeted client interactions that have become prominent among today’s profitable enterprises. AI and ML are prevalent in almost every field and the effect is deep. For instance, today’s financial sector, retail trade, healthcare, and manufacturing industries have reported great advancements in terms of productivity and cost and customer satisfaction through the integration of AI and ML solutions [2].

It has found widespread use in the financial field to perform clerical functions that used to consume a lot of time and energy and area also linked to human error such as; fraud detection, credit scoring, and risk assessment. On the other hand, in retail business, recommendation system based on machine learning helps to improve consumer’s experience and increase revenues. In healthcare too, many changes have been experienced where AI is used to interpret medical images, explain likely patient outcomes, and even prescribe possible treatments based on big data about patients. This is a development that has been realized and has seen better analysis and enhanced treatment of patients with the conditions. Likewise, in production, AI is enhancing the efficiency in operations, procurement and supply chain, and maintenance, and cutting down losses, embodied in breakdowns and excess inventory [9].

Using AI and ML across business processes confused and improved conventional practices apart from opening new innovative conclusions for how businesses can be conducted and revenue be generated. Companies or organizations that effectively deploy these technologies will expect leading trends and respond to customer requirements in a similarly effective and efficient manner as well as up-grading the operational internal procedures value. This transition from a passive to an active strategy is slowly turning into the key variable that allows companies to maintain their competitive position on the global market. Speaking of the PwC’s AI forecast for 2030

that says the potential contribution of AI to grow is $15.7 trillions, 60% of growth is expected to come from productivity improvements and automation. This bears the great promise of both AI and ML on the generators of economic growth but also on upending entire sectors on a global level [4]. The figure 2 shows combination between strategic business and IT can create firm performance, value, and sustainability of the business strategies. On the left, Business Strategy section contains elements of decision support process, elements of the new products and services development processes, and organizational capabilities. All these components are marshaled to the IT Strategy as depicted below The IT Strategy is anchored by state-of-the-art technologies; artificial intelligence, machine learning, deep learning, big data and digital Technologies. These are labeled according to the nature of the flow of influence in order to articulate the alignment of these strategies through arrows. Finally, this alignment achieves the intended positive organization consequences encompassing firm performance, value, and sustainability which is depicted in the box on the right. This diagram is good in illustrating the vital juncture in the business as well as the IT strategies to improve the success of an organization.

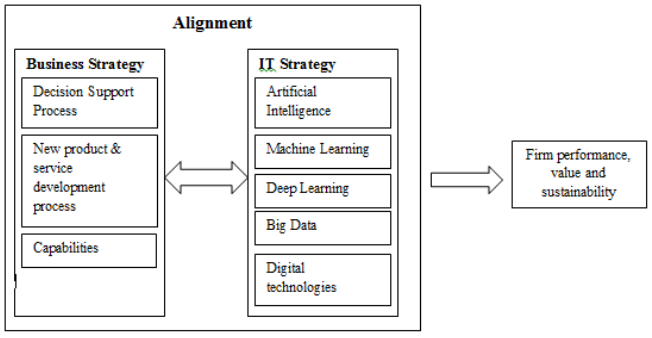

Fig. 2 : Role of AI and Machine leaning in Business

Despite the advantages of adopting AI and ML in businesses and organizational settings, the deployment of the two kind of technologies in business has its disadvantages. Some challenges that companies face include the following: data quality challenge, implementation challenge, and the emerging ethical challenge. Further, there is a steadily increasing understanding that organizations need to invest not only in AI and ML itself but in its employees as well. Manager and employees have to learn how to apply intelligent technologies to make them as complementary to their work as possible. As AI transition from being just an accessory in organizational decision making to being integrated into it, issues to to do with data protection, biasness and responsibility are arising. These problems call for the standard and transparent form of AI practices because the use of these technologies must be moral and oriented towards the accomplishment of generally accepted goals [5].

It is with this background that the following paper seeks to highlight the disruptive potential of AI and ML in business processes. It looks at how these technologies are being deployed in different sectors to spur the creation of new solutions or improve processes, processes as well as offer organisations an edge. By investigating into general and specific cases and analysing important literature in the field, the paper identifies the prospect and blackspot to adopt AI and ML in the enterprise. From this analysis, the paper acknowledges the benefits of implementing the technologies to address the growing technological disruptions globally.

II. LITERATURE REVIEW

The concept of employing artificial intelligence and machine learning technologies in business processes has become the center of concern in the last decade. Because of their increasing development, the ways in which these technologies can be utilized to automate, improve and inform processes, decisions, and customers experiences have become significant research topics. Mainstream academic research about artificial intelligence and machine learning cuts across multiple industries to provide a rich sample of the disruptive ways new technologies are overturning

conventional business practices. Starting from such applications as predictive analytics in supply chain management and finishing with recommender systems in e-commerce, AI and ML show themselves as essential tools for organizations looking for opportunities to become more competitive. From this literature review, key works from recent studies that explain how AI and ML are revolutionary in business operations cuts across sectors are presented. The review will analyse the benefits, the challenges and future possibilities of AI and ML in the enterprise based on the interesting findings of some of the recent research.

Zaki [6], identifies the important paths to digital, with a focus on digital technology, strategic management, customer experience and data driven. They reveal how all these factors interact to generate new business models and improved service management. The authors state that, according to literature, there are major opportunities for obtaining competitive advantages and stable revenues through digital transformations, there are major challenges to implementing DTs. Findings point to the fact that digital economics is changing both internal processes and external customer experiences and strategic processes, and causing businesses to innovate new value propositions. The paper captures essence of strategic transformation in managing digital disruption and improving the customer value proposition by leveraging on data driven business models.

Kunwar [7], discusses change management and its application of AI in the financial sector in regards to its use, issues, organizational effects on jobs and role or function. This work outlines the impact of AI in the financial services industry by presenting 20 electronic publications from academic and industry sources using a qualitative document analysis technique, which identifies that the use of AI has extended not only to processes and analytics but also to investment decisions. This paper seeks to assess the impact of AI in finance, and from the results, it is evident that although the improvement in efficiency has been phenomenal across all the sectors of finance, there is a severe scarcity of human capital to meet the demands of the implementation of AI in the financial world. It is found that AI technologies will persist in increasing their responsibilities in financial activities; human-led processes will progressively be automated in the future, and AI will be the dominant force in the evolution of the financial domain.

Brock and Wangenheim [8], discuss how AI has resurfaced as a strategic innovation and analyse the practical implementation in the firms' digital business initiatives. By analyzing case studies and surveying senior managers from different regions, the authors discover that AI is frequently implemented alongside other DSSs meant to augment current business processes instead of dramatically changing them. The research puts forward best practice principles for the effective implementation of AI to underpin digital change programmes, which covers areas like data, velocity, sponsorship, and people. The paper provides recommendation for managers on how to get ready for and execute AI and disrupts some of the hype around the topic.

That is why, Benbya et al. [9], delivers an understanding of the current status of AI implementation in organizations with a focus on scope of great organizations. It emphasizes the notion that, for all the egregious AI hype as a pivotal and revolutionary approach to organizing labor and production, even its adoption is far from universal at this point let alone widespread across industries, especially not in companies that are not startups or otherwise technologically focused. A sampling by HR professionals reveals that a majority, less than 50% of large organizations have commenced AI projects or programs of substance but the rate is escalating. This paper extends on understanding the issues and concerns, which include lack of AI expertise and integration issues, associated with AI implementation, and provides methods to address these barriers. It then ends the analysis of AI's future for enterprises and

presents the contributions of other articles analyzing this topic.

In Olson and Levy [10], the authors discuss what is predicted to be the development of artificial intelligence (AI) in the marketing field, noting its capacity to improve, and individualize processes. That remind that AI is very useful in automating many tedious tasks, leaving marketers to concentrate on such things as planning and being creative. The paper explains how AI helps to scale personalisation at a company level without adding more work to teams' plates, but rather providing real-time and forecast data to improve customer interactions. This is why many businesses are looking to AI as a means to deliver more targeted and engaging consumer experiences, to foster more extensive, longer-term associations with customers. The paper details how the use of AI in marketing improves decision making, execution and customer engagement through the enhanced analytics and engagement approaches.

Mithas et al. [11] provides an analysis of the different compliance strategies that organisations have to consider while implementing artificial intelligence (AI). It even leads to the important questions if firms should choose between a specific AI strategy or if AI should be included into the digital/IT strategy. The authors bring contrast moving AI strategy to similar advances realized in technological advancement and offer understanding of how firms can use AI to derive competitive advantages. This paper also looks at the correlation between AI plans and the total approach to digital planning and how firms can create comprehensive planning that includes artificial intelligence. Lastly, it discusses the managerial and tactical concerns for the corporate executive, information technology personnel, and academic scholars, stressing corporate AI integration with other goals.

Mikalef et al. [12] also hints at the difficulties organisations experience in improving performance through artificial intelligence (AI). Building on the resource-based view of Bendor-Samuel centre the authors for the proposition that organisations require an 'AI capability' to coordinate and differential the requisite resources. The paper therefore undertakes a literature review in order to theoretically build on the idea of AI capability and determine its key axes. This framework argues that organizations must develop and market this capability to unlock challenges and realise significant value from their AI deployments. The study also found that for the firms that adopted AI, a long-term strategic approach was critical and that firms should use AI to delivers sustainable performance improvement.

The work of Syam and Sharma [13] has focus more on the changes that has brought about by the application of artificial intelligence and machine learning in personal selling and sales management with more emphasis on the fourth industrial revolution. The authors describe how AI and machine learning will transfer decision making to machines and reapplied key areas of sales practice. With a focus on the seven step selling process the paper outlines how AI technologies will redefine sales research and practice. The study includes implications for theory and practice to explain the deep-seated innovation of traditional sales management and decision making due to AI.

Lal et al. [14] also focuses on a relatively emerging concept of Artificial Intelligence-DSS to underpin the human decision-making strategy. Despite these results suggesting that AI might be able to substitute expert workers at scale, the study also demonstrates that in some respects humans are still superior, this forces companies to reorganize their work flow to accommodate for AI support. This paper discusses recent technologies and methods from AI related to AI-DSS more specifically in MCDA. It also examines whether the use of AI-DSS is an ominous threat to human decision-making and if there is so, then how these challenges emerge. The paper sheds light on how AI and a human professional approach to work together in the current business world.

Goralski and Tan [15], discusses the two-sword effects of AI on business organization, government, and the

world at large with respect to the sustainable development goals of the United Nations. The authors also emphasize the positive potential of AI as being the possibly enabler of global progress towards sustainability or the possibly reinforcement of negative trends in such areas as economy, environment, and society. In this paper, three cases are explored to understand the use of AI in business strategy and public policy, and its implications for leadership development and management education. This study offers lessons for tomorrow's chief executives on how best to rise to these challenges while grappling with AI and sustainable growth, and show that the values of responsible leadership matter in this emergent age of artificial intelligence.

Table 1 : Comparison between existing literature

Study	Industry Focus	Key Points	Benefits	Challenges	Implementation Stage	AI Application Areas	Human Capital Impact
Zaki [6]	Cross-industry	Focuses on digital transformation, customer experience, and data-driven business models	Competitive advantage through digital transformation	Major challenges in implementing digital technologies (DTs)	Early to Mid-stage	Digital business models, service management	Workforce adaptation to digital and data-driven models
Kunwar [7]	Financial Services	AI's impact on job roles, decision-making, and investment processes	Improved efficiency across all finance sectors	Scarcity of human capital for AI implementation	Mid-stage	Fraud detection, risk assessment, investment decisions	Increased automation, fewer human roles in analytics
Brock & Wangenheim [8]	Cross-industry	AI as a strategic innovation in digital transformation initiatives	Best practices for integrating AI in digital initiatives	Hype around AI can mislead expectations	Mid-stage	Data management, process augmentation	AI augments human roles, does not replace them
Benbya et al. [9]	Large Organizations	Status of AI implementation, especially in non-tech-focused companies	AI adoption is rising in large organizations	Lack of AI expertise and integration issues	Early-stage	Organizational processes, strategic management	Lack of AI expertise requires workforce upskilling
Olson & Levy [10]	Marketing	AI's role in automating and personalizing marketing	Enhanced customer engagement and personalized	Integration with existing systems	Mid-stage	Customer engagement, targeted marketing	Allows marketers to focus on creativity, not

		efforts	marketing				repetitive tasks
Mithas et al. [11]	Cross-industry	AI in compliance and digital strategy	Competitive advantage through AI integration	Managerial and tactical challenges in corporate AI integration	Early to Mid-stage	Compliance strategies, IT strategy	Requires high-level coordination between AI and IT teams
Mikalef et al. [12]	Cross-industry	AI capability and performance improvement	Firms adopting AI see long-term performance gains	Developing AI capability is challenging	Mid-stage	Performance improvement, resource management	AI capability development requires specialized training
Syam & Sharma [13]	Sales Management	AI and ML impact on personal selling and decision-making	Transformation of traditional sales practices	Shift in decision-making roles from humans to machines	Early-stage	Sales management, personal selling	Automation reduces need for human decision-making
Lal et al. [14]	Decision Support Systems (DSS)	AI-DSS impacts on human decision-making and workflow	AI complements human decision-making	Challenges in balancing human expertise with AI systems	Mid-stage	Multi-Criteria Decision Analysis (MCDA)	Human experts still needed to oversee AI support
Goralski & Tan [15]	Business & Public Policy	AI's dual impact on sustainability and business strategies	Potential for global progress on sustainable development	Risk of reinforcing negative economic and social trends	Early-stage	Sustainability goals, leadership development	Need for leadership in managing AI for sustainability

The table 1 gives general information about different studies, which investigated the effects of AI and ML in different fields. The papers therefore cover areas like finance management, marketing, sales, decision support systems and sustainability discussing both the advantages and disadvantages of artificial intelligence. Some of the end benefits likely to be obtained include increased efficiency, customer value, competitive edge, and effective decision making. Nevertheless, issues like lack of experience in AI implementation, integration complexities, workforce compliance, and AI related expectation management are still present. The levels of using A.I range from early implementation to mid-implementing across the different sectors and this demonstrating that although A.I is being adopted, there are hindrances to its adoption. AI is present in numerous fields – finance where AI helps with fraud detection and risk assessment, and customer engagement in marketing, as well as AI's support of decision-making. Another familiar theme is human

capital impact as AI takes over many monotonous processes, the task falls on businesses to train their employees for new AI-based changes. In summary, using the presented table one can realize how AI and ML are on the advance in transforming the business processes, even to underline the existing issues with their implementation.

III. ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN BUSINESS

Artificial Intelligence (AI) has emerged as a crucial tool in contemporary business organization since it can change and improve several procedures. The required AI in business results from the desire of businesses to improve productivity, work using data, and minimize the use of human labour on redundant tasks. Present-day rivals have huge amounts of data that needs to be analyzed, the customer experience that needs to be improved and operational costs that need to be brought down, all of which AI can through better algorithms and Machine Learning. It is almost staggering to list down all the possibilities where AI finds application in business; it spans across areas such as predictive sales which aids the business to anticipate future market trends and consumer behavior and then there is the case of personalized marketing where a company can recommend a particular product to a certain customer. AI is also significantly used for process automation utilizing Robotic Process Automation (RPA) allowing the business to automate repetitive tasks such as invoice payment and customer service requests. Further, there are Autonomous decision support systems provide strategic information to managers based on real-time data analysis. Therefore, businesses are not only automating their processes with the help of the AI tool but also expanding and developing them throughout various fields.

AI & Machine Learning is transforming the business environment by helping companies to automate their functions & decision making and improving customers' satisfaction. In business, such technologies are crucial for sorting big amounts of information, on top of identifying tendencies and even enhancing business performance. AI and ML examples are demand forecasting using predictive models, marketing automation in segmentation, customer care including self- serving chat bots and operation and financial risk management. They enable enterprises, to work smarter, spend less and be more creative in the real-time feel they provide firms in a shifting global digital economy. AI and more so the ML are technologies that are ever in development, and with time is expected to bring more change and growth to industries.

Table 2. Comparison of AI Techniques in Business

AI Technique	Description	Strengths	Limitations	Applications in Business
Supervised Learning	Involves training models using labeled data to make predictions.	High accuracy for classification and prediction tasks.	Requires large amounts of labeled data.	Fraud detection, stock market predictions, product recommendations.
Unsupervised Learning	Analyzesunlabeled data to find hidden patterns or groupings.	Useful for discovering unknown patterns.	Results can be difficult to interpret.	Customer segmentation, anomaly detection, clustering customers.
Reinforcement	Algorithms learn by trial and error through	Excellent for real-time decision-	Requires extensive training and	Dynamic pricing, personalized marketing,

Learning	interacting with the environment.	making and problem-solving.	computational resources.	game theory applications.
Natural Language Processing (NLP)	AI techniques that enable machines to understand and generate human language.	Effective in understanding and responding to unstructured text.	Limited by language complexity and context.	Chatbots, sentiment analysis, document summarization.
Robotic Process Automation (RPA)	Automates rule-based, repetitive tasks in business operations.	Highly efficient in reducing manual work and error rates.	Limited to rule-based, non-cognitive tasks.	Invoice processing, data entry, customer service automation.
Deep Learning	Uses neural networks with multiple layers to learn complex patterns.	Exceptional for image, video, and speech recognition.	Computationally expensive and data-hungry.	Image recognition, speech-to-text, personalized product recommendations.

Table 2. showcases several AI and MLmethodologies applied in business, together with their descriptions, advantages, disadvantages, and purposes. But it requires large labeled datasets that may be a disadvantage. Clustering is useful for customer segmentation, as it exposes inconspicuous patters; nevertheless, it may be difficult to understand. Reinforcement learning work best where decisions are made in real-time and learning occurs from the results of the action: the application works best for dynamic price determination and for designing individual marketing campaigns. Natural Language Processing (NLP) enables a business to engage with unstructured language, including in service conversation and sentiment analysis applications, but it is challenged by the inherent ambiguity of language. BPM is efficient in address only largely cognitive process, while RPA is efficient in automating routine, highly structured work but not cognitive work. Finally, Deep Learning is developed for working with large data and complex such as images, text or speech, though, it needs huge computational power and large data sets and can be used for high-class recommendations as well as creating effective image recognition systems. All of them have specific benefits, and adaptation of techniques allows businesses to improve their processes, add value to their clients and tailor products based on insights.

Table 3. Machine Learning Techniques comparison for business purposes.

ML Technique	Description	Strengths	Limitations	Applications in Business
Linear Regression	A supervised learning algorithm used for predicting continuous outcomes.	Simple and easy to interpret.	Assumes a linear relationship, which may not always be realistic.	Sales forecasting, price prediction, trend analysis.
Logistic	A supervised learning	Effective for binary	Not suitable for	Customer churn

Regression	algorithm used for binary classification problems.	classification and probabilistic interpretation.	multi-class classification directly.	prediction, fraud detection.
Decision Trees	A tree-based algorithm that splits data into branches for classification or regression.	Easy to understand and interpret results.	Prone to overfitting, especially with small datasets.	Customer segmentation, decision support systems.
Random Forests	An ensemble learning method that builds multiple decision trees to improve accuracy.	Handles large datasets and reduces overfitting.	Computationally expensive and complex to interpret.	Risk management, recommendation systems.
Support Vector Machines (SVM)	A supervised learning algorithm that finds a hyperplane to classify data points.	Effective in high-dimensional spaces and with complex data.	Sensitive to noise and outliers.	Image classification, text categorization, sentiment analysis.
K-Nearest Neighbors (KNN)	A simple algorithm that classifies data based on the closest data points (neighbors).	Simple and effective for small datasets and low-dimensional spaces.	Does not work well with large datasets or high dimensions.	Customer classification, product recommendations.
Neural Networks	A deep learning algorithm that mimics the way the human brain works to recognize patterns.	Highly flexible and capable of learning complex patterns.	Requires a large amount of data and computational resources.	Speech recognition, image recognition, customer behaviour modeling.

Table 3. presents the Machine Learning (ML) business comparisons of different methods, their applications, and constraints. Linear and Logistic Regression are common for predictions and binary classification problems including sales, stock price, frauds, etc., but they are not good for non-linear and multi-class problems. Decision Trees are easy to work with for tasks such as customer segmentation but it has a major problem of overfitting while Random Forests are better in performance through a vote of decision trees it takes longer to calculate. SVM seems to work best in analytical tasks such as image classification though complex, it lacks robustness to noise. KNN is easy to implement particularly for classification but unsuitable for large data sets. For an example Neural Networks are effective for more involved job such as image and speech recognition but need a lot of data and resources. All these techniques are effective in a different manner, and not one of them is perfectly suitable for every business circumstance.

IV. CONCLUSIONS

AI and ML have emerged as crucial in redesigning organizational management processes through robotics, improving organizational decisions, and providing customer interactions. There has been a clear shift towards the enhancement of productivity and cost cutting especially through the adoption of Innovative technologies in areas such as finance, retail, healthcare and manufacturing. There are some limitations contributing to poor data quality, anticipation of workforce readiness, and realistic issue related to the usage of AI. This means to successfully implement these businesses need to invest in the

technology as well as employee training and addressing of ethical issues. Future impact of AI on business is also expected to increase but this impact will be determinant by the budding challenges as well as by practicing responsible a transparent AI.

V. REFERENCES

[1] Akerkar, R. (2019). Artificial intelligence for business. Springer.

[2] Zohuri, B., & Moghaddam, M. (2020). From business intelligence to artificial intelligence. Journal of Material Sciences & Manufacturing Research, 1(1), 1-10.

[3] Marr, B. (2019). Artificial intelligence in practice: how 50 successful companies used AI and machine learning to solve problems. John Wiley & Sons.

[4] Moh'd Ali, M. A., Basahr, A., Rabbani, M. R., & Abdulla, Y. (2020, November). Transforming business decision making with internet of things (IoT) and machine learning (ML). In 2020 International Conference on Decision Aid Sciences and Application (DASA) (pp. 674-679). IEEE.

[5] Mohanty, S., & Vyas, S. (2018). How to compete in the age of artificial intelligence: Implementing a collaborative human-machine strategy for your business. Apress.

[6] Zaki, M. (2019). Digital transformation: harnessing digital technologies for the next generation of services. Journal of Services Marketing, 33(4), 429-435.

[7] Kunwar, M. (2019). Artificial intelligence in finance: Understanding how automation and machine learning is transforming the financial industry.

[8] Brock, J. K.-U., & von Wangenheim, F. (2019). Demystifying AI: What Digital Transformation Leaders Can Teach You about Realistic Artificial Intelligence. California Management Review, 61(4), 110-134. https://doi.org/10.1177/1536504219865226

[9] Benbya, H., Davenport, T. H., &Pachidi, S. (2020). Artificial intelligence in organizations: Current state and future opportunities. MIS Quarterly Executive, 19(4).

[10] Olson, C., & Levy, J. (2018). Transforming marketing with artificial intelligence. Applied Marketing Analytics, 3(4), 291-297.

[11] Mithas, S., Murugesan, S., & Seetharaman, P. (2020). What is your artificial intelligence strategy?. IT Professional, 22(2), 4-9.

[12] Mikalef, P., Fjørtoft, S. O., &Torvatn, H. Y. (2019). Developing an artificial intelligence capability: A theoretical framework for business value. In Business Information Systems Workshops: BIS 2019 International Workshops, Seville, Spain, June 26–28, 2019, Revised Papers 22 (pp. 409-416). Springer International Publishing.

[13] Syam, N., & Sharma, A. (2018). Waiting for a sales renaissance in the fourth industrial revolution: Machine learning and artificial intelligence in sales research and practice. Industrial marketing management, 69, 135-146.

[14] Lal, K., Ballamudi, V. K. R., &Thaduri, U. R. (2018). Exploiting the Potential of Artificial Intelligence in Decision Support Systems. ABC Journal of Advanced Research, 7(2), 131-138.

[15] Goralski, M. A., & Tan, T. K. (2020). Artificial intelligence and sustainable development. The International Journal of Management Education, 18(1), 100330.