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POINT OF VIEW

NFT-enabled organization design: prospects, promises and hurdles

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Abstract
Non-fungible tokens (NFTs) are digital assets based on blockchain technology that are increasingly being used for various applications in organizations. Given NFTs' unique technological features, we posit that traditional, centralized organizations can adopt them to introduce novel solutions to the fundamental problems of organizing, namely, division of labor and integration of efforts. We examine the prospects and promises of NFT-enabled organization design and suggest how organizations can navigate its potential hurdles. We discuss critical boundary conditions for the deployment of NFTs in organization design and conclude by articulating how our *Point of View* article contributes to scholarship on blockchain technology and decentralized autonomous organizations (DAOs).

Keywords NFTs · Blockchain · Organization design · New forms of organizing · Decentralized autonomous organizations (DAOs) · Future of work

Introduction

NFTs, or non-fungible tokens, are rapidly becoming a forceful technological and economic phenomenon (Nadini et al. 2021). These tokens grant certifiable ownership of digital (e.g., image, video, audio) and real-world (e.g., land, artwork) assets, relying on an immutable digital passport recorded on a blockchain—a distributed ledger in which users can record their virtual transactions (Swan 2015; Wang et al. 2021). Unlike conventional cryptographic assets based on blockchain technology (such as Bitcoin and Ethereum), NFTs are not interchangeable, hence the term *non-fungible*. Because blockchain technology enables perfect traceability and authentication, NFTs are increasingly being used in digital exchanges for trading various assets. Although the early adoption of NFTs was concentrated in the art market, it has now spread to other industries, ranging from entertainment to transportation, with traditional organizations increasingly experimenting with the technology in real use cases (Chalmers et al. 2022; Luke et al. 2021). With Amazon's recent announcement that it will launch its own NFT marketplace offering the possibility of buying digital collectibles linked to the physical goods delivered to clients' doorsteps, NFTs have gained renewed attention in the business world (Art Plugged 2023). Within the span of a few years, the NFT market volume has already reached a critical mass of around $26 billion (Baytaş et al. 2022).

Yet, despite the tremendous enthusiasm around NFTs, their application within organizations has so far been limited to marketing and supply chain management. For instance, some firms are disrupting the current marketing landscape using NFTs to increase customer engagement (Mueller et al. 2022). Coca-Cola issued an International Friendship Day NFT to engage customers in shared celebratory moments through NFTs. Another case in point is the beverage company Anheuser-Busch, which organized an NFT Beer Fest at its flagship brewery in March 2022 exclusively for the holders of company-specific NFTs. NFTs allow for an elaborate approach to create incentives beyond the traditional way of granting exclusive access, such as gated or premium offers (Nelson 2021). Indeed, as NFTs are digitally unique, customers tend to perceive them as scarce assets, which increases their value and

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desirability. Marketers have also begun to leverage NFT programmability by sending additional products, gifts, or vouchers to holders of a specific NFT, which engenders meaningful user experience and fosters community engagement around their brand (Chohan and Paschan 2023; Kaczynski and Kominers 2021). NFT holders can access an exclusive community, and belonging to this community may become an important part of their personal identity. Therefore, NFTs can strengthen brand image when customers identify strongly with an exclusive community. Furthermore, given their digital footprint and data tracking capabilities, NFTs are also disrupting the supply chain industry by reducing costs, eliminating bottlenecks, and fostering transparency in the supply networks. For instance, predicting and tracking the real-time movement and shelf life of perishable goods can effectively reduce waste. The company Koinearth uses NFTs to track physical goods across the supply chain (TZ APAC 2021). Hofstetter et al. (2022), Chohan and Paschen (2023), and Chod et al. (2020) provide extensive reviews on NFT use cases for marketing and supply chain management in organizational settings.

Beyond these popular NFT applications in marketing and supply chain management, in this article, we posit that organizations can harness NFTs' unique features to introduce novel solutions to the fundamental problems of organizing (i.e., division of labor and integration of efforts). We specifically focus on how NFTs, relying on emerging blockchain technologies, may benefit traditional (i.e., centralized) organizations by complementing solutions to those important problems. NFTs can introduce novelty in task allocation, task ownership, and incentive design. Our framework reveals how NFTs enable some degree of "decentralization" in traditional organizational contexts, a novel research avenue that needs further exploration. This paper contributes to scholarship on blockchain technology and decentralized autonomous organizations (DAOs) by revealing that NFTs can benefit traditional organizations without the need to fundamentally transform their structure. We first provide an accessible introduction to NFTs, their key properties, and current applications. We then present extant research on the ways blockchain technology impacts organizations and conceptualize NFT-enabled organization design, illustrating our central arguments through relevant application cases. Our aim is to provide novel insights into how traditional organizations can leverage NFTs to complement existing solutions to solving the most fundamental problems of organizing. We also emphasize that NFTs are not a panacea for solving those problems and reveal how organizations can navigate the organizational and technological hurdles that plague NFT-enabled organization design. We conclude by providing crucial boundary conditions for the deployment of NFTs in organization design and discussing our theoretical contributions.

NFTs: background, properties and current use

NFTs are unique and non-interchangeable digital tokens that are recorded on a public ledger (i.e., the blockchain). They can be instantly minted and transferred through smart contracts on the blockchain. Immutability and transparency are key properties of blockchain technology that have been studied in earlier work (e.g., Friedlmaier et al. 2018; Lumineau et al. 2021). NFTs instantly secure the ownership of unique assets, because they are recorded on a blockchain that makes each transaction irreversible. NFTs also feature perfect transparency. Every time an event associated with an NFT (such as its creation or sale) occurs, a non-editable, visible record is made in the blockchain (e.g., Ethereum), which enables users to verify each transaction without third-party involvement. The following three properties are unique to NFTs and remain unexplored in organization design scholarship:

(i) Representativity: NFTs are a digital representation of digital or physical assets (Chandra 2022), which may comprise artwork, music, videos, event tickets, or luxury goods. NFTs can also be used as a digital certificate of ownership for intellectual property, such as patents, copyrights, work tasks, or ideas, which gives NFT holders the possibility to monetize them and control their usage.

(ii) Collectability: NFTs are unique digital assets, as they are non-fungible by design. By contrast, other blockchain-supported assets, such as cryptocurrencies, are fungible and thus can be traded one for another. Since NFTs are unique, users can collect them and store them to benefit from both their economic and non-economic value. People may want to collect NFTs, as they may provide entertainment or reinforce their holders' social status (Serada et al. 2021). NFTs' uniqueness makes them desirable in certain communities and implies that they have an idiosyncratic economic value that may potentially grow over time.

(iii) Exchangeability: NFTs enable the ownership of unique assets that are exchangeable in virtual markets. Chandra (2022) defines NFTs as "a digital representation of an asset that is written in a 'smart contract' […] and tradeable using digital cryptocurrencies […]" and "a system to claim, represent, store, and move value (i.e., within virtual worlds) using smart codes" (p. 1). Relying on smart contracts, NFTs can be traded in virtual marketplaces such as Binance, Uniswap, OpenSea, Axie Marketplace and Nifty Gateway at minimum service and trading fees.

Drawing on those key properties, marketing professionals have started to design NFTs to grant exclusive rights to their customers and improve brand image. For instance, the

South Korean automaker KIA created 10,000 NFTs coined "Robo Dog NFTs" and adopted a two-step method for their purchase (Kia 2023). KIA initially offered 10,000 "Robo Dog Adoption Pass NFTs" on a first-come, first-serve basis, and each of these granted early access to the opportunity to purchase one actual "Robo Dog NFT" for the preferential price of $20.22. KIA then auctioned the remaining original NFTs with a starting bid of $299. Another important use case is in supply chain management (e.g., Chod et al. 2020), where firms can rely on NFTs to improve accuracy of product tracking, given that all events in the supply chain are indelible and visible on the blockchain, from the product's point of origin to its final consumption. For instance, the luxury watch brand Breitling has introduced an NFT passport for each of its watches, thereby facilitating the verification of their authenticity and reducing exploitative behavior. This NFT passport is linked to Breitling's warranty program, enabling holders to track past repairs of their watches (Sophir et al. 2021).

Conceptualizing NFT-enabled organization design

Despite the growing interest in NFTs, our review shows that their application in organizations focuses on the fields of marketing and supply chain management. Organizational scholars still lack in-depth insight into how NFTs can improve organization design. While some academics suggest leveraging blockchain technology in organizations, their proposed applications hint at decentralized mechanisms that would primarily benefit DAOs or require transformation of existing organizations into DAO-like systems (Vergne 2020). For instance, some have argued that blockchain facilitates cooperation and coordination in ways that differ from contractual agreements or relational governance (Lumineau et al. 2021). Blockchain governance, the "self-contained and autonomous system of formal rules" (p. 506), enables enforcement that does not rely on the law or value of future relationships, but on protocols and code-based rules that occur autonomously. It relies on machine consensus that enables accountability, predictability, and mutual understanding, which substitutes for contractual or relational governance (Lumineau et al. 2021) and facilitates intraorganizational collaboration (see Kim and Laskowski 2017; Loten 2018). Within this perspective, past work has examined how blockchain supports high levels of decentralization of digital platforms (Hsieh and Vergne 2023), where algorithms substitute hierarchical authority to coordinate across both time and space. On those digital, decentralized platforms, tasks can be distributed without central authority as contributors self-select into tasks, and compensation is determined algorithmically and not based on employment contracts and managerial evaluations. There is little doubt that blockchain can be deployed as a facilitator of structural coordination, meaning that it fosters the division of labor, roles, and responsibilities (e.g., Chandra 2022).

In this article, we posit that traditional, centralized organizations may particularly benefit from NFTs to find novel solutions to existing problems of organizing and incorporate selected features of DAOs without radically transforming their organization design, which may encounter less organizational resistance. In this section, we elaborate further on the universal problems of organizing and offer conceptual insights into NFT-enabled organization design. Table 1 displays the dimensions of organization design that can benefit from NFTs, the design opportunities that this technology enables, the specific benefits enabled by NFTs' unique features, and an example for each dimension.

Universal problems of organizing

We first evoke the basic notion of organizations and their fundamental problems of organizing. We draw on Puranam et al. (2014) to portray an organization as "(1) a multiagent system with (2) identifiable boundaries and (3) system-level goals (purpose) towards which (4) the constituent agent's efforts are expected to make a contribution" (p. 163). The functioning of such an organization requires solutions to the two unavoidable and interlinked problems of division of labor and integration of efforts (Burton and Obel 1984).

Division of labor includes task division and task allocation. While task division refers to the decomposition of organizational goals into a set of interrelated tasks and subtasks, task allocation is the problem of mapping interrelated subtasks to individuals or groups by matching their expertise and experience with the subtasks' requirements (Hackman and Oldham 1976). Task ownership, which makes task allocation more effective, refers to individuals believing that they are accountable for the outcome of the tasks, both in terms of quality and timeliness. The integration of efforts involves mapping a set of rewards to organizational agents to incentivize them to cooperate in accomplishing specific tasks[1] (Gulati et al. 2005; Heath and Staudenmayer 2000). There is significant research on conceptualizing, formulating, and identifying solutions to these problems of organizing (refer to Puranam 2018 for a concise review). Next, we suggest how NFTs could facilitate novel solutions to the problems of division of labor and integration of efforts.

[1] We acknowledge that rewards are not the only factors that affect work motivation. Because individuals strive for purpose and meaning, other factors, such as communion (i.e., acceptance in relationships and getting along with colleagues) and belonging, must be present to ensure a smooth integration of efforts (Barrick et al. 2013).

Table 1 NFT-enabled organization design

Organization design dimensions	Organization design opportunities	Benefits enabled by NFTs' unique features	Examples
Division of labor	Facilitating (sub)task allocation	NFT representativity and exchangeability enable NFT holders to trade ownership of (fractions of) tasks with other employees or external parties in a decentralized marketplace. It may help trust building among NFT holders and reinforce their feelings of belonging to specific work communities Fractionalized NFTs may facilitate subtask allocation in teams without relying on trust	Representing ownership of work tasks through an NFT, where each team member owns a fraction of it. Fractionalized NFTs can serve as an alignment device that encourages team members to optimally distribute work within a team
	Improving efficiency in task self-selection	NFT representativity and exchangeability enable a two-step task allocation that may enhance both expertise-task matching and task motivation	KIA-inspired two-step process for task allocation: i) Task NFTs given to employees matched according to expertise recognition processes (self-assignment) ii) Remaining tasks made available to non-NFT holders in a decentralized marketplace
	Enhancing task ownership	NFT representativity offers new ways of claiming or enacting ownership. It can enhance task allocation as employees may feel intrinsically motivated to self-assign to tasks if they can own them once completed NFT collectability enables employees to accumulate ownership rights of accomplished tasks over time, thereby increasing task identification. Employees can also show off collected NFTs, which may increase their social status and feelings of belonging within a work community	Representing ownership of accomplished tasks through NFTs in a project management tool (e.g., Slack)
Integration of efforts	Rewarding original idea contributors	NFT representativity allows organizations to associate ideas to NFTs	Pearson-inspired idea generation and sharing platform. NFT-enabled smart contracts can reward original contributors with royalties for each successive reuse and transfer of their ideas
	Limiting crowding out effects of monetary incentives	NFT exchangeability enables organizations to reduce their reliance on monetary incentives for certain tasks and potentially mitigate crowding out effects on intrinsic motivation NFT collectability implies that NFT holders can reach specific thresholds linked to promotions and enhancement of career prospects	McDonald's-inspired NFTs to distribute to employees as incentives that can be exchanged for other digital assets or material goods in virtual marketplaces

NFT-enabled division of labor

We propose that NFTs can contribute novel solutions to fundamental problems of the division of labor by facilitating (sub)task allocation, improving efficiency in the self-selection of tasks, and enhancing task ownership. First, (sub)task allocation can be facilitated by NFTs because of their representativity and exchangeability. NFT holders can trade ownership of tasks (or fractions thereof) with other employees or external parties in a decentralized marketplace. Frequent virtual exchanges of NFTs may build trust among NFT holders and reinforce their feelings of belonging to specific work communities. Further, organizations can facilitate team coordination through fractionalized NFTs, which rely on smart contracts that divide an NFT into multiple fractions, each representing partial ownership of the parent NFT (see Bertocchi 2023). Hence, holders of a shared NFT (representing a work task) may allocate subtasks among themselves without necessarily having to trust their co-holders. Indeed, each team member owns a fraction of a team NFT, which serves as an alignment device that encourages team members to optimally distribute work and achieve the highest task performance as a team.

Second, NFTs can improve efficiency in the self-selection of tasks. Similarly to the KIA example above, one could envision a two-step process for task allocation in which organizations give first access to task NFTs to employees based on their expertise. These employees can self-assign to these tasks, and the remaining tasks can be made available to non-NFT holders in a decentralized marketplace in the second stage. NFTs' unique features of representativity and exchangeability enable this two-step task allocation, which may enhance both expertise-task matching and task motivation. In task allocation, NFTs enable meritocratic principles by matching knowledge and skills to open tasks regardless of employee characteristics such as gender, ethnicity, or political beliefs. Therefore, organizations can employ NFT-enabled task allocation to level the playing field for underrepresented or disadvantaged groups and thus advance their diversity and inclusion agenda.

Third, the application of NFTs in the division of labor can enhance task ownership. Notably, NFT representativity offers new ways of claiming or enacting ownership (Chalmers et al. 2022), which enhances task allocation, as employees may feel intrinsically motivated to self-assign to tasks if they can own them once completed. In fact, NFTs can facilitate tracing of what tasks are assigned to which individuals, the progress on such tasks, and potential outcomes of accomplished tasks (e.g., increased sales). For instance, many contemporary project management tools (e.g., Slack) facilitate cooperation and coordination by solving task interdependencies among team members. While performed tasks are typically visible on those platforms, their ownership remains opaque and is difficult to trace over time. Representing the ownership of accomplished tasks through NFTs ensures that consensus on task ownership is maintained in an organization and prevents employees from self-appropriating future rewards for accomplished tasks. NFT collectability can enable task owners to accumulate ownership rights of accomplished tasks over time (similarly to collectibles in contemporary gamification systems), thereby increasing identification with such tasks. Furthermore, showing off collected NFTs may increase NFT holders' social status and feelings of belonging within a work community.

NFT-enabled integration of efforts

We propose that NFTs can benefit organizations' integration of efforts by providing novel forms of incentives that reward original idea contributors and limit potential crowding out effects of monetary incentives. First, novel forms of incentives through NFT distributions can foster idea generation and sharing and complement other rewards aimed at increasing employee commitment to the organization (e.g., stock options). NFT-enabled smart contracts[2] can promote idea generation and sharing, as organizations may represent ideas as NFTs to reward original contributors for each successive reuse and transfer of their ideas. Use cases in marketing inspire such novel forms of incentives. For instance, textbook publisher Pearson plans to profit from secondhand sales by turning its digital textbooks into NFTs (Knight 2022). Artists increasingly use NFT-enabled smart contracts to receive a royalty on their work every time it is sold. Organizations can set up an idea generation and sharing platform and use NFTs to distribute royalties to original contributors for the successful sharing or implementation of relevant ideas.

Second, NFTs can potentially mitigate the prevailing crowding out effect of monetary incentives on intrinsic motivation (Frey and Jegen 2001). Indeed, an idiosyncratic characteristic of NFTs in a reward context is that they can be flexibly tuned to cover an entire range of incentives. For example, organizations already use NFTs to reward their customers, such as McDonald's France, which has created pieces of art NFTs of its flagship products (Yeo 2021). By the same token, organizations can reward employees with NFTs that can be used as a status symbol within the organization or exchanged for alternative digital assets or material goods (e.g., vacation coupons, wellness offerings, sponsored meals). Enabled by exchangeability, NFTs can reduce reliance on monetary incentives for certain tasks (e.g., the ones that require creativity or organizational citizenship).

[2] Smart contracts are computer programs that trigger an action when predetermined conditions are met.

Employees may also collect NFTs and reach specific thresholds that can be linked to promotions and enhancement of career prospects, which may potentially boost internalized extrinsic motivation (Roberts et al. 2006).

Navigating organizational and technological hurdles

Despite the many promises of NFT-enabled organization design, the design and deployment of NFTs within an organizational setting is likely to face many hurdles of organizational and technological nature. For instance, various design choices need to be made, such as what kind of smart contracts to deploy, what type of NFTs to link to which tasks, or which criteria should governg the expertise-task matching. Each of these design choices involves trade-offs favoring one group of individuals over another and could shift the existing paradigm of influence and power based on seniority and hierarchy to a new paradigm. For instance, software developers may play an increasingly significant role (see Hsieh et al., 2018), as they will need to translate business needs into smart contracts, jointly decide the processes and outcomes of algorithmic rules, and explain their code to the many stakeholders that are impacted by it. As smart contracts rely on algorithms that can be difficult to comprehend for humans, there is a risk that developers could manipulate algorithms or write algorithmic rules that exacerbate existing biases or create new ones.

The influence of HR professionals may also increase, as they will need to provide their expertise (e.g., on incentive systems) in design decisions taking place at the strategic level given their manyfold implications for employee motivation, organizational justice, and culture. Such shifts in HR professionals' influence could result in conflicts and slow down the adoption of NFTs for the division of labor and integration of efforts. For instance, power conflicts between the parties involved in designing the new incentive system may generate distrust and consequently reduce motivation to create new knowledge among the individuals at the receiving end of those design choices. To preempt and mitigate such adverse effects, organizations could employ a cross-functional team for designing and deploying NFTs. Developers may design smart contracts and related NFTs, while other stakeholders, such as specialists in finance or labor law, may be involved in negotiating contract rules.

The adoption of a new technology is typically met with resistance and negative perceptions by employees (e.g., Kellogg et al. 2020). These challenges are attributed to a lack of understanding of the technology itself and to organizational changes that any such adoption catalyzes (see Goldsby and Hanisch 2022). Using NFTs to represent work tasks and ideas could raise many fairness and legal concerns that still need to be addressed. For instance, as knowledge creation typically involves many individuals, from the ideator, the idea champion, to the idea implementor, the royalties resulting from profits of specific knowledge artifacts should be transparently and fairly shared among all involved individuals to incentivize knowledge creation and sharing (Bartol and Sritastava 2002). From a legal perspective, smart contracts need to comply with labor, tax, and financial regulations, which creates significant compliance issues and reduces their appeal.

For collectability, there is the risk of "collector fatigue", which occurs when collectors become disinterested in specific NFTs. This can be detrimental to employees' feelings of belonging and social status if those were strongly associated with their NFT collection. Organizations may mitigate this risk by borrowing gamification principles from the deployment of NFTs in marketing. For instance, reaching specific milestones may give rewards to collectors in the real world, thereby enhancing the appeal of NFT collectability (Hymel 2022).

Furthermore, organizations that implement NFTs become dependent on the technology on which NFTs rely, such as proprietary blockchains, which have the risk of being discontinued by developers. Organizations may also lack the technological maturity to implement NFTs in organization design without taking any major risks, as blockchain technology needs advanced networks and hardware infrastructure (Lumineau et al., 2021). Other technological hurdles involve potential fraud and cyberattacks due to the newness of the blockchain technology, which may create instability in the use cases. For instance, FTX, one of the largest global crypto exchanges, spectacularly collapsed in November 2022 because of a liquidity crisis sparked by concerns of undisclosed leverage and solvency. Its CEO, Sam Bankman-Fried, was arrested and charged with fraud (Reiff 2023). Consequently, stricter regulations to ensure trust and stability will likely constrain the way blockchain technology evolves in the near future.

Deploying NFTs in organizations: some boundary conditions

Besides the above-mentioned organizational and technological hurdles that may hinder the adoption of NFTs in organization design, we acknowledge the many boundary conditions of deploying NFTs. First, while NFTs can be applied in both internal and external labor markets, we argue that NFT-enabled division of labor is particularly effective in hierarchical settings, in which the pool of internal candidates for work tasks is constrained and there is little need for labor market intermediaries (e.g., headhunters) as information is more symmetric. Organizations can then gather a

large set of ability signals on a constrained pool of internal candidates to reduce uncertainty in task allocation (Bidwell et al. 2015). NFTs facilitate task allocation in hierarchical settings, because they reveal new ability signals that are specific to the internal job market. For instance, NFTs enable organizations to trace the contributions (e.g., increased sales) of accomplished tasks, whose ownership is visible on the blockchain, which supports organizations in quantifying relevant employees' contributions.

Second, we have argued that the machine-coded authentication of tasks with NFTs can strengthen trust in the division of labor, as holders of a shared NFT can coordinate without necessarily having to trust the other holders. We claim that uncertainty reduction and trust building will be stronger whenever relationships are in their initial stage (e.g., in free markets). In large multi-business firms or project-based organizations (e.g., professional service firms), employees may join new teams and start fresh relationships as they start new projects, which means that the internal market has similarities with a free market where individuals are not yet interconnected (e.g., Bidwell and Keller 2014). Hence, trust building through NFTs may be particularly effective as the relationship tenure is low. In contexts where employees and teams have a long history of prior interactions, NFTs can facilitate trust for constellations of relationships that have suffered from trust breaches.

Third, we claim that NFTs can specifically support task allocation in organizations that rely on highly specific human capital, because those organizations cannot leverage labor market intermediaries or external referral networks (Pieper 2015) to source information on such candidates and reduce uncertainty. NFTs can capture ability signals on skill- (or firm-) specific knowledge generated by potential candidates over time to help organizations match their expertise to skill- (or firm-) specific tasks. In contrast, deploying NFTs in task division may prevent teams from using their tacit knowledge on expertise-task matching built over time, which may potentially lead to suboptimal decisions on task division in situations where such tacit knowledge significantly reduces uncertainty on candidates' skills.

Fourth, we argue that the gains from NFTs in task division and integration of efforts may depend on the type of tasks. We claim that NFT-enabled task allocation is more suited to non-routine tasks, because their allocation requires more flexibility and has less efficiency. Furthermore, as NFT-enabled organization design draws on decentralization, its benefits are likely to override its cost in contexts where tasks are decomposable and can be completed in a linear and sequential order (Zhou 2013; Karim et al. 2023). We expect that NFTs will introduce complexity and coordination costs that may override their benefits in settings where subtasks involve high uncertainty and interdependence (i.e., they cannot be performed sequentially). Next, we recognize that deploying NFTs as individual incentives may introduce autonomy and enhance individual goals, yet these incentives can reduce prosocial behavior, interpersonal communication, and team-level collaboration (Wright et al. 1993; Richardson et al. 2002). As a result, economic gains resulting from the deployment of NFTs in the integration of efforts could occur at the expense of a collaborative organizational culture. In essence, the net benefits of decentralization depend on the feasibility of linking rewards to the tasks completed. To mitigate these potential detrimental effects, organizations should examine the features of tasks under consideration and only introduce NFTs when tasks are decomposable and interdependencies between subtasks are low. Further, they should deploy NFTs as individual incentives in combination with team- and organizational-level incentives. Organizations may use fractionalized NFTs that can be shared among many employees or teams to foster collaboration within and across teams, prosocial behavior, and a more collaborative organizational culture.

Discussion

In this paper, we argue that traditional organizations can leverage three key features of NFTs—representativity, collectability, and exchangeability—to create novel solutions to their fundamental problems of organizing. While past work has identified important organization design opportunities based on blockchain technology, we present NFT-enabled organization design solutions that require little resources to deploy, as they do not require a holistic organizational change. Specifically, we draw from and extend management scholarship on blockchain technology that has primarily focused on the extreme cases of DAOs (e.g., Hsieh et al., 2018). We add to recent work (e.g., Murray et al., 2021) that has examined how blockchain technology can mitigate or remove certain agency costs resulting from contracting with agents within traditional firms. Rather than reducing contracting costs between principals and agents, we posit that NFTs can mitigate horizontal coordination issues within and across teams and result in more efficient division of labor and integration of efforts. NFTs, relying on emerging blockchain technologies, bring novelty to task allocation, task ownership, and reward systems. We invite management scholars to explore which design components of DAOs enabled by emerging technologies could be useful to identify novel solutions to key problems of organizing in traditional organizations. For instance, future work could explore how decentralized governance principles of DAOs could enhance democratic processes and organizational fairness in decisions about division of labor and integration of efforts (e.g., reward systems) in traditional organizations.

Our work contributes to research at the intersection of blockchain and organizations (Lumineau et al. 2021; Hsieh and Vergne 2023) by suggesting that in traditional organizations, relational enforcement through NFTs is an important mechanism of blockchain governance. We argue that to facilitate task allocation, organizations can enable employees to exchange NFTs with other employees in a decentralized marketplace. Further, to improve task ownership, employees can accumulate NFTs of accomplished tasks over time, which increases their identification with the tasks. As a result, NFTs can enhance employees' feelings of belonging to specific work communities, which may incentivize them to keep to their agreements, as deviations would have severe societal costs.[3] In other words, beyond the benefits of leveraging blockchain technology to curb opportunistic behavior through automatic execution of transactions (e.g., Lumineau and Oliveira, 2020), our work suggests that NFTs have notable features that contribute to relational enforcement in blockchain governance.

In sum, our *Point of View* article articulates the prospects, promises and hurdles of NFT-enabled organization design. We hope that it will inspire management scholars and practitioners to further engage in this promising field.

Authors contributions PNT and YRS jointly developed the initial idea, searched for relevant examples, and built the theory. Both authors contributed to, read, and approved the final manuscript.

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Declarations

Competing interests The authors declare that they have no competing interests.

[3] Gil and Zanarone (2017) discussed potential threats that collaboration may stop and future benefits may be lost ("shadow of the future").

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