

DECENTRALIZATION IN ORGANIZATIONS: A REVOLUTION OR A MIRAGE?

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Along with the explosive growth in decentralization of organizations and in research that studies them, skepticism has emerged regarding the possibility that decentralization is a “mirage.” Specifically, the real-world effectiveness of decentralized forms of organizing has been both praised and challenged. In other words, is decentralization a revolution or a mirage? We address this question by first examining the “ideal” form of centralized organization—bureaucracy—introduced in the 1920s. We then identify key temporal pivot points that launched new trajectories of decentralization with increasingly distributed decision-making, disrupting the ideal. We identify four pivots (multidivisional, organic, community, and platform), discuss how each challenged bureaucracy’s core assumptions of an ideal form of organizing, and highlight both the advantages and the potential limitations of each. We conclude that recent decentralization trends represent neither a revolution nor a mirage. Rather, we uncover a resurgence of evolving decentralization concepts, developed across these four historical waves of disruption. We end our review with an integrative theoretical framework that offers a fresh perspective on decentralization. It suggests opportunities to develop and validate novel theoretical claims and directs scholarly efforts toward overlooked areas such as temporal dynamics, feedback loops, measurement, and the reversal of decentralization efforts.

Organizational structure, as Mintzberg (1979) defines it, is the way in which an organization divides work into distinct tasks and then coordinates the work. Integral to this division and coordination are three core attributes that guide the design of an organization (Burns & Stalker, 1961; Mintzberg, 1979; Pugh, Hickson, Hinings, Macdonald, Turner & Lupton, 1963; Scott, 1992): the degree of formalization (e.g., elaborate vs. few procedures), the degree of specialization (e.g., precise vs. fluid roles), and, our focus in this study, the degree of centralization (e.g., hierarchical vs. decentralized authority).

The degree of an organization’s centralization is inherently about the locus of decision-making. In traditional centralized structures, “participants in peripheral positions send information to the

center ... where a decision is made,” and then decisions are “sent back out to the periphery” for execution (Vroom, 1969: 242). Decentralization shifts this dynamic, turning participants in peripheral positions into decision-makers.¹

In the beginning of the 20th century, centralized organization with hierarchical authority (i.e., bureaucracy) was widely regarded as the ideal type of organizational structure (Monteiro & Adler, 2022; Weber, 1947: 196). Since then, however, uncertain environments and the growing complexity and ambiguity of tasks, coupled with the need to leverage the intellectual resources and enthusiasm of peripheral participants to get the tasks done, have driven a shift toward decentralization (Scott, 1992). Consistent with the literature that we reviewed, we define *decentralization* as the degree to which decision-making authority is distributed in an organization (i.e., delegated down the hierarchy, away from a central authority).

We thank our editor, Bill McEvily, as well as Phanish Puranam, for discussions, generous advice, and comments. We are thankful for the valuable comments from the audiences at the Academy of Management Annual Meetings and the Decentralization in Organizations conference. Our research project was supported by the Stanford Technology Ventures Program (STVP), the Stanford Initiative for Entrepreneurs’ Resilience and Well-Being (SIER), and the Lieberman Fellowship at Stanford.

Accepted by Bill McEvily

¹ Our focus is decision-making authority *within* organizations, where one individual has legitimate authority over another. Other aspects of organizations that can be decentralized—including physical location of workers, communication, and infrastructure—are outside the scope of our review.

Many types of organizations have adopted a variety of decentralization practices, and much intriguing empirical work has studied them. Despite the diversity, literature on decentralization is fragmented, and no integrative review has emerged to compare the variety of approaches to decentralization—a gap that we address in this integrative review.

An integrative review of decentralization is significant for several reasons. While there is a longstanding interest in the tension between delegation and autonomy that is at the heart of decentralization (Greiner, 1972), several recent studies confirm a rise in decentralized forms of organizing. In their review of large U.S. corporations over the last decade, for example, Gulati, Marchetti, and Puranam (2023) find an approximately 20% increase in keywords indicating decentralization for nonmanagerial postings and a 10% increase in senior manager postings just below the CEO. Reineke and Katila (2025) and Rikken, Janssen, and Kwee (2023) document a rapid growth in many previously unseen forms of decentralized organizations like decentralized platforms and decentralized autonomous organizations (DAOs). Bayern (2021) makes the point that these types of organizations are exceedingly difficult to prevent.

In parallel with practical relevance, decentralization attracts a diverse and growing body of scholarship. Our review identified 177 empirical articles on decentralization that constitute the core of our review. Beyond this core literature, each disruption² to the ideal form of organizing that we identified has generated a large body of high-quality work in other disciplines, including political science, economics, sociology, and even physical sciences. As a result, both theory and research integrated from various fields are needed to fully understand decentralization.

Along with the considerable scholarly attention, decentralization also faces critiques questioning its practicality and effectiveness. Scholars across fields—such as Bimber (1994) in education, Schneider (2019) in social science, and DuPont (2017) in organizations—label it a “mirage,” highlighting its ambiguous definition, which fuels both its popularity, and confusion about what the term actually means. Further, scholars have expressed skepticism about the actual effectiveness of decentralization in realizing the benefits it claims to bring. As a result, a theoretically grounded review is needed to help

scholars evaluate the strengths and weaknesses of the past decentralization pivots and the emerging decentralization trends, such as DAOs, and their relationship to current paradigms.

In our integrative review, we take Weber’s (1947) centralized, ideal bureaucracy (Monteiro & Adler, 2022) as a starting point. By reviewing antecedents, underlying mechanisms, and consequences of each subsequent disruption, we begin to understand how and why each disruption challenges the ideal view of centralization and how each disruption reveals a distinct set of boundary conditions that add precision and richness to the original theory of ideal organizational forms. We analyze the empirical literature within each disruption using Scott’s (1992) categorization of bureaucracy’s presumed superiority in division of labor, information processing, and monitoring. We use management research as a starting point and then integrate parallel developments in other disciplines for an integrative review. In so doing, we complement existing *Annals* reviews on social hierarchies (Magee & Galinsky, 2008), information processing and decision-making (Joseph & Gaba, 2020), centralized bureaucracies (Monteiro & Adler, 2022), and algorithmic decision-making in organizations (Kellogg, Valentine & Christin, 2020), as well as reviews on intraorganizational networks (McEvily, Soda & Tortoriello, 2014). That said, none offers the integrative review of decentralization within organizations that we provide.

There are three contributions. First, we synthesize work on decentralization of organizational structures. We trace pivot points³ over time by identifying boundary conditions that counterpoint Weber’s ideal and start a new disruption. Each of the distinct disruptions adds richness to theorizing and starts a clustering of new work around the revised direction. Through a careful review of the decentralization literature, we identify four distinct, major disruptions to the baseline case of bureaucracy.

Second, we contribute by integrating different types of decentralization studies to yield understanding of why, how, and with what success bureaucracies have been challenged over the years. Several authors have announced the death of bureaucracies in the context of various decentralization efforts, from the Aston authors in the 1960s to scholars studying DAOs, driven by increasing product complexity, uncertainty of environments, increasing technological opportunity, and the changing preferences of the

² Each pivot point that reorients the established form of centralized organization toward decentralization is labeled as a “disruption.” We treat each decentralization as an “experiment” or “disruption.”

³ As do Glynn and D’Aunno (2023), we define pivots as theoretical points of reorientation that generate theoretical rethinking.

workforce (Bloom, Liang, Roberts & Ying, 2015). Yet, bureaucracies continue to thrive. Drawing on our integrative review, we directly compare each “disruption” relative to the ideal of bureaucracy to understand how and why each disruption challenged the ideal and why bureaucracies continue to coexist.

Third, we contribute by identifying how organizations decentralize decision-making given the socio-technical trend of an ever-widening gap between ability and authority in organizations:

Authority is centralized, but ability is inherently decentralized because it comes from practice ... Whereas the boss retains his full *rights* [emphasis in original] to make all decisions, he has less and less *ability* [emphasis in original] to do so because of the advance of science and technology. (Thompson, 1961: 47).

These and other influential trends in society, including democratic and egalitarian movements, and the need to design for, coordinate, and motivate an increasingly heterogeneous workforce make scholarly understanding of decentralization increasingly relevant. By proposing an integrative theoretical framework that provides opportunities to develop and validate novel theoretical claims and explore overlooked areas, we aim to inspire future scholarly work on decentralization.

METHODS

Our primary methods were threefold: (1) a comprehensive review of relevant research in management and organizations to summarize our knowledge, and to identify and advance new questions regarding decentralization of decision-making in organizations; (2) analysis of abstracts, keywords, text, and citations of the research identified in our review to establish a timeline, and identify pivot points and the related disruptions to the ideal of centralized bureaucracy; and (3) tracking, supported by data analysis and visualization, of seminal work in each disruption, and the larger corpus of work across disciplines (e.g., sociology, economics, and physical sciences) that emerged.

Review of Decentralization Research

We searched for empirical decentralization articles in the top peer-reviewed journals typically used in such reviews of the management literature. Eight management journals (*Academy of Management Journal*, *Academy of Management Discoveries*, *Academy of Management Perspectives*, *Administrative Science Quarterly*, *Organization Science*, *Strategic Management Journal*, *Management Science*, and

Journal of Management) and the two major specialist journals in organizational design (*Research Policy* and *Journal of Organization Design*) were reviewed.

Our review focuses on studies that examine decentralization of decision-making *within* organizations. We compiled articles by searching for the terms “decentralization,” “decentralized,” “centralization,” “centralized,” “autonomous,”⁴ “self-organizing,” “self-organization,” “collective action,” and “platform” in the abstract, title, or keywords.⁵ This search returned 981 papers.

We then placed several boundary conditions on the scope of this review, given the rich literature around the topic. First, we focus on *formal organizations*. Following others (e.g., Galbraith, 1973; Puranam, Alexy & Reitzig, 2014; Scott & Davis, 2007), we define a formal organization as (1) a set of individuals that exists over time, (2) with a boundary that defines membership, (3) a purpose or goal to which these individuals contribute, and (4) involving decision-making regarding that purpose or goal. Thus, phenomena such as decentralization of nation states, interorganizational alliances, and spectators at sporting events are outside of our scope. The second important boundary condition is the focus on decision-making *authority*. As a consequence, while crowdsourcing, for example, is conceptually relevant for decentralization, crowdsourcing that focuses on decentralized information sourcing (i.e., gathering of information) without decision-making is outside the scope of our review and is covered by other reviews. Third, like Joseph and Gaba (2020), we focus on *formal* structures. Therefore, informal structures and social networks (e.g., McEvily et al., 2014; Reischauer & Mair, 2018)⁶ as well as the initial

⁴ Some authors treat autonomous and (vertical) decentralization as synonyms (e.g., in autonomous work groups).

⁵ We also searched for these keywords in the full text but only returned results that also contained one of the more specific additional keywords.

⁶ Consistent with our definition, networks per se are not formal organizations but rather systems of at least partially connected nodes. While some networks may include individuals and have some attributes of a formal organization, networks are a broader concept and include phenomena like telecommunications networks and ant colonies. Conversely, organizations have attributes like roles and responsibilities that networks per se do not. Networks and network methods can, however, be useful to conceptualize and analyze organizations, particularly regarding knowledge sharing and other communication patterns. Indeed, greater use of network concepts and methods is an important future research direction.

emergence of structures in newly formed firms are outside of our scope. We also excluded studies on technologies that enable decentralized organizations, such as articles that discuss technical details of blockchains, but do not contain insights on decentralization in organizations. Studies focusing on regulatory policy are also excluded.⁷ Finally, our database for the review focuses on *empirical* articles only. Through an intensive effort of categorizing each article, we excluded articles on formal models, simulations, and purely conceptual or technical articles.

To ground the structure of our review, we used Scott's (1992: 154–163) three rational systems explanations of the emergence of bureaucracies and centralized decision-making: ability to (1) divide labor, (2) process information efficiently, and (3) monitor. We first reviewed Weber's ideal bureaucracy using this framework and then identified how the explanation(s) were challenged in the papers we reviewed. From this analysis, four different pivot points for “disruptions” emerged.

As this categorization framework emerged from our reading of the papers, we identified seminal articles for each disruption and classified papers by their similarity to each seminal article in terms of their citation network. We refined this classification based on our detailed reading of the articles. Our final corpus is 177 papers.

Our detailed reading of the articles also enabled us to use snowball sampling for any articles we may have overlooked to form a comprehensive review, looking for influential work that has stimulated new work in the study of decentralization and the disruptions we identified. We also asked discipline experts for recommendations. In this way, we attempted to cover more peripheral works that may be otherwise missed and relevant work that did not use the term “decentralization” to describe related phenomena.

Although our analysis was based on interpretive synthesis, as described above, we complemented this analysis with a more granular quantitative verification. We used visualization and analytical tools to confirm the patterns and fine-tune the pivot points and seminal works that we had identified.

⁷ Further, we excluded papers that were discussing physical decentralization (remote work), decentralization in communication, supply chain, risk management, and planning, and papers that mentioned the construct but did not use decentralization as the focal variable of interest.

BASELINE IDEAL: THE CENTRALIZED BUREAUCRACY

In the beginning of the 20th century, the mainstream view was that a centralized organization with hierarchical authority and formalized procedures, tasks, and oversight (i.e., bureaucracy) was an ideal type of organizational structure (Monteiro & Adler, 2022; Weber, 1947: 196). In the ideal version, bureaucracy is organized as a strict rule-based hierarchy (Weber, 1947).⁸ Vertical hierarchy provides the only required oversight, and there are no lateral structures. All lower-level positions are controlled by exactly one higher-level officer (superior), and all members of the organization are appointed hierarchically by officials holding a higher office (Weber, 1947). Atop the hierarchy sits a competent “supreme chief” (Weber, 1978: 220), a position that controls how jobs are split into tasks, and a position that coordinates and monitors their execution (Albrow, 1970: 36). Drawing from Scott's (1992) rational systems explanations, we first outline the purported advantages of *bureaucracies* in *division of labor*, *information processing*, and *monitoring*, followed by how four disruptions ushered in an era of decentralization in each of these dimensions and challenged the ideal.

Division of Labor

Division of labor is determined by bureaucracy's hierarchically arranged authority. Superiors—and ultimately the supreme chief—govern the way an organization's jobs are divided into distinct, often minute, tasks (Albrow, 1970: 47; Pollard, 1965: 261). Superiors are assumed to be able to specify the necessary descriptions and requirements for each task fully and to craft complete contracts to contract the requisite labor (Weber, 1947). “Role competence,” that is, finding an individual whose technical and professional expertise matches the tasks of a particular role (Katila, Thatchenkery, Christensen & Zenios, 2017), explains how individuals and positions are matched. To avoid favoritism and to ensure a process of appointment based on technical competence, no appointments—apart from that of the “supreme chief”—occur via election. The only way lower

⁸ Weber presents “pure type” bureaucracy as the exemplar implementing his concept of rational-legal authority in organizations. Legal norms are rules established by agreement or imposition on grounds of expediency or rational values or both. Bureaucracies (or “officialdoms”) are concerned with the administration of systems of such rules.

offices can influence the division of labor is to file grievances and appeal decisions of higher offices with those offices' superiors (Weber, 1947). However, it is then up to superiors to decide whether any changes are prudent. Further, all positions have strictly separate, nonoverlapping spheres of tasks which makes each position and the related tasks relatively narrow and predetermined. No incumbent fills multiple positions. Overall, division of labor is clear-cut, specialized, and hierarchically determined (Weber, 1947).

In a typical bureaucracy (often called a unitary form or U-form), the supreme leader supervises several *functionally organized departments* (Scott, 1992; Stinchcombe, 1990). A clear-cut division of labor by functional department is proposed to increase decision-making speed "because everyone knows exactly what to do ... and whose role it is to do which task" (Katila et al., 2017: 2418). Having formal roles organized around functions also makes coordinating resources with other roles effective (Katila et al., 2017). Other significant benefits of functional specialization are greater focus and the ability to deeply master one's task. Increased skill to perform the task is another benefit because less time is spent switching tasks. Overall, all these design elements ensure higher productivity of the bureaucratic form (Weber, 1947).

Information Processing

Bottom-up information aggregation and top-down delegation are hallmarks of information processing in traditional bureaucracies. Information flows are vertical (Nass, 1986). Since each position reports to a higher position, information about day-to-day activities is passed from the bottom of the hierarchy to the top. Decisions are, in turn, passed back down from top to bottom. No lateral or informal communication or information processing is expected because this would undermine hierarchical reporting lines (Bordua & Reiss, 1966). According to Weber (1947), this type of information processing is ideal for production in terms of precision, stability, reliability, and scope of operations. Moreover, Weber (1947) suggests it enables highly predictable production activities, is applicable to a wide range of tasks, and is capable of rapid and clear decisions that are free from ambiguity, necessity of compromise, and politics and shifting majorities (Gajduschek, 2003).

Because the ideal bureaucracy rests on a formal system of rules and requirements that have been formulated, formalized, and recorded in writing, all relationships and interactions to process information are fully specified in formal contracts (Child, 1972). For

example, each position and its information processing requirements are defined as a combination of written documents and the continuous organization of official functions. Information is processed by these preset rules that are available in written form to those whom they concern.

Monitoring of Agents

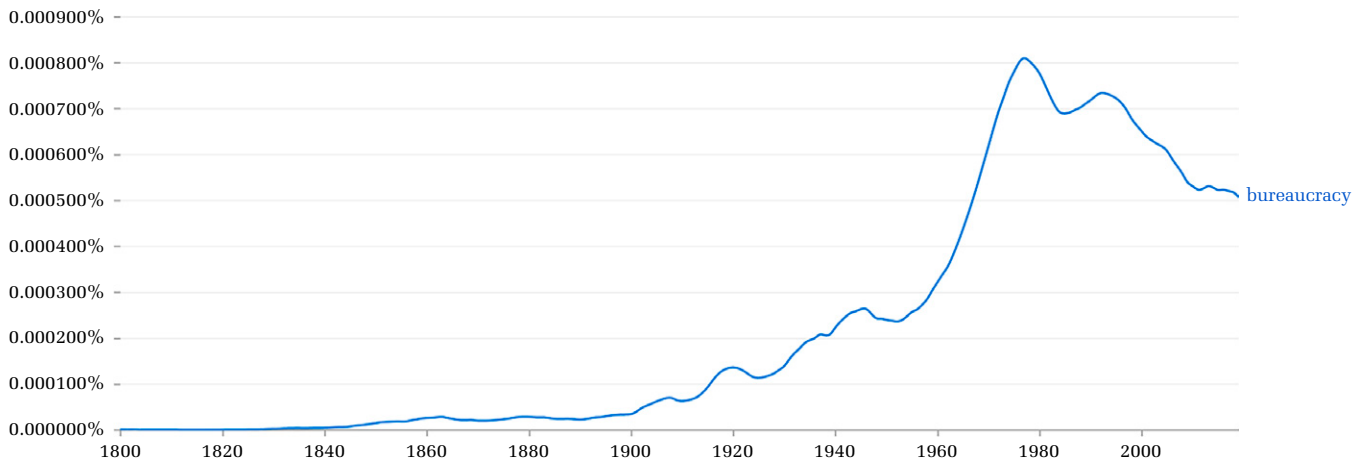
Hierarchical lines of authority and formal superior-agent relationships underlie efficient monitoring in a bureaucracy. Monitoring of agents is done hierarchically in a "spirit of formalistic impersonality" without "hatred or passion" or "affection or enthusiasm" (Weber, 1947: 340). Weber calls for "strict systematic discipline and control in the conduct of the office [position]" (p. 334) by each employee, which then acts as a yardstick, along with competence, to monitor and evaluate performance. Weber (1947) also calls for a complete separation of the office's physical location and the incumbent's living quarters. This further facilitates formal and impersonal hierarchical monitoring in the workplace.

Motivation (to perform one's work well), which partly substitutes for monitoring, is tied to impersonal order—not the person. Motivation is generated by monetary compensation (tied to hierarchical oversight) and career opportunities—all of which depend on judgments by superiors, not peers. For instance, bureaucracy's hierarchical structure contains career paths, creating motivation from advancement opportunities within the focal organization's hierarchy (Meyer, Egger-Peitler, Höllerer & Hammerschmid, 2014). Weber's bureaucracy also calls for a strict separation of owners and officials. As such, no equity compensation can be given, and performance-based pay is uncommon. Instead, fixed monetary rewards are used that are set by salary bands depending on an incumbent's level in the hierarchy. Altogether, no intrinsic motivation from the office, coworkers, or any other affectual aspect of the job is assumed.

Seminal Work and Interdisciplinary Impact

The seminal work in bureaucracy is Weber's (1947) book that details centralized bureaucracies and their properties. It is the first comprehensive description of an ideal type bureaucracy and is referred to as the main reference for the concepts of bureaucracy, centralization, and rational-legal control throughout the literature we reviewed. The book consists of a collection of Weber's essays originally published in German in 1921 (Hanke, 2009). Different translations into English began to appear—one of the most prominent

FIGURE 1
Frequency of Terms Related to “Bureaucracy” (Baseline Ideal) over Time



Source: Google Ngram Viewer.

and most highly cited is by sociologist Talcott Parson—in 1947. Our keyword research (see Figure 1) indicates that the frequency of the use of the term “bureaucracy” closely tracks the publication history of Weber’s work, with peaks in 1921 and 1947 and consistently increasing use in the following years, only interrupted by slumps that coincide with the aftermath of the two world wars.

In its first two decades, Weber’s (1947) work primarily influenced research in sociology, psychology, and political science (see Figure 2). Some work in social sciences, namely in history, economics, and management, also began to recognize Weber’s ideas. Health, life, and physical sciences soon followed. Today, Weber’s interdisciplinary impact remains similar, with the exception of his influence in the field of management that has grown relative to the early years.⁹

In sum, bureaucracies are methodically organized and structured. Division of labor is clear-cut and specialized, information is processed vertically along the hierarchy, and monitoring is mostly tied to hierarchical authority of superiors. Overall, Weber’s view is that,

However many forms there may be which do not appear to fit this pattern [...] and however much people may complain about the “evils of bureaucracy,” it would be sheer illusion to think for a moment that continuous administrative work can be carried out in any field except by means of officials working in offices. [...] [B]ureaucratic administration is, other things being equal, always, from a formal technical

point of view, the most rational type [of carrying out control over human beings]. [...] The choice is only between bureaucracy and dilettantism in the field of administration. (Weber, 1947: 337)

DISRUPTIONS TO THE BASELINE IDEAL: DECENTRALIZATION RESEARCH

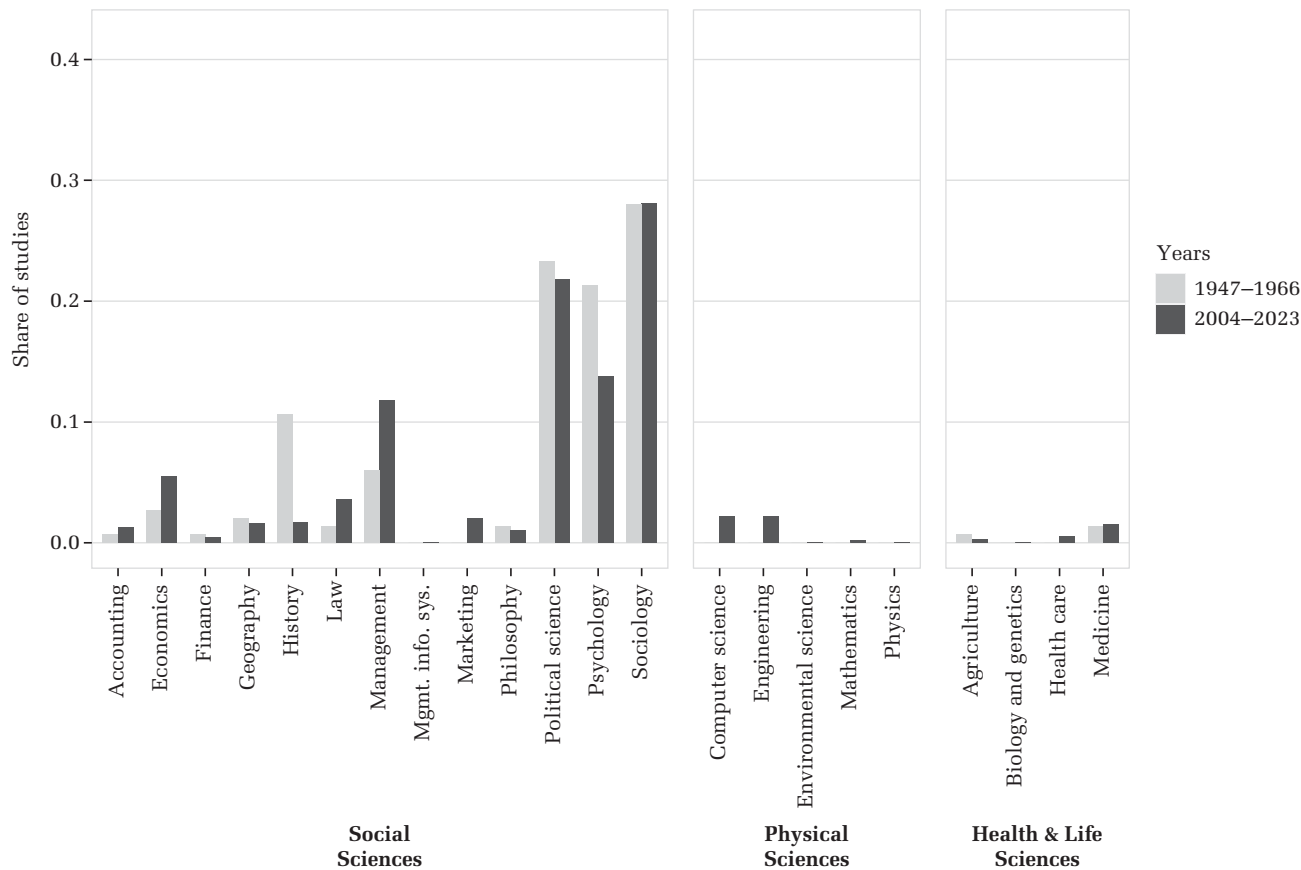
Next, we thoroughly examined the body of decentralization research post-Weber. Using the core corpus of 177 articles and other related empirical work that we had collected, as noted above, we traced the sequence of scholarly contributions since the 1940s to today to understand the evolution of the work.

Analysis Steps

Our analysis of the corpus of scholarly contributions indicated that several new theoretical ideas emerged to fundamentally challenge Weber’s key assumptions. In essence, new boundary conditions were recognized. These boundary conditions revealed limitations in the previously assumed generalizability of the theory of bureaucracy’s superiority as an organizational form. Interestingly, these pivots did not substitute prior work but rather added fresh sub-areas of focus while allowing existing work to stand beside the new work. Often these shifts coincided with broader socio-technical changes and with the need to interpret and understand new organizational models that were emerging in real-world practice. Altogether, through our reading, we identified four critical shifts and reorientation points that introduced

⁹ Source: Authors’ analysis of citation patterns.

FIGURE 2
Interdisciplinary Impact of Bureaucracy’s Seminal Work



Note: The seminal work is Weber (1947).
n = 3884

boundary conditions and moved attention from one set of theoretical ideas to the next.

To contrast the assumptions of Weber’s bureaucracy with those of the rest of the decentralization work and to deepen the interpretation, we used the three dimensions in Scott’s (1992) framework: division of labor, information processing, and monitoring. We noted the overlap and difference between Weber and each focal work in each of the three dimensions. This exercise showed shifting attention from historically dominant theoretical ideas to new ones, offering support for the disruptions that we had identified. The evolving focus and the new additions are documented in Table 1.

As an empirical verification of each disruption’s duration, distinctiveness, and impact, we added data analysis and visualization. To confirm *duration*, we identified keywords related to each disruption and charted their trajectory over time, including when they first and last appeared, as well as tracking their

annual frequency of occurrence, illustrated in Figures 4, 6, 8, and 10.¹⁰

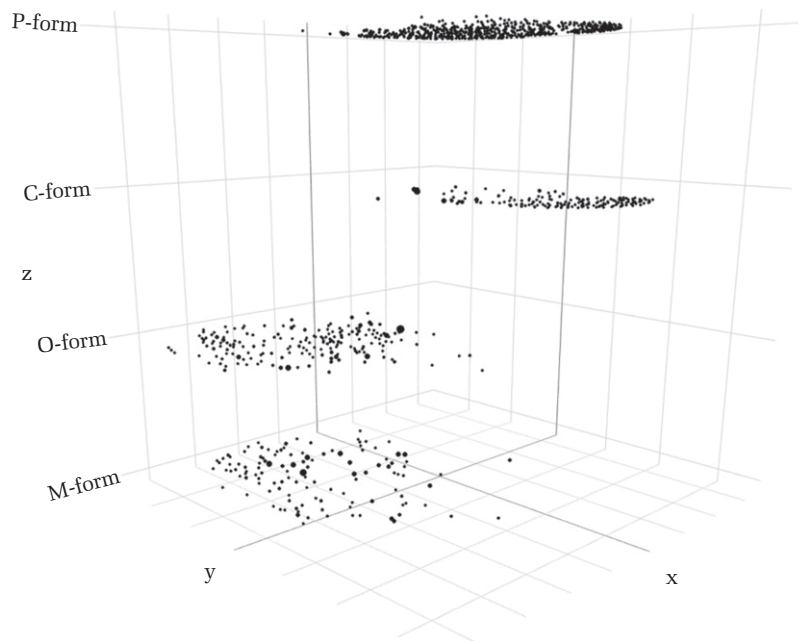
To confirm the *distinctiveness* of each disruption, we used co-citation networks. We tracked citations for each sample paper and used co-citations to discern which works cite one another, noting the forming of distinct clusters, as visualized in Figure 3.

¹⁰ We used Google Ngram Viewer keyword searches to link each disruption to temporal timelines of scholarship and to show a thematic overview over time. Google’s Ngram Viewer displays longitudinal word count frequencies in a set of corpora (i.e. all text in English-language books on Google books up until 2019, published in any country). Because many of the most relevant works in our literatures are books, we used Ngram searches per Monteiro and Adler (2022). Searches for the central keywords relating to each disruption broadly support the timing and sequence of the different disruptions we identify.

TABLE 1
Decentralization Disruptions

	Baseline: Bureaucracy				1. Multidivisional	2. Organic	3. Community	4. Platform
Division of Labor	Membership	Closed, employees	Closed, employees	Closed, employees	By manager or with manager, by qualification	By manager, with manager or peers, by qualification	Open, volunteers	Open: filtered by platform Platform: by manager Providers: self-selection
	Task selection	By manager	By manager	By manager or with manager, by qualification	By manager or with manager, by qualification	By manager, with manager or peers, by qualification	Self-selection	Platform: by manager Providers: self-selection
	Task Specialization	Tall hierarchy	Tall hierarchy	Modular hierarchy	Modular hierarchy	Flat hierarchy	Very flat hierarchy	Platform: hierarchy Providers: marketplace
	Hierarchy	Consistent engagement	Consistent engagement	Consistent engagement	Consistent engagement	Consistent engagement	Episodic engagement	Platform: consistent engagement Providers: episodic engagement
	Engagement	Consistent engagement	Consistent engagement	Consistent engagement	Consistent engagement	Consistent engagement	Episodic engagement	Platform: consistent engagement Providers: episodic engagement
Information Processing	Scope	Supreme leader: long-term, broad strategy Employees: short-term, narrow, nonoverlapped tasks	Supreme leader: long-term, broad strategy Employees: short-term, narrow, nonoverlapped tasks	Central office: organization-wide, often long-term issues Divisions: division strategy and operations	Central office: organization-wide, often long-term issues Divisions: division strategy and operations	Employees: fluid, broad roles	Small inner circle: prestige projects and governance Members: fluid, few roles	Platform: infrastructure rules Providers: content, pricing, logistics
	Communication	Vertical	Vertical	Extensive within divisions, some vertical	Extensive within divisions, some vertical	Extensive lateral, some vertical	Multidirectional	Multisided skewed to platform
	Processes	Many, high formalization	Many, high formalization	Some, varied formalization	Some, varied formalization	Some, moderate to low formalization	Few, mostly informal	Some, formal, automated
	Decision-making authority	By position	By position	By position	By position	By position, by groups of peers	Consensus or member vote	By algorithmic management
	Monitoring	High: behaviors by managers	High: behaviors by managers	Moderate: outcomes (esp. TMT) and behaviors by managers	Moderate: outcomes (esp. TMT) and behaviors by managers	Moderate to low: outcomes and behaviors by managers or peers	Very low: by members	High: immediate by algorithm, over time by peers and users
Short-term rewards	Short-term rewards	Extrinsic: salary	Extrinsic: salary	Extrinsic: high-powered incentives (esp. TMT) Intrinsic: achievement motivation	Extrinsic: high-powered incentives (esp. TMT) Intrinsic: achievement motivation	Extrinsic: salary and maybe bonuses Intrinsic: motivation via work itself	Non-financial rewards Extrinsic: build skills, meet personal needs Intrinsic: common good, enjoyment	Extrinsic: financial rewards Intrinsic: some social rewards
	Long-term rewards	Promotion	Promotion	Promotion	Promotion	Promotion	None for most, inner circle for a few	Financial rewards, freedom, growth

FIGURE 3
Clustering of the Sample Papers Using Co-citation Networks: Four Top Clusters



Visualized using a co-citation network map (see also Vedula et al., 2022; Zupic & Čater, 2015) based on the co-citation network of our sample and seminal papers and all their citing and cited papers where papers are nodes and co-citations edges. The z-axis displays the four largest clusters matching the four disruptions. The x and y axes are space coordinates whose layout places papers such that relative closeness of papers indicates many co-citations. Co-citation network is clustered using the “cluster_fast_greedy” algorithm of the igraph R package that conducts community detection via greedy optimization of modularity. For readability, we constrain the network to top 400 papers by in-degree and do not display co-citation edges between the papers. Layout is determined by the Fruchterman-Reingold algorithm applied by R’s igraph library.

To analyze *impact*, we verified keyword frequencies as noted above. To assess interdisciplinary impact, we used sample articles’ Field of Study (FOS) categories by Microsoft Academic, cross-referenced with All Science Journal Classification (ASJC) codes by Scopus, and traced each disruption’s relative influence across disciplines using visualizations in Figures 5, 7, 9, and 11.¹¹

¹¹ Cross-referencing is important because FOS categories—assigned by an unsupervised machine learning algorithm—can differ somewhat from ASJC classifications despite both being hierarchical in nature. Two authors went through the FOS category labels of the papers, cross-validated the categories with ASJC, and manually adjusted any, as needed, to match the hierarchical structure of ASJC. In the figures, we used the highest-level FOS categories that most closely matched the top-level categories of ASJC (i.e., life, health, physical, and social sciences), applicable second-level categories under each top level, and further subdivided social sciences into third-level categories for added granularity. Only categories with significant citation activity are displayed. If a paper is categorized into multiple categories, it is distributed proportionally across them.

Taken together, Table 1 provides a summary of the primary disruptions in decentralization research that emerged from our literature review and outlines how these points shifted toward new ideas and away from bureaucracy, thus revealing evolutionary changes over time in decentralization work. As significant departures from Weber’s work, we observe four major disruptions—M-form, O-form, C-form, and P-form—which we discuss below.¹²

Disruption 1: Multidivisional Form (M-Form)

The multidivisional organization (M-form) became prominent at the turn of the 20th century (Chandler, 1962; Freeland, 1996; Galbraith, 1973). Prior to this time, major corporations in industries like food processing and later automotive were vertically

¹² We use the labels M-form for multidivisional, O-form for organic, C-form for community, and P-form for platforms, for short. Two of the labels were commonly used in the literature we reviewed: M-form (Chandler, 1962) and the C-form (Seidel & Stewart, 2011). We add the labels O-form and P-form.

integrated and organized in a form of traditional bureaucracy (Scott & Davis, 2008). However, as these companies pursued growth via diversification into new products, many performed poorly. A classic example is DuPont (Chandler, 1962). After World War I, this very profitable monopolist diversified from a single business (i.e., explosives) into many businesses (e.g., rayon, artificial leather, and paints). Yet despite significant technical expertise and economies of scale, these new businesses lost money. The key problem was uncertainty leading to information overload at the apex of the organization. The remedy was decentralization via the M-form (Chandler 1962).

The M-form is widely regarded as one of the most significant organizational innovations (e.g., Freeland, 1996; Mickelthwait & Wooldridge, 2003). Consistent with the work we reviewed, we define the M-form as structuring the organization into modular divisions, often termed “business units,” around outputs (e.g., products, geographies, customers, and brands) such that each division has (1) operations and division strategy decision authority and (2) most or all of the resources needed to produce that output (Galbraith, 1973). For example, luxury goods maker Gucci organized for many years around brands like Stella McCartney and Gucci. In contrast, Johnson & Johnson organized around products such as its pharmaceutical and personal hygiene products. Compared with traditional bureaucracy, the defining features of the M-form include organizing around outputs (vs. inputs), modular (vs. hierarchical) structure, within-division (vs. vertical) information flows, and outcome (vs. behavioral) monitoring (see Table 1).

The M-form quickly became the dominant organizational form for large, diversified corporations like General Electric, Johnson & Johnson, and 3M (Rumelt, Schendel & Teece, 1994) and later for those like Microsoft, Meta, and Nike. For example, when Google became Alphabet in 2015, its corporate leaders adopted the M-form to improve the focus of its many businesses, act more quickly, and achieve better performance (Fast Company, 2016). The M-form is also a useful training ground for general management talent because these executives can learn about running a business at a relatively small scale (Galbraith, 1973). Indeed, divisions are “mini-businesses.”

Division of labor. The division of labor within the M-form differs from traditional bureaucracy. A primary difference is between the divisions and the “central office.” M-form places responsibility for daily operations and division strategy at the division level while the central office (i.e., corporate-level executives) is

responsible for organization-wide strategy decisions such as major resource allocations to divisions, acquisitions and divestitures, managing organization-wide functions (e.g., R&D and legal), assignment of product-market charters to divisions, and monitoring divisions (Eisenhardt & Brown, 1999; Freeland, 1996; Joseph & Ocasio, 2012). The central office may also offer high-level coordination and support for division strategy (Gupta, 1987). For example, General Electric’s corporate strategy unit helped divisions to develop their strategies and provided analytical capabilities for divisional strategic decision-making prior to Jack Welch becoming CEO (Ocasio & Joseph, 2008). The central office can also facilitate cross-division collaboration (Eisenhardt & Galunic, 2000; Hill, Hitt & Hoskisson, 1992).

The M-form also differs from traditional bureaucracy because it spreads functional specialists across divisions such that each division has sufficient functional skills to produce its relevant output. Specifically, within M-form corporations, each division is typically a profit center led by a general manager and a team of functional managers (Freeland, 1996; Galunic & Eisenhardt, 1996; Joseph & Ocasio, 2012). Within non-profit organizations using M-form, divisions are similar although profit is typically not relevant. Thus, division functional managers are members of the divisional top management team and report to the division general manager, not a higher-level functional specialist as in traditional bureaucracy. In turn, functional specialists within the divisions report to division functional managers. These managers are often broad specialists who fit the functional needs of the division rather than the deep specialists of a traditional bureaucracy. Thus, the M-form decentralizes functions from the central office while recentralizing them within divisions (Stinchcombe, 1990).

Information processing. Information processing also differs from traditional bureaucracy. The M-form reduces the need to process information vertically by (1) providing all the resources (including functional skills) necessary to produce divisional outputs and (2) decentralizing significant decision-making authority to division managers (Chandler, 1962; Galbraith, 1973). Thus, the M-form maximizes within-division communication and coordination while limiting the need to communicate horizontally with other divisions and vertically with the central office (Galbraith, 1973).

Within the M-form, division general managers make the operating and strategy decisions about their own divisions. This enables divisions to quickly adapt to changing local conditions because divisional managers typically face limited output

diversity (e.g., a specific product market), possess decision-making authority, and have sufficient resources. In contrast, the central office typically makes the long-term strategy decisions about organization-wide issues. Thus, decision-making in the M-form is clear: The central office is responsible for organization-wide, often long-term, decisions about corporate strategy while divisions are responsible for division strategy and division-wide, often short-term, decisions about their own daily operations.

Finally, division general managers are at the nexus of information processing within the organization (i.e., they sit between the division and the central office) (Bower, 1970; Joseph & Wilson, 2018; Martin, 2011). They communicate corporate information to division managers and division information to the central office (Gupta, 1987). Ideally, these managers also collectively decide when to engage in cross-division collaborations (Martin & Eisenhardt, 2010). If these managers lack full information or the necessary skills, performance of the M-form naturally suffers (Lin & Germain, 2003).

Monitoring of agents. Interestingly, while the initial rationale for the M-form was driven by limits to information processing (Chandler, 1962), later work—often using transaction cost economics—highlights the value of the M-form for monitoring and efficient capital allocation (Hill, 1988; Hill et al., 1992; Williamson, 1975). Specifically, given the distance between the central office and divisions plus the clarity of division-performance measures, the M-form emphasizes monitoring outcome-based measures like division profitability and revenue, not tracking day-to-day behaviors with bureaucratic monitoring (Kownatzki, Walter, Floyd & Lechner, 2013; Sengul & Gimeno, 2013; Williamson, 1975). To motivate division employees, M-form organizations often rely on high-powered incentives such as bonuses based on division performance, particularly for the general manager and the division top management team (Roth & O'Donnell, 1996; Williamson, 1975; Zenger & Hesterly, 1997). In addition, M-form organizations provide strong achievement motivation for these executives given their wide discretion and clear responsibility for divisional success (McClelland, 1961). Finally, the central office's ability to allocate capital among divisions facilitates risk diversification across a portfolio of businesses (Argyres, 1995; Berle & Means, 1932; Williamson, 1975).

Further research in strategy, organization theory, and complexity theory emphasizes the recombinant modularity and flexibility of the M-form (Anderson,

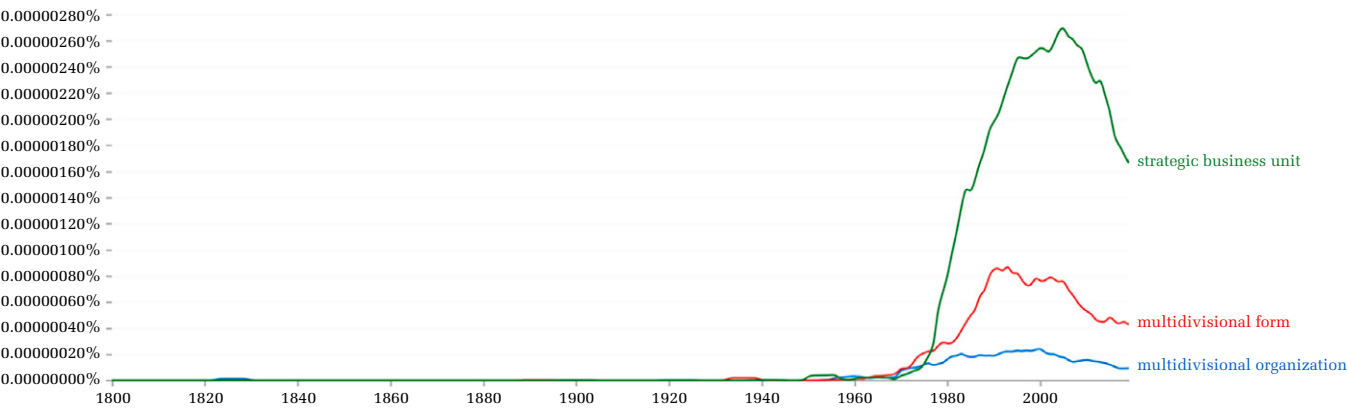
Meyer, Eisenhardt, Carley & Pettigrew, 1999; Baldwin & Clark, 2000; Galunic & Rodan, 1998; Gilbert 2005, 2006; Karim, 2006, 2009; Schilling, 2000). For example, Galunic and Eisenhardt (1996, 2001) studied a high-performing M-form multinational that quarterly added, eliminated, combined, or split at least some of its business units. This recombination (or “charter-change”) process matched the corporation's business units to changing markets and technologies, creating intertemporal economies of scope (Helfat & Eisenhardt, 2004; Sakhartov & Folta, 2015). Similarly, Gilbert (2005, 2006) examined how traditional newspapers effectively responded to the internet opportunity by flexibly adding new business units that exploited the M-form's modularity. More abstractly, the M-form is a complex adaptive system with partially connected, yet unique, divisions that recombine to adapt to uncertainty (Anderson et al., 1999; Martin & Eisenhardt, 2010).

Seminal work and interdisciplinary impact. We identified Chandler's (1962) book as a seminal scholarly work on M-form organizations. This came from our reading of the literature where the book was one of the earliest, highly-cited references to the M-form concept. Data provide confirmation—our keyword analysis showed a marked increase in the use of the term “multidivisional” in the years immediately following the release of Chandler's work, suggesting significant impact on academic discourse (see Figure 4).

The early influence of Chandler's (1962) work was mainly in management and economics (see Figure 5). Its interdisciplinary influence also extended to several related disciplines in the social sciences (e.g., sociology and political science) as well as to computer science and engineering. Today, Chandler (1962) still has an outsized influence on management research surpassing its influence on other subfields.

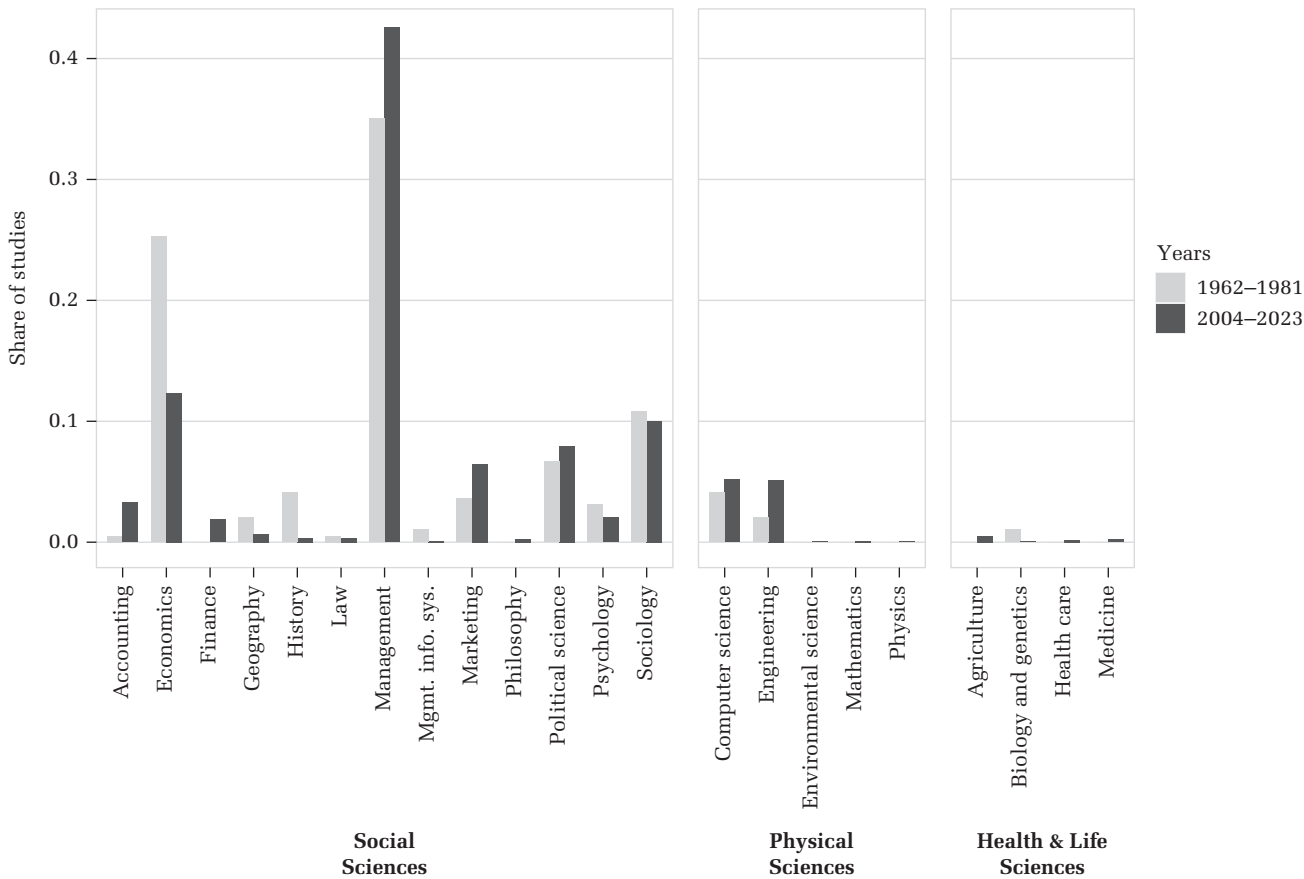
Variations of the form. There are several variations of the M-form organization. For example, M-form organizations vary in their degree of functional decentralization (i.e., which functions are organization-wide and part of the central office vs. decentralized to the divisions) (Brickley & van Drunen, 1990; Eklund, 2022; Hoskisson, 1987; Keats & Hitt, 1988). Often, functions that are similar across all divisions are centralized to create efficiencies, scale economies, and depth in expertise (Galbraith, 1973). For example, DuPont initially centralized the R&D and the legal functions but decentralized the manufacturing, sales, and engineering functions to its newly formed divisions (Chandler, 1962).

FIGURE 4
Frequency of Terms Related to “Multidivisional Form” (Disruption 1) over Time



Source: Google Ngram Viewer.

FIGURE 5
Interdisciplinary Impact of M-Form’s Seminal Work



Note: The seminal work is Chandler (1962).
n = 2659

M-form organizations also vary in their degree of diversification (Hoskisson & Johnson, 1992; Porter, 1987; Williamson, 1975). There are two main approaches: related diversification and unrelated diversification (Rumelt, 1974). Organizations pursue related diversification primarily in order to realize the benefits of synergies among divisions. Firms pursue unrelated diversification primarily to realize financial diversification and create an internal capital market (Hill & Hoskisson, 1987; Porter, 1985). Diversification also influences the optimal amount of monitoring, with greater diversification associated with less monitoring of divisions by the central office (Galbraith & Merrill, 1991; Govindarajan, 1988; Gupta, 1987; Harrison, Hall & Nargundkar, 1993; Lin, 2014).

Limitations. While the M-form is widely seen as a major organizational innovation, it has several limitations. One limitation is that, since the M-form organization duplicates resources such as sales and manufacturing specialists in every division, it can be costly (Galbraith, 1973). Thus, the M-form is useful when an organization reaches sufficient size and diversity to justify spreading functions into divisions (Ackerman, 1970; Child, 1973a; Khandwalla, 1974).

Given that functional expertise is spread across divisions, another limitation is that M-form organizations often develop broad functional expertise but not the deep expertise that is possible in the traditional functional bureaucracy (Argyres & Silverman, 2004; Arora, Belenzon & Rios, 2014; Leiponen & Helfat, 2011). For example, Eklund (2022) finds that decentralizing R&D to divisions leads to more innovations, but also more incremental (and fewer radical) innovations than centralized R&D. Moreover, non-expert general managers may be unable to make well-informed technical choices (Dobrajska, Billinger & Karim, 2015).

Apple is a particularly intriguing example of these limitations. On the surface, it seems well-suited to the M-form because it is large, has multiple products, and operates in markets with high technical and product uncertainty. Indeed, prior to the return of Steve Jobs, Apple used an M-form organization with discrete business units, each with its own P&L responsibilities. Yet, as Podolny and Hansen (2020) describe, Jobs believed that rapidly evolving, deeply technical businesses demand managers with strong technical expertise, so he reorganized Apple into a functional form that emphasizes technical specialties. The leaders of these functions invariably have deep technical expertise, are deeply immersed in product details, and collaboratively debate across functions as they hone new product designs (Podolny & Hansen, 2020). The reasoning is that experts are the best

leaders of experts. A functional organization creates deep expertise in which experts can learn from one another. That said, Apple's functional organization also copes with the information processing demands that otherwise might overwhelm it in several ways by (1) increasing information processing efficiency by relying on a workforce of long-time employees who have communicated in cross-functional teams for many years; (2) decreasing the need for information processing with a relatively narrow product strategy that leverages the same core resources across many products (e.g., brand, superior industrial design, and large-scale consumer electronics manufacturing), and (3) with a late-entrant strategy into new markets.

Besides the limitations of costly duplicate resources and fragmented functional expertise, another limitation is cross-division collaboration (Gupta & Govindarajan, 2000; Hill et al., 1992). Since the M-form focuses information processing within divisions, division managers are often unaware of or disinterested in opportunities for synergistic collaboration with other divisions. Indeed, division general managers may even see themselves as rivals with each other (Liu et al., 2022; Tsai, 2002). Thus, while a key rationale for diversifying into multiple businesses is gaining synergies from cross-division collaborations, they are often difficult to achieve (Martin & Eisenhardt, 2010).

Ocasio and Joseph (2018) illustrate this collaboration challenge by comparing Apple and Motorola. Relying on the attention-based view (Ocasio, 1997), they contend that the M-form with its modular divisions focuses the attention of division managers on their own businesses, making it difficult to collaborate. For example, in the late 1990s, both Apple and Motorola adopted similar "digital hub" strategies that promised seamless integration across their products. Yet, Motorola's M-form structure made it challenging to engage in the necessary collaboration because general managers were too focused on their divisional interests, failed to communicate with each other, and sometimes saw one another as rivals. Their "digital hub" strategy faltered. In contrast, Apple's more centralized, functional organization focused the attention of functional leaders on Apple as a whole. Moreover, their deep technical expertise and experience in cross-functional collaboration yielded a successful "digital hub" strategy (Ocasio & Joseph, 2018).

Disruption 2: Organic Form (O-Form)

The organic organization (O-form) emerged in the mid-20th century as new corporations like Hewlett-Packard, Genentech, and Cisco and existing ones

like IBM and General Electric embraced growth via innovation (Davis & Scott, 2008) and as interest in the human side of organizations emerged (Mayo, 1945; Trist & Bamforth, 1951). At roughly the same time, research interest in the O-form began with Burns and Stalker (1961). By observing 20 UK firms, they identified two types of organizations: mechanistic and organic. Each was effective in a specific environment. The more structured mechanistic organization (which closely resembles bureaucracy) was effective in stable environments like the textile industry because of its efficiency in these routine situations. In contrast, the less structured organic organization (e.g., flat hierarchy, fluid roles, and few procedures) was effective in uncertain environments like the electronics industry (Miller, 1983). The O-form's flexibility fits with these uncertain situations where innovation and adaptation matter. Together, these findings became the basis for contingency theory (i.e., linking particular structures with better performance under specific levels of environmental uncertainty) that many later studies confirm (e.g., Eisenhardt & Tabrizi, 1995; Lawrence & Lorsch, 1967; Negandhi & Reimann, 1972; Pisano, 1994; Simonetti & Boseman, 1975).

Consistent with the work we reviewed, we define the O-form as a loosely structured organization with decentralized decision-making, often by peers. Compared with traditional bureaucracy, the defining features of the O-form include flat (vs. tall) hierarchy, fluid and broad (vs. precise and narrow) roles, lateral and vertical (vs. just vertical) information flows, and limited (vs. extensive) formalized processes and monitoring (see Table 1).

Several research strands build on Burns and Stalker (1961). One is work on *lateral processes*. In a landmark study, Lawrence and Lorsch (1967) compared the structures of firms in the stable container versus uncertain plastics industries. While the authors confirmed contingency theory, they also noted both more innovation among the plastics firms and more lateral communication and decision-making by peers in temporary task forces and ongoing teams and by integrators (i.e., individuals like product managers who coordinate across functions or divisions). Termed "lateral processes," these approaches (later including matrix organization) cut across lines of authority to ensure that the relevant information to make effective decisions is available (Galbraith, 1973). So, lateral processes address uncertainty by decentralizing decision-making to where the information exists. Rather than referring decisions up the hierarchy, peers work together to decide (Bartlett & Ghoshal,

1993; Davis & Lawrence, 1978; Martin, 2011; Ouchi, 1980; Roberts, Stout & Halpern, 1994; Tabrizi, 2015; Tsai, 2002; Weick & Roberts, 1993; Weigelt & Miller, 2013).

A second research strand extends the mechanistic versus organic dichotomy to the concept of *optimal structure*. That is, an optimal amount of structure (i.e., an inverted U-shaped relationship between structure and performance) exists that balances efficiency and flexibility (Brown & Eisenhardt, 1997, 1998). This insight is shown in multiple disciplines (Baum, Calabrese & Silverman, 2000; Bigley & Roberts, 2001; Bingham, Eisenhardt & Furr, 2007; Gell-Mann, 1994; Jones, 1987; Karim, Lee & Hoehn-Weiss, 2023; Katila & Ahuja, 2002; Kauffman, 1995; Lee, 2022; Owen-Smith & Powell, 2003; Rothaermel, Hitt & Jobe, 2006; Tushman & O'Reilly, 1996; Uzzi, 1997; Weick, 1996). Moreover, the optimal structure decreases (Eisenhardt & Tabrizi, 1995; Mintzberg & McHugh, 1985; Pisano, 1994) and the range of optimal structures becomes narrower (i.e., inverted-V) (Davis, Eisenhardt & Bingham, 2009) with increasing uncertainty. This implies that the tension between efficiency and flexibility is especially acute with high uncertainty. In complexity theory terms, an unstable "edge of chaos" exists (Brown & Eisenhardt, 1998; Gell-Mann, 1994; Kauffman, 1995). Finally, the penalty for too little structure is more catastrophic than too much (i.e., structure-performance curve is skewed right) (Davis et al., 2009). Thus, the O-form (1) can work in many environments (e.g., wherever innovation is the strategy), (2) is necessary in highly uncertain ones, and (3) is catastrophic if there is too little structure.

Division of labor. The division of labor within organic organizations differs in several ways from traditional bureaucracy. Roles are typically less specialized and more fluid (Burns & Stalker, 1961). Since the hierarchy is flatter, roles often provide greater discretion to incumbents at lower hierarchical levels. Thus, elaborate role descriptions often give way to "simple rules" that offer flexible guidance and more leeway (Bingham & Eisenhardt, 2011; Bingham et al., 2007; Rindova & Kotha, 2001; Weick, 1993). Roles also have a wider span of control (Lee & Kray, 2021) and can co-evolve with the organizational structure (Sandhu & Kulik, 2019).

Information processing. Information processing also differs from traditional bureaucracy. There is typically more communication in the O-form because members are less reliant on formal roles, hierarchy, and formal procedures like routines to guide their actions (Galbraith, 1973). While organic organizations rarely eliminate vertical communication, they usually

have increased lateral communication and decision-making by peers, often using lateral processes that cut across lines of authority and decentralize decision-making (Galbraith, 1973; Lawrence & Lorsch, 1967). The O-form is thus likely to yield high-quality decisions because it emphasizes involving the most relevant people (Jansen, Van Den Bosch & Volberda, 2006). For example, Martin and Eisenhardt (2010) describe cross-divisional teams of general managers (i.e., multibusiness team) who chose effective collaborative opportunities across their divisions. Others (Ancona & Caldwell, 1992; Caldwell & O'Reilly, 2003; Clark & Fujimoto, 1992) identify the importance of cross-functional product teams with individuals from marketing, manufacturing, and engineering. Similarly, Mintzberg and McHugh (1985) describe the temporary project task forces that came together to make specific films at the National Film Board of Canada, and Katila, Levitt, and Sheffer (2018) observe the craft and project integration that aided green building construction in the United States. Overall, the O-form is characterized by richer and more lateral information processing and decision-making and by more innovative and adaptive outcomes than traditional bureaucracy.

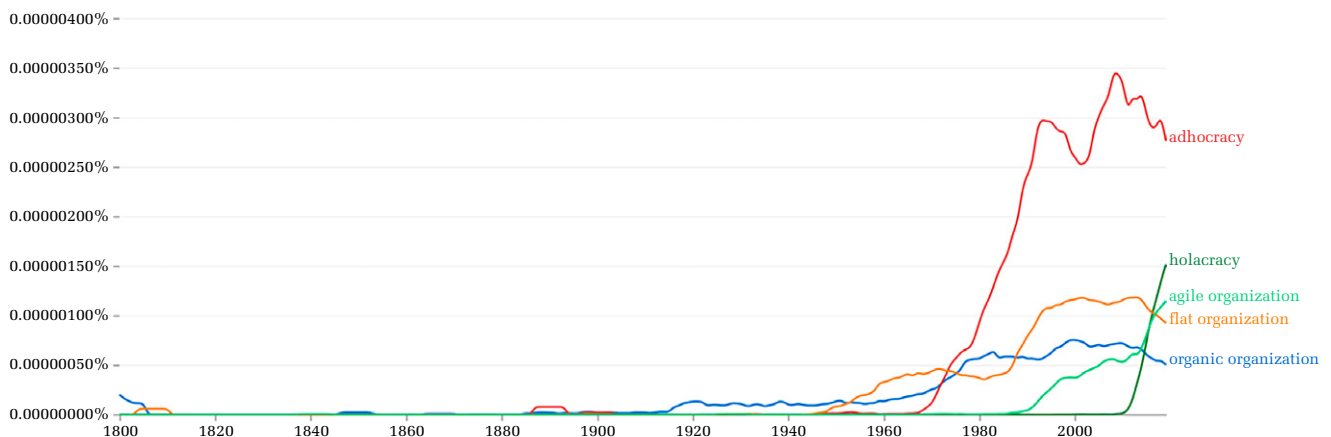
Monitoring of agents. Monitoring also differs from traditional bureaucracy. Since roles are often broad with high discretion, monitoring is frequently based on outcomes rather than on day-to-day behaviors. Thus, the O-form works well for professionals who typically prefer less monitoring and broad discretion. In addition, since O-form organizations often rely on teams of peers, group evaluations and rewards are common. Peer evaluation can be useful

as well, although it can be difficult to implement (Loughry & Tosi, 2008).

Like traditional bureaucracy, extrinsic rewards like salaries and promotion are important. However, unlike traditional bureaucracy, employees can also receive performance bonuses. Further, since O-form roles are broad with high discretion, they often provide intrinsic motivation through the work itself (Hackman & Oldham, 1975). Thus, the O-form not only works well for professionals who prefer these roles but also for individuals who want more autonomy, significance, and variety in their work despite being in traditionally bureaucratic jobs like manufacturing (Hackman & Oldham, 1975). For example, the T-Mobile call center organization effectively used the O-form, including job enrichment, to create more meaningful work (Dixon, 2018). Indeed, many people respond to the O-form with higher motivation and job satisfaction (Cordery, Mueller & Smith, 1991) because this more self-directed work taps into intrinsic motivation (Hirst, Knippenberg, Chen & Sacramento, 2011; Klapper & Reitzig, 2018).

Seminal work and interdisciplinary impact. We identified Burns and Stalker (1961) as a seminal scholarly work on O-form organizations. Our reading of the literature suggested that this book is widely acknowledged for its pioneering insight that organizations should decentralize contingent on environmental uncertainty (see Figure 6). Our empirical analyses provide support: A keyword analysis shows an uptick in the term “organic organization” soon after its publication, highlighting its influence on later research.

FIGURE 6
Frequency of Terms Related to “Organic Form” (Disruption 2) over Time



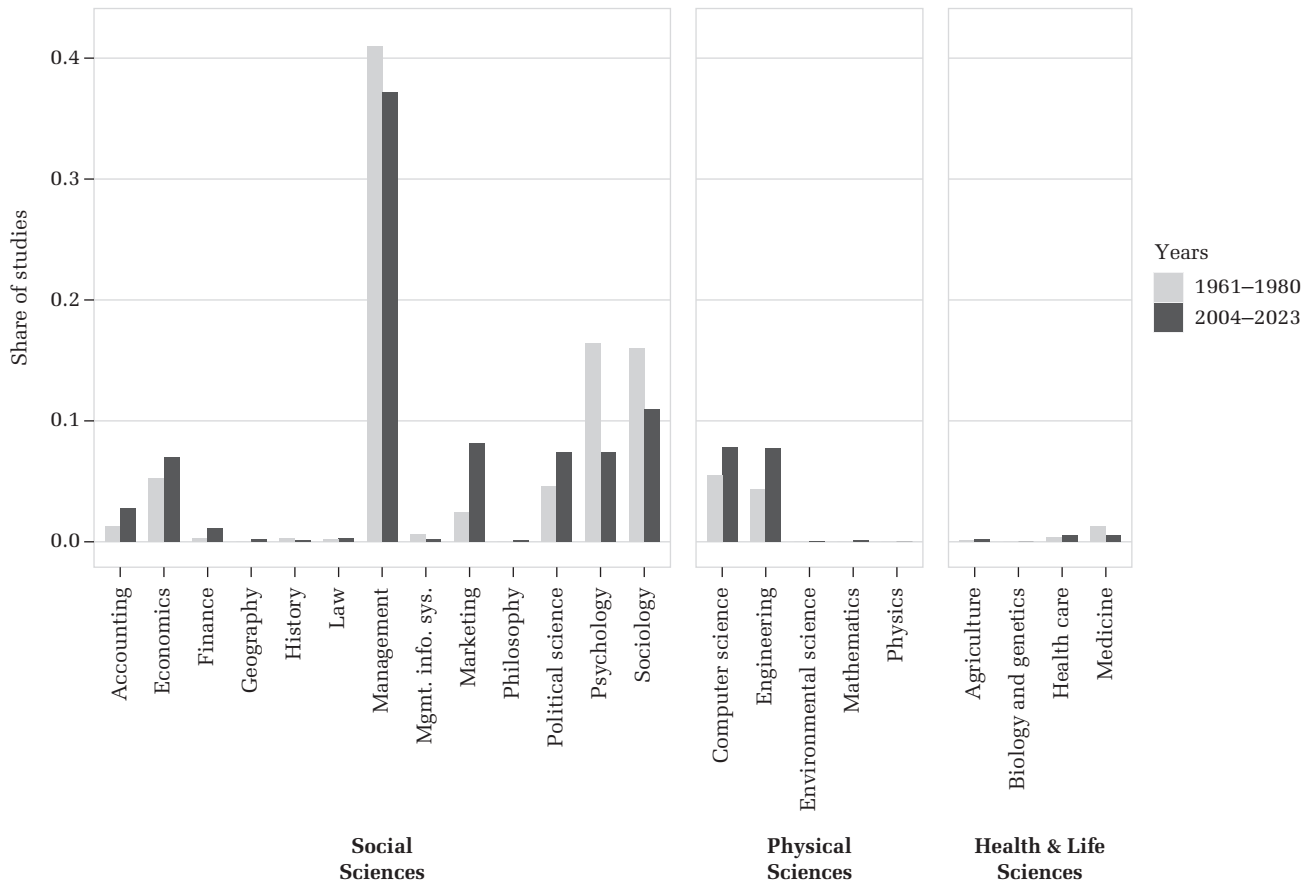
Source: Google Ngram Viewer.

The early influence of Burns and Stalker (1961) was primarily in the management literature (see Figure 7). The work also gained some traction in sociology and psychology. Over time, the substantial influence on management persisted, outpacing other subfields, while its influence in sociology and psychology diminished. Citations in computer science and engineering are signs of increasing interdisciplinary influence.

Variations of the form. Specific variations of the organic form have been proposed. An early one is the clan, employed by many Japanese organizations and some U.S. firms like Hewlett-Packard (Ouchi, 1980). The clan uses social control, especially socialization, to guide managerial behavior within organic organizations as a substitute for the structure of bureaucracy. Another particularly prominent variation is the ambidextrous organization (e.g., Gibson & Birkinshaw, 2004; Jansen, Şimşek & Cao, 2012; Jansen

et al., 2006; Katila, Chen & Piezunka, 2012; O'Reilly & Tushman, 2008; Taylor & Helfat, 2009; Tushman & O'Reilly, 1996;). This variation involves balancing between mechanistic and organic structures within the same organization in order to achieve both the efficiency of alignment and the flexibility of adaptation (Gibson & Birkinshaw, 2004; Jansen et al., 2006) or oscillating between the two (Boumgarden, Nickerson & Zenger, 2012; Raveendran, 2019). Other variations of organic organization include “adhocracy” (Mintzberg & McHugh, 1985) employed by Boeing and NASA, “agile” (Rigby, Sutherland & Noble, 2018) utilized by SpaceX, “holacracy” (Robertson, 2015) used by CashCo (pseudonym), a manufacturing organization in the finance industry (Lee, 2024), and “structured chaos” (Brown & Eisenhardt, 1998) used by Google (Lashinsky, 2006). Despite this variety, these variations all blend some structure with many common features of the O-form, per the above.

FIGURE 7
Interdisciplinary Impact of O-Form’s Seminal Work



Note: The seminal work is Burns and Stalker (1961).
n = 3697

More broadly, organizations vary in their degree of “organic-ness.” That is, although the O-form is broadly characterized by features like a flat (vs. tall) hierarchy, and fluid and broad (vs. precise and narrow) roles, particular organizations may be more or less organic. Organizations are optimally more organic when there is high uncertainty (i.e., when flexibility, adaptability, and innovation become more important than efficiency and alignment) (Lawrence & Lorsch, 1967). That said, organizations can be too organic (Davis et al., 2009). For example, organizations like GitHub, Valve, and Zappos tried hyper-organic structures. These organizations, however, had so little structure that they were unstable (i.e., became chaotic, unable to adapt, and often failed) (e.g., Burton, Håkansson, Nickerson, Puranam, Workiewicz & Zenger, 2017; Martela, 2019). In complexity theory terms, they fell off the “edge of chaos” into an “error catastrophe” (Davis et al., 2009). For example, Spotify flexibly organized around what they termed tribes, chapters, and guilds (Littlewood, 2020), yet these highly autonomous cross-functional teams lacked sufficient managerial and communication structures to coordinate with others. They wasted time, duplicated effort, and were dismantled (Littlewood, 2020). Instead, successful O-form organizations are often moderately organic (i.e., much less structured than traditional bureaucracy, but not extreme) (Brown & Eisenhardt, 1997; Gibson & Birkinshaw, 2004; Jansen et al., 2012).

Organic organizations can also vary in terms of the hierarchical level of their lateral processes. For example, Google used integrators and cross-business teams at its most senior levels (Fast Company, 2016), while the National Film Board of Canada (Mintzberg & McHugh, 1985) and some automotive firms (Clark & Fujimoto, 1992) used cross-functional teams and task forces at lower levels. In addition, organic organizations can also vary in terms of which lateral processes they adopt. So, while most organic organizations use task forces and teams, only some adopt the more complex matrix organization (Bartlett & Ghoshal, 1993).

Limitations. Like all forms, the O-form has limitations. Given extensive communication, fluid and broad roles, and lateral relationships like teams and integrators, there can be a loss of accountability and confusion about who is responsible for what (Lee, 2020). For example, Tabrizi (2015) finds that roughly 75% of cross-functional teams experience some dysfunction such as poor accountability, lack of engagement by busy managers, and unclear goals. Similarly, Lanaj, Hollenbeck, Ilgen, Barnes, and

Harmon (2013) find that the benefits of decentralized planning in multiteam systems are offset by excessive risk-taking and coordination failures. Decision-making can also be slow because of extensive group meetings. Power struggles can ensue as lines of authority are crossed. This is especially problematic when using a matrix. Although there are matrix success stories like Dana Farber (Gardner, 2017), problems like confusion, power struggles, and decision strangulation often emerge (Corkindale, 2008; Davis & Lawrence, 1978; Foss, 2003). Finding (and maintaining) an appropriate amount of structure is essential to overcome the form’s key limitation, making it work (Brown & Eisenhardt, 1998; Galbraith, 1973).

Innovative companies like SpaceX that are staffed by highly educated professionals and operate in highly uncertain environments fit well with the O-form and illustrate a successful O-form. SpaceX has a moderately organic organization (i.e., a relatively flat hierarchy, few formalized procedures, small teams, decentralized decision-making, and flexible agile development) (Weinzierl, Lucas & Sarang, 2021). Yet, SpaceX also has targeted structure. For example, while engineers have much discretion, they also have clear, often aggressive goals, given in advance, such as tight schedules (Wu & Calic, 2022). This structure sharpens accountability. Similarly, while engineers are expected to be innovative, speed and cost are central to the SpaceX strategy (Wu & Calic, 2022). So, SpaceX engineers are given a few “simple rules” for design that drive down cost and speed progress (e.g., eliminate complexity with the fewest components possible, reuse components, and use modular design) (Pampush, Weintz, Martinez & Jones, 2022; Weinzierl et al., 2021). These rules give guidance without elaborate procedures. Following these rules, for example, an R&D team dramatically and innovatively reduced the number of parts in the flagship Raptor Engine while increasing its power, proudly proclaiming “More power, less parts” (Pampush et al., 2022). As is well-known (Gilbert, 2021; Vance, 2017), the SpaceX CEO dictates some decisions. For example, he insisted that rocket reusability be achieved with hyper-thrusters, not parachutes—a choice that the COO termed the best strategic decision at SpaceX (Pampush et al., 2022). Yet, most decisions are decentralized. In addition to targeted structures, SpaceX mitigates the limitations of the O-form organization with a lean structure of relatively few employees—an approach that works, in part, because SpaceX hires top talent, provides them with very interesting work, and demands extreme work hours (Wu & Calic, 2022).

Disruption 3: Community Form (C-Form)

Communities have existed for centuries, since pirate crews selected their ships and elected their leadership and charters (Friedman, Leeson & Skarbek, 2019; Leeson, 2009) and a UK community assembled an English-language dictionary over a 70-year period from 1858 to 1928 (Seidel & Stuart, 2011). Digital communication technologies, more time for personal interests, and software as an ideal community task, however, have recently made communities more prominent, global, and large (Baldwin & von Hippel, 2011; O'Mahony & Lakhani, 2011). Impressively, communities like Wikipedia can successfully put many people to work for the common good and for free (Puranam et al., 2014).

Consistent with the work we reviewed, we define the community (C-form) as an organization composed of members working collaboratively, voluntarily, and with minimal monitoring to develop and share knowledge, resources, and ideas related to a common personal interest. Like the O-form, the C-form is loosely structured, but even more so (i.e., with minimal hierarchy, more fluid or even no roles, simpler processes, and little monitoring). Unlike the O-form, community members are mostly unpaid volunteers (vs. paid employees) and engage when and how they choose (vs. consistent work commitment). They also share a specific personal interest, such as a hobby or project that attracts members, and receive a range of non-financial rewards like personal enjoyment, contributing to the common good, and building skills that keeps them engaged.¹³ Finally, compared with the traditional bureaucracy, the defining features of the C-form include open membership (vs. closed employment), very flat (vs. tall) hierarchy, fluid or no (vs. precise and narrow) roles, multidirectional (vs. vertical) information flows, very limited (vs. extensive) formalized processes and monitoring, self-selected (vs. assigned by managers) tasks, and non-financial (vs. financial) rewards (see Table 1).

Division of labor. The division of labor within communities differs from traditional bureaucracy in several ways. First, while bureaucratic organizations screen and select employees based on qualifications, communities do not. While some screening may

occur, community membership is usually open to all (O'Mahony & Ferraro, 2007; Puranam et al., 2014). This means that communities often have diverse members, including both professionals and non-professionals (Croidieu & Kim, 2018), thereby accessing a wide variety of skills that may otherwise be unavailable in traditional organizations. Community membership is also typically fluid such that individuals can join, leave, or return whenever they wish without contractual restrictions or even the need to notify anyone (O'Mahony, 2003).

Second, community members decide (i.e., self-select) their own tasks (Baldwin & Clark, 2006; Faraj, Jarvenpaa & Majchrzak, 2011). So, members are free to pursue their personal interests, and choose when and how to contribute (Gächter, von Krogh & Haefliger, 2010; von Krogh, Spaeth & Lakhani, 2003). In contrast, in traditional bureaucracy, managers identify tasks and assign employees to them. As a result, communities excel in modular (i.e., simple) tasks: Members can decide their own activities and act in parallel with little direction (Baldwin & von Hippel, 2011). Members can also engage in individual experimentation and explore broadly (Bremner & Eisenhardt, 2022). Communities can also be more flexible than traditional bureaucracy because members can reconfigure their efforts without asking for permission (Fjeldstad, Snow, Miles & Lettl, 2012). Also, since members select tasks of interest to them, they are likely to be motivated (Shah, 2006).

Information processing. Information processing also differs from traditional bureaucracy. Community members typically engage in inclusive and highly participative information processing (Altman, Nagle & Tushman, 2015; Bremner & Eisenhardt, 2022; von Krogh et al., 2003). That is, information is typically shared, interpreted, and acted upon collectively by community members rather than the bottom-up information aggregation and top-down delegation of bureaucracies. This rich information flow is enhanced because information is typically open to all rather than being proprietary, restricted, or even closed as in traditional bureaucracies (Puranam et al., 2014).

Decisions are typically consensus-driven or driven by member voting rather than dictated by hierarchy (O'Mahony & Ferraro 2007; Reineke & Katila, 2025). Thus, community decisions typically reflect the views of members. Rather than relying on the formal procedures of traditional bureaucracies, communities often value personal relationships, trust, and mutual understanding in their decision-making. Although decision-making can be slow

¹³ Communities are also not networks per se. Communities have a purpose, often a distinct "inner circle" social structure, and personal identification with the community (Shah & Tripsas, 2007).

within communities (Shah, 2006), it can also be fast and flexible when members agree.

Monitoring of agents. Traditional monitoring is often infeasible due to the absence of lines of authority and formal employment. Moreover, community members are typically geographically dispersed and often work asynchronously and episodically. This further exacerbates monitoring. Communities can also quickly become large. For example, the hobbyist DIY.Drone community reached over 40,000 members in a few years (Bremner & Eisenhardt, 2022). Communities do have, however, some substitute monitoring mechanisms, such as shared work artifacts or community norms (Massa & O'Mahony, 2021), as well as reputation systems based on ratings or the aggregation of online trace data into reputation scores (Kuwabara, 2015). Some communities such as DAOs use blockchain technology to enable collaboration without hierarchical monitoring (Lumineau, Wang & Schilke, 2021; Reinecke & Katila, 2025).

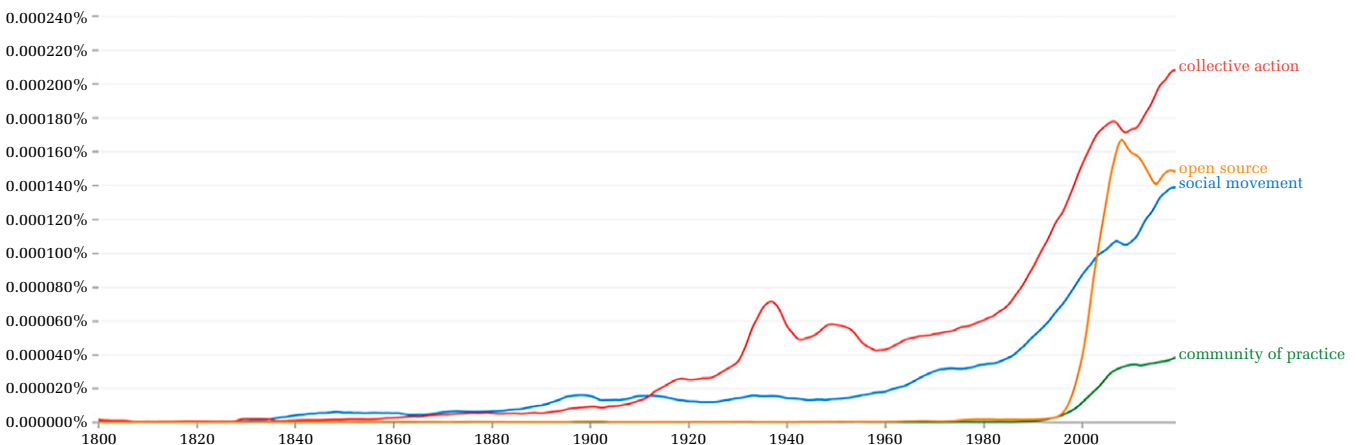
Unlike traditional bureaucracy, most (or even all) community members are unpaid with few opportunities for promotion. Instead, community members receive non-financial personal rewards (Lerner & Tirole, 2002; von Hippel & von Krogh, 2003). These rewards include intrinsic motivation derived from working on personally meaningful or enjoyable tasks (Croidieu & Kim, 2018; O'Mahony & Bechky, 2008; Shah, 2006) and the satisfaction of creating public goods (Nagle, 2018). Some members also value the opportunities to build their resumes, demonstrate skills, meet personal needs for information and camaraderie, and compete against "enemies" such as Microsoft (Seidel & Stuart, 2011) or abstract

concepts such as "capitalism" (Reinecke & Ansari, 2021). Although communities require some governance (Dahlander & Wallin, 2006; O'Mahony & Bechky, 2008), financial rewards are not necessary to get work done (von Krogh, Haefliger, Spaeth & Wallin, 2012). Consequently, communities can rely on the efforts of potentially thousands of members working for free.

While communities do not have a traditional bureaucratic hierarchy, members may seek to move "to the center" by advancing through concentric circles of influence in order to engage in more prestigious "inner circle" projects and to influence community governance (Dahlander & O'Mahony, 2010; von Krogh et al., 2003). These more influential members often rely on several sources of power such as authority (e.g., founder status or election by community members), charisma (e.g., persuasive communication skills), and expertise (e.g., technical contributions or organizing accomplishments) (O'Mahony & Ferraro, 2007). The inner circle may occasionally reject member contributions as being inadequate but does not direct members' work (Puranam et al., 2014).

Seminal work and interdisciplinary impact. We identified Olson (1965) as a seminal scholarly work on C-form organizations. This book is the first to provide a comprehensive theory of how and why individuals organize into groups to achieve common goals. That said, several concepts related to community organizations appeared in the first half of the 20th century, and the keywords "collective" and "collective action" emerged then as well (see Figure 8). Contemporary research on community organizations is rooted in this prior work on collective action while also drawing heavily on Olson (1965). Indeed, Olson's work (1965)

FIGURE 8
Frequency of Terms Related to "Community Form" (Disruption 3) over Time



Source: Google Ngram Viewer.

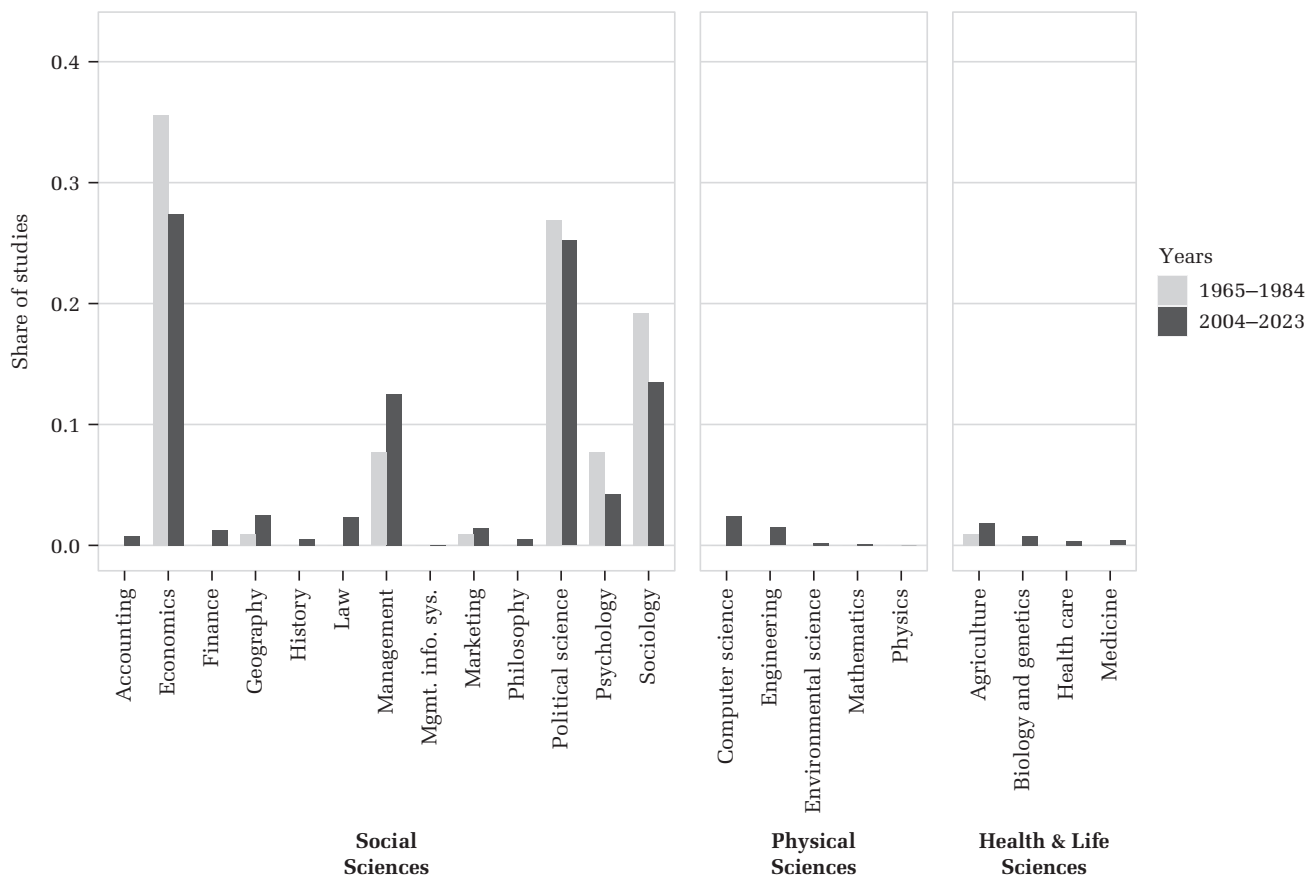
appears to have led to a resurgence of interest in communities.

Early on, Olson's (1965) work influenced economics, political science, and sociology (see Figure 9). It also gained some traction in other social sciences, like management and psychology, and a budding influence on the physical and life sciences. The long-term trend indicates slightly declining interest in many disciplines but a relatively increasing influence on management.

Variations of the form. Communities vary in terms of the nature of their work. User communities (e.g., Bremner & Eisenhardt, 2022; Franke & Shah, 2003; Shah & Tripsas, 2007) form around common interests such as snowboarding, parenting, and drones. Open-source communities (e.g., Nagle, 2018; O'Mahony 2003; Raymond, 1999) organize around their common interest in the development of specific products like Linux and Apache software.

Communities also vary in how they relate to other organizations. While some communities are standalone entities, many have relationships with other organizations or are embedded in other organizations (Bechky & Chung, 2018). User communities, for example, may spin out ventures (Franke & Shah, 2003; Shah & Tripsas, 2007). Since members are frequently avid users of products related to their interests, they may reveal attractive product-market opportunities for entrepreneurs. This occurred, for example, when Steve Jobs and Steve Wozniak left the Homebrew Club community of computer enthusiasts to launch Apple (Furnari, 2014). Ventures that emerge from user communities also then frequently work with these communities to gain product feedback (Shah & Tripsas, 2007). Open-source communities may also develop relationships with organizations that contribute their employees as members in order to enhance employee skills or

FIGURE 9
Interdisciplinary Impact of C-Form's Seminal Work



Note: The seminal work is Olson (1965).
n = 1631

contribute to a collective product that adds value to the organization (Nagle, 2018). Often these relationships occur for large-scale software communities such as when firms like IBM contributed employees to the development of Linux. Sometimes community members embed themselves in organizations that they wish to influence. Schifeling and Soderstrom (2022), for example, document how Environmental Defense Fund's (EDF) Climate Corps embedded graduate student fellows in partner organizations to advance climate change reforms. A key to the success of community relationships with other organizations is negotiating sharp boundaries such as employee versus member status and ownership of intellectual property (Bremner & Eisenhardt, 2022; O'Mahony & Bechky, 2008).

Communities also vary in their degree of decentralization. While most are highly decentralized, some members, particularly founders, may attempt to centralize decision-making in their communities. This centralization can be helpful in launching the community but can become ineffective over time. For example, the founder of the Linux Debian community retained many decision rights that his successor wisely relinquished (O'Mahony & Ferraro, 2007). In contrast, the founder of the Terra (LUNA) community retained many decision rights which ultimately contributed to the community's demise (Kereiakes, Kwon, Di Maggio & Platias, 2019; Securities and Exchange Commission, 2023).

Most recently, the DAO (e.g., Lumineau et al., 2021; Murray, Kuban, Josefy & Anderson, 2021; Reineke & Katila, 2025) has emerged as a new variation of community. DAOs are built on top of blockchain technology which can reduce the coordination problems that often limit communities (Lumineau et al., 2021; Reineke & Katila, 2025). For example, some specifiable managerial tasks can be delegated to the software code of "smart contracts" (Lumineau et al., 2021). In addition, and like open-source communities, DAOs may also employ IT tools such as decentralized version control systems that reduce participation costs for community members (Islam, Miller & Park, 2017).

Limitations. Like all forms, the C-form has limitations. First, task self-selection and episodic engagement make coordination difficult. Thus, communities excel when their task self-selection advantage is beneficial, in other words, in stable settings or with simple (i.e., decomposable) tasks like software (Baldwin & von Hippel, 2011), and in ambiguous settings in which low-cost randomness pays off (Lifshitz-Assaf, 2018). In contrast, they are less effective when coordination

matters. Thus, communities are *less* effective in uncertain settings where individuals know roughly where to look for missing information (Bremner & Eisenhardt, 2022; c.f. Katila, 2002). Here, coordinated processes (parallel and serial experimentation [e.g., Leatherbee & Katila, 2020]) that address specific uncertainties are better executed in other organizational forms (Bremner & Eisenhardt, 2022).

The coordination limitation also makes communities less effective in addressing novel, complex (i.e., non-modular) tasks. These tasks require integrative problem-solving among people working closely together (MacCormack, Rusnak & Baldwin, 2006). Given that members often work remotely and asynchronously, it can be difficult to develop effective working relationships to solve these tasks. When these novel, complex tasks are also large, they may require hybrid problem-solving that blends modular and integrative problem-solving (Baumann & Sigelkow, 2013; Bremner & Eisenhardt, 2022; Katila & Ahuja, 2002). This type of problem-solving requires coordination of the problem-solving architecture and the actual problem-solving activities—both of which are difficult to achieve in communities.

In addition, communities depend on the right people (i.e., self-selected members with relevant skills) participating at the right time to accomplish tasks (Bremner & Eisenhardt, 2022). This is likely to occur when the community is sufficiently large and the necessary skills are common, such as in many software projects. However, this is less likely when the relevant skills are rare or well-paid. Indeed, communities often lack both the financial incentives to attract such valuable talent and the ability to direct their efforts.

A comparison of drone makers 3DR and DJI is revealing (Bremner & Eisenhardt, 2022). While both were pioneers in the civilian drone industry, 3DR used a user community (DIY.Drone) for its innovations while DJI used a traditional functional organization. The community initially excelled when the primary innovation was highly ambiguous such that its broad, diverse, and inexpensive individual experimentation was beneficial. However, the community fell behind as the relevant innovations evolved from long-tail random exploration to solve ambiguous problems to (1) targeted experimentation to resolve specific uncertainties (e.g., product-market fit) and (2) swift execution of highly interdependent, novel engineering tasks. These tasks required skilled engineers from multiple engineering specialties to coordinate their efforts in designing a large, complex, and novel innovation (e.g., quadrotor drone). DJI hired the right top talent full time, gave rich financial incentives,

coordinated work, and avoided time-consuming negotiation over IP. In contrast, the community lacked both sufficiently skilled engineering talent and the ability to coordinate their members to work quickly together. The community's preference for open IP created further distractions and allowed hardware "free riders" to clone community designs for their own commercial benefit (Bremner & Eisenhardt, 2022).

Besides weak coordination and difficulty attracting rare, expensive talent, another limitation is the potential for internal dysfunction. As communities grow, the likelihood of disagreement increases and community-based decision-making can become difficult. In addition, extensive online participation and open membership increase the likelihood of objectionable behavior by at least some members and perhaps an unwelcoming community culture (Faraj et al., 2011; Shah, 2006).

Disruption 4: Platform Form (P-Form)

Prior to the rise of digital platforms, the idea of a platform as a marketplace was often used in the context of a variety of physical marketplaces such as the Grand Bazaar of Cairo. The ubiquity of the internet, the related exponential increase in "big data," and the rapid scaling of algorithms and AI that enabled and automated interactions fueled the growth of digital platforms and with it, a distinct organizing form: the platform (P-form) (Gawer, Cusumano & Yoffie, 2024; Furr, Ozcan & Eisenhardt, 2022; Katila & Thatchenkery, 2023; Stark & Pais, 2021).¹⁴ Many of the world's largest and most highly valued companies (e.g., Apple, Google [Alphabet], Facebook [Meta], Amazon, and Tencent) now generate much of their revenue from the form. What makes the P-form an increasingly distinct organizational form is the platform owner's reliance on the practices and contracting of algorithmic management "without [traditional] managerial authority having been delegated to them" (Stark & Pais, 2021: 47). This type of invisible hierarchy further distinguishes the P-form from the other organizational forms.¹⁵

¹⁴ As noted above, the crowdsourcing platforms such as InnoCentive or TopCoder that focus on decentralized information sourcing (i.e., gathering of information) without decision-making are outside our scope.

¹⁵ Networks involve cooperative relationships that slowly build trust and loyalty through direct and indirect ties over time (Smith-Doerr & Powell, 2005), whereas platforms are about matching users in the moment, building "quick trust" based on the ratings of other users, and

Consistent with the work we reviewed, P-form organizations reduce friction and transaction costs in bringing two or more participant groups together. P-form organizations are multipart, comprised of (1) platform owners who design the rules and structures, and operate the platform; and (2) participants who interact with the platform and often also exchange goods, services, and information on the platform (termed users or participants on one-sided platforms; and variously termed as developers and buyers, complementors and end-customers, or simply as sellers and buyers on two-sided platforms; Thatchenkery & Katila, 2023). The work we reviewed focused on both consumer-oriented platforms like Uber and Apple AppStore (Cameron, 2022; Tidhar & Eisenhardt, 2020; Zhang, Li & Tong, 2022) and enterprise-oriented platforms like the Salesforce Platform or Microsoft's Windows Server (Ceccagnoli et al., 2012; Thatchenkery & Katila, 2021, 2023). In contrast with traditional bureaucracies, platforms are characterized by relatively open (vs. closed) membership, self-selected (vs. assigned) tasks, resource ownership by participants (vs. organization), and monitoring by algorithms (vs. participants) (see Table 1).

Division of labor. The division of labor within P-form differs from the other organizational forms. A key difference is the roles. Specifically, the P-form places responsibility for the platform infrastructure with the platform owner. A typical division of labor is that the *platform owner* (1) decides design rules and functionalities (e.g., application programming interfaces [APIs]), gatekeeping rules, and governance; (2) uses data analytics and algorithms to personalize the user experience; and (3) creates an environment that is dependable and trustworthy to interact (Rietveld & Schilling, 2021; Thatchenkery & Katila, 2023). In contrast, *content providers* (e.g., AppStore developers) make decisions about product specs and revenue models. *End users* in turn shape content like product evaluations and provider ratings. For example, Netflix viewers rate shows which then affects which shows Netflix will offer and what other similar users will see (Kretschmer, Leiponen, Schilling & Vasudeva, 2022). Thus, the typical division of labor decentralizes some key decisions (Koo & Eesley, 2021; Tidhar & Eisenhardt, 2020).

P-form's division of labor mirrors the top-down approach of bureaucratic hierarchies, with the

loyalty through lock-in (Stark & Pais, 2021). Thus, platforms are a distinct organizational form that is neither a market nor a network (Stark & Pais, 2021).

platform owner dictating roles and responsibilities. However, their management diverges. Unlike bureaucracies, where the division of labor is explicitly outlined and communicated through formal documentation and rules, the P-form relies on algorithmic management. This means that decisions about task allocation, such as who performs specific tasks, are made by algorithms, often without clear visibility or explanation for those decisions (Cameron, 2022; Karunakaran, 2022). This “black box” approach to dividing labor is very different from the transparent, rule-based systems used in traditional bureaucracies.

P-form also differs in resource provision. First, many resources and much of the effort are provided by non-employees, not employees or even contractors. Participants contribute the resources (e.g., Uber and Lyft drivers provide cars) and the efforts (e.g., developers code for AppStore) by which platform owners create much of their value. Unlike bureaucracies that separate ownership from employment, platform owners rely on the resources and efforts of potentially thousands of participants with little concern about resource constraints. This enables platforms to potentially scale quickly at relatively low cost. Second, platform owners are sometimes incentivized to share their own resources with participants to jump-start the multisided platform ecosystem (Kretschmer et al., 2022). Thatchenkery and Katila (2023) used the example of Microsoft’s proprietary implementation of Java that was provided to participants of the enterprise infrastructure software ecosystem. In traditional bureaucracy, there are no similar incentives to share assets.

While traditional bureaucracies screen and select employees based on qualification, platforms are in principle open to most or even all. Instead of selective hiring practices, platforms use gatekeeping policies to screen participant contributions and algorithmic management to check compliance with platform rules (Zhang, Li & Tong, 2022). They often remove participants who do not comply. Platform membership is often fluid such that participants can join or leave freely without contractual constraint. This openness can enable platforms to innovate and diversify products rapidly, and so scale and strengthen their network effects quickly, but also presents challenges for platform owners to retain participants (Ai, Chen, Mei, Ye & Zhang, 2023).

Information processing. Information processing in the P-form diverges from the traditional bureaucracy in some respects. The primary strength of digital platforms lies in efficient processing of information, simultaneously and in real time. Algorithms

filter, classify, and process data, often employing machine learning techniques to identify patterns and make predictions (Rathje, Katila & Reineke, 2024). Unlike traditional bureaucracy where information flow is often slow and hierarchically controlled, in the P-form, processed information can instantly refine the algorithms, accelerating decision-making. Immediate response significantly reduces the delays typically associated with complex decision-making in bureaucracies. Overall, rapid information processing marks a significant departure from Weber’s bureaucracy.¹⁶

There are also similarities to bureaucracy. P-form organization’s information processing mirrors the top-down reporting lines found in traditional bureaucracies. Information, interactions, and contributions from participants travel up to the platform, where they are synthesized by algorithms. Decisions, approvals, and refined information then cascade down to the participants. The rarity of lateral information exchanges further aligns platforms with the conventional bureaucratic model, emphasizing a top-down approach in information flow and decision-making.

In fact, platform owners are typically bureaucratically structured (Monteiro & Adler, 2022), which fits with the theory that coordinating interconnected components (e.g., apps integrating with the platform) necessitates more centralized organizational structures (Pfeffer & Salancik, 2003: 285–286). Managing the flow of information across a wide range of participants demands more centralized decision-making structures for effective coordination.

Information flow from platform owners to participants (down the hierarchy) again mirrors bureaucracies. Since there are many participants, platform owners typically communicate with them through rules (Baldwin & Woodward, 2009). These rules often relate to pricing (e.g., how much each side of the platform earns), design openness (e.g., minimum quality standards), and the interface between users (e.g., search ranking and matching algorithms). But unlike bureaucracies, since the platform rules are

¹⁶ Rapid information processing creates both benefits and drawbacks for participants. Information creates positive feedback loops such that accumulating information improves platform matching, personalization of user experiences, and overall platform performance (Zhu & Furr, 2016). But this information can also be used to provide insights that enhance the power of the platform owner (e.g., which products to produce itself) at the cost of user-participants (Zhu & Liu, 2018).

often “black boxed” and there are many users in varied situations, users can find the rules ambiguous and interpret them incorrectly. For example, Koo and Eesley (2021) study Alibaba’s Thousand Faces rule change that was intended to encourage sellers to deepen their product lines. Yet some sellers misinterpreted the rule and did the opposite. In addition, and unlike bureaucratic rules that change slowly, platform rules often frequently change given the more volatile environment. This can create uncertainty and even anxiety among users as, for example, Jhaver, Karpfen, and Antin (2018) found at Airbnb, or with fans of Taylor Swift who were upset to discover that their only option to buy tickets for the singer’s Eras tour (i.e., the Ticketmaster platform) faced “service delays, and confusing pricing practices” (Katila & Thatchenkery, 2023). Some have argued that platform owners deliberately create ambiguity and uncertainty in order to control users (Stark & Pais, 2021; Weintraub, Ping & Lippiello, 2023), while others see the owners as hiding strategy from rivals, keeping sellers from “gaming” the platform, or simply miscommunicating (Koo & Eesley, 2021). Overall, the information flow in platforms is circular but also uneven and asymmetric in favor of the platform owner.

Monitoring of agents. A major difference in monitoring of agents between the Weberian bureaucracy and the P-form is that monitoring of participants by traditional managers is largely absent. Typically, no employment relationship exists between the platform owner and the participants. Instead, algorithms reduce human monitoring by filtering information about outputs into key signals and metrics (Rahman, 2021). For example, rideshare drivers rate passengers and vice versa. These ratings then accumulate into rankings that can affect, for example, placement on search results, future products, and ability to stay on the platform.

In addition, P-form organizations often engage in extensive algorithmic monitoring. Although some of this information is used to improve matching and optimize platform performance, Kellogg and colleagues (2020) outline how these algorithms can monitor users, especially less-skilled gig workers, instantly and comprehensively. Thus, while traditional monitoring by managers is absent, algorithmic monitoring can resemble bureaucracy’s “impersonal” approach.

Third, participants do not receive traditional bureaucratic rewards like salaries and career advancement. Instead, participants are typically financially compensated by a percentage of sales and the possibility of growing their businesses

rapidly (Roccapriore & Pollock, 2023). Some platforms also offer social rewards. For example, Ott and Eisenhardt (2020) describe how a platform linking East Asian hosts with international travelers used a newsletter and Facebook group to enhance the camaraderie and loyalty of hosts. Similarly, Salesforce sponsors its Dreamforce conference (Parker, Van Alstyne & Jiang, 2017). These events foster inspiration among complementors who otherwise may feel alienated by decentralization of the P-form.

Seminal work and interdisciplinary impact. Although there are several possibilities (e.g., Rochet & Tirole, 2003), we identified Shapiro and Varian (1998) as the focal seminal work on the P-form because it is the first with a comprehensive identification of the key concepts of platforms as an organizational form and network effects. Indeed, Shapiro and Varian (1998) is frequently referred to in our paper corpus as a model for economic view on platform organizing. Our keyword research adds evidence for the work’s seminal influence with use of the term “digital platform” rising sharply after its publication, followed by the term “multisided” soon after (see Figure 10).

In the first 13 years, Shapiro and Varian (1998) primarily influenced the management literature, economics, and marketing. Physical sciences (particularly computer science) also show a large impact outside the main discipline of social sciences (see Figure 11). This significant multidisciplinary influence continues today.

Variations of the form. There are several variations of the P-form. First, platform organizations vary in their number of rules. Some are highly formalized with many rules such as complex terms of use (Stark & Pais, 2021). In this regard, these platforms resemble traditional bureaucracies. Others have few rules and are more akin to the O-form (Volar & Eisenhardt, 2025).

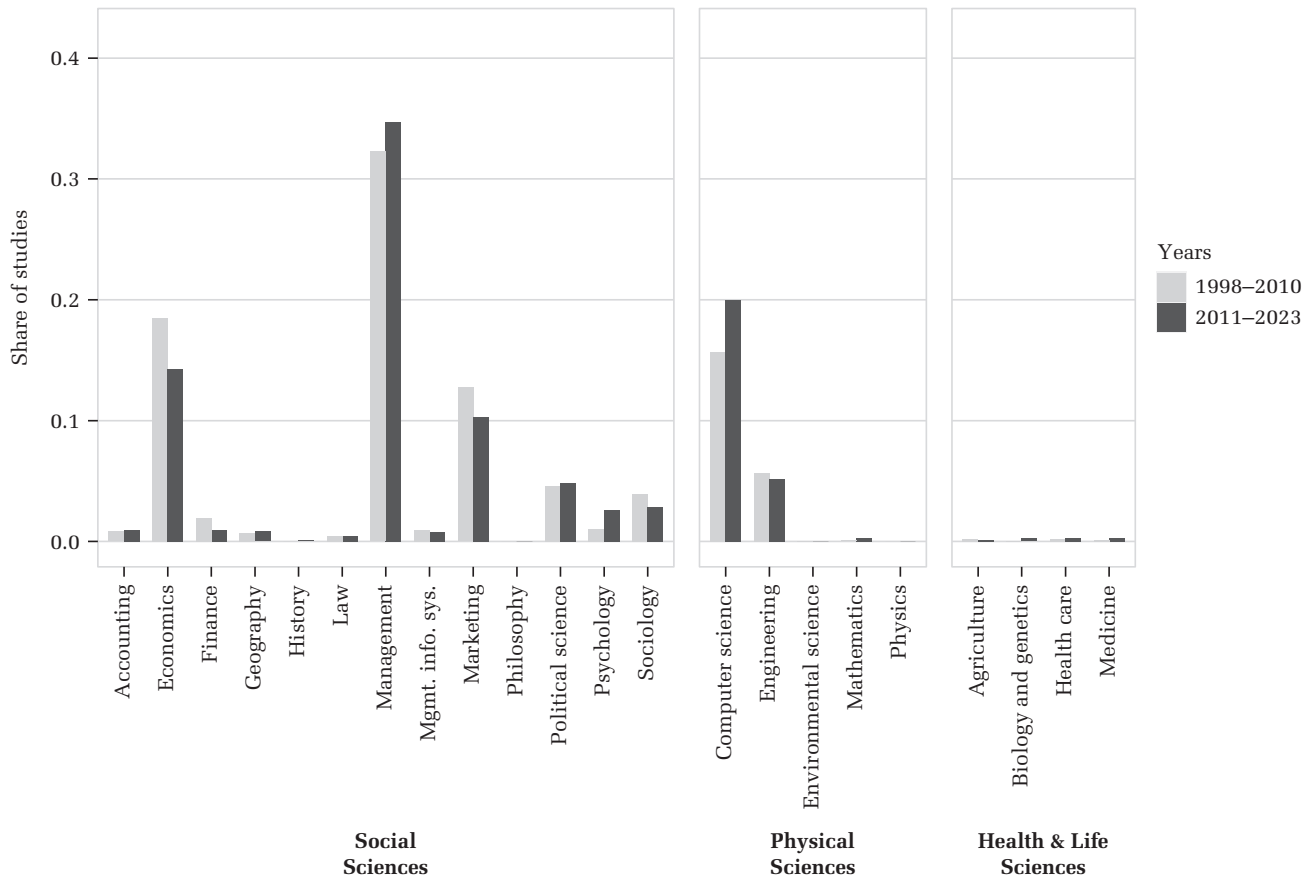
P-form organizations also vary in terms of whether the platform owner competes with participants (i.e., dual platform-complementors) or just owns the platform. Some platform owners kickstart the platform with their own products to ensure supply such as Nintendo launching its initial gaming platform with its own Super Mario game. This typically benefits everyone. Others offer some products, but not so many that they deter providers, raise competitive concerns, and limit innovation (Thatchenkery & Katila, 2023). Still others like Amazon exploit their information advantage to add products that favor their own interests (Zhu & Liu, 2018). Finally, some do not compete with participants. Regarding cooperation,

FIGURE 10
Frequency of Terms Related to “Platform Form” (Disruption 4) over Time



Source: Google Ngram Viewer.

FIGURE 11
Interdisciplinary Impact of P-Form’s Seminal Work



Note: The seminal work is Shapiro and Varian (1998).
n = 2774

some platform owners offer extensive assistance to providers which often appeals to inexperienced providers, while others are more hands-off (Katila, Piezunka, Reineke & Eisenhardt, 2022).

Limitations. Like all forms, there are limitations to the P-form. First, since there are often many participants, coordination among them can be difficult. Limited lateral information flow between participants exacerbates this difficulty. Thus, there may be intra-platform competition and duplicate products in some areas on the platform (Wen & Zhu, 2019) and product gaps in others (Katila et al., 2022). Platform owners may try to “maintain order” (Zhang et al., 2022), but this is not easy. Finally, like the C-form organizations, P-form ones typically lack the coordination to create deeply innovative products, although the underlying product that supports a product platform often is.

Second, platforms depend on heterogeneous demand (i.e., long-tail demand with a wide variety of customer needs) (Shapiro & Varian, 1998). When this occurs, many diverse participants are attracted to the platform. This, in turn, attracts more end users and sets network effects in motion. In other words, the P-form works well for scaling of individualized contributions at pace. When the organization cannot adopt governance to every local situation yet needs to swiftly communicate rules that determine action limits, platforms have several advantages. In contrast, the traditional bureaucratic form works well when the product is homogenous or local needs are not global needs. Homogeneous demand (i.e., short-tail demand with little variety in customer needs) likely stymies strong network effects (Parker et al., 2017). Rather, creating products and adding the desired features within a functional or M-form organization is a better choice.

Equity crowdinvesting platforms such as SeedInvest, Indiegogo, and Crowdcube provide intriguing examples of both opportunities and limitations of platforms (Lukkarinen & Katila, 2024). Because platforms are open to all, the P-form promises to democratize access to capital to enable a wider array of investors to participate in the funding of startups, from traditional venture capitalists to individual investors, and to diversify the investee base (entrepreneurs) by providing them with a more accessible and inclusive avenue for raising capital. But there are also challenges. Because each investment opportunity and startup is unique, with its own unique risks, it can be challenging for the platform owner to “maintain order” and for investors, especially those with less experience, to evaluate early-stage investment opportunities effectively (Lukkarinen & Katila, 2024). Platform algorithm

plays a pivotal role as well. It can shape investment decisions and opportunities for both investors and ventures. By determining which projects are highlighted and recommended to potential investors, the algorithm can significantly influence the visibility and attractiveness of certain ventures over others. This can create a virtuous cycle for selected ventures and influence market dynamics but may also lead to a skewed representation whereby worthy projects might get overlooked if they do not align with the platform algorithm’s current preferences. Additionally, the transparency and fairness of the algorithm are crucial; if investors perceive the platform’s recommendations as biased or manipulative, it could undermine trust in the platform and discourage participation.

Summary

Scholarly understanding of decentralization has evolved over decades. We followed the sequence of perspectives from the ideal of Weber’s bureaucracy through four disruptions: multidivisional with decentralization to modular divisions (M-form), organic with flatter hierarchy and lateral communication (O-form), community with fluid participation and task self-selection (C-form), and platforms with diverse participation and algorithmic management (P-form). While each form decentralizes decision-making to more peripheral participants and away from the center of the organization, each form nevertheless retains (and sometimes returns to share) many aspects of the division of labor, information processing, and monitoring that characterize the traditional bureaucratic form. We discuss these collective insights of our review below.

DISCUSSION AND CONCLUSION

We began this review of decentralization research by examining the “ideal” form of centralized organization (i.e., the bureaucracy). We then identified key pivot points that introduced new trajectories of decentralization, disrupting the ideal. We outlined four major disruptions that occurred over time—multidivisional, organic, community, and platform—along with societal trends and technical advances that enabled and accelerated them. We also discussed how each challenged the assumptions of traditional bureaucracy about organizing, particularly regarding the division of labor, information processing, and monitoring. We conclude with the major insights from our review, discussion of interdisciplinary research, and directions for future work.

Major Insights from Review #1: Four Disruptions

We traced the development of decentralization studies over time and in the process created a theoretically grounded typology of decentralization disruptions (see Table 1). Each disruption exposed specific limitations in the ideal of bureaucratic centralization and its assumed benefits. Overall, these disruptions arose to address new societal and technical conditions that emerged.

M-form became prominent in the early 20th century as executives attempted to grow their organizations via diversification into new products and geographies (Chandler, 1962; Freeland, 1996). It was enabled by societal changes including the legalization of the corporation and the emergence of a modern financial system that could provide capital for diversification (Scott & Davis, 2008) as well as by the widespread adoption of telecommunications technologies, particularly the telephone network. Yet, this growth via diversification created uncertainty leading to information overload at the apex of the corporation. The M-form was the solution.

O-form emerged in the mid-20th century as executives attempted to grow their organizations via innovation. In particular, World War II created a plethora of innovations that companies like Hewlett-Packard leveraged to grow. Indeed, while the early research on the O-form emphasized environmental dynamism (e.g., Burns & Stalker, 1961; Lawrence & Lorsch, 1967), the organic firms in their studies were innovation-centric and competed in new technology-based industries. Simultaneously, there was growing societal interest in the human side of organizations (Hackman & Oldham, 1975; Mayo, 1945; Trist & Bamforth, 1951), even in jobs like auto assembly that were traditionally bureaucratic. Thus, the O-form (1) helped to resolve the information overload created by the uncertainty of innovative products and new markets and (2) offered intrinsically motivating jobs that fit with the professionals working in innovation-centric organizations and with employees in other organizations who wanted more meaningful work.

Communities like the Carmelite nuns, Freemasonry, and the Royal Geographic Society have existed for centuries. However, the emergence of digital communication technologies as well as more available time to devote to personal interests enabled communities like Wikipedia to become prominent, global, and large (Baldwin & von Hippel, 2011). Moreover, software was the perfect catalyst for the emergence of many communities because its modularity fits well with the strengths of communities

(Bremner & Eisenhardt, 2022; O'Mahony & Lakhani, 2011; Puranam et al., 2014). For example, communities like Linux and Apache quickly developed free or almost free software that even giant corporations like IBM and Microsoft could not match.

The rise of the P-form was driven by the internet boom, availability of big data, and advances in prediction algorithms, which powered the digital platform expansion and a new business model for platform companies. The P-form succeeded by enabling individuals like rideshare drivers, exercise app developers, and artisans to profit at scale. Open-source developers also discovered platforms as a means to achieve autonomy and financial rewards: they could gain both autonomy *and* profit by participating on a platform. Altogether, charting the multifaceted nature of decentralization over time reveals how societal and technical trends enabled new organizational forms to emerge.

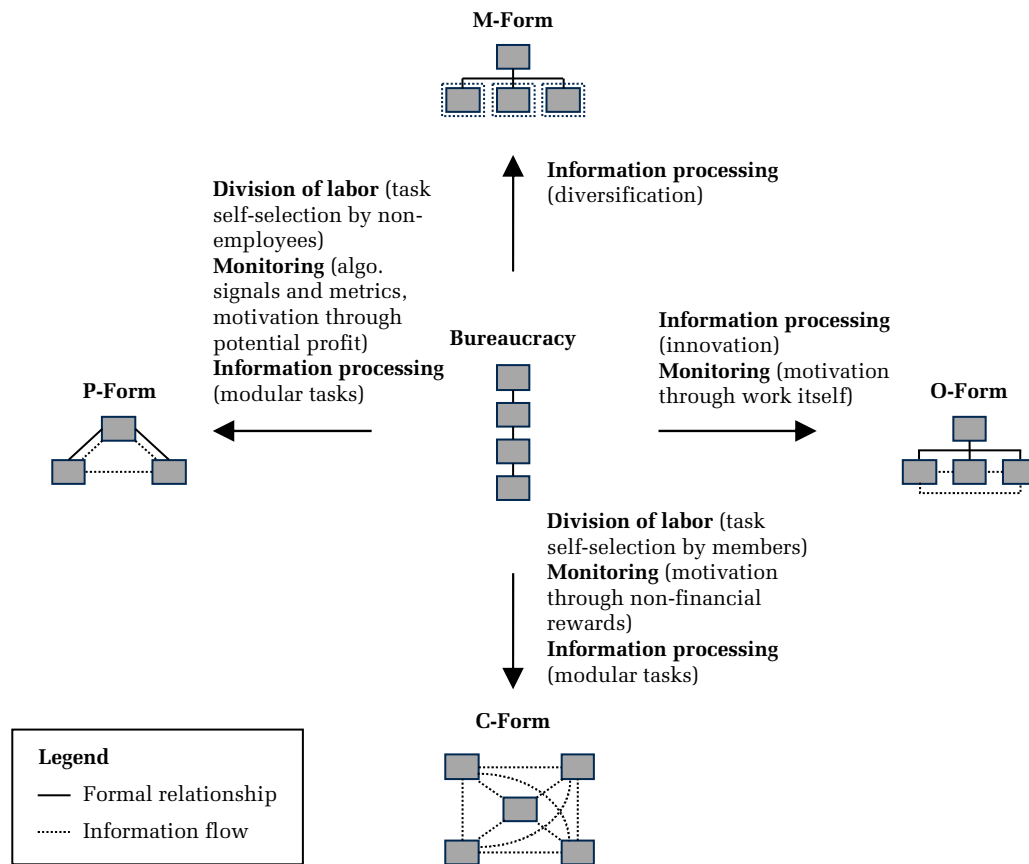
Major Insights from Review #2: Boundary Conditions of the Theory of Bureaucracy

Along with expanding the range of phenomena addressed, each disruption moved the spotlight from one set of theoretical ideas to another and so highlighted how the original theory of bureaucracy explained a more limited range of phenomena than perhaps initially anticipated. Each disruption revealed new boundary condition(s) for bureaucracy (see Figure 12) and introduced an organizational innovation (i.e., a new form) that extended decentralization in a novel way. Each, however, did so to different degrees, in different ways, and at different points in time.

The M-form was the first disruption to reveal key boundary conditions for bureaucracy. Traditional bureaucracy assumes a stable organization in a certain setting. Efficiency (not flexibility) matters. However, diversification into new products and geographies created an *information processing* overload at the apex of organizations like DuPont (Chandler, 1962).¹⁷ The solution was decentralization via the M-form which organizes divisions around outputs (e.g., products and geographies) and focuses information processing within divisions. Later, the O-form emerged to cope with a similar information overload at the apex of innovation-centric

¹⁷ While each disruption leads to changes in division of labor, information processing, and monitoring, we focus in this section on the evolution of the most significant changes that shaped the principal boundary conditions.

FIGURE 12
Evolution of Boundary Conditions for Bureaucracy



organizations (Burns & Stalker, 1961). Overall, bureaucracy's assumptions of stability and efficiency indicate boundary conditions for traditional bureaucracy that emerge when organizations pursue diversification or innovation and so face both substantial uncertainty (not stability) and the related need for flexibility (not only efficiency).

The O-form also added further boundary conditions for bureaucracy. Traditional bureaucracy assumes that employees require monitoring (not discretion) and are motivated by pay (and not by the work itself). However, innovation-centric organizations like Hewlett-Packard and IBM needed professional employees who did not fit these *monitoring* assumptions. While the M-form modestly challenged these assumptions, the O-form challenged them directly by motivation through the work itself (Hackman & Oldham, 1975) to attract both professionals to innovation-centric organizations and lower-level employees who prefer this type of work. Overall, bureaucracy's assumptions of extensive monitoring of employees in

narrow and stable roles, and motivation solely by pay and promotion, indicate boundary conditions for traditional bureaucracy that emerge when employees also demand intrinsic motivation through the work itself.

More recently, the C- and P-forms revealed further boundary conditions for bureaucracy. Traditional bureaucracy assumes assigned, well-defined tasks within a clear employment relationship. However, communities like Wikipedia challenged both bureaucracy's *division of labor* with self-selection of tasks and *monitoring* by eliminating the employment relationship, including pay and promotion rewards. Instead, they rely on volunteer members who select their own tasks, are weakly monitored, and are motivated by non-financial rewards. In addition, communities typically engage in modular tasks like software that mitigate the *information processing* advantages for coordination that bureaucracy provides. Similarly, the P-form eliminates the employment relationship (for participants). Rather, platforms motivate participants through the potential to grow

their own businesses, often profitably. The P-form also goes further than the C-form by relying on asset ownership by participants. That is, the P-form often creates substantial value for the platform owner from the assets of participants. Overall, bureaucracy's assumptions of a division of labor based on assigned and well-defined tasks, monitoring and motivation within an employment relationship, and asset ownership indicate boundary conditions for traditional bureaucracy that emerge when individuals prefer personal flexibility to select tasks and rewards (not an employment relationship) and engage in modular (not highly coordinated) tasks, and when organizations can gain network effects by harnessing the assets of others. In particular, the P-form excels, in part, because it leverages the resources of participants.

In summary, new boundary conditions of the traditional theory of bureaucracy emerged with successive disruptions. Each disruption introduced a new organizational form (i.e., multidivisional, organic, community, and platform) that challenged the assumptions of traditional bureaucracy, thus clarifying its boundary conditions.

Major Insights from Review #3: Is Decentralization a Mirage, a Revolution, or Neither?

Comparing the organizational forms (Table 1, Figure 12) yields an intriguing insight: rather than an outright disruption, each is more like an evolutionary "pivot" around "bureaucracy"—akin to the basketball maneuver in which one foot remains grounded while the other moves in a concentric circle. Our review confirms that the new organizational forms do not replace one another but rather coexist and evolve in tandem. This pivot-like pattern is mirrored in the keyword trends (Figures 1, 4, 6, 8, and 10). Rather than fading, the interest in and the prevalence of an organizational form stabilizes. This highlights both their continued relevance and adaptation. Indeed, our review confirms decentralization as neither a mirage nor a revolution. Rather, more recent organizational forms of decentralization often build upon, combine with, or refine ideas from past waves of decentralization.

The organizational forms are also evolutionary in that they share overlapping characteristics and often combine with one another in real-world organizations. For instance, the M-form and O-form are complements such that the M-form can be more or less organic. Indeed, many large corporations that have adopted the M-form also use the O-form's lateral

processes like task forces and lateral information processing. Both the O-form and the C-form emphasize limited structure, but the C-form is more extreme. That is, the C-form eliminates the employment relationship, including task assignment and pay. Instead, it relies on attracting members with common personal interests, self-selection of tasks, and non-financial rewards to engage them. Yet, like the M-form, the C-form can also be more or less organic. In addition, the C-form relates to the M-form in that large communities with diverse interests may self-organize into modular units to provide greater focus. Conversely, the M-form relates to the C-form in that multidivisional M-form corporations may contribute employees to communities such as in large open-source software projects like Linux. Finally, the P-form can exist as a division within an M-form organization. It can also be more or less organic. Overall, the newer organizational forms frequently build on, combine with, or refine the decentralization ideas of their predecessors.

In addition, parallels exist between traditional bureaucracy and both the M- and P-forms. Like bureaucracy, the M- and P-forms involve structural changes in the division of labor. Further, these forms typically retain some power centralization at the apex of the organization that positions both M- and P-forms as more closely related to bureaucracy than the other two organizational forms.

Consistent with the evolutionary nature of decentralization, our review also supports the well-known organizational theory finding that many organizations become more "bureaucratic" as they become older and larger (Blau, 1960). For example, P-form organizations often gradually evolve as they grow and age such that they become closer to traditional bureaucracy. In other words, a central authority increasingly exerts control over a decentralized crowd of participants, thus resembling the rule-based governance of traditional bureaucracy. In fact, our review indicates that the algorithmic management of many P-form organizations may not truly decentralize power. So, some P-form organizations come to resemble traditional bureaucracy in terms of key features like impersonal, rule-based decision-making, rather than taking a huge step away from bureaucracy. In other words, although P-form organizations vary in their degree of decentralization, they tend to become more bureaucratic as they grow and mature. Thus, the P-form brings us back full circle to some Weberian ideals for efficient organization. Similarly, (C-form) DAOs can exhibit centralization of decision-making that limits the individual

autonomy of their members (Reineke & Katila, 2025). In summary, we conclude that recent trends toward decentralization are neither a mirage nor a revolution but rather represent a continuous resurgence and renaissance of decentralization concepts, evolving across historical waves of disruption.

Major Insights from Review #4: An Integrative Conceptual Model

Figure 13 provides an integrative conceptual model of the emergence, processes, and outcomes of decentralization in organizations. Based on our review, this model indicates (1) the drivers of decentralization (i.e., societal and technical changes); (2) three underlying core processes that are decentralized to varying degrees (i.e., division of labor, information processing, and monitoring); and (3) major organizational outcomes (e.g., growth, [in]efficiency, and innovation).

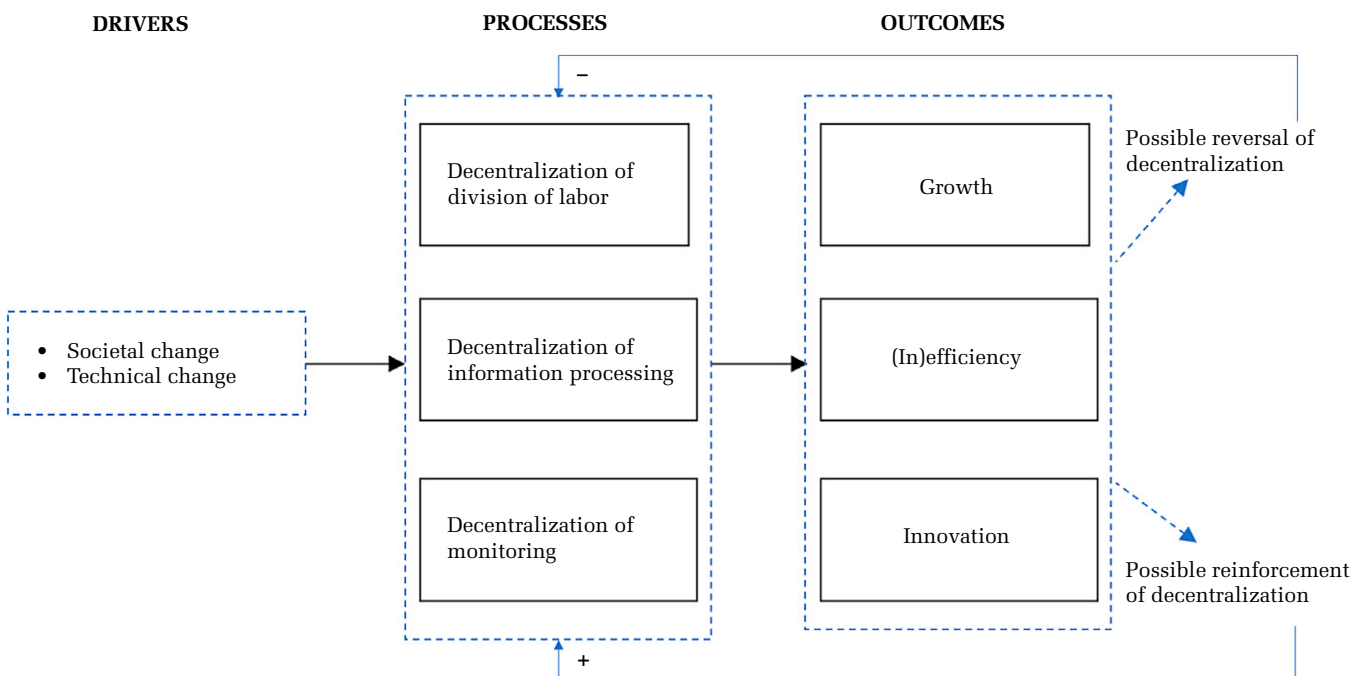
A key insight of this model is how different emphases on division of labor versus information processing versus monitoring under each decentralized form (M-, O-, C-, and P-form) likely yield different outcomes (i.e., different levels of growth, efficiency, or innovation). Our integrative literature review suggests that more centralized structures (like bureaucracy,

limited M-form) prioritize some degree of efficiency. In contrast, more decentralized forms prioritize growth or innovation, potentially sacrificing efficiency. These insights suggest new theoretical predictions that connect decentralization processes and organizational outcomes and thus are ripe for testing in future work.

The model also helps generate new theoretical insights on why decentralization would increase or decrease over time. As indicated in Figure 13, if a decentralized organization achieves controllable growth and innovation, a *positive* feedback loop ensues—reinforcing decentralized processes in the division of labor, information processing, and monitoring—further boosting decentralization. Conversely, if inefficiency or uncontrollable growth becomes prominent (such as when decision demands in growing organizations overwhelm decentralized decision-making systems), decentralized structures may be reconsidered, resulting in a *negative* feedback loop that reduces decentralization (e.g., Burton et al., 2017) and accelerates a shift toward more centralized decision-making (Lee, 2020).

Overall, the model helps illustrate positive feedback loops that result from favorable organizational outcomes such as innovation and growth that

FIGURE 13
Decentralization: Integrative View



reinforce decentralization, as well as negative feedback loops where lack of strategic direction and inefficiencies likely trigger the organization to reverse its decentralization efforts.

The model also puts a special emphasis on pathways that may lead organizations to retreat from decentralization. The retreat may stem from challenges in decentralizing the division of labor, information processing, or monitoring (see Figure 13). Regarding the division of labor, in the absence of hierarchy that coordinates the division of labor, some solutions to the organization's problems may become over-indexed. Such duplicate efforts may go undetected, resulting in inefficient use of resources. In turn, other solutions may be completely missed. Altogether, in the absence of hierarchy (that coordinates the division of labor), key uncertainties in decision-making may remain uncovered.

Second, information processing is a challenge that may lead organizations to retreat from decentralization. In the absence of both hierarchy and the related systematic coordination of information flows, information may not match the needs of the organization, resulting in inefficiencies. A related challenge is that choices may not get made or not made quickly enough if intended actions contradict one another, resulting in strategic uncertainty.

Third, in the absence of hierarchy, organizations may lack expertise in monitoring as expertise may not be built in key areas to evaluate solutions. Further, in the absence of monitoring, individual motivations and approaches to participation may diverge creating inefficiencies or excessive uncontrolled growth in many directions. Altogether, these challenges that may lead organizations to step away from decentralization often remain unexplained by the existing literature. This opens up exciting opportunities for further empirical investigation.

Interdisciplinary Research

Supported by detailed visualizations and quantitative analysis (Figures 2, 5, 7, 9, and 11), our review also offers intriguing insights into work across disciplinary boundaries. The first observation is about cross-disciplinary impact: Management scholarship today is much more focused on all types of decentralization than it was in the past. In fact, much early research on all forms occurred outside management. For example, bureaucracy was covered by studies by political scientists, psychologists, and sociologists; communities by economists, political scientists, and sociologists; and platforms by researchers

in marketing, economics, and computer science. Intriguingly, however, there is a significant shift over time. The current focus, scholarly interest, and discourse on decentralization is situated within the field of management,¹⁸ consistent with the importance of this review for management scholars.

Another unexpected observation from our review is that the research on M(multidivisional)-, O(organic)-, and P(platform)-forms is more *interdisciplinary* than that on the C(community)-form. Our additional analysis¹⁹ shows that the published work on communities is the *least* interdisciplinary. In contrast, the work on platforms is the *most* interdisciplinary—in other words, a platform paper is the most likely to be categorized in two or more different subfields, while a community paper is the least likely to do so.

Another interesting differentiator is that interdisciplinary community papers most commonly combine law and sociology, followed by law and political science. In contrast, multidivisional, organic, and platform papers most commonly combine management and marketing, followed by economics and marketing. The third most common combination is accounting and management for multidivisional and organic, and computer science and marketing for the platforms. The key point is that P-form is the most interdisciplinary and C-form is the least. Further, management scholars are actively involved in this interdisciplinary work, except for that on C-form, which represents opportunities for future work.

Figures 2, 5, 7, 9, and 11 add other elements that make communities (and bureaucracies) different—neither has an outsized impact on management nor much impact *outside* the social sciences. Management studies hover just above 10% of all the C-form studies. In contrast, management studies are 35%–40% of the work done in M-, O-, and P-forms today. Said differently, while management scholarship is interested in the C-form, it does not attract the same level of interest as the other three decentralization forms, pointing to opportunities for future work.

¹⁸ C-form is an exception.

¹⁹ Authors' analysis of the categories in which each paper was categorized by FOS. We define cross-disciplinary impact as the range of different subfields where follow-on work is generated, and interdisciplinary impact as the extent to which researchers combine ideas from two or more subfields into a new piece of work such that the new work is classified in at least two different subfields.

Major Opportunities for Decentralization Research

Our review indicates that each disruption examines decentralization phenomena through its own lens, at different points in time (Figures 1, 4, 6, 8, and 10), and with little bridging of disciplinary clusters (Figures 2, 5, 7, 9, and 11). This fragmentation points toward a need for more work to understand each discipline's perspective, identify overlaps and contradictions, and deepen the interdisciplinary synthesis. It also suggests that management scholars could dive deeper into questions that have been explored in other disciplines. We trace the interdisciplinary roots of each disruption to highlight questions that have not yet been addressed but also add new questions, concerns, and opportunities for future research. While these articles do not always discuss aspects of decentralization that are currently covered by management scholars, their findings often illuminate unexamined aspects that could expand theories in useful ways.

Another opportunity is a dynamic view of decentralization. Much of the extant research is static, not longitudinal. Rather, it relies on snapshots in time and treats organizational form as a backdrop or context. Thus, future research could usefully adopt a more dynamic perspective that examines how decentralization unfolds (and retreats) over time and why.

A third opportunity is greater use of network concepts and methods. Network analysis can be useful for studying formal organizations but is, with a few notable exceptions (e.g., Bunderson, Van Der Vegt, Cantimur & Rink, 2016), underutilized in the study of decentralization. Network concepts and data that include information on networks and network ties would enable scholars to differentiate between centralization versus decentralization and between dispersion versus distribution of decision-making power within a network of participants, thereby adding a third dimension to the discussion of decentralization (Vergne, 2020). There also exists an opportunity to map network to non-network measures of decentralization. This would enable exploration, for example, of similarities and differences in effects and meaning between related (but not identical) concepts such as "centralization" and "(network) centrality."

Definition and measurement of decentralization offer another significant opportunity for future work. While we ground our review by defining *decentralization* as the degree to which decision-making authority is distributed within an organization away from a central authority, the field lacks agreement on the exact definition and metrics. For

example, there is no consensus on whether decentralization is a continuum or organizations move from one form to another in a punctuated crisis, as suggested by Greiner (1972). Similarly, fundamental measures may be problematic. For example, measures of decentralization such as counting hierarchical levels and determining the level at which organizational decision-making occurs were developed in the 1970s and 1980s (e.g., Reimann, 1974). Since then, little work has occurred to develop these measures further and adjust them to fit modern organizations. More accurate measures may clarify issues such as whether decision-making is genuinely dispersed or conversely, concentrated among a few central figures within a given organization (e.g., inner circle in the C-form or platform owner in the P-form) (Reineke & Katila, 2025).

Finally, our typology helps to enable future research to categorize new forms of decentralization (and the bureaucratic assumptions that they challenge) as they emerge. Relatedly, it also enables deeper research into understanding combinations (i.e., hybrids) of organizational forms. For example, are centralized and decentralized organizations orthogonal forms? Must a contemporary organization excel at both?

Conclusion

Starting with the "ideal" form of centralized organization (i.e., bureaucracy), we identified four pivots—multidivisional (M), organic (O), community (C), and platform (P), discussed how each challenged bureaucracy's core assumptions of an ideal organizing form, and highlighted both the advantages and potential disadvantages of each. Some work on new decentralized forms of organizing argues that a particular decentralization effort represents a radically new organizational form. Yet this work often misses the links to existing theory and research. Our review adds value by providing an integrated synthesis and a theory-based typology of disruptions that can deepen understanding of new decentralization disruptions and how they build on existing ones.

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