REGULATE ARTIFICAIL INTELLIGENCE IN RESPONSIBLE WAY (REVIEW)

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ABSTRACT

Managing AI marks an important milestone in information technology management. It involves various tasks such as communication, leadership, coordination, and control of the ever-evolving frontier of computational advancements. The goal is to refer human intelligence in managing increasingly difficult decision-making problems. effective management of AI involves decisions making about three inter-dependent facts of AI, namely autonomy, learning, and inscrutability. These decisions must be made while continuously pushing the AI's scope and frontier's performance. Ongoing research and development are essential to realizing the full potential of AI. Over time, the frontiers of AI have shifted, and this special issue's 7 exceptional papers teach us concerning administration at the cutting edge of AI. These studies have explored various aspects of AI management, including the role of trust in AI, ethical considerations when using AI, and strategies for implementing AI in organizations.as we think about the future of managing AI, we can expect that the frontiers will continue to expand. With new advancements and breakthroughs, we will encounter new challenges and complexities in managing AI. Information systems scholarship will play an essential role in exploring and shaping this future, as researchers and practitioners work together to build a better understanding of AI management. Ultimately, effectively managing AI will require collaboration, multidisciplinary perspectives, and a commitment to ethical and responsible use of AI.

Keywords: AI, Learning, Autonomy, Inscrutability, , Algorithm, Version three, Human, Square ,Inter-perability

I. INTRODUCTION

A new strategy is needed for managing AI[3] contrast to conventional information technology management. AI, in contrast to earlier technologies, is a frontier of developing computer abilities that is always changing. The use of machine learning technologies, which are more autonomous, capable of deep learning, and impenetrable than any prior intelligent IT artefacts, are what power of AI. AI technologies, including simulated agents, identification of faces, self-driving vehicles, and processing of natural languages, are being used to solve a variety of AI-related problems. Over fifty percent of firms will use some sort of AI by 2020 thanks to the technology's adaptability and promise. However, the novelty and complexity of AI present significant challenges for management. The management of AI requires a new level of interdisciplinary collaboration between technical and managerial experts. Additionally, ethical considerations must be integrated into AI management decision-making.

The ongoing evolution of AI means that the management of this technology requires continuous research and development[1]. The development of effective management strategies for AI involves creating trust between humans and AI systems and understanding the implications of deploying these technologies in different settings. Nonetheless, the potential of AI is substantial and will continue to require innovative and agile management approaches.

While AI offers remarkable possibilities for enhancing people's lives across multiple domAIns and provides businesses with unprecedented opportunities, it is not a technological panacea. AI introduces new challenges and risks that must be addressed through effective management.

One significant challenge is the potential displacement of human labor by AI, leading to job losses and economic disruption. Additionally, the lack of transparency and interpretability of some AI applications can lead to biased and discriminatory outcomes. The misuse of AI technologies can also lead to privacy breaches and other ethical concerns.

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Effective management of AI[3] must involve striking a balance between promoting innovation and ensuring [4]ethical and responsible use of these technologies. Organizations must take steps to identify and mitigate potential risks of AI and adopt ethical and transparent approaches to AI decision-making.

To summarize, although AI has limitless potential for improving the lives of individuals, and driving innovation in businesses, its deployment must be accompanied by effective management strategies that account for both opportunities and challenges. AI is not a panacea, and it is up to managers to ensure its responsible and ethical use.

A wide range of complex issues concerning strategies for business, interfaces of human-AI, facts, secure, confidentiality, norms, labour, and rights of human, and safety of nationals are presented by the rise of AI. It is impossible to overestimate the importance of managers in managing AI since they play a crucial role in developing and carrying out of AI-based systems, allocation of resources, and governance of organizations. Managers are responsible for navigating the challenges and realizing the potential benefits of AI while avoiding negative consequences. AI introduces technical, ethical, and moral problems[6], These include those concerning worker, labour, and rights for consumers, privacy, AI Ness, justice, discrimination, bias, deskilling, and surveillance. Organizations are being held accountable for the consequences of AI, making it critical for management to critically form their organizations' AI following activities while being reflective.

Information systems researchers have a crucial role to play in conducting research, helping managers make evidence-based practice decisions, and contributing to the discourse on AI[9]. The interdisciplinary nature of the information systems field, with its sociotechnical roots, is well suited to this role. The 7 papers are included in this special issue of MIS Quarterly offer insights into managing AI, conceptualize AI, and distinguish AI from traditional information technologies, investigating critical challenge's set to manage AI. The papers focus on different aspects of AI, such as autonomy, learning, and inscrutability, recognizing the current frontiers across these facets and proposing phenomena that may emerge in the future[10]. AI introduces both opportunities and challenges for managers, and they must navigate these to avoid negative consequences. The interdisciplinary nature of the information systems field, with its sociotechnical roots, provides a vital perspective, and researchers must conduct research to help managers make evidence-based decisions. The seven papers in this special issue of MIS Quarterly provide valuable insights into managing AI, conceptualizing AI, and identifying its key challenges, making significant contributions to the discourse on AI.

II. LITERATURE REVIEW

A. **AI as the Dynamic Frontier of Computing**
The definition of artificial intelligence has evolved over the years, starting with the 1956 Dartmouth summer workshop that AI to create machines that behave intelligently like humans[21]. Today, no one is coincided-upon definitions for AI there, although current definitions emphasize diverse characteristics of AI, such as its capacity to adapt and replication. The uncertainty surrounding the notion of AI has proven constructive, resulting in creative investigation and technical improvement, but also leaving possibility for other views and conjecture.

Artificial intellect is defined by the authors of this study as the frontier of computer improvements that reference human intellect in tackling increasingly more complicated making decisions challenges[7]. AI is considered as a shifting frontier of subsequent-generation computing improvements that is constantly the next step in computing that computer scientists are smoothing out. Decision making is a key component of AI since it entails informing or automating some part of the decision-making process of humans, presuming intelligence comprises successful goal-directed behavior.

Predictive models that outperform humans in some circumstances are used in current methods to AI, leading to outsized effects and quickly compounding societal implications. As such, managing AI is a complex challenge that requires careful consideration of technical, moral, and ethical issues. The authors suggest that information systems researchers can contribute to this discourse by conducting research and offering evidence-based practice

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to help managers navigate the challenges and realize the potential benefits of AI while avoiding negative consequences.

There is an accurate representation of the development of digital computing and AI after World War II[8]. Turing's work on computation and von Neumann's architecture were foundational for digital computing, while cybernetics and other related fields and the groundwork for AI.

The development of rule-based algorithms, known as "expert systems," in the 1980s was a significant step towards the commercialization of AI. Expert systems were designed to represent[1] domain knowledge and apply to answer hard issues, use sophisticated methods of reasoning, with the goal of automating decision-making processes.

However, Since expert systems were extendedly regarded at the time as a form of AI, most people today would not consider them AI in the sense that we understand it today. Today's AI is characterized by machine learning and deep learning algorithms, which allow machines to learn and adapt based on data inputs, rather than relying solely on pre-programmed rules.

AI represents a turning point in decision-making, as it involves making decisions autonomously. AI technologies use computer's programs that display sort intelligence and are designed to inform or automate some aspect of human decision-making. Intelligence, in this context, refers to the ability to achieve successful goal-directed action.

While the use of AI in decision-making can be controversial, it has the potential to enhance decision-making by providing faster, more accurate, and more objective analyses of data. However, it is important to ensure that AI is used ethically and transparently[23], with appropriate oversight and accountability mechanisms in place

our definition of AI also explicitly invokes a relationship between AI and human behavior[22]. Early definitions of AI used humans as a standard for machine intelligence, but more recent definitions distinguish between thinking and acting "rationally" versus "humanly."

Russell and Norvig's distinction between thinking and acting rationally versus humanly highlights the fact that AI is not necessarily about replicating human intelligence but rather creating rational agents that can perform tasks optimally. However, the notion of emulating or outperforming humans[11] remains central to discussions around AI.

Managers have both possibilities and problems as a result of AI's emulation capabilities, or its ability to think humanly. On the first side, AI has the power to boost labour efficiency[12], which has recently stalled. On the other conjunction, the potential of AI to mimic human decision-makers has limitations, notably in terms of creativity.

The imitation capacity of AI also alleviates safety and ethical problems. Hackers can use AI's emulation capability to avoid detection by cybersecurity measures that distinguish between bot and human behavior. Additionally, AI's emulation of human decision-making can codify biases and errors, which has been the subject of research in this special issue[24].

One proposed solution to address AI biases is human augmentation, as suggested by Teodorescu[15], Morse, Kane's essay "Failures of Fairness in Automation Require a Deeper Understanding of Human-ML Augmentation" and Awwad also. [25]. This approach involves leveraging human judgment to augment and improve the accuracy and fairness of AI systems.

In their essay "Is AI Ground Truth Really True?," Lebovitz, Levina, and Lifshitz-Assaf ask, "Is AI Ground Truth Really True?" The Dangers of Training and Evaluating AI Tools Based on Experts' Know-How," emphasise the limitations of performance of AI as a result of the development of its fundamental ground truth.. They argue that

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AI systems[25] trainned on biased or incomplete data can perpetuate and amplify these biases, which has ethical implications.

The type of logic incorporated in decision-making by AI must be investigated. Scholars have emphasised the difficulties of thinking constructively about situations when there is [20]inadequate knowledge or implicit understanding. AI reinforces an instrumental rationality that emphasizes efficiency and control at the expense of value-oriented rationality. While earlier forms of IT were associated with instrumental rationality, AI's interactive and comprehensive nature makes it different. Some argue that AI can get at tacit elements of knowledge, but as [16]Lebovitz, Levina, and Lifshitz-Assaf note, the "know what" instrumental rationality of AI is not readily separable from the "know how" critical to knowledge work. Ultimately, AI is informed by human intelligence and embodies particular forms of rationality that emulate, outperform, or underperform human decision-making.

B. Delineating the AI Frontier
The statement accurately portrays AI as a constantly evolving and transformative technology that reshapes the frontier of computing. As AI progresses, it pushes the boundaries of what is possible and challenges traditional computing practices. This fluidity and constant change mean that managing AI is an ongoing and never-ending process that requires adaptation and flexibility[13].

The concept of AI being "nascent, liminal, and emerging" reflects the idea that AI is still in its early stages and has the potential to grow and transform rapidly. The statement also suggests that AI technology is not static and that new developments and breakthroughs are constantly emerging[14].

The statement highlights the need for continuous management of AI, rather than viewing it as a one-time project or static entity. As AI technology evolves, it requires ongoing management to ensure that it aligns with organizational goals, meets ethical and legal standards, and adapts to changing circumstances.

III. THE SCOPE OF AI
Analysts The AI frontier's scope aspect relates to the constantly expanding spectrum of circumstances in which AI is employed. AI is growing more prevalent [17]and pervades most, if not all, parts of the human experience, going well beyond employment. The environment of decision-making issues in which AI is produced, applied, and employed has evolved substantially since the birth of computing, and its ubiquity brings complexity. The digital technologies used in AI are communicative and editable, and the context of decisions made using or in collaboration with AI has grown dramatically.

Contemporary[18] forms of AI change substantially from earlier generations in three basic, interconnected characteristics that effect executives when addressing today's AI frontiers: autonomy, learning, and inscrutability.

Autonomy refers to the ability of AI systems to make decisions and take actions without human intervention.[19] This is made possible by advances in machine learning and deep learning algorithms, which allow AI systems to analyze and interpret vast amounts of data and make decisions based on that analysis.

Learning refers to the ability of AI systems to improve their performance over time through experience[30]. Contemporary forms of AI are designed to learn from the data they are fed, adapt to changing circumstances, and improve their decision-making capabilities over time.

Inscrutability refers to the difficulty of understanding how AI systems arrive at their decisions. As AI systems become more complex and sophisticated, it becomes increasingly difficult for humans to understand how they arrive at their decisions. This is particularly challenging for managers who need to be able to explain the rationale behind important decisions made by AI systems to stakeholders.

These three facts of contemporary AI pose significant challenges for managers who need to effectively harness the power of AI while also managing the risks and potential downsides associated with these technologies.

We summarize these in T1and discuss them below.

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A. **Autonomy**

The Contemporary forms of AI have an increasing[28] capacity to act on their own, without human intervention, and make autonomous decisions that have material outcomes. These outcomes often occur without human knowledge or awareness.

Examples of autonomous AI systems have grown rapidly in recent years, and include software-controlled vehicles that can drive themselves, robo-advisor software that automatically rebalances investments, and AI underwriters that have the ability to process loans without human intervention. These types of AI systems are becoming increasingly common and are no longer the exception.

Table 1: Key Concepts of AI	
Concept	*Definition*
AI(AI)	The frontier you are referring to is known as artificial general intelligence (AGI). AGI refers to the development of AI systems that can perform intellectual tasks that are typically associated with human beings, such as problem-solving, reasoning, and learning
Dimensions of the AI Frontier	
Performance frontier	The ever-improving execution of tasks to which AI is applied
Scope frontier	The ever-expanding range of contexts to which AI is applied
Facts of AI	
Autonomy	[2]Acting without human intervention
Learning	Improving through data and experience
Inscrutability	Being unintelligible to specific audiences

While the benefits of autonomous AI systems are significant, they also pose significant challenges and risks, particularly with regard to safety, security, and ethics. [26]As AI systems become more autonomous, it becomes increasingly important for managers and policymakers to carefully consider the risks and trade-offs associated with their deployment, and to develop appropriate regulations and governance frameworks to ensure their safe and ethical use.

B. **Learnig**

The improved learning skills have allowed AI is to make competency into considerably great complicated making of decision environments, such as those involving audio, video, object and speech identification, as well as natural language processing. These modern progress have enabled AI to analyze and interpret vast amounts of unstructured data, which was previously challenging or impossible for machines to do.

The ability of AI systems to learn from experience and improve their performance over time has significant implications for a wide range of industries and applications, from healthcare and finance to transportation and manufacturing. However, it also poses significant challenges, particularly with regard to data privacy and bias, and underscores the need for appropriate regulations and governance frameworks to ensure the safe and ethical use of these technologies.

C. **Inscrutability**

Modern AI is increasingly able to produce mathematical frameworks and outcomes that are understandable to a small group of people but transparent to others or, in some circumstances, not understandable to humans at all because to advancements in autonomy and learning. The situations in which AI is being used have multiplied in diversity and difficulty, and the algorithms that are involved in producing autonomy as well as learning have become more complicated. These changes have given rise to a number of issues that are now being debated under terminology such the black-box problem, AI accountability, or algorithm tractability.
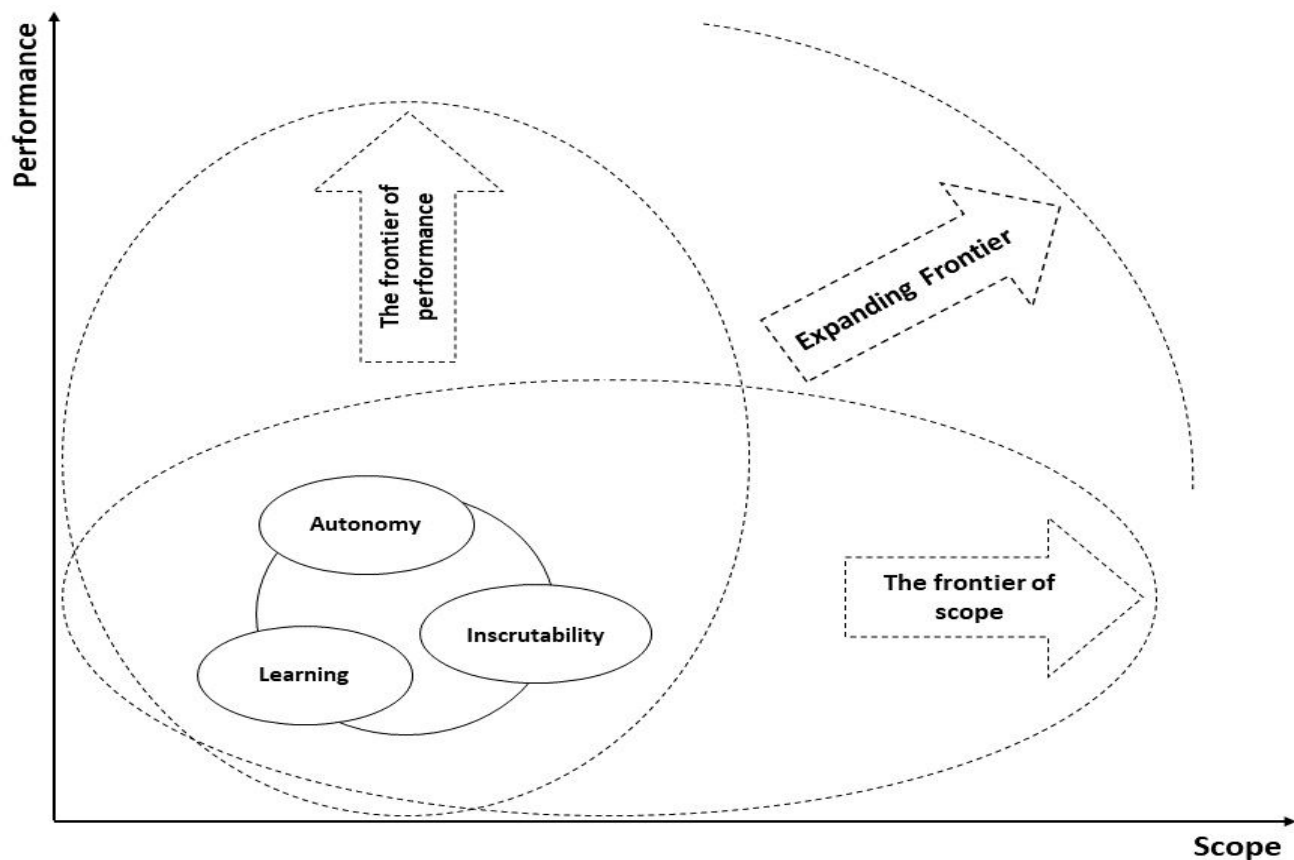
The [28]black-box problem refers to the challenge of understanding how AI systems arrive at their decisions or recommendations, particularly when responsibility and liability when AI systems are involved in decision-making

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that has significant consequences. Algorithm tractability refers to the challenge of ensuring that algorithms used in AI systems are transparent, auditable, and subject to scrutiny and review.

Information is needed by manager and recognize the pertinent information of AI technologies in order to effectively integrate them into their decision-making processes. This includes understanding the capabilities and limitations of AI systems, as well as being able to interpret and communicate the outputs and decisions generated by these systems. In addition, managers must also consider the ethical and social implications of using AI in their organizations, such as issues of bias, privacy, and accountability

As AI continues to evolve and become more integrated into organizational decision making, the role of managers will likely shift towards one of oversight and guidance, ensuring that AI is being used appropriately and effectively to support organizational goals. This will require ongoing learning and adaptation on the part of managers, as they navigate the complex and rapidly changing landscape of AI technologies. Ultimately, the successful integration of AI into organizational decision making will depend on the ability of managers to effectively collaborate with AI systems, leveraging the unique strengths of both humans and machines to drive positive outcomes for their organizations.

Fig. 1. Frontier of AI.

IV. MANAGING THE AI FRONTIER

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A. **Managing Autonomy**

The integration of AI into management and IT has brought about significant changes in the roles and interactions of humans and technology. Historically, IT and AI have been used to automate and inform ate work, reducing the need for human effort and minimizing human error. However, as newer generations of AI technologies emerge, self-learning machines are progressively performing data processing that was not necessarily delegated by humans. They arrive at and carry out judgements, and their autonomy is progressively generative, far beyond the generativity of previous information technologies. people and autonomous machines interact in a number of ways, with people committing to automated operators in a variety of ways, such as reflexive, supervisory, anticipatory, and prescriptive agents. autonomous machines can also lead, assess, and control humans, depending on whether the behaviors are chosen by a human or by an algorithm.

The key issue associated with these interactions involves understanding the respective strengths of humans and autonomous agents. Historically, technology were more adapted to problem-solving, especially for widely accepted issues, but humans were required for activities including creating problems, intractability, and complication. However, this balance has started to shift. Independent agents are increasingly behaving in ways that approximate knowledge workers, and the line between what humans and robots should perform is being blurred. Humans do integrate making sense as AI technologies do more of the creative component of knowledge job. These knowledge workers tailor their identities to their responsibilities as independent agents.

The passage highlights the implications of autonomy and agency of AI on human interactions and managerial challenges. The authors argue that The interplay of people with AI is a critical management issue of our day, and the topic of enhancement should be considered in terms of fair Problems. AI's computational advantages allow them to incorporate more variables relating to a fairness problem than a human would ever take into account, but the task of making "fair" decisions should be shifted directly into the hands of algorithms. However, dependence on expansion may have negative reliance effects as people become more reliant on autonomous tools, potentially undermining the impact of human-AI communication[5]. Overall, the passage suggests that the integration of AI into various tasks and decision-making processes raise complex ethical and managerial issues that require careful consideration.

B. **Managing Learning**

This passage discusses the role of learning in advancing AI and the managerial issues associated with it. Previous generations of AI technologies relied on proprietary data sets, but with the widespread availability of digital trace data, AI can now feed on all kinds of data, including tacit knowledge. However, this AI's concerns about privacy, trust, intellectual property rights ownership, security, and governance. When AI produces its own knowledge and rules, adverse effects such as bias, algorithmic AI, and benefit-agnostic decisions become increasingly visible and problematic. The use of technology and enhancement may not be sufficient, and personnel in charge of AI must create and maintain AI- conceptual representations of the AI framework, as well as continuously learn about how AI behaves when given varied inputs and parameters. Human mediation is being eliminated from many domains as AI evolves from basic to large-scale techniques. Managing AI necessitates learning reflexivity in the form of consideration, correction, and modification of both AI and human aspects. Two papers in the special issue look at the difficulties that arise when AI learns "truth" from data and from humans.

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C. **Managing Inscrutability**

AI becomes more complex and autonomous, it becomes increasingly difficult for humans to understand how it arrived at a particular decision or recommendation. This can create challenges for managers who need to explain and justify the decisions made by AI systems to stakeholders, such as customers, regulators, and employees. In addition, inscrutability can lead to unintended consequences, such as bias or discrimination, that may go unnoticed until they cause significant harm. Therefore, it is important for managers to develop strategies for managing inscrutability, such as using explainable AI techniques, implementing transparency and accountability frameworks, and investing in AI literacy and education for employees and stakeholders.

The original boundaries of AI were set by deterministic, explicit logic written into technology, such as based on rules intelligent expert systems. The utilization of data in AI, on the other hand, has changed, and new learning algorithms are less dependent on pre-programmed rules and supervision from humans, resulting in a transition from deterministic to probabilistic learning[17]. This has given rise to new dimensions of inscrutability, including opacity, transparency, explain-ability, and interpretability, which are interdependent and move from the algorithm to the human.

The lack of sight into an algorithm is referred to as opacity, whereas transparency refers to the desire of the algorithm's owners to provide details about it. Explain-ability refers to an algorithm's ability to be codified and understood, whereas the interpretability pertains to specific humans' understanding and sense-making. In the domain, sufficient clarification AI language signifies interpretability, and interpretability is based on the human's learning patterns and literacy.

In AI, incomprehensibility can occur. lead to ethical concerns and challenges for organizations, especially when decisions are made without a clear understanding of the underlying algorithmic processes. This is where the concepts of liability, accountability, culpability, and fiduciary responsibility become important. Liability refers to the legal responsibility that organizations may face in case of [30]harm caused by the AI system. Accountability is the obligation of organizations to take responsibility for the actions and decisions made by the AI system. Culpability refers to the degree of blameworthiness or responsibility that organizations may have for the actions of the AI system. Finally, fiduciary responsibility refers to the obligation of organizations to act in the best interest of their stakeholders.

To address ethical issues associated with AI, organizations need to ensure that they have a clear understanding of the level of opacity, transparency, explain-ability, and interpretability of their AI systems. This can involve implementing techniques such as model interpretability, data transparency, and algorithmic explain-ability to make the decision-making process more transparent and understandable. It may also involve establishing ethical guidelines and principles that guide the development and deployment of AI systems within an organization. Ultimately, managing the ethical implications of AI requires a proactive approach that prioritizes transparency, accountability, and responsibility

It is clear that inscrutability is a critical issue for managers when dealing with AI technologies. The examples from this special issue highlight the challenges of evaluating the performance of machine learning-based AI tools and the importance of having AI and R&D experience av-AI lable in upper echelons of firms to make strategic decisions about AI. As AI becomes more prevalent in organizations, it will be increasingly important for managers to understand issues of opacity, transparency, explain-ability, and interpretability to address ethical and liability concerns and make informed decisions about AI implementation.

Table 2 is not provided in the given text. However, the text suggests that managing AI involves various dimensions such as the AI is used in decision-making, ethical implications, and inscrutability. The issues related to managing AI cut across these dimensions and may invoke legal and regulatory issues. Each aspect has one probable future frontier that might perhaps be relevant to controlling AI in the not-too-distant future.

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			TABLE I. Original, Contemporary, And Potential Future Frontiers In Managing Ai		
Facets of AI	*Original Frontiers*	*Contemporary Frontiers*	*Papers in the Special Issue that Explore the Frontiers*	*Examples of a Future Frontier*	*Example of a Cross-Cutting Future Frontier*
Auton omy	Human-bracketed AI affordances for automating and informating	Generative agency of AI Conjoined agency between humans and AI	[13]Lou & Wu: Creativity and originality are the limits of AI's capacity for innovation. Teodorescu, Mores, Awwad, and Kane: Different forms of augmentation Bias in AI and related topics.	AI and physicality	
Learni ng	Structured	Large-scale trace	van den Broek, Sergeeva, and Huysman: Mutual learning between humans and AI is essential.	Adversarial learning	
	Proprietary	data			
	Datasets		[18]Fügener, Grahl, Gupta, and Ketter: Performance considerations between personal and group achievement must be addressed in human-AI communication contexts.		
		Human-	According to Sturm, Gerlac, Pumplun, Mesbah, Peters, Tauchert, Nan, and Buxmann, attentive human modification is necessary for AI learning to be successful in certain environments.		
	Human-driven	unmediated	van den Broek, Sergeeva, and Huysman: Mutual learning between humans and AI is essential.		
	data analysis	analysis			
			Fügener, Grahl, Gupta, and Ketter: Performance considerations between personal and group achievement must be addressed in human-AI communication contexts.		
			According to Sturm, Gerlac, Pumplun, Mesbah, Peters, Tauchert, Nan, and Buxmann, attentive human modification is		

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			necessary for AI learning to be successful in certain environments.		
			van den Broek, Sergeeva, and Huysman: Mutual learning between humans and AI is essential.		Ethical Issues
			Fügener, Grahl, Gupta, and Ketter: Performance considerations between personal and group achievement must be addressed in human-AI communication contexts.		
			According to Sturm, Gerlac, Pumplun, Mesbah, Peters, Tauchert, Nan, and Buxmann, attentive human modification is necessary for AI learning to be successful in certain environments.		
			van den Broek, Sergeeva, and Huysman: Mutual learning between humans and AI is essential.		
Inscru tabilit y	Explicit	Opaque and	Management and advisory boards must have enough variety and expertise to evaluate the strategic potential of AI, according to Li, Li, Wang, and Thatcher.	Social context and	
	Deterministi c	probabilistic		interpretabili ty	
	Logic	algorithmic logic	Lebovitz, Levina, and Lifshitz-Assaf: Understanding the difference between understand-what and knowledge is key to assessing AI[16].		
			Management and advisory boards must have enough variety and expertise to evaluate the strategic potential of AI, according to Li, Li, Wang, and Thatcher.		
	Manually	Self-evolving,			
	Generated	genetic deep	Lebovitz, Levina, and Lifshitz-Assaf: Understanding the difference between understand-what and knowledge is key to		

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			assessing AI[16].		
	Reasoning	Learning algorithms	Management and advisory boards must have enough variety and expertise to evaluate the strategic potential of AI, according to Li, Li, Wang, and Thatcher.		
			Lebovitz, Levina, and Lifshitz-Assaf: Understanding the difference between understand-what and knowledge is key to assessing AI[16].		
			Management and advisory boards must have enough variety and expertise to evaluate the strategic potential of AI, according to Li, Li, Wang, and Thatcher.		

V. CONCLUSION

In conclusion, the special edition AI aims to change the discussion around managing AI by emphasizing the need of a sociotechnical approach. The information systems field, with its tradition of sociotechnical thinking, has a unique opportunity to inform other fields about the challenges and solutions to managing AI. By focusing on both social and technical components, the field can become a reference discipline for managing AI. The goal is to pursue new ideas and cumulative knowledge to address the [28]complex issues associated with AI and help organizations effectively manage this technology.

It is clear that managing AI is a complex and multidisciplinary issue that requires a variety of approaches. As the editors of the special issue have experienced, traditional disciplinary boundaries are becoming less relevant in the face of the challenges posed by AI. The papers in the special issue include a diverse variety of professional methods, ranging from observation and interpretative research to interventionist and experimental investigations. The editors spent considerable time evaluating the rigor and potential contribution of each paper, reflecting the importance of ensuring that research on managing AI is both rigorous and relevant to the field. Overall, the special issue underscores the need for interdisciplinary collaboration and the importance of drawing on a variety of disciplinary perspectives in managing the challenges and opportunities of AI.

The impact of AI on the research community and scholarly conversation is not trivial. As AI technologies continue to evolve and become more integrated into research processes, it is important to be aware of the opportunities and challenges they bring. For example, AI may offer new and innovative ways to conduct research, but it may also AI concerns about bias, ethics, and inscrutability. As researchers, we must continuously reflect on how our own norms and processes may be challenged by the autonomy and learning capabilities of AI, and how we can ensure that our research outputs are transparent and trustworthy. Ultimately, the successful management of AI in the research community and beyond will require a multidisciplinary approach that takes into account both the technical and social dimensions of the phenomenon.

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