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Cognitive Reapportionment and the Art of Letting Go: A Theoretical Framework for the Allocation of Decision Rights

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ABSTRACT

We have entered an era where, in addition to us humans, systems can also think. It is imperative to decide how decision rights and authorities are allocated and distributed across interconnected co-cognitors: things that think. To address this question vital to the redesign of organizations, we reconceptualize cognitive reapportionment as the dynamic reallocation of decision rights and authorities across human and system co-cognitors capable of independent decision making. We articulate the *Helix Model of Decision Journeys*, wherein decision journeys, comprised of decision elements allocable to human or system co-cognitors, interweave and integrate business processes. The dynamic reapportionment of cognitive responsibilities across co-cognitors is dependent upon the type of scientific reasoning—deduction, induction, or abduction—at each decision element. We further propose two intertwined mechanisms for the art of letting go that facilitate the adoption of the Helix model. First, the nexus of omnipresent system co-cognitors collectively needs to evoke trust. Only when *Technology Trust Thresholds* are exceeded can decision making be reorganized and control relinquished to system co-cognitors. Second, the world of omnipresent cognitors will compel us to redesign, reprogram, and remix our workflow and business processes. Only through a purposeful effort to *Redesign in the Remix Regime* can the deduction-induction-abduction nature of decision tasks serve as the basis for their reapportionment.

KEYWORDS

Artificial intelligence; AI; organizational design; decision rights; cognition; intelligent systems; cognitive reapportionment; human-AI decisions

Introduction

As we enter the age of generative artificial intelligence (AI) and its ever-more powerful successors, the allocation of decision rights will undergo a profound transformation. The past few years have witnessed rapid progress in AI and our ability to leverage its capabilities in diverse systems. As a result, AI used to aid in the automation of tasks and to assist in decision making, is becoming increasingly capable of making decisions independently, without human intervention [2, 3, 18]. The expectations from this technology are unprecedented, with prognosticators envisaging futures wherein AI will have human-like interactional competencies and take over most forms of repetitive, creative, and decision tasks from humans [4, 7]. For decades, we have built trust in leveraging these abilities in systems

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of transport and system control. However, this raises important questions about how decision rights should be allocated between humans and AI. To manifest the potential of AI, there is a need to consider the employment of these capabilities in the redesign of organizations and decision making within them.

In the near future, we are likely to see a number of different ways to allocate decision rights between humans and AI [17]. One possibility is that AI systems will be used to make decisions in collaboration with humans. Humans will provide the overall direction and guidance, while the AI will handle the details. Another possibility is that AI systems will be given more autonomy to make decisions independently, with humans providing oversight and review. Yet another possibility is that humans and AI systems will independently handle different portions of a decision, with the final solution being an ensemble of the two outputs. How decision rights are allocated will have a significant impact on organizations, commerce, and society. For example, if AI systems are given too much autonomy, they could make decisions that are harmful to humans. On the other hand, if humans are reluctant to cede decision rights to AI, we may miss out on the potential benefits of AI, such as increased efficiency, productivity, and safety effects. However, time is of the essence; it is essential to consider the allocation of decision-making authority between humans and AI before sophisticated AI systems begin to make decisions beyond our understanding or control.

One way to organize our thinking about the allocation of decision rights is to consider the different types of decisions that must be made. Some decisions are relatively routine and can be safely delegated to AI systems. For example, AI systems are already used to make decisions about pricing products, routing traffic, and managing inventory. Other decisions are more complex and require human judgment and discretion [22]. For example, decisions about hiring employees, launching new products, and setting corporate strategy are still typically made by humans. As AI systems become more sophisticated, it is likely that they will be able to make more and more complex decisions on their own [25]. This implies that the line between decisions that are made by humans and decisions that are made by AI is likely to become increasingly blurred.

The distinction between decision types, when viewed in conjunction with the historical endeavors on cognitive reapportionment [8–10, 13], can serve as a lodestar for theorizing a framework for the allocation of decision rights. Cognitive reapportionment is "the design of organizational decision-making processes to allocate decision rights and authorities across humans, systems, and combinations of humans and systems in a way that optimizes the use of cognitive resources" [12, p. 3]. This manuscript offers scholars a theoretical edifice to design future organizations that shall consist of cognition and intelligence spread across humans and technical systems. It serves as the introduction to the special section on *Cognitive Reapportionment in the Era of Generative AI* and provides a setting for the portfolio of the four papers constituting this special section and the framework that embraces the portfolio and raises challenges and opportunities for others going forward. As we stand at the cusp of a new era in AI-based managerial decision-making, it is pertinent for us to challenge our way of conceptualizing business practice and decision-making therein, while learning the art of letting go.

The rest of this paper is organized as follows. We first present a definitional background on intelligent systems, cognition, apportionment, and reapportionment. We then articulate a middle way for future business practice through the swollen middle consisting of the coexistence of human and machine actors intertwined via cognitive reapportionment. Next, we present our *Helix Model of Decision Journeys* and explicate how cognitive reapportionment depends on the type of scientific inquiry at each decision element. We propose two intertwined mechanisms: *Technology Trust Thresholds* and *Redesign in the Remix Regime*, for the art of letting go, that facilitate deployment of the Helix model. Finally, we introduce the four papers in this special section and draw their varied connections to the concept and context of cognitive reapportionment.

Intelligent Systems and Cognition

Intelligence is the work of symbol systems, and accordingly, intelligent systems can be autonomous, agentic in nature, and can learn [23]. When considering intelligent systems, it is pertinent to consider cognition and the role of understanding in cognition because intelligent systems can realize cognition beyond human boundaries and capabilities. However, understanding is an entirely different idea necessitating human involvement as organizations of the future leverage intelligent systems, exemplified in the following quote. "Every teacher knows that there is a profound difference between a student learning a lesson by rote and learning it with understanding, or meaningfully. When something has been learned by rote, it can be regurgitated more or less literally, but it cannot be used as a cognitive tool." [23, p. 101]. These words of caution from Herbert Simon are very relevant today as various intelligent systems, such as large language models (LLMs), are known to generate persuasive texts without much understanding of the domain at hand.

Not surprisingly, a theory of human thinking cannot avoid reference to a unique characteristic cognitive skill of human beings, that is, the use of language [5, 15]. Accordingly, the recent avatar of intelligent systems, namely Generative AI, is perceived as "the voice of authority" on every subject, largely given their perceived ability to write in well-formed language. Generative AI effectively "lectures to a conclusion" and is rendering current generations of users rather passive as compared to information consumption via search, which still required the previous generation of users to exert some effort to consume search results. Cognitive tasks are complex and diverse and, therefore, encompass and extend beyond the use of language. Understanding is a critical prerequisite to achieving outcomes in cognitive tasks. These are critical considerations in the allocation of decision rights and authorities in AI-based organizations.

Since both humans and intelligent systems can perform cognitive tasks, AI-based organizations must be designed to apportion and reapportion cognitive responsibilities across both these types of agents (human and machine). Cognition must be transferred or relinquished to different agents based on the nature of the decision that needs to be undertaken. A distinction between apportionment and reapportionment is critical. Apportionment is the first allocation of decision authority to the actor that initiates the decision making. Reapportionment, however, is the process of "letting go" of decision authority, and it influences how control of decision authority is abdicated or retained in the future.

We illustrate the difference between apportionment and reapportionment with an example. What is popularly known today as prompt engineering is apportionment to a human actor who initiates a cognitive activity by directing a machine actor using text-based instructions. Needless to say, the prompts provided to Generative AI are important and have a bearing on the journeys that follow. Apportionment of decision authority to human actors influences machines and their learning in a goal-directed manner. The human actor may further reapportion cognition to the Generative AI through chain-of-thought-prompting. Reapportionment of cognitive authority during and at the end of the decision journey to human actors is vital, given that Generative AI is known to confidently hallucinate. Although it is necessary to abdicate cognitive responsibilities to machine actors occasionally, ascertaining the veracity of the outputs rendered by machines such as Generative AI is necessarily a human responsibility. In summary, cognitive reapportionment is a design concept related to the dynamic (re) allocation of decisions and cognitive responsibilities between humans and intelligent systems [12].

Swollen Middle and Middle Way of Cognitive Reapportionment

The activities-tasks-processes-technology-outcomes lens is appropriate when utilized for the technology-assisted manufacturing paradigm of the past. However, this passive technological lens is inadequate for examining the dynamic leverage of AI in the cognitive age heralded by recent advances in Generative AI. Given that the cognitive age will be organized in a fundamentally different manner, we propose that decision journeys are at the heart of business practice today. Accordingly, we articulate a perspective that places "decision journeys" at the core of organizing and business practice.

Much of the current discourse on intelligent systems has either (1) conceptualized humans and intelligent systems working in tandem on specific tasks [1, 4, 14] or (2) has abstracted to the organizational level and conceived these two as operating together without being bound together by specific objectives or structure [7, 20, 21]. We offer a *middle way* to conceptualize the coexistence of human and machine actors within and without organizations. Since organizations achieve their goals through a series of business decisions, we posit that business practice can be theorized as "bundles of decisions" [11, 12, 24]. These decisions are realized in the form of decision journeys that incorporate and traverse different decision elements and end in business outcomes. A decision journey interweaves business processes and integrates them into a holistic tapestry of business practice, whereby decision-making authority and control are seized and relinquished across human and machine actors, seamlessly. Thus, decision journeys incorporate a focus on cognitive reapportionment, involving a dynamic reallocation of decision rights and authorities across human and machine actors.

Consequently, we envision organizing business practice along a continuum aptly described using the metaphor of a *swollen middle* (akin to the prolate spheroid, a.k.a. the American Football). At one end of the spectrum, humans excel at certain tasks. For example, the publication of academic research is a peer-reviewed process for good reason. Humans are best equipped to judge the potential contributions of a manuscript. At the other end of the spectrum, there are many specific, narrowly defined tasks in which machines have surpassed humans. Having identified the two ends of the spectrum, we assert that most business practice is arrayed neither purely at the human end of the spectrum nor entirely "staffed" by machines but rather in the swollen middle, incorporating features of both human and machine actors intertwined via cognitive reapportionment.

At one end of the spectrum, we can envision stakeholders that resist using AI and insist on shouldering all the cognitive responsibilities themselves to accomplish their outcomes without leveraging AI. Some business practices will continue to be conducted in this manner. Needless to say, the publication of peer-reviewed scholarly research is one such example closer to our hearts. At the other end of the spectrum are *employee less firms*, a.k.a. ELFs. Such business practices will have relinquished control entirely to machine actors and will proceed without the explicit involvement of human actors. It is already possible to implement ELFs in certain domains where cognitive responsibilities can be relinquished to machine actors and humans are only minimally involved. Having envisioned both ends of this spectrum, we maintain that most business practice will be organized involving both human and machine actors, accordingly motivating our focus on cognitive reapportionment of decision rights and responsibilities across human and machine actors.

Helix Model of Decision Journeys

We propose that future organizations and their business practice shall consist of various human and non-human (intelligent system) actors working in consort to achieve outcomes and goals through interleaved and interweaved decision journeys. Decision journeys can be decomposed into decision elements, wherein each element can be apportioned to either human or system actors. These actors are defined as co-cognitiors [6] as they undertake cognitive responsibilities in service of goals via different decision journeys.

As decision journeys progress along decision elements, cognition can be reapportioned from the current co-cognitor (human or machine) to another. A cognitor is an entity that can perform an act of cognition [10, 13]. In our theoretical framework, the anatomy of reapportionment is dependent upon the type of scientific inquiry or reasoning that underlies the co-cognitor's responses to the decision element. Three types of scientific inquiry or reasoning influencing the allocation of decision rights and responsibilities are discussed next.

First, deduction entails certainties whereby if the premises are deemed to be true, the conclusions must be true. Second, induction, however, deals with probabilities. Leveraging large amounts of data, induction is adept at discovering patterns from the data and assigning probabilities to these patterns. Third, abduction pertains to the art of formulating hunches and providing plausible explanations [11, 16, 19]. Abduction is often commonplace in professions like law and medicine, wherein lawyers *practice* law and doctors *practice* medicine. Whereas medicine relies on a deductive theory of how organs and systems in the body operate, empirical evidence must also be inductively investigated, enabling an abductive diagnosis before treating a particular patient. Doctors, therefore, *practice* abductive reasoning as they interweave deductive theories of the human body with inductive patterns of observations to diagnose and treat ailments.

The allocation of decision rights at each decision element also requires attention to the locus of reasoning and cognitive abilities therein. Think of a sieve that only lets through particles of a certain diameter or lower. Is the sieve reasoning, or is this merely a mechanical process? Along similar lines, think of an algorithm that undertakes an action based on a certain value of a data item. The reasoning in both cases is outside the "system," and it resides in the human operating, orchestrating, or ordaining the system. Reasoning is not merely the discriminating between actions—it necessitates a deeper sense of understanding.

Humans are better at reasoning and, accordingly, are better at abduction [11, 16, 19]; therefore, as decision journeys progress, cognition can be relinquished to a machine co-cognitor based on the need for deduction or, to some extent, induction. This is because research has shown that machines may be better at induction or deduction. In our theorizing of decision journeys, cognitive reapportionment across co-cognitors is triggered based on the type of scientific inquiry or reasoning required at each decision element. Accordingly, the abductive nature of scientific inquiry will critically influence human involvement and shape business practice in future AI-based organizations.

Cognitive reapportionment involves delegating decisions and cognitive tasks to system co-cognitors. Thus, the twin constructs of (i) trust and (ii) control are intricately intertwined with the construct of cognitive reapportionment. As trust in system co-cognitors builds, human actors get accustomed to relinquishing control to system actors, and thus cognitive reapportionment realizes decision delegation patterns that result from the dynamic allocation of cognitive tasks to agentic systems.

In summary, the *Helix Model of Decision Journeys* (see Figure 1) encapsulates the chunking of decision journeys into tractable decision elements that are allocable to human and system co-cognitors, while allowing a dynamic reapportionment of cognitive responsibilities across both these types of co-cognitors as decision journeys unfold across business practices. Our helix defines a decision journey consisting of cascading reasoning responsibilities reapportioned to appropriate actors. In doing so, our theoretical abstraction accounts for cognitive responsibilities of an algorithmic nature, those that imbibe heuristic reasoning, or responsibilities that necessitate intuiting. Our theory focuses on decision journeys as a unit of analysis and cognitive reapportionment as a core dynamic design construct representing a unified field theory that embraces and interweaves all forms of "co-cognitors." Collectively, the cognitive chunks embedded in the decision journeys of our helix model will form the DNA of AI-based organizations of the future.

Our Theory as a Parable

We illustrate our theory with a parable. There was once a soldier and his companion horse who were assigned the task of delivering a fragile piece of pottery to another kingdom. The journey to the other kingdom had many challenges and obstacles. There were meadows of tall grass, rock-strewn fields, a shallow river to ford, and at some places, the path followed the precipice of a ravine. During the journey, depending upon the type of obstacle that they encountered, the soldier would change the location of the pottery that he was entrusted to deliver. When walking through tall grass, he sat on the horse and held the pottery in his hands. When crossing a field of rocks, he put the pottery on the back of the horse and allowed the horse to lead the way. When fording the river, he walked over the slippery stones while holding the pottery safe in his own hands. Walking along the precipice of a ravine, the soldier kept the pottery on the horse and walked in front, guiding the horse along the way. By dynamically allocating control of the fragile pottery to himself or the horse, the obstacles were navigated, and the soldier delivered the pottery and accomplished his task successfully. In this parable, the soldier is the human co-cognitor, and the horse is the machine co-cognitor. The path undertaken is the decision journey, and each obstacle faced along the way is a decision element. The piece of pottery is the cognitive responsibility, and therefore, the change of control of the pottery is akin to cognitive reapportionment.

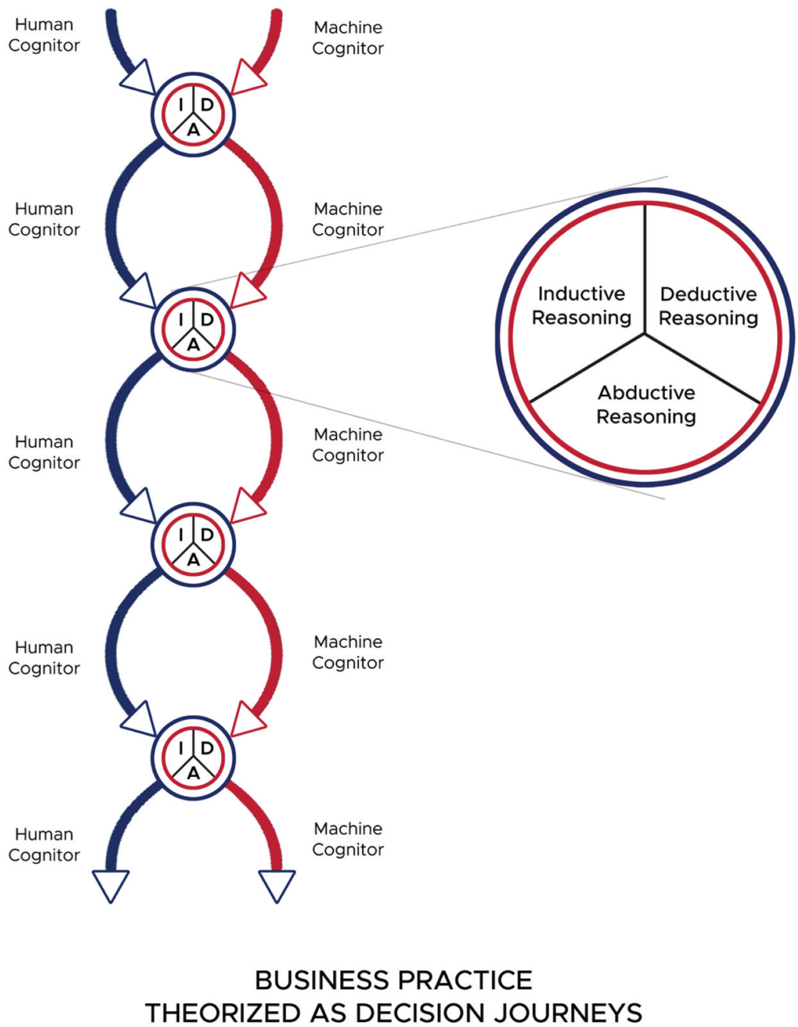

Figure 1. A Helix model of decision journeys.

Mechanisms to Deploy the Helix Model Through the Art of Letting Go

To facilitate the elaboration of our Helix model, we propose two intertwined mechanisms. First is the notion of developing trust in system co-cognitors. When trust in a technology exceeds a threshold, work can be reorganized, and control can be relinquished to the technology. The deployment of the Helix model to redesign organizations for the cognitive age will necessitate such trust in AI. We dub this mechanism as *Technology Trust Thresholds*. Autonomous driving provides a context for motivating the idea of technology trust thresholds. An autonomous vehicle may seem like a single entity, but its underlying composition and structure reveal a nexus of machine cognitors. In an era where avionics, barring flight takeoffs and landings, are largely autonomous, we find it difficult to relinquish our responsibilities for driving automobiles to machine agents. This is an example of co-cognitors not being given control as the technology does not cross the trust threshold.

Developing trust in machine co-cognitors will require system thinkers and administrators to undertake an assessment of each specific co-cognitor, the decision element, and its context. This may necessitate the explainability of the AI, the finitude of the decision, or the staticity of the context. If we seek to let go of control to AI systems, we must inculcate and engender our trust in these technologies, particularly as they operate in their "live" environments, to exceed appropriate thresholds.

Second, the widespread adoption of AI will compel a radical rethink and redesign of business processes. A systematic effort with this purpose will be necessary to deploy the Helix model. We dub this mechanism as *Redesign in the Remix Regime*. The current paradigm of business processes as the unitary organizational unit, encompassing business process modeling and value stream mapping, will require a shift to more elemental units as AI surpasses human capacities in many domains. Business practices must be broken down into their atomic elements of constituent decisions and the type of scientific inquiry or reasoning underlying responses to each decision element identified. Designers must delineate cognitive responsibilities at each element and assign them to appropriate human and system co-cognitors. Finally, these atomic elemental building blocks must be remixed to reimagine business practices anew in the form of decision journeys.

At this stage, it is pertinent to note that given its transformative impact, current conversations imply that Generative AI will form the basis of the cognitive age. However, Generative AI's key ability is to resemble how humans start and sustain conversations. In other words, what Generative AI seeks to accomplish merely resembles the conversational skills of humans. However, advances in other AI will enable the formation of a multitude of machine co-cognitors, capable of various cognitive and decision tasks. Such technologies are on a radical evolutionary path towards a capability of fundamentally reallocating cognitive responsibilities and decision rights to technologies and thus achieving true autonomy. What is even more intriguing is that the future will be fluid, and it will not rely on a fixed (re)allocation of cognitive responsibilities. Cognitive reapportionment will enable a fluid human-machine future, which will be adaptive such that under certain conditions and contexts, decision rights will be allocable on the fly.

Papers in This Special Section

The papers in this special section contribute to the evolution of the concept of cognitive reapportionment in different ways. Each brings new insight in the context of new capabilities from the advancement of technologies and new social and business practices.

The first study in this special section, "Understanding the Unintended Effects of Human-Machine Moderation in Addressing Harassment within Online Communities," by An Nguyen, Arun Rai, and Likoebe Maruping, addresses an important emergent phenomenon wherein the system and human co-cognitors are integrated within a decision journey. Over the past decade, online harassment has intensified, jeopardizing member participation and well-being within digital communities. In response, platforms are integrating bots into their content moderation processes, potentially remixing and reimagining the moderation process for scale. This research investigates the unintended consequences of human-machine moderation against online harassment in digital communities.

The authors hypothesize two potential outcomes in the focal community: an emboldening effect, which leads to increased harassment of outgroup members by dominant groups, and a disengaging effect, which results in declining membership of marginalized groups. Further, they anticipate a spillover effect of increased harassment in neighboring communities without this hybrid moderation. These hypotheses are assessed by examining 4 million Reddit comments leveraging a BERT-based model, Detoxify. Bayesian Structural Time Series analysis is applied to investigate changes in harassment levels pre- and post-implementation of human-machine moderation. This study contributes to the literature on online harassment and human-machine augmentation. It highlights that efforts to sustain diverse perspectives in online communities may unintentionally hinder vibrant discussions, which are crucial for synthesizing shared understandings. The introduced concepts of emboldening and disengaging provide valuable insights for addressing tensions in community moderation with solutions of human-machine co-cognitors. Recognizing the interconnectedness of online communities, the findings uncover not only the direct effects on the dynamics of the focal community but also ripple effects on neighboring communities. Thus, this research highlights the complex immediate and secondary impacts of integrating machine cognition into human-led moderation efforts.

The second study in this special section, "Competition and Cognition in the Market for Online News," by Abhishek Ray, Hossein Ghasemkhani, and Cesar Martinelli, addresses the shifting dynamics in online news market competition due to digital technology use in news production, increased consumer partisan polarization, and the corresponding media partisanship. News organizations have adapted to the advent of AI by reallocating cognitive tasks and using automated systems for tasks like article writing through the use of generative AI tools. However, the use of such tools is double-edged, necessitating an examination of the trust thresholds for these systems. While these tools can analyze vast data sets, there are trust concerns regarding factual accuracy and the potential threat to a balanced information environment, especially when AI-generated content is framed with partisan biases.

The authors develop a game-theoretic framework of the online news market and examine the competition between different types of news websites (neutral and partisan) targeting polarized consumers with specific cognitive biases. The analysis uncovers that in the race to maximize engagement-driven revenues, online news providers can strategically manipulate consumer perceptions. Neutral outlets, interestingly, benefit from an imbalance in polarization and the consumer's belief in their neutrality. Under specific conditions, such as increased search costs or consumer bias towards a news outlet's partisan stance, the echo-chamber effect—where consumers only engage with news reinforcing their beliefs, can be lessened. A key finding is that the classic "marketplace of ideas" view of news competition may be passe in the modern digital landscape, as consumers' varying perceptions of news content and sources complicate the dynamic. This research advances discussions on online news neutrality by providing new insights into source versus content neutrality in the face of increasing affective polarization. Its contribution lies in the uncovering of the economic implications of technology and cognitive reapportionment in journalism, its interactions with cognitive biases, and the role of partisan polarization in consumption within the contemporary news landscape.

The third paper in this special section, "The Effect of Digital Platform Strategies on Firm Value in the Banking Industry," by Maximilian Schreieck, Yongli Huang, Alexander Kupfer, and Helmut Krcmar, examines a context especially relevant to the deployment of system co-cognitors. This study examines investor reactions to announcements of digital platform strategies by a global sample of 165 banks. The findings reveal that investors, on average, respond positively to such announcements. Intriguingly, the positive effect is more pronounced for banks in emerging markets compared to those in developed markets. Most importantly, while banks' orientation towards AI was expected to amplify the positive stock market reaction, the results indicate a nuanced impact. Specifically, AI orientation is more beneficial for banks in emerging markets, while its effect on developed market banks is ambiguous. Thus, AI orientation enhances investor reaction to the announcement of digital platform strategies in emerging markets.

These results suggest that though digital platform strategies are valuable for incumbent banks, the impact of these strategies varies depending on the bank's market and AI orientation. The authors argue that AI orientation can help banks from emerging markets to increase the generativity of their digital platforms by providing third-party developers access to AI technology. However, investors in developed markets may be more skeptical of digital platform strategies from banks that are already investing in customer-facing AI solutions. This implies a deficit of trust in system co-cognitors within this context. This study contributes to the literature on AI business value in particular and, more broadly, to the vast discourses on information technology (IT) business value and digital globalization. It fills a gap in our understanding of the differential effects of digital platform strategies and AI orientation across global markets.

The fourth and final paper in this special section, titled "Abnormal Returns to AI Patent Infringement Litigations," is by John Sudeep Teli, Arun Rai, and Yu-Kai Lin. This paper advances a different line of inquiry related to the rise of AI and system cognitors. AI is providing a multitude of growth and innovation opportunities to firms. However, firms also face challenging new risks, such as patent infringement litigation (PIL) related to AI. This study examines the stock market reactions to AI-PILs for defendant firms as compared to firms involved in non-AI PILs. The authors find that firms entangled in AI-PILs experience more negative short-term abnormal returns relative to firms facing non-AI PILs. This divergence in the market reaction is because investors perceive AI-PILs as a more significant risk due to the unique complexities and potential opportunities tied with AI, as it remixes cognitive roles across AI, non-AI machines, and humans. The severity of these negative returns is influenced by the type of plaintiffs—either non-practicing or practicing entities—and the nature of the AI patents, whether expertise-driven or data-driven, suggesting that litigation risks and the subsequent market assessment of those risks differ between these categories. Particularly, the most significant negative impacts occur when non-practicing entities sue over expertise-driven AI patents and when practicing entities target data-driven AI patents.

This study contributes to the literature on AI business value, and more broadly, IT business value, and the literature on IT patent infringement by surfacing the risks posed by AI-PILs. The findings suggest that firms actively engaged in AI innovation need to proactively consider and mitigate the risks from litigation on AI patent infringement. These considerations will only increase as machine co-cognitors become more prevalent in the cognitive age.

Conclusion

We conceptualize extended intelligent systems à la the extended enterprise – going beyond the machine to incorporate the human through a framework of cognitive reapportionment. Our framework will serve as a guide for the (re)allocation of decision rights and authorities across extended intelligent systems. Through this manuscript, we invite information systems and organizational scholars to build *out* our conceptual *Helix Model of Decision Journeys* and conduct research along the possible strands of cognitive reapportionment, accompanied by technology trust thresholds and redesign in the remix regime. This perspective can be leveraged to examine the antecedents and consequences of future organizational forms and business practices involving intertwined, interlinked, and interdependent human and intelligent systems. We also offer an invitation to scholars to build *beyond* our model by widening their theorizing through extensions to the dimensions and contexts of this theoretical framework. Such examinations will be important and impactful endeavors as we become more entrenched in the cognitive age. Through this manuscript, we also introduce the special section on Cognitive Reapportionment in the Era of Generative AI. The papers in the special section and this manuscript provide an edifice for future scholars to extend their investigations on the co-existence of humans and intelligent systems within and beyond organizations.

Acknowledgment

This special section consists of a selection of the best research that was initially presented at the Workshop on e-Business. The author teams of the nine best papers out of thirty-one submitted their revised work, which then underwent several rounds of revisions, with each paper refereed by three reviewers and the three editors of the special section. We express our gratitude to all the authors and reviewers for their contributions. The four papers that appear in this special section represent the very best of the research from this endeavor. We conclude by acknowledging and thanking Devina Chaturvedi for her assiduous and excellent editorial assistance and research support.

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No potential conflict of interest was reported by the author(s).

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