

# 1 Introduction

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## 1.1 Organizational Control as a Fundamental Organizational Challenge

The fundamental challenge of organizations is to obtain cooperation among a collection of individuals or units who have, at best, only partially overlapping objectives (Barnard 1938; Weber 1947). Left to their own devices, individuals would pursue partially congruent or incongruent goals, and their efforts would remain uncoordinated. Any pursuit of organizational objectives therefore requires finding the means to obtain cooperation among individuals with diverse interests (Ouchi 1980). The purpose of organizational control is to obtain such cooperation.

Organizational control research has historically followed one of two directions. Early organizational theorists have interpreted organizational control as the sum of interpersonal influence relations in organizations, using “to control” as a synonym for “to direct” workers’ activities (e.g., Tannenbaum 1968)<sup>1</sup> or treating control as the equivalent to having power over workers (e.g., Etzioni 1965). This rather narrow conceptualization of control focuses exclusively on influence and authority relationships in organizations and is responsible for the negative connotation that is often associated with organizational control. It has also been the catalyst for a small but thought-provoking literature advocating a critical perspective on organizational control (e.g., Barker 1993; Delbridge 2010; Jermier 1998).

In this book, we follow a second and broader conceptualization of organizational control. This conceptualization grants workers considerably more autonomy and focuses more broadly on any “mechanisms through which an organization can be managed so that it moves towards its objectives” (Ouchi 1979: 833). These mechanisms include a close monitoring and directing of workers’ activities (from Tannenbaum’s viewpoint), but they also include

<sup>1</sup> Tannenbaum (1962: 239) defined organizational control as “any process in which a person or group of persons or organization of persons determines, i.e., intentionally affects, what another person or group or organization will do.”

giving workers discretion over their activities and instead monitoring the outcomes of those activities and taking corrective actions if necessary (Reeves & Woodward 1970). These mechanisms could also be more subtle, such as attempts to achieve goal congruence by selectively hiring workers who already display a high commitment to organizational objectives, or by socializing workers, with the goal of instilling and maintaining a deep commitment to organizational objectives (Ouchi 1979).

## **1.2 Pervasiveness, Relevance, and Timeliness of Organizational Control**

The classic administration theorist Henri Fayol (1949) has emphasized control as one of the primary functions of management, along with forecasting and planning, organizing, commanding, and coordinating. However, according to Fayol, control permeates every aspect of managing, as control integrates the other primary functions. Not surprisingly, both classic (e.g., Taylor 1911; Weber 1946) and modern theories of management (e.g., March & Simon 1958; Scott 1992) recognize that organization implies control. In fact, the very starting point for agency theory (e.g., Fama & Jensen 1983; Jensen & Meckling 1976) is the separation of ownership and control characterizing modern corporations (Berle & Means 1932).

The strategic management literature considers organizational control an essential part of a strategic planning exercise, with strategic control focusing “on the dual questions of whether: (1) the strategy is being implemented as planned; and (2) the results produced by the strategy are those intended” (Schendel & Hofer 1979: 18). In many organizations, there are variations of a multistep strategic planning process in which monitoring progress and maintaining momentum and motivation is the final step. Control, along with organizational culture, structure, and human resource management, is considered an essential tool for implementing intended strategies (Anthony & Govindarajan 2001).

In line with the strategic management literature, the accounting field has also highlighted organizational control as a general management function that is concerned with the achievement of overall organizational goals and objectives (Anthony 1965) and positioned control as being sandwiched between strategic planning and operational control. If strategic planning is concerned with setting long-term goals and objectives for the entire organization, and operational control is concerned with ensuring that immediate tasks are carried out, organizational control is the process that links the two (Otley et al. 1995).

Organizational control is therefore fundamental to all organizations and one of management’s essential functions (Fayol 1949; Mintzberg 1989; Van Maanen & Barley 1984). At the same time, it remains a vexing challenge, as

the pursuit of larger organizational goals requires individuals to subordinate, at least to some extent, their individual goals and surrender, at least partially, their autonomy to the larger collective (Barnard 1938). This inherent tension gives rise to “the age-old management dilemma: how to cause members to behave in ways compatible with organizational goals” (Kunda 1992: 11).

Moreover, modern ways of organizing and recent technological innovation have not resolved this tension between the pursuit of individual and organizational interests. On the one hand, as we will discuss in Chapter 5, new developments in information and communication technologies allow for unprecedented abilities to monitor workers’ behavior and performance. Artificial intelligence (AI) and machine learning (ML) increasingly complement and expand – and can even replace – conventional forms of organizational control. In some cases, AI and ML can even remove managers – and human supervision in general – from the scene of work. On the other hand, we are also facing key organizational changes, such as the COVID-19 pandemic-related surge in remote work and the progression of alternative work arrangements, such as temporary workers, independent contractors, and freelancers. These trends indicate a rapidly changing organizational environment that may no longer exhibit key tenets of classic control theory, such as information asymmetry, stable and hierarchical employment relationships, or shared identities, loyalties, and norms among workers.

These trends are problematic as they often have complex and even contradictory implications for organizational control, posing a conundrum for both theory and practice. For instance, we have long known that traditional behavior and outcome controls do not accommodate knowledge worker tasks characterized by elusive means-ends relationships (i.e., with low behavior observability) and ambiguous outcome assessments (i.e., with low outcome measurability) (Frenkel et al. 1995; Ouchi 1979). This is a challenge that has become even more pronounced in our increasingly virtual or remote world. What is relatively new, however, is that the often proposed alternative of informal (or clan) control – which emphasizes the role of shared identities, loyalties, and norms in guiding and influencing behavior (e.g., Kirsch 1996; Ouchi 1979) – is equally problematic for the increasing numbers of remote, temporary, and gig workers in our economies. This is because these work arrangements are not conducive to the creation of strong organizational identities and norms, and workers develop little loyalty to their often multiple simultaneous “employers” (Barley et al. 2017).

A solution to this conundrum could be the enhanced electronic monitoring capabilities accessible to organizations, which could chip away at the traditional information asymmetry in favor of workers (cf., Eisenhardt 1985). However, the increased accessibility of worker surveillance data also represents increasing challenges in terms of collecting, storing, analyzing, and

sharing vast troves of information. This is because the amount of information scales faster than managers' and workers' attention and processing capabilities, leading to information overload, biased decision-making, and attention distracted from the job itself (Farr et al. 2014; Van Knippenberg et al. 2015). The economist and Nobel laureate Herb Simon (1996: 144) had it right all along when he cautioned that a "design representation suitable to a world in which the scarce factor is information may be exactly the wrong one for a world in which the scarce factor is attention." The availability of enhanced forms of control, on the one hand, and the challenges associated with managing the newly obtained information due to managers' and workers' attention being limited, on the other hand, highlight the continued importance of bounded rationality as a key constraint (cf., Eisenhardt 1989a). And it remains an open question to what extent recent advances in AI and ML can help mitigate such bounded rationality constraints.

These trends and their complex and often contradictory implications cast increasing doubts on the explanatory and predictive power of classic control theory. Prior research has started to examine these trends and challenges, but research in this area consists largely of a patchwork of articles focused on one or only a few facets of this new work environment. What is lacking is a comprehensive framework addressing what implications all these changes combined have for organizational control.

In addition, with the exception of more recent research that has examined combinations of different types of controls (e.g., Cardinal et al. 2004, 2010; Kreutzer et al. 2016; Sihag & Rijdsdijk 2019), the majority of correlational research has focused on a limited selection of organizational controls, has ignored interdependencies among controls, and has resulted in net-effects thinking emphasizing the isolated effects of individual controls. Classic contingency approaches, where the relationship between organizational control and its outcomes depends on a third (moderating) variable, tend to be limited to two or three variables, and therefore also fall short of matching the complexity of the phenomenon. Hence, both correlational and contingency approaches are underspecified and do not realistically display organizational controls' coexistence in actual organizations (Cardinal et al. 2017). Despite several attempts to integrate multidimensional configurations into control theory (e.g., Bedford & Malmi 2015; Cardinal et al. 2010, 2018; Gregory et al. 2013; Kreutzer & Lechner 2010; Wiener et al. 2016), this research has only presented some of the fundamental components needed for configurational theorizing about control but "not gone far enough to create a theoretical frame for understanding how the multiple elements of control manifest into coherent patterns" (Cardinal et al. 2018: 87). A comprehensive configurational approach to organizational control, while promising, is still lacking.

### 1.3 What to Expect from This Book

Our book is intended to address these challenges by reconceptualizing organizational control theory to accommodate new and evolving technological trends, organizational practices, and organizational forms. Our book offers three related contributions to our understanding of organizational control in twenty-first-century organizations. First, we report the results of comprehensive conceptual and empirical reviews of the multidisciplinary organizational control literature, including its underlying theories and assumptions. Our review culminates in an overarching organizing framework of the dimensions, functions, outcomes, and key contingencies comprising organizational control theory, thereby integrating and synthesizing diverse insights across multiple disciplines as a starting point for our reconceptualization. Our synthesis further extends recent reviews of the field (Cardinal et al. 2017; Sitkin et al. 2020), particularly since some of the developments we outline have materialized only recently and challenge the conclusions reached by prior reviews.

Second, we illustrate how recent trends in technological, demographic, sociocultural, and organizational environments expose the limitations of traditional control practices and challenge key assumptions underlying organizational control theory. This anachronism highlights the need for a critical look at the suitability of our control approaches for contemporary and emergent organizational contexts. Specifically, we incorporate three key organizational trends that capitalize on the latest technological developments and that have direct implications for organizational control: the COVID-19 pandemic-fueled surge in remote work; the progression of alternative work arrangements, such as temporary, on-call, and contract workers, independent contractors, and freelancers, as well as the larger gig economy; and the increasingly widespread reliance on algorithmic surveillance and control. By integrating these trends, we not only expand the theoretical scope of control research but also highlight the evolving nature, as well as new forms, of organizational control.

Third, extending the literature's predominant correlational and contingency approaches, we propose a configurational approach (e.g., Furnari et al. 2021; Meyer et al. 1993). We conceptualize organizational control as multidimensional constellations that explicitly incorporate the complex interdependencies between different control dimensions and that reflect the multidisciplinary nature of the phenomenon. A configurational approach enables us to consolidate past gains by synthesizing broad patterns across multiple disciplines (cf., Meyer et al. 1993). More importantly, this approach allows us to develop new theory on how multiple controls combine in complementary – and sometimes contradictory – ways to jointly affect outcomes (i.e., acknowledging conjunction between explanatory variables), often with multiple alternative paths to the same levels of outcomes (i.e., incorporating equifinality or disjunction) (cf.,

Furnari et al. 2021). These configurations are orchestrated by the technological and organizational trends outlined earlier – as well as the implications these trends have for key assumptions underlying organizational control – serving as the central themes and integrative mechanisms. The goal of our book is to start bridging the gap between today's organizational challenges and our theoretical understanding of organizational control.

## 1.4 What to Expect in This Book

In Chapter 2, we perform a systematic, cross-disciplinary review of the most influential journal articles on organizational control to synthesize our definition of organizational control. We provide a comparison of how organizational control has been conceptualized across the disciplines of accounting, information systems (IS), management, marketing, and operations management, and present a citation network that illustrates the multidisciplinary intellectual underpinnings of our control definition as well as influential articles that have shaped the field's understanding of organizational control. We conclude our conceptualization of organizational control by discussing overlap and differences with related constructs, such as power, structure, culture, and the locus of control.

In Chapter 3, we offer a brief review of the history of organizational control – from ancient bureaucracies to the behavioral theory of the firm – as well as a discussion of the theoretical foundation underlying organizational control research. We also present the results of a co-citation analysis examining 1,148 organizational control articles published between 1938 and 2022 to illuminate the field's intellectual base and emerging research fronts. Based on the uncovered intellectual structure of the organizational control field, we review its constituent theories, outline its underlying assumptions, and briefly discuss the critical perspective on organizational control.

Building on this theoretical foundation, in Chapter 4, we review the multidisciplinary organizational control literature, synthesize its key elements, and present a comprehensive theoretical framework that includes the dimensions of organizational control (i.e., target, formality, singularity, direction, and style), the control functions or mechanisms describing how the control dimensions influence outcomes (i.e., monitoring, incentives, and coordination), the control outcomes (i.e., adaptability, human relations, process, and rational goal outcomes), as well as key contingencies. We further submit our framework to an empirical test by examining the proposed relationships with a multidisciplinary meta-analysis of 293 articles, published between 1967 and 2022, that analyzed 310 independent samples, for a total sample size of 110,585. The results of this analysis provide broad support for the key tenets of organizational control theory, including antecedents and control–outcome relationships. The results also

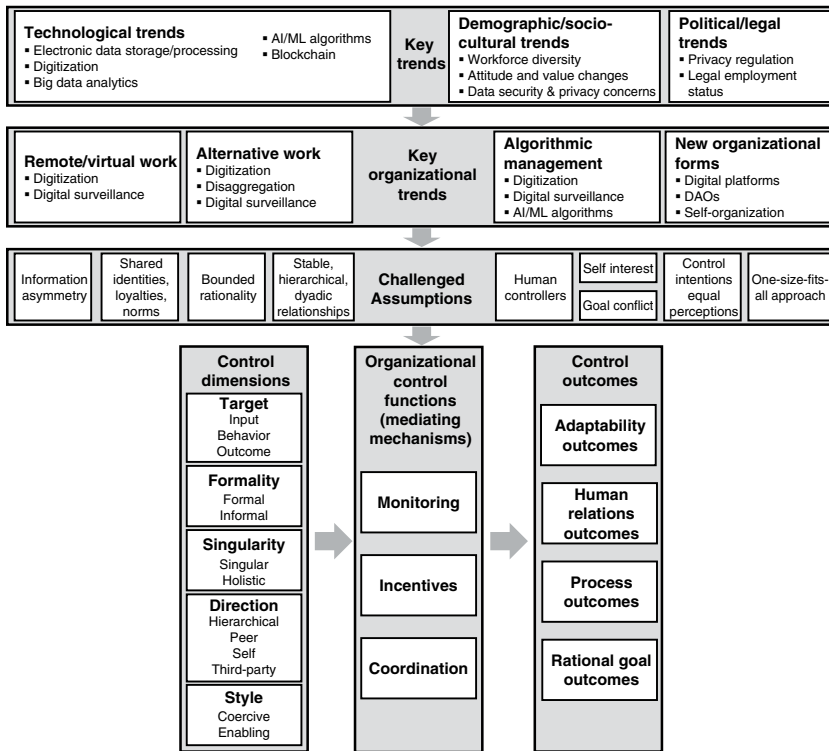


Figure 1.1 Organizational control: an organizing framework

suggest the presence of numerous context factors and contingencies, as well as significant interaction effects between controls, including both complementary and substitution effects among controls. Together, these results attest to the powerful impact, but also causal complexity, of organizational control.

Having established the theoretical and empirical foundations of organization control research, in Chapter 5, we examine key trends in the technological, demographic, sociocultural, and organizational environments that have implications for organizational control. We outline how these trends influence the future of work within and beyond organizational boundaries, challenge taken-for-granted assumptions underlying traditional control approaches, and give rise to an increasingly challenging and contested space for organizational control in contemporary organizations. Figure 1.1 provides an overview of our organizing framework.

In Chapter 6, we present our reconceptualization of organizational control. We discuss four fundamental shifts in organizations – from face-to-face work to remote work; from stable, full-time work to alternative work arrangements; from human managers to algorithmic control; and from traditional to

platform-mediated gig work – and discuss the impact of these shifts on organizational control. Our reconceptualization consists of both a conceptual part, where we advance a configurational approach to model the causal complexity inherent in organizational control, and an empirical part, where we present exemplary archetypes of control configurations across a variety of twenty-first-century organizations, including trucking companies, GitLab, Amazon warehouses, Uber, and Upwork.

In Chapter 7, we conclude our reconceptualization of organizational control by discussing new forms of control, novel combinations of existing controls, new challenges to fundamental assumptions, and new forms of organizing – all of which should represent promising directions for future organizational control research and practice.

### **1.5 Roadmap for Researchers and Practitioners**

The overall structure we just outlined provides a general roadmap for our reconceptualization of organizational control. We also recognize, however, that different audiences might benefit from following a different path through our book and may want to focus on certain chapters more than others. For our fellow researchers interested in the phenomenon, Parts I and II, Chapters 2–4, should be instructive in defining and mapping the intellectual structure of the field. In particular, the synthesis of a definition (Chapter 2), its history and theoretical background (Chapter 3), and our multidisciplinary literature review – both conceptual and (meta-)analytical (Chapters 3 and 4) – culminate in our organizing framework (Chapter 4) that we hope can provide the theoretical basis for future theory development and empirical inquiry into the phenomenon. In these first few chapters, we also provide detailed methodological descriptions of our co-citation analysis (Section 3.2) and meta-analysis (Section 4.5), to allow for future replication and extension. Chapters 5 and 6 provide insights into the changing internal and external context, including challenges to the fundamental assumptions underlying traditional organizational control research, that any future research needs to address. We also provide a detailed description of our configurational approach to reconceptualizing organizational control, including the logic behind our approach and an illustration of its application to analyzing archetypical control configurations across a range of organizations and industries (Chapter 6). Chapter 7 summarizes key theoretical implications and avenues for future research.

Managers and other practitioners, on the other hand, might be more interested in the practical implications of our reconceptualization of organizational control. For this audience, we would recommend reconciling their understanding of organizational control with our definition presented in Section 2.1, as well as familiarizing themselves with the key dimensions, mechanisms, and



outcomes of organizational control in our organizing framework (the lower part of Figure 1.1 and Chapter 4). The most insightful part of our book for this audience, however, should be our discussion of the future of work inside and outside organizations, including recent technological, demographic, sociocultural, and organizational trends (Chapter 5), and their implications for organizational control (Chapter 6). Both our diverse set of case studies illustrating different archetypes of organizational control configurations (Chapter 6), as well as our discussion of new forms – and new combinations – of organizational control, new challenges to fundamental assumptions, and new forms of organizing (Chapter 7), should allow practitioners to reflect on their own organizations' control approaches. Especially the graphical representations of control configurations, and the detailed illustrations of the employed control elements and their often complex interactions, should provide a basis for such a critical reflection.