



## Hybridized professional groups and institutional work: COSO and the rise of enterprise risk management



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### A B S T R A C T

The rise of risk management represents one of the major organizational shifts of the past decade. This article examines the emergence and diffusion of the dominant standard in the field, the *Enterprise Risk Management – Integrated Framework*, first published by the Committee of Sponsoring Organizations in 2004. Drawing on a range of interviews with key stakeholders and an analysis of secondary materials, we find evidence of numerous forms of institutional work including theorizing, rhetorical appeals, mythologizing, constructing normative networks and educating. The diaspora of associated entities provided a key platform for advocating and promoting the ERM technology and provided a stable and influential network of support. Our analysis suggests that, as a large, multi-faceted hybridized professional group, COSO was able to bridge conventional diffusion categories of disruption, creation and maintenance. We argue that the notion of institutional work offers a useful lens for examining the diffusion of innovations in accounting research.

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### Introduction

Risk management is an idea that can be said to have arrived (Arena, Arnaboldi, & Azzone, 2010; Mikes, 2008; Power, 2007, 2013; Spira & Page, 2003). As a practice, risk management and its associated accoutrements of risk frameworks, executive positions, committees and information systems, have been increasingly embraced by organizations across the globe. These changes represent a fundamental shift in ways of talking about, and dealing with, risk (Power, 2013). This paper examines a central development in the emergence of risk management, the rise of arguably the most widely invoked risk management framework in the world, the Committee of Sponsoring Organization's *Enterprise Risk Management – Integrated Framework* (ERM-IF) published in 2004. Expanding on its

earlier guidance on internal control, this model has become widely embedded into the risk management mainstream (see COSO, 2010b; Fraser, Schoening-Thiessen, & Simkins, 2008; Power, 2007, 2009), prompting Power (2007, p. 849) to describe the framework as “a world-level template for best practice.”

The advent of “new” management innovations has long been a focus of research in management including accounting (e.g., Bol & Moers, 2010; Busco & Quattrone, 2009; Chua & Taylor, 2008; Davila, Foster, & Li, 2009; Jones & Dugdale, 2002; Lapsley & Wright, 2004; Malmi, 1999; Qu & Cooper, 2011; Sharma, Lawrence, & Lowe, 2010; see also a recent special issue on management innovations in *European Management Review*, Spring 2013). Research on the topic has been theorized from a variety of different perspectives including diffusion theory (e.g., Rogers, 1995), actor network theory (e.g., Qu & Cooper, 2011), fads and fashions theory (e.g., Abrahamson, 1991), and organizational evolution perspectives (e.g., Scott, 2003). Recent research has focused attention on the

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relatively under-explored so-called “supply side” (Zahir ul Hassan & Vosselman, 2010) of the diffusion process, addressing the intriguing puzzle of how ‘sellers’ of innovations convince ‘buyers’ to invest considerable resources in innovations with uncertain benefits in the absence of a law or mandate requiring their use.

Drawing insights from the emerging literature on institutional work (e.g., Hwang & Colyvas, 2011; Lawrence & Suddaby, 2006; Lawrence, Suddaby, & Leca, 2011; Perkmann & Spicer, 2008; Suddaby & Viale, 2011), this study specifically aims to examine the emergence and institutionalization of COSO’s ERM-IF. Adopting a qualitative research design, we interviewed a range of individuals directly involved in COSO’s Board and Project Advisory Council at the time the ERM-IF framework was devised, as well as the principal authors of the framework. We also interviewed individuals outside of the COSO groups (e.g., consultants, executives) that we felt would offer valuable insights into the process of diffusion. In total, we conducted 15 interviews with individuals important to COSO and the ERM-IF. We also consulted a large body of secondary materials to provide further evidence and substantiate findings.

This article makes two key contributions. First, it presents an account of the mechanisms and processes that gave rise to the formation of COSO’s ERM model, which has become the dominant risk management model in North America and beyond. We detail how COSO engaged in a comprehensive project of institutional work comprised of political, cultural and technical activities (Lawrence & Suddaby, 2006; Perkmann & Spicer, 2008). Drawing upon taxonomies developed in the area of institutional work, we illustrate the varied and overlapping forms of agency that enabled COSO’s ERM-IF to successfully institutionalize. Recent research in the area of institutional work augments and extends institutional theory, a perspective which has wide currency in accounting research. While others have focused on particular categories of institutional work (e.g., Goretzki, Strauss, & Weber, 2013), we adopt a holistic approach to illustrate the wide ambit of work required to successfully diffuse a new managerial technology. We demonstrate that COSO’s institutional work was marked by non-sequential, often serendipitous, actions that acted to overlap and reinforce each other. To the best of our knowledge, this article is the first to fully elaborate the notion of institutional work in accounting research.

Second, we present a more fully articulated conception of the actors involved in the supply side of a management innovation. Specifically, we draw attention to the notion of *hybridized professional groups*, reflecting the way that COSO was able to draw importantly from the social and cultural capital, networks and resources of its members in disseminating the emerging model. Miller, Kurunmaki, and O’Leary (2008) argue that existing literature has largely neglected the hybrid practices, processes and expertises that make possible lateral information flows and coordination across the boundaries of organizations, firms, and groups of experts or professionals. While others have argued for a marked division of labor in theorizing and diffusing new technologies (for example, Scarbrough (2002)

argues that professional groups tend to fulfill theorization roles in the shaping of a management fashion while consultants fulfill the diffusion side), we demonstrate that a more distributed but cohesive group of actors – comprised of accountants, auditors, academics, researchers and consultants – was able to perform multiple roles and effectively support both the development and preservation of the concept.

This article is structured as follows. In the next section, we briefly review literature on the diffusion of new management innovations. This precedes an overview of COSO’s ERM-IF and a discussion of the theoretical framework of the paper, focusing on the notion of institutional work. After outlining our research method, we then follow the construction and diffusion of COSO’s ERM-IF as the preeminent enterprise risk management framework in the world, focusing in particular on the institutional work performed by COSO. The final sections of the paper discuss the implications of our findings, summarize the contribution of our research, and conclude with directions for future research.

### The diffusion of “new” management innovations

Many researchers have observed that management innovations – including ISO standards (Corbett & Kirsch, 2001), product development management control systems (Davila et al., 2009), activity-based costing (Malmi, 1999), total quality management (Sharma et al., 2010), performance-based incentives (Bol & Moers, 2010) and the balanced scorecard (Busco & Quattrone, 2009; Qu & Cooper, 2011) – have swept across a broad range of industrial sectors in the past two decades (Abrahamson & Fairchild, 1999; Alcouffe, Berland, & Levant, 2008; Bort & Kieser, 2011; Jackson, 2001). In broad terms, diffusion refers to the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1995). The general topic of innovation has inspired vast amounts of research, theorizing and speculation in recent decades (as early as 1978, Kelly and Kranzberg reviewed more than 4000 items in the literature on technological innovation alone).

A wide range of studies have examined the factors that support the demand for management innovations. The phenomenon of management ‘fads’ and ‘fashions’ has inspired a large body of research, prompting some commentators to question whether management fashions research itself has become the next academic fad (Clark, 2004). The social and organizational functions of management innovations are generally related to reducing uncertainty, insecurity, ambiguity and imperfection (Mazza & Alvarez, 2000) and providing managers with an image of innovativeness (Kieser, 1997) or even heroism (Clark & Salaman, 1998). Somewhat paradoxically, this is often achieved through the use of concepts that are of high linguistic ambiguity (Benders & Van Veen, 2001).

More recent work has focused on the so-called “supply-side” of innovation by examining the processes through which a network of different actors including consultants (Qu & Cooper, 2011), business school academics and management gurus (Huczynski, 1993; Jones & Dugdale, 2002), CFOs (Naranjo-Gil, Maas, & Hartmann, 2009), publishers,

managers and other intermediaries promote business ideas. Jones and Dugdale (2002) highlight the key role of consultants (rather than academics or professional associations) in the construction of activity-based costing and associated ideas (e.g., activity-based management and activity-based budgeting) that served to create an “ABC bandwagon”. They describe a complex diffusion process that was the result of a complicated entanglement of actors (primarily consultants but also academics and professional associations) and intermediaries (e.g., documents, journals, computer software), in addition to, inscriptions, events and circumstances. Qu and Cooper (2011) examine the role of textual and graphical inscriptions more closely and demonstrate that these inscriptions serve as important consultant-client negotiation devices. Researchers elsewhere have added another dimension to diffusion research by investigating the way that management control innovations have been bundled with other proven technologies to further enhance diffusion (e.g., Ax & Bjornenak, 2005; Bjornenak & Olson, 1999; Modell, 2009).

A recurring theme in recent diffusion research has been a focus on the spread of standards that explicitly formulate general rules defining and regulating activity (Mendel, 2002). In broad terms, standards can be generated as a result of formal regulatory processes (such as legislative safety requirements), de facto processes (such as product specifications gaining predominant market share) or through a voluntary consensus process (Mendel, 2002). An emerging stream of research has focused on the diffusion of a range of *voluntary managerial standards*, which lack an official mandate, including standards issued by the International Organization for Standardization (ISO) such as ISO 26000 (Castka & Balzarova, 2008), ISO 9000 (Guler, Guillén, & Macpherson, 2002), ISO 14001 (King, Lenox, & Terlaak, 2005), the environmental standard *Responsible Care* (Delmas & Montiel, 2008), the responsible investment index FTSE4Good (Slager, Gond, & Moon, 2012) and AACSB educational certification standards (Durand & McGuire, 2005).

Research in the area has focused attention on the role of distributed agency as well as the impact of regulatory context. Durand and McGuire (2005) demonstrate that standard making organizations expand their remit in response to both selection pressure and the desire to maintain their legitimacy. They emphasize the contribution of intermediaries, such as NGOs and consultants, in institutionalizing standards. Similarly, Slager et al. (2012) emphasize the distributed, continuous agency of a wide range of actors in the emergence of the FTSE4Good index, including “new actors who aid in the translating of the standard’s requirements for actors seeking to adopt it” (p. 784). Drawing greater attention to regulatory context, Chua and Taylor (2008) conjecture that the diffusion of international financial reporting standards (IFRS) was promoted via its sponsorship from powerful interest groups and regulators largely because of the broad international character (rather than a uniquely ‘American’ feel), and also because of the plasticity of the principles which allow for local customization and translation (compared to rigid rules).

In summary, work to date provides ample evidence of the coordinated efforts of key parties in a market or area in the

diffusion of innovations in management. Research is less clear, however, about the way that voluntary managerial standards such as COSO’s ERM-IF are constructed and maintained. Although the regulatory power of such standards is widely acknowledged, little attention has been given to the purposive activities that underlie the process of standard making and promoting. The regulatory power of standards does not, of course, appear out of nowhere, but derives importantly from the institutional work undertaken by various actors. However, as Slager et al. (2012, p. 765) conclude, “the activities within the standard making organizations are usually not considered as these organizations tend to be treated as a ‘black box.’” Since the mid-1990s, risk management has entered private and public sector management thinking to become an organizing concept as never before (Power, 2004, 2007), with attendant standards and blueprints of best practice. The next section overviews the leading standard in this field, COSO’s ERM-IF.

#### *COSO’s Enterprise Risk Management – Integrated Framework*

Formed in 1985, the Committee of Sponsoring Organizations (COSO) is a not-for-profit organization with a mission of providing thought leadership by developing governance-based frameworks and guidance.<sup>2</sup> Active in the three related areas of fraud deterrence, internal control and risk management, COSO’s ERM-IF model is one of its best known outputs. In contrast to highly quantitative risk metrics based approaches, COSO (2004, p. 2) defines enterprise risk management (ERM) as “a process, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.” ERM is thus presented as a standard and a comprehensive and holistic way for organizations to manage risks across the entire organization (Mikes, 2009; Pagach & Warr, 2010). As well as being widely implemented in practice, COSO’s ERM-IF has become a growing focus for a wide range of researchers and practitioners (e.g., Beasley, Pagach, & Warr, 2008; Desender, 2007; Fraser et al., 2008; Mikes, 2009; Pagach & Warr, 2010; Power, 2007, 2009; Power, Scheytt, Soim, & Sahlin, 2009).<sup>3</sup>

Fig. 1 depicts COSO’s stylized ERM-IF cube, the major graphic associated with the tool. The cube was intentionally designed so that the three visible surfaces depict three important considerations to be made in ERM. The most prominent face consists of eight ideal-typical ERM processes organizations can employ to manage risk. *Internal environment* addresses the organization’s attitude toward risk; how an organization and its people view and address risk via ‘risk appetite’, values and management philosophy. *Objective setting* suggests that an organization must have goals and objectives in order to evaluate what risks might challenge successful goal attainment. *Event identification* refers to a comprehensive review of internal and external events that could either help (opportunities) or hinder

<sup>2</sup> The website for COSO can be found at [www.coso.org](http://www.coso.org)

<sup>3</sup> For a collection of recent work from academics and practitioners at the ERM Initiative see <http://poole.ncsu.edu/erm>.

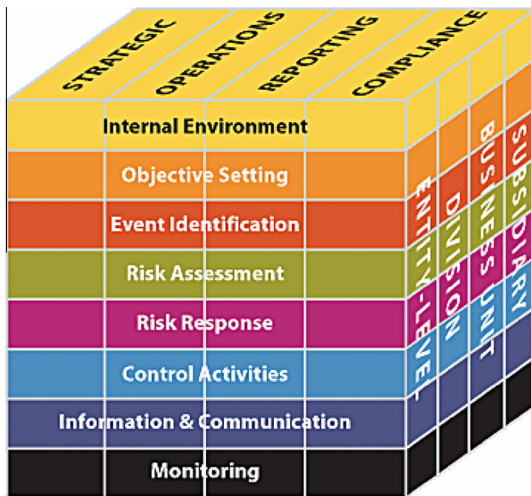


Fig. 1. COSO's enterprise risk management cube (reproduced from COSO, 2004, p. 7).

(risks) goal attainment. Within *risk assessment*, identified risks are assessed for their likelihood of occurrence and potential for impact so that organizations can prioritize important risks. *Risk response* describes the process whereby management must decide whether to accept, avoid, minimize or share the risk based on the organization's pre-determined risk appetite. *Control activities* ensure that the risk response steps are implemented effectively via various internal controls, policies and procedures. Continuous *information and communication* ensures that all parties associated with the risk management receive timely and relevant information. And, in keeping with the cybernetic systems logic, the *monitoring* component requires the entire process be constantly monitored and improved as necessary. The other dimensions of the cube speak to the breadth and wide application of this "new" management innovation.<sup>4</sup> In this way, the cube design is intended to convey the flexibility and scalability of COSO's prescriptions for risk management.

As it emerged, it became apparent that risk management was a canvass with a host of aspiring artists. Within the broad area of financial management, management accountants, internal auditors, external auditors, management consultants as well as a new and increasingly visible body of risk managers (see Aabo, Fraser, & Simkins, 2005; Hall, Mikes, & Millo, 2013) all sought to stake a claim as the concept opened up opportunities for applied use. In effect, this made risk management different from other innovations in accounting such as activity-based costing,

<sup>4</sup> The top face of the cube lists four possible categories of objectives (i.e., strategic, operations, reporting and compliance) that can (but need not all) be included in implementing risk management. The third face identifies the potential units of an organization (i.e., subsidiary, business unit, division, and entity-level) that can (but need not all) be recipients of risk management implementation. A specific component can influence any number of other components, and further, adopters/implementers might move back and forth between some components before considering others (COSO, 2004).

the balanced scorecard or risk-based auditing, which have generally been circumscribed to particular areas of management accounting, auditing or financial accounting. In this sense, COSO's ERM-IF is an innovation that is remarkable in its breadth (contested by a range of sub-disciplines) and commercial penetration (applied throughout the world). While there is no legal mandate for its use, it nevertheless has attracted normative force. While Olson and Wu (2008) claim that there are over 80 risk management standards across the globe,<sup>5</sup> research has consistently identified COSO ERM-IF as the best known (Fraser et al., 2008) and most widely diffused risk management standard (COSO, 2010b). The institutional work that has facilitated this rise is thus an important object of scholarly attention.

#### *From entrepreneurs to collectives: The emergence of institutional work*

After prolonged criticism that traditional neo-institutional research has been remiss in addressing field-level change (Dacin, Goodstein, & Scott, 2002), ideas of change and agency were first introduced into the area of institutional theory in the form of institutional entrepreneurship (DiMaggio, 1988; Greenwood & Suddaby, 2006; Oliver, 1991). In place of the limited role of agency found in neo-institutional theory, institutional entrepreneurship conceives of actors as active influencers of institutional logics rather than passive bystanders. Maguire, Hardy, and Lawrence (2004) describe institutional entrepreneurs as actors that "leverage resources to create new institutions or to transform existing ones" (p. 657). They show that actors use a variety of strategies (e.g., compromise, manipulation) to pursue their own interests against the rigidity and resistance of institutions (see also Oliver, 1991). For some, however, accounts of institutional entrepreneurship have tended to be hagiographic and represent a bridge too far in asserting the heroic influence of individual agents (Delmestri, 2006; Lawrence, Suddaby, & Leca, 2009; Suddaby, 2010). As Lawrence et al. (2011, pp. 52–53) put it: "Missing from such grand accounts of institutions and agency are the myriad, day-to-day equivocal instances of agency that, although aimed at affecting the institutional order, represent a complex *mélange* of forms of agency – successful or not, simultaneously radical and

<sup>5</sup> Indeed, several international risk management standards pre-date the COSO framework including CAN/CSA-Q850-97 *Risk Management: Guideline for Decision-Makers* issued by the Canadian Standards Association in 1997 (62 pages); BS 6079-3:2000 *Project Management: Guide to the Management of Business-related Project Risk* issued by the British Standards Institution in 2000 (22 pages); JIS Q2001: 2001(E) *Guidelines for Development and Importance of Risk Management Systems* issued by the Japanese Standards Association in 2001 (20 pages); IEEE Standard 1540-2001 *Standard for Software Life Cycle Processes – Risk Management* issued by the American Institute of Electrical and Electronics Engineers in 2001 (24 pages); and AS/NZS 4360:2004 *Risk Management* issued jointly by Standards Australia/Standards New Zealand in 2004 (24 pages). Based on a wide ranging analysis of several standards, Raz and Hillson (2005) conclude that there is "wide consensus regarding the main steps and activities of a generic risk management process" (p. 65) and that "where there are apparent differences in process, these are largely attributable to variations in terminology" (p. 64).

conservative, strategic and emotional, full of compromises, and rife with unintended consequences.”

Research in the area of *institutional work* seeks to address this concern by recognizing that in many instances collectives of actors create, maintain, disrupt, challenge, adjust and transform institutions. The notion was first introduced by Lawrence and Suddaby (2006). They describe institutional work as the “purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions” (Lawrence & Suddaby, 2006, p. 215). Thus, the focus of institutional work is to examine how actors interact with, and influence, institutions. Lawrence and Suddaby identify three types of institutional work: work that (i) disrupts, (ii) creates and (iii) maintains institutions. Table 1 summarizes the types of work associated with each of these activities.

As illustrated in Table 1, multiple actors and varied forms of institutional work are necessary to institutionalize a management idea (Lawrence & Suddaby, 2006; Perkmann & Spicer, 2008). These categories of work can be mutually reinforcing and lead to a total reconfiguration of an institution. These various forms of institutional work – jockeying for political power, defining the normative structures, and cognitive appeals – underscore that the creation of an institution requires significant effort and skill from actors. Professional groups have been highlighted as particularly influential in reconfiguring or transforming fields and the institutions within them (Cooper & Robson, 2006; Greenwood, Suddaby, & Hinings, 2002; Lawrence & Suddaby, 2006; Perkmann & Spicer, 2008; Scott, 2008; Suddaby & Viale, 2011).

Actors directly influence the creation of new institutions by performing institutional work that *disrupts* existing ones (Hwang & Colyvas, 2011). Lawrence and Suddaby (2006, pp. 234–235) suggest that in organizational fields, there are often “actors whose interests are not served by existing institutional arrangements, and who will consequently work when possible to disrupt the extant set of institutions”. As organizations and environments change, their existing institutions may become less legitimate and less taken-for-granted, and as a result, new organizational logics and new interpretive schemes arise (Greenwood & Hinings, 1988; Greenwood et al., 2002).<sup>6</sup> Maguire and Hardy (2009), studying the decline in commercial insecticide use, show how discourse was used to problematize and disrupt a previously taken-for-granted practice. In contrast, Lounsbury and Crumley (2007), focusing on the emergence of active money management, and Currie, Lockett, Finn, Martin, and Waring (2012), investigating the institutional work that specialist doctors perform to maintain their power and status, draw attention to *creation* and *maintenance* forms of institutional work. These studies highlight that types of institutional work interact and can be deployed together, and also that the distinction between creating versus maintaining types of institutional work may not be a stark one in practice.

<sup>6</sup> A variety of pressures – political, competitive, functional and social – help to explain what disrupts an institution (and could even lead to deinstitutionalization) (Oliver, 1992). These pressures can arise from within the organization or from the environment.

Furthermore, they demonstrate that an actor’s social position and status (both intra- and inter-professionally) in their institutional field serves to frame their institutional work.

Research on institutional work has begun to unpack the actual activities and efforts that individuals and groups put forward in creating, maintaining and disrupting institutions. In spite of these contributions, research on institutional work remains in its infancy; there are significant opportunities to describe and explain the details of the ‘work’ involved. To this end, Hwang and Colyvas (2011, p. 62) conclude that institutional work is “... an umbrella concept and a rallying point” rather than a coherent framework. Our field study seeks to explore the ‘work’ in the institutional work surrounding the institutionalization of COSO’s ERM-IF. We show that institutional work is not precisely categorized and necessarily intentional but haphazard and dynamic, ricocheting off other actors and bodies of knowledge and garnering momentum from unexpected and serendipitous sources.

## Method

In light of the emerging state of the field and the phenomena under examination, field research comprising semi-structured interviews is appropriate for this study (Edmondson & McManus, 2007). Table 2 below comprises a list of all interview participants. Specifically, we conducted 15 in-depth semi-structured interviews with 13 individuals from various locations in Canada and the United States between May 2010 and September 2012.<sup>7</sup> Three of the interviews were conducted in person and the remaining 12 interviews were conducted over the phone. The average length of the interviews was approximately 60 min. All but one participant permitted the use of a recording device allowing for accurate transcriptions; the single unrecorded interview was conducted with careful and thorough note-taking during and immediately following the interview to ensure accurate representations of the participant’s responses. Five of the participants requested that their identity remain anonymous, whereas the other eight participants gave permission for the use of quotations linked to their names and organizations.

As Table 2 reflects, a diverse group of participants were recruited: early participants were identified to reach key players holding authorship, guidance or oversight roles; we then followed up on specific suggestions made by participants on whom else we should speak with; and we also selected some participants to fill gaps in our understandings, or to challenge and confirm unexpected insights. Many of the participants had prior or current relationships with COSO, but some individuals also had no formal connection to COSO (i.e., they were drawn from realms of industry and/or consulting). We stopped recruiting participants at the point when incremental learning from interviews became minimal (i.e., our iterations between

<sup>7</sup> We conducted a second interview with two participants to confirm some of our understandings and interpretations, and also to probe for additional information in a few areas.

**Table 1**  
Institutional work associated with disrupting, creating and maintaining institutions.<sup>a</sup>

<i>Disrupting</i>	
1. Disconnecting sanctions/rewards	Accesses the state and court systems to disconnect rewards and sanctions from a set of practices, technologies or rules
2. Disassociating moral foundations	Refers to disassociating a practice, rule or technology from its moral foundation, which results in an institution that is no longer considered appropriate within its specific cultural context
3. Undermining assumptions and beliefs	Decreases the perceived costs and risks of innovation and differentiation by weakening the core assumptions and beliefs of an institution
<i>Creating</i>	
1. Advocacy	Refers to determining the interests of and then mobilizing support from political/regulatory actors to redefine the allocation of material resources or social/political capital
2. Defining	Refers to the creation of rule systems to constrain action and also confers status, identity or membership within a field
3. Vesting	Refers to the creation of rule systems that grant property rights. By creating or changing the rule systems, vesting can create new actors and field dynamics
4. Constructing identities	Creates and defines the relationships between actors and the field
5. Changing normative associations	Challenges and reformulates the relationships between norms and the moral and cultural foundation of the institutional fields in which they are produced
6. Constructing normative networks	Refers to the process through which formerly disconnected actors construct normative networks. Within, they ratify practices and take on the responsibility for monitoring, evaluation and enforcement
7. Mimicry	Refers to leveraging existing practices, tools and rules by juxtaposing features of the new with those of the old taken-for-granted practices
8. Theorizing	Refers to the creation of abstract or generalized categorizations, and the identification of causal relationships between elements. Theorizing begins with the naming of new practices, and this follows with its communication and further elaboration
9. Educating	Refers to sharing skills/knowledge and providing access to the necessary information to educate actors' use of a new institution
<i>Maintaining</i>	
1. Enabling work	Refers to the creation of rules to facilitate, supplement and support institutions; for example, by creating new agents or roles to support institutions and divert resources towards them
2. Policing	Refers to oversight activities performed to enforce, audit and monitor compliance
3. Deterring	Refers to coercive barriers to institutional change
4. Valourizing and demonizing	Circulates positive and negative examples to the public in order to demonstrate the institutions' normative foundations
5. Mythologizing	Maintains the normative underpinnings of an institution by creating and sustaining myths about its history
6. Embedding and routinizing	Instills the normative foundations of an institution into participants' day to day routines and organizational practices

<sup>a</sup> Adapted from Lawrence and Suddaby (2006).

data collection and analysis were fully developed and convergence was attained).

Our semi-structured interview guide was driven by four topics: (1) the participant's background and experience in risk management; (2) the development and diffusion of COSO's ERM-IF and other frameworks; (3) criticisms of and reflections on risk management and COSO's framework; (4) and any predictions concerning the future directions and developments of risk management. We allowed participants to talk openly and at length, moving to a related area or idea they felt was relevant. When necessary, we used prompting questions to refocus participants by asking if there were any other explanations they considered important to the spread of COSO's ERM-IF, or if they could provide a specific example in relation to an earlier comment.

We also consulted two key sets of secondary materials. We reviewed a variety of COSO's guidance and "thought papers", most importantly of which is the *Enterprise Risk Management – Integrated Framework* but also the *Internal Control – Integrated Framework* and more recent ERM-related implementation guidance. We also reviewed 2483 articles as part of a bibliometric analysis based on keyword searches relating to "risk management" and "COSO". Our focus set was on four journals published by the sponsoring

organizations in the period from 2000 through 2013: (i) *Journal of Accountancy*; (ii) *Strategic Finance*; (iii) *Internal Auditor*; and (iv) *Financial Executive* (see Fig. 3 below). We selected these journals because of the significant membership bodies and international presence of the sponsoring organizations. As well, these journals were accessible back to 2000 whereas newsletters and direct communication to members were not.<sup>8</sup> Of importance, however, is that many of the journal issues included in our analysis contained professional updates and newsletters directed at membership.

#### Data analysis

Each interview recording was transcribed into a text-based file and reviewed to ensure the transcription was

<sup>8</sup> The *Internal Auditor* periodical and *Financial Executive* magazine are the IIA's and FEI's sole trade publications. The IMA publishes a magazine (*Strategic Finance*) and a refereed online journal (*Management Accounting Quarterly*) but refers to *Strategic Finance* as its flagship publication and so we have selected this magazine. Finally, the AICPA has nearly a dozen topic-specific publications (e.g., tax, fraud and forensics) but to maintain comparability we have selected the *Journal of Accountancy*; it is the only general interest publication and the AICPA refers to it as its flagship publication.

**Table 2**  
Interview participants.<sup>a</sup>

#	Name	Current roles	Past roles
1	Mr. John Fraser	Vice-President Internal Audit and Chief Risk Officer, Hydro One	N/A
2	Professional Accounting Institute 1	Confidential, Professional Accounting Institute	Anonymized respondent
3	Dr. Mark Beasley	1. COSO Board of Directors 2. Associate Professor, North Carolina State University 3. Director, ERM Initiative	Advisory Council to COSO for COSO's ERM-IF
4	Mr. Peter Jackson	Principal, riskWaves corp.	The Criteria of Control Board, Canadian Institute of Chartered Accountants
5	Dr. Douglas Prawitt	Professor, Brigham Young University	Advisory Council to COSO for COSO's ERM-IF
6	Mr. Frank Martens	Director, Risk & Regulatory Consulting, PricewaterhouseCoopers LLP	PwC Author & Principal Contributor for COSO's ERM-IF
7	Dr. Larry Rittenberg	1. Chairman, COSO Board of Directors 2. Professor, University of Wisconsin-Madison	American Accounting Association Representative for COSO's ERM-IF
8	Dr. Paul Walker	Associate Professor, University of Virginia	Hired by COSO to recommend whether it should develop a framework that provides guidance on enterprise-wide risk management
9	Mr. Richard Steinberg	CEO, Steinberg Governance Advisors, Inc.	1. PwC Author & Principal Contributor for COSO's ERM-IF 2. PwC Author & Principal Contributor for COSO's IC-IF
10	Consultant 1	Confidential, Consulting Company	Anonymized respondent
11	Consultant 2	Confidential, Consulting Company	Anonymized respondent
12	Consultant 3	Confidential, Consulting Company	Anonymized respondent
13	Dr. Mark Beasley <i>Follow-up Interview</i>	1. COSO Board of Directors 2. Associate Professor, North Carolina State University 3. Director, ERM Initiative	Advisory Council to COSO for COSO's ERM-IF
14	Mr. Frank Martens <i>Follow-up Interview</i>	Director, Risk & Regulatory Consulting, PricewaterhouseCoopers LLP	PwC Author & Principal Contributor for COSO's ERM-IF
15	Consultant 4	Confidential, Consulting Company	Anonymized respondent

<sup>a</sup> Current roles reflect the roles interview participants held at the time interviews were conducted. Past roles reflect the roles interview participants held during the development of COSO's ERM-IF.

complete and accurate. Coding the data was performed using qualitative data analysis software. Each text was analyzed to draw inferences, to make comparisons and to identify themes in the data set (Smith, 2003; Weber, 1990). Meaning oriented analysis, a sub-type of content analysis, directs researchers to focus on the underlying themes of the data. While this approach can be subjective, we were cautious not to draw any assumptions or conclusions without supporting data (Lee & Peterson, 1997; Weber, 1990). Furthermore, the interviews and coding was performed by one author, and then challenged or confirmed by the other.<sup>9</sup>

The coding process took place in two stages. The first round of coding was driven by the predetermined high-level themes in our semi-structured interview guide. Since coding within this first round was an iterative process, categorizations evolved over time and allowed us to test tentative ideas in the field. During the second round of coding, high-level themes were re-sorted by dissecting and reorganizing the participants' responses around key ideas and insights, followed by comparing these findings with existing research in enterprise risk management (see Patton, 1990). The data analysis was iterative to minimize the risk of misunderstanding or misinterpreting interviewees' responses. Given that several respondents

had similar backgrounds and experiences (e.g., COSO members, ERM consultants), some of their ideas and perspectives could be compared and confirmed against one another. Our analysis was characterized by ongoing hypothesizing and theorizing, and by continuously discarding and revising suitable theories in pursuit of the "best fit between data and analysis" (Patton, 1990, p. 462).

#### *Context: The Committee of Sponsoring Organizations*

The Committee of Sponsoring Organizations (COSO) is a voluntary private sector organization with a stated mission to provide "thought leadership through the development of comprehensive frameworks and guidance on enterprise risk management, internal control and fraud deterrence designed to improve organizational performance and governance and to reduce the extent of fraud in organizations" (COSO, n.d.). COSO is an initiative created and supported by five major professional associations in the US [i.e., the American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA), Financial Executives International (FEI), the Institute of Internal Auditors (IIA), and the Institute of Management Accountants (IMA; previously the National Association of Accountants)]. Throughout its history, the COSO Board has been comprised of a Chairperson and a Board Member from each of five accounting associations (known collectively as the

<sup>9</sup> Note that initial interviews were conducted by both researchers to ensure a consistency of approach.

**Table 3**  
Key events in COSO's history.

Event	Year
Committee of Sponsoring Organizations (COSO) was created	1985
COSO released <i>Report of the National Commission on Fraudulent Financial Reporting</i>	1987
COSO released <i>Internal Control – Integrated Framework</i>	1992
COSO released <i>Fraudulent Financial Reporting: 1987–1997</i>	1999
COSO engaged consultants to evaluate need for ERM framework	1999
Consultants recommended COSO develop an ERM framework	2000
A series of significant corporate and accounting scandals such as Enron, Tyco International, WorldCom	2001–2002
COSO initiated work on ERM-IF project; established Project Advisory Council; engaged PricewaterhouseCoopers	2001
COSO surveyed the marketplace	2001
Sarbanes–Oxley Act enacted in the United States	2002
COSO released exposure draft of <i>Enterprise Risk Management – Integrated Framework</i>	2003
COSO released final version of <i>Enterprise Risk Management – Integrated Framework</i>	2004
COSO updated and released <i>Fraudulent Financial Reporting: 1998–2007</i>	2010
COSO issued additional ERM guidance	2009–2013

“sponsoring organizations”).<sup>10</sup> COSO initiated work in 1985 to report on fraudulent financial reporting, and since then has added internal control and enterprise risk management to their agenda (COSO, n.d.; Landsittel & Rittenberg, 2010). Table 3 provides an overview of key events and publications throughout COSO's history.

COSO is recognized internationally for its foresight on emerging business trends and needs. Landsittel and Rittenberg (2010, p. 457), the two most recent Board Chairmen, explain that new projects are identified according to “perceived practice needs and COSO's mission statement” in addition to, environmental scanning, academic research and input from the sponsoring organizations. It is a long-standing COSO practice (formally embedded in COSO's *Mission and Operating Policies*) to engage consultants to conduct research and make recommendations before initiating new projects. For COSO's significant governance projects, the Board typically establishes a task force (responsible for guiding framework development by reviewing drafts, ensuring practical relevance and assessing clarity/integrity) and engages a project team (responsible for overall development and authorship). In the case of COSO's ERM-IF, the task force (referred to as “Project Advisory Council” in the ERM-IF and henceforth) included consultants, university professors and industry executives, and the project team was comprised of senior representatives from PricewaterhouseCoopers LLP (PwC).

As an organization, COSO possesses a number of unique features. In addition to being a distributed, non-profit, independent, virtual organization supported by a network of five major professional associations, COSO often engages ancillary task forces and project teams to further its mission. COSO's membership comprises a range of professional underpinnings (e.g., Certified Professional Accountant, Certified Fraud Examiner, Certified Internal Auditor) and educational backgrounds (undergraduate,

practice-oriented masters and research-oriented doctorate degrees). The substance of their day-to-day employment also varies widely (e.g., teaching, research, consulting, auditing, standard setting and working in industry). COSO Board members themselves struggled to classify the organization in precise terms:

COSO is kind of an odd organization, not just in terms of being a virtual organization but, you know, what is it? It's not really a standard setter and yet it is kind of a standard setter. It's not a company; it's not a for-profit organization. And so I think, when COSO comes out with guidance, it carries a pretty unique credibility because you can't attribute their actions to a profit motive per se. (Douglas Prawitt, Interview 5)

The cipher COSO itself is noteworthy. Described as “disarmingly mundane” by Consultant 3, COSO leaves unspecified the identity of the involved organizations and imparts an almost faceless proceduralism to COSO's activities. However, this innocuous acronym is not without effects as COSO allows profit seeking organizations to have effects through a non-profit. Indeed, though non-mandated, COSO's standards have effectively seeded an entire economic ecology (spanning different professions and functions) that has underpinned the generation of billions of professional service fees.

We argue that unique characteristics of the COSO organization, especially its hybridized professional form, enabled it to perform various forms of institutional work that helped to disrupt existing logics, and then to create and maintain the preeminent framework for managing risk. We turn to each of these phases below.

### COSO as a disruptor

In the early 1990s, internal control grew to become an important business issue and a key concern for a variety of business stakeholders. This growing interest is reflected in the publication of the *Financial Aspects of Corporate Governance* (commonly known as “The Cadbury Report”) by the Cadbury Committee in the UK in 1992, the *Internal Control – Integrated Framework* (IC-IF) by COSO in 1992, the *King Report on Corporate Governance* by the King Committee on Corporate Governance in South Africa in 1994, the

<sup>10</sup> The Board typically meets quarterly, rotating between the locations of each sponsoring organizations. According to COSO's *Mission and Operating Policies*, the Chairperson is appointed for a 3-year term (with a possible extension) and must be a member of at least one of the five founding sponsoring organizations. The stated time commitment of the Chairperson role is 6–8 days per month and a negotiable, partial fee is paid to the Board Chair annually at the Board's discretion and based on the needs of the chair. For further details see <http://www.coso.org/aboutus.htm>.



Criteria of Control framework by the Canadian Institute of Chartered Accountants in Canada in 1995, and the *Internal Control: Guidance for Directors on the Combined Code* (commonly known as the “Turnbull Report”) by the London Stock Exchange in the UK in 1999. Significant amongst the stated motivations of these reports was the rapid change and myriad of economic, corporate, environmental and regulatory shocks throughout the 1990s. For example, in 1995 the Oklahoma City bombing was the most destructive act of terrorism of its time; the late 1990s saw the rapid growth of the internet accelerate globalization; in 2000 the Dot-com bubble burst disrupting financial markets and economic activity across the globe; while Y2K concerns generated fear that technology would not shift into the new millennium (see, for example, AICPA, 1993; Anonymous, 1997; Chenok, 1995; Dennis, 2000; Semer, 1998; Tucker, 2001; all publications published by COSO’s sponsoring organizations).

For COSO, an important forerunner to its ERM-IF was its IC-IF. Depicted in Fig. 2 below, this framework emerged from the COSO sponsored Treadway report (Treadway, 1987). The framework outlines five constituent elements of effective internal control, defined broadly as a process designed to “provide reasonable assurance regarding the achievement of objectives” in relation to (i) the effectiveness and efficiency of operations; (ii) the reliability of financial reporting; and (iii) compliance with applicable laws and regulations (COSO, 1994, p. 3). COSO’s IC-IF was released in 1992 (revised in 1994 and, most recently, in 2013). Its adoption dramatically increased in 2002 when the Sarbanes–Oxley Act (SOX) was enacted in response to a series of significant corporate and accounting scandals. SOX, and specifically section 404 on internal control assessment, mandated organizations to enhance their controls and consequently brought COSO’s IC-IF to the fore in the frenzy to address SOX requirements (see, for example, Bridge & Moss, 2003). Several interview respondents pointed

squarely to COSO’s IC-IF when identifying the major factors that led to the popularity of COSO:

COSO as an entity is becoming more widely known partially because the Sarbanes Oxley Section 404 reporting requirements which is pointing them to the internal control framework, but it points them to COSO too. (Mark Beasley, Interview 3)

Numerous scholars have discussed the way that the notion of internal control gradually evolved and refocused around notions of risk during the late 1990s (see Power, 2004, 2007, 2009; Spira & Page, 2003). Spira and Page (2003) stress that the publication of the Turnbull Report in 1999 had already extended beyond financial and internal control to contemplate risk management. They note that scientific and technological advances made risk more quantifiable and confirmed that risk (and its effects) was indeed serious; as Spira and Page put it, “...changes in technology and auditing encouraged a devolution of control downwards, and rigidly enforced compliance with policies and procedures was replaced by the rhetoric of risk...” (p. 647). As it became increasingly believed that risk could be measured and managed, demand for meaningful frameworks intensified.

In addition to the disruption of the concept of internal control generally, COSO’s IC-IF also encountered disrupting influences. Both suppliers and users of competing internal control frameworks publicly challenged and critiqued COSO’s IC-IF. For example, Oliverio (2001) pointed to a number of failings including the absence of implementation guidance and clear allocations of responsibility, as well as, the imperative of an enterprise-wide approach. Furthermore, the competing frameworks were all motivated in some part by observations that COSO’s IC-IF was no longer adequate in managing against diverse and growing risks. Where internal control was once seen as a valuable process for assuring the achievement of an organization’s goals, it was seen to come under increasing scrutiny.

In response to these charges, COSO itself engaged in disrupting work by commissioning a group of consultants to research and evaluate “whether [COSO] should develop a framework that provides guidance on enterprise-wide risk management” (Scott, Shenkir, & Walker, 2000, p. 2). In the report, Scott et al. (2000; hereafter SSW) confirmed the 1990s as a decade that experienced dramatic change as a result of a number of factors: “globalization; emerging markets; consolidation of companies and restructuring; deregulation; increasing competition; product and market innovation; rapidly changing technology, especially information technology; e-commerce; emergence of the internet and new economy; and crisis and major risk debacles” (SSW, 2000, p. 3). The consultants took little time in verifying the need for a new framework and pointed to a vigorous demand for a credible set of practices to help organizations manage, monitor and plan for risk extending beyond a narrow focus on internal controls.

COSO’s ERM-IF reflected both the style and language of the IC-IF (exemplified by the resemblance of Figs. 1 and 2) such that the costs and risks of adoption were minimized for potential adopters. Our interview data highlighted a strong connection between the transition from COSO’s IC-IF to their ERM-IF:

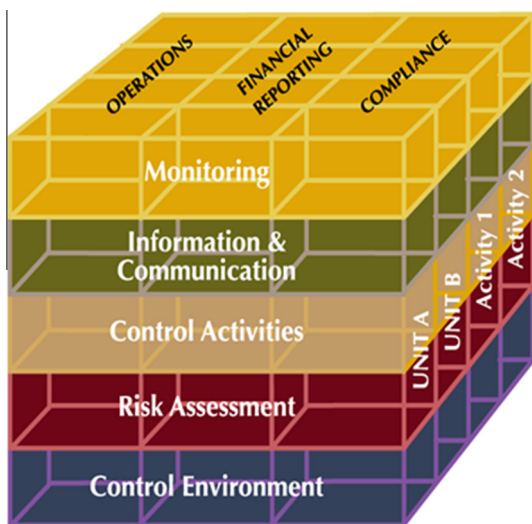


Fig. 2. COSO’s internal control cube (reproduced from COSO, 1994, pp. 19).

There were some people who were looking ahead and saying ‘Okay, what’s the next step?’ We [COSO] have this internal control framework out here and now companies are using it, auditors are looking at internal controls... What’s the next step in the evolution of things? What are outside parties interested in? They are interested in how you’re controlling things, but what’s at the core of that control framework? First, it’s identifying risk and then implementing controls to mitigate and control those risks... So in a way, the COSO internal control framework was a rudimentary risk management framework. (Douglas Prawitt, Interview 5)

This quotation implies that COSO’s ERM-IF was effectively an updated replacement for the IC-IF, however, it should be noted that COSO’s ERM-IF was in no way formally intended to replace the IC-IF. Rather, COSO’s IC-IF is better conceived of as a springboard for ERM-IF.

In summary, mounting pressures and shocks paired with the growing sense that risk could be measured resulted in a gradual shift away from the logics of internal control towards the logics of risk.<sup>11</sup> In addition to the disruption of the logics of internal control generally, critiques of COSO’s IC-IF specifically also began to be circulated, suggesting that the model was no longer adequate for contemporary organizations. This disruption work was not intentionally deployed by COSO but instead enabled COSO to then execute its own disruption work by commissioning consultants to evaluate the need for a framework to manage risk, and also by further undermining the assumptions and comprehensiveness of the IC-IF. COSO defended its institutional space by using their IC-IF as a springboard to create the ERM-IF with similar style/language and lower costs/risks of adoption. The logics of internal control were disrupted without formal intervention, and this paved the way for a new framework to emerge.

### COSO as a creator

Based on the recommendations from the consulting team in 2000 to create a risk framework, COSO’s Board engaged Big-4 accounting firm PricewaterhouseCoopers (PwC) to lead and author the framework.<sup>12</sup> As one consultant in the field reflected:

In effect, what PwC was able to do was to position itself to roll out its framework as the international benchmark. Under the COSO badge, PwC was able to take the lead in consulting in the area. (Consultant, Interview 3)

COSO also formed a Project Advisory Council to provide guidance throughout the development of COSO’s ERM-IF. As noted in Table 4, the council was comprised of nine individuals employed as consultants, university professors and industry executives from across the US. This composition offered a wide range of resources for the new mission. Consultants offered a crucial nexus with practice and an understanding of organizational challenges with risk management and the type of guidance likely to resonate in the corporate community. University professors, involved in both teaching and research, offered academic capital and familiarity with the emerging academic research in the field. Finally, members from industry were able to speak to risk management challenges and needs, and the stakes, struggles and preferences of the key corporates. As Table 4 reflects, members from industry were not only drawn from diverse industries, but they also held a range of job positions and functional expertise (e.g., internal control, risk, financial management).

COSO’s Board was responsible for overseeing the work of the Project Advisory Council and authorship team from PwC. Because COSO’s Board is comprised of one member from each sponsoring organization, COSO had access not just to these five representatives, but access to the visions, membership corps and reputational capital of five organizations that conduct research and support members throughout the world. Reflecting on the “clout” of the combined groups, Rick Steinberg (Interview 9) suggested that “it was their insight and their foresight in terms of being able to see the need [for the ERM-IF]”. Indeed, a significant and influential identity was constructed such that the organizational structure of COSO and the power of its members provided elevated status to COSO as a creator of innovative change.

In addition to constructing a network of hybridized professionals to facilitate ERM-IF collaborations, several aspects of COSO were important to creating the ERM-IF. By 2004, COSO had a proven track record extending over two decades. COSO had issued the *Report of the National Commission on Fraudulent Financial Reporting* in 1987 (known as the “Treadway Commission” report); had formulated and released an integrated framework on internal control in 1992; and, had published an extensive 10-year analysis of fraudulent financial reporting occurrences in 1999. Table 3 above provides a timeline of these and other key events in COSO’s history. It was against this background as a powerful organization with an acknowledged track record of successfully creating and promoting guidelines and practices that COSO’s ERM framework was created.

The credibility of the COSO structure also resonated in the corporate community. For example, COSO’s original 1992 version of its IC-IF (i.e., one source of COSO’s credibility) was been referred to as having “gained broad accep-

<sup>11</sup> The “logics” of internal control and of enterprise risk management are intended to highlight a deep-rooted implementation, such that the logics or ways of internal control and enterprise risk management become routine (Power, 2004) or accepted as religion (Bernstein, 1996). Power (2004) suggests three explanations for the shift from internal control to enterprise risk management: (1) changing regulation, (2) organization’s desire for self-insurance against growing risk, and (3) demand for risks to be auditable. Power summarizes this shift in logics well by concluding that, “The private world of organisational internal control systems has been turned inside out, made public, codified and standardised and repackaged as risk management. In this way, a blueprint for extending the reach of risk management into every aspect of organisational life has been created” (pp. 27–28).

<sup>12</sup> In an analysis of which public accounting firms purchased Andersen offices/clients in 2002, Kohlbeck, Mayhew, Murphy, and Wilkins (2008) note that PwC did not purchase any offices because they had the largest market share at the time.

tance” and being “widely used”, “time-tested” and “recognized as a leading source” (Protiviti, 2013, p. i).<sup>13</sup> Moreover, the “independence” of this expertise was widely believed by respondents to lend substantial credibility to the organization.

COSO has carved out a unique kind of niche and credibility as being an independent body that has come out with the framework that ended up being very heavily influential. It's seen as an organization that brings top experts and thinkers together to develop frameworks and there's a lot of credibility that COSO brings to the table as an objective, independent organization that has had success and done good things in the past. (Douglas Prawitt, Interview 5)

One respondent reflected on a previous consulting engagement where he'd prepared a thorough discussion of all the major risk frameworks around the world for presentation to a client. In hearing of this, the client likened COSO to “the name brand in the US” (Paul Walker, Interview 8) and demanded that discussion of alternative frameworks be removed.<sup>14</sup>

During the development of the ERM-IF, the COSO Board, Project Advisory Council and PwC intensified their interactions with the marketplace to determine whether their definitions and theorizations would accord to user needs. In the fall of 2001, COSO conducted a public survey to serve as a consultation and information gathering process. This survey was conducted in order to understand the market's view on various issues (e.g., what companies were doing at the time, what companies were willing to consider doing, what companies wished they were doing). Once the ERM framework had been theorized and written in draft form, an exposure draft was released for public comment in

the summer of 2003.<sup>15</sup> During this exposure period, members from the COSO groups spoke at a significant number of conferences held by the five sponsoring organizations and by other associations/organizations. The intent was to engage the marketplace, to provide information about the process of developing the framework, and also begin to share information and educate potential adopters about how COSO's ERM-IF would help organizations govern (see, for example, Chapman, 2003; Minter, 2002). Presentations during the exposure period provided an opportunity to collect feedback, in addition to the written comments that were submitted. Based on comments submitted by interested parties and individuals, the revised version was then released in the fall of 2004 (COSO, n.d.).<sup>16</sup>

While the events leading up to the turn of the millennium focused attention on risk management practices and supported SSW's recommendation to COSO, significant world events during the time COSO was creating the ERM-IF acted to heighten the demand for a framework for managing risk. Indeed, COSO's ERM-IF (2004, p. v) is explicitly motivated in part by the observation that “the period of the framework's development was marked by a series of high-profile business scandals and failures where investors, company personnel, and other stakeholders suffered tremendous loss”.<sup>17</sup> These failures, combined with catastrophic terrorist attacks (such as 9/11) and natural disasters generated substantial uncertainty. Numerous scholars have pointed to the way that this uncertainty and “politics of fear” (Altheide, 2003; Gardner, 2009) substantially fueled demand for effective innovations and tools to support decision making and be seen to be effectively managing.

This combination of economic, corporate, environmental and regulatory factors resulted in a receptive marketplace for a framework to manage risk. COSO and its board members recognized organizations' “readiness” for a framework to facilitate their risk discussions, for example:

What the profession needed was a comprehensive way to talk about risk. There are many ways of looking at risk but what we found is that people were talking and using the same terms in different fashions and so forth. And, our view was that we needed a comprehen-

<sup>13</sup> In addition to the examples and evidence provided above, there are a range of additional markers of COSO's resonating credibility including: (1) COSO's IC-IF is the only framework specifically named in the SEC's guidance for implementing Section 404 (see <http://www.sec.gov/rules/final/33-8238.htm>); (2) in addition to English, COSO's IC-IF has been translated into seven languages (i.e., Chinese, Japanese, Spanish, French, Arabic, Portuguese, Norwegian) and a Russian translation is currently in progress (R.B. Hirth, current Chairman of COSO, personal communication, January 31, 2014); and (3) the US government's Greenbook (when the US president releases their budget, the Treasury releases the General Explanations of the Administration's Revenue Proposals, coined the “Greenbook”) has been modeled after COSO's IC-IF as have several other SOX-like documents in other countries (R.B. Hirth, current Chairman of COSO, personal communication, January 31, 2014).

<sup>14</sup> During the interview Paul Walker specifically referred to the ISO 31000 – Risk Management standard created by the International Organization for Standardization (ISO), the Australia/New Zealand Standard 4360 Risk Management, as well as the Turnbull and King Reports more generally. Other competing risk frameworks include: an Integrated Risk Management Framework created by the Treasury Board of Canada Secretariat, A Conceptual Framework for Integrated Risk Management created by The Conference Board of Canada, as well as proprietary frameworks from various consulting groups (e.g., Protiviti, McKinsey, KPMG LLP, PwC, CRISIL) and other professional associations (e.g., Canadian Standards Association (CSA) Technical Committee on Risk Management, Risk Insurance Management Society, Global Association of Risk Professionals).

<sup>15</sup> For example, the AICPA announced the release of COSO's ERM-IF exposure draft in the *Journal of Accountancy* (see Volume 196, Issue 4, p. 20) as well as the release of the final framework (see Volume 198, Issue 6, p. 20 and p. 25). In contrast, the AAA which does not publish its own trade magazine, published a news release to announce COSO's ERM-IF exposure draft (“New Study Addresses Enterprise Risks”) and final draft (“COSO's ERM Framework – FREE SUMMARY AVAILABLE”, emphasis in original). Both postings appear to have been front page news releases as suggested in the AAA's news archives (found here: <http://aaahq.org/newsarc.cfm>).

<sup>16</sup> Appendix E (pp. 115–120) in COSO's ERM-IF “summarizes the more significant issues and resulting modifications reflected in the final report.” The sponsoring organizations were also involved in the feedback collection process; for example the Auditing Standards Committee of the AAA composed a formal response (see here: <http://aaahq.org/audit/asc.htm>) as did the Committee on Corporate Reporting of the FEI (see here: [http://www2.financialexecutives.org/news/finrep/letters/COSO\\_10\\_13\\_03.pdf](http://www2.financialexecutives.org/news/finrep/letters/COSO_10_13_03.pdf)).

<sup>17</sup> Many of the worst and most costly corporate accounting scandals happened in 2001, 2002 and 2003 (e.g., Enron in 2001, WorldCom in 2002, Tyco International in 2002, Freddie Mac in 2002, HealthSouth Corporation in 2003).

**Table 4**Hybridized professional group: Composition of COSO groups.<sup>a</sup>

<b>Committee of Sponsoring Organizations of the Treadway Commission (COSO)</b>	
COSO Chair	John J. Flaherty, CIA, CPA
American Accounting Association	Larry E. Rittenberg, Ph.D., CPA, CIA*
American Institute of Certified Public Accountants	Alan W. Anderson, CPA
Financial Executives International	John P. Jessup, MBA
	Nicholas S. Cyprus, MBA, CPA
Institute of Management Accountants	Frank C. Minter, CPA
	Dennis L. Neider, CMA, CPA
The Institute of Internal Auditors	William G. Bishop, III, CIA
	David A. Richards, CIA, CPA
<b>Project Advisory Council to COSO</b>	
Tony Maki, Chair, CPA	Steven E. Jameson, CPA, CIA, CFE, CFSA
Partner	<i>Executive Vice President, Chief Internal Audit &amp; Risk Officer</i>
Moss Adams LLP	<i>Community Trust Bancorp, Inc.</i>
Mark S. Beasley, Ph.D., CPA*	John P. Jessup, MBA
Professor	<i>Vice President and Treasurer</i>
North Carolina State University	<i>E. I. duPont de Nemours and Company</i>
Jerry W. DeFoor, CPA	Tony M. Knapp
Vice President and Controller	<i>Senior Vice President and Controller</i>
Protective Life Corporation	<i>Motorola, Inc.</i>
James W. DeLoach, MBA, CPA	Douglas F. Prawitt, PhD, CPA*
Managing Director	Professor
Protiviti Inc.	<i>Brigham Young University</i>
Andrew J. Jackson, CIA, CISA	
Senior Vice President of Enterprise Risk Assurance Services	
American Express Company	
<b>Author/Principal Contributors</b>	
PricewaterhouseCoopers LLP	Miles E.A. Everson, CPA
Richard M. Steinberg, MBA*	<i>Partner and Financial Services</i>
Former Partner and Corporate Governance Leader	<i>Finance, Operations, Risk and Compliance Leader</i>
(Presently Steinberg Governance Advisors)	<i>New York</i>
Frank J. Martens, CA*	Lucy E. Nottingham
Senior Manager, Client Services	<i>Manager, Internal Firm Services</i>
Vancouver, Canada	<i>Boston</i>

<sup>a</sup> The information herein reflects employers and positions held as at 2004. Every effort was made to confirm the graduate-level educations and professional certifications of involved parties. We apologize for any omissions.

\* Individuals interviewed for this research project.

sive framework on enterprise risk management and it had to be across the enterprise and that if we could introduce the framework, it could get more people talking about enterprise risk management—management and therefore moving to manage risk in a much more effective way. So that was the motivation behind starting with the ERM framework. (Larry Rittenberg, Interview 7)

In this sense, the timing of the COSO ERM-IF was serendipitous; coinciding with some of the major corporate scandals of recent history. It should be stressed that despite the 2004 release date of COSO's ERM-IF, COSO commissioned the preliminary ERM work in 1999.

The final version of COSO's ERM-IF contains two volumes: the first volume of COSO's ERM-IF consists of an executive summary and description of the ERM process, and the second volume comprises a collection of application techniques to help illustrate key tenets of ERM. Within

both of these volumes, risk is problematized extensively and framed as an overwhelming impediment to organizational performance. While the framework acknowledges the potential upside of risk (COSO, 2004, p. 16), the negative threat posed by risk is highlighted by drawing on several graphic metaphors and cautions such as earthquakes (e.g., pp. 42, 50) and the devastating impacts of large-scale financial frauds (e.g., pp. 30, 34). In the face of this inexorable uncertainty, COSO's (2004) ERM-IF is mythologized as "integral to value creation" (p. 13), and able to "enhance the entity's capacity to build value" (p. 13). COSO promises that ERM encompasses: "aligning risk appetite and strategy... enhancing risk response decisions... reducing operational surprises and losses... identifying and managing cross-enterprise risks... providing integrated responses to multiple risks... seizing opportunities... [and] improving deployment of capital" (pp. 14–15). Through this process, readers (and potential adopters) are warned of risks that they previously never knew they had; "It can be argued that no problem is so insignificant

as to make investigation of its implications unwarranted” (p. 80). The persuasive rhetoric underpinning the framework suggests that failure to implement a comprehensive risk management framework is both dangerous and futile. Risk is consistently positioned as a critical business problem, and investing resources into implementing COSO’s ERM-IF is presented as a viable and sound solution. In short, according to its authors, implementing COSO’s ERM-IF will “help management achieve the entity’s performance and profitability targets and prevent loss of resources... help ensure effective reporting and compliance with laws and regulations, and help avoid damage to the entity’s reputation and associated consequences” (p. 3).

The framework suggests that “everyone has some responsibility” (COSO, 2004, p. 8) but also identifies specific roles for how various organizational participants should be involved – thus suggesting both an individual and collective responsibility to take control and become “part of the essence of the enterprise” (p. 17). To extend the significance of COSO’s ERM-IF even further, the framework enables broader stakeholder engagement by highlighting roles for boards of directors, regulators, professional organizations and educators as follows:

With this foundation for mutual understanding, all parties will be able to speak a common language and communicate more effectively. Business executives will be positioned to assess their company’s enterprise risk management progress against a standard, and strengthen the process and move their enterprise toward established goals. Future research can be leveraged off an established base. Legislators and regulators will be able to gain an increased understanding of enterprise risk management, including its benefits and limitations. With all parties utilizing a common enterprise risk management framework, these benefits will be realized. (COSO, 2004, p. 9)

By problematizing risks into something critical that must be carefully managed, COSO’s ERM-IF legitimized the space for professional groups and consultants to intervene in risk management – a hugely lucrative, but hitherto largely latent, commercial market.

As noted above, the colorful, multi-layered, three-dimensional cube included in the IC-IF bears a striking resemblance to the cube included in the ERM-IF (refer to Figs. 1 and 2). An interview respondent confirmed that, “... it made sense that the enterprise risk management framework should be consistent with the *Internal Control – Integrated Framework*. ... you see quite a bit of consistency” (Larry Rittenberg, Interview 7). Consultant 4 stated more pointedly, “it was a master stroke to double up on the same model look. It had been successful for COSO, and people, especially in the US, had bought into it.” COSO’s ERM-IF also offered critics of the IC-IF a new and improved tool to alleviate their concerns with the IC-IF. The assumptions and beliefs of internal control had been problematized, undermined and disrupted, and COSO leveraged this problem by presenting their ERM-IF as a solution.

In articulating the new framework, COSO members recognized the need to theorize a high-level of abstraction if

the framework were going to have application across a wide range of time and space. The emerging categories – internal environment, objective setting, event identification, risk assessment, risk response, control activities, information and communication, and monitoring – were supported with a discussion that avoided direct application within specific industries. As such, the emerging framework was claimed to be universally applicable; individual firms from any industry or geography could tailor the framework to their needs. A careful balance was thus struck between seeming to offer direct guidance, while at the same time permitting adaptation and considerable scope for different approaches and settings. Interview respondents involved in theorizing the ERM-IF acknowledged the scalability and discretionary nature of the framework. This ambiguity meant that organizations could easily adopt some of the framework’s prescriptions without “getting lost” in full implementation.

You can implement COSO’s framework and it’s scalable and can be implemented across all the functional units in your organization. And so, you can take any organization, and if you break it down into its subcomponents, if it’s accounting, you can break it down into accounts receivable and accounts payable, or payroll – it is scalable across all of those units and I think that is one of the parts that is really valuable in both of COSO’s internal control and enterprise risk management frameworks. It’s very valuable but is most often overlooked. And I think that’s one of the reasons why it continues to work so well. (Larry Rittenberg, Interview 7)

Because of that lack of a mandate [from a regulator, for example], organizations can sort of pick and choose pieces of it that work and not feel like they have to do a full blown implementation. We’re in the early phases of ERM where people are just out there picking, there’s no mandate for anything and so I think people have found it helpful but I guess it’s good that they’re not being forced into it at this point. ERM is so complex to really do, companies have realized if they try to go from A to Z, it will stall. (Mark Beasley, Interview 3)

In summary, the ERM-IF was brought into existence in a receptive marketplace characterized by rapid change and a rolling myriad of external shocks that had shaken corporate confidence and fed a growing appetite for methodologies and practices offering to equip organizations with an ability to navigate through stormy environments. COSO was able to build on its identity as a “thought leader” with a proven track record, and also to construct a widely connected normative network wherein the ERM-IF would diffuse. An important part of the institutional work performed by COSO as a creator was to engage the marketplace early through consultation and information gathering processes, and also to begin to educate potential adopters at presentations and conferences during the exposure period. In turn, COSO was able to leverage the receptive marketplace and conduct advocacy work to mobilize their ERM-IF. During the creation

of the framework itself, defining work outlined a common language and important rule systems; theorizing work ensured a high level of abstraction to provide adopters with flexibility and scalability; and mimicry work leveraged the style and language of the IC-IF to further increase the appeal and eventual adoption of COSO's ERM-IF. Within the framework, COSO sought to define specific roles to support ERM through enabling work so that a greater number of organizational participants could engage. COSO was able to leverage the fact that the logics of internal control had been disrupted and therefore changed the normative assumptions to present ERM-IF as a solution. In so doing, COSO deployed mythologizing work to problematize risk and advance stories of success and best practice. This combination of institutional work was sufficient to diffuse a framework without the need for supporting rules and regulatory systems suggested in vesting work.

### COSO as a maintainer

By 2004 then, COSO had created a fully articulated framework, and was equipped with a solid reputation as a “thought leader”<sup>18</sup> and a track record comprising the successful dissemination of their IC-IF framework. This reputation and success enabled COSO to conduct institutional work to maintain ERM. PwC was at the forefront of COSO and leveraged the platform to push their internal framework. As Consultant 4 stated, “with COSO's badge and PwC's reputation and members, diffusion was inevitable.” Concerning the ascendance of COSO's ERM-IF to its preminent status, one respondent (who was also one of the authors with PwC) noted:

I think part of it is because of the COSO consortium of organizations and frankly PricewaterhouseCoopers having been the author of the COSO ERM report – the names attached and the fact that COSO's internal control became a standard. The background and expertise of those organizations, and if I may say so also PwC, has caused people to look to it as the place to go in gaining insight, in gaining direction on how to build an ERM architecture in their organizations. (Rick Steinberg, Interview 9)

COSO had not only constructed a highly reputable identity for itself but had also constructed a network with reach that was geographically unbounded. The five sponsoring organization representatives that make up COSO's Board are spread across the US and so too are the members of the Project Advisory Council for COSO's ERM-IF. Even the group of four individuals from PwC – a former partner, current partner, and two managers – that was tasked to author the framework was geographically distributed across North America. Furthermore, the sponsoring organizations' members are spread all over the world: the AICPA

has nearly 386,000 members (380,000 of which are in the USA) in 128 countries; the FEI has 15,000 members in 85 chapters across North America and one chapter in Japan; the IIA serves more than 180,000 members in 190 countries and territories around the world; the IMA has a global membership body of approximately 65,000 accountants and financial professionals; and the AAA has approximately 8500 members (6800 of which are in the USA).<sup>19</sup> Having COSO-related people situated all over North America enabled COSO to cast a wide net to support the maintenance of ERM by realigning actors and redirecting supporting resources.

Within North America, there is no doubt that dissemination and maintenance of the ERM-IF benefitted from an American feel. All respondents commented that a framework made in the US by an organization headquartered in the US gave it a lot of resonance within the United States and elsewhere across the globe.

Part of it is probably, just the fact that it's a US framework, to be honest with you. I think that carries a lot of clout, probably decreasingly so the way the world is moving, but I think that it still does carry some impact. (Douglas Prawitt, Interview 5)

The whole US thing; it's what I call the McDonald effect: it's American, it's big, and it's what the New York Stock Exchange will accept. (John Fraser, Interview 1)

One respondent recounted a conversation he'd had with a minister from another country about COSO as follows:

I was invited to speak in Tokyo and I remember talking to the Minister of Economy ... he said, “But you also have to understand that many Japanese businesses are already New York Stock Exchange traded and so whatever they hear is happening in the US, they want to do it”. He said, “Many others are New York Stock Exchange wannabes. So they're not on the New York Stock Exchange yet, but they want to figure out what the best practices are in the US and then get ready and say that they're already doing those practices ... so that division is going to implement enterprise risk management or some COSO framework to make it look more relevant.” (Paul Walker, Interview 8)

The diffusion of COSO's ERM-IF benefitted from various forms of promotional work; as one respondent put it, “other frameworks just weren't getting the profiling that COSO got.... If people can name one, they're going to name COSO” (Professional Accounting Institute, Interview 2). The promotional work that helped publicize COSO's ERM-IF to potential adopters was a shared task between the COSO Board, the Project Advisory Council, PwC, and the five sponsoring organizations. Once the framework was complete, COSO's Board<sup>20</sup> was formally responsible for

<sup>18</sup> We note here that our references to COSO as a “thought leader” and to its “thought papers” are adopted from the organization's stated mission “to provide thought leadership” and vision “to be a recognized thought leader” according to its operating charters (found at <http://www.coso.org/aboutus.htm>). We note that this uncritical phrase is repeated across COSO publications and press releases.

<sup>19</sup> Membership numbers were located on each organization's website, and in most cases, the numbers were either updated or confirmed by emailing a representative from each organization's membership services department.

<sup>20</sup> The requirement (and budget) to make presentations at conferences/panels and represent COSO at other events is built into the job description for the COSO Chairman of the Board. For recent examples, see <https://na.theiia.org/standards-guidance/topics/pages/coso-resource-center.aspx>.

promoting it since the Project Advisory Council was a temporary taskforce and PwC was formally hired mainly as authors of the framework.

In terms of promotional activities in this phase, several initiatives were undertaken. The five sponsoring organizations were formally requested to support COSO's ERM-IF publicly, and to assist in the development of their materials, courses and standards.<sup>21</sup> Since each of the five sponsoring organizations had its own norms and membership domains, each organization supported COSO's ERM-IF in different ways (for example, by making the framework available on their website and/or by notifying members of its release via email newsletters).<sup>22</sup> The sponsoring organizations (except the AAA) each publish their own magazine with the latest news and professional developments. Fig. 3 shows that journal coverage of "COSO" spiked around the release of COSO's ERM-IF (see 2004–2005) but otherwise remained generally stable (see trend line). In contrast, journal coverage of "risk management" shows a consistent increase (see trend line) with a spike at the beginning of COSO's continued ERM guidance (see 2009). The continued upward trend reflects the way that maintenance institutional work continued to support diffusion. As well, a press release, media tour and webcast were used to promote the framework and carry it to potential adopters (for examples of recent press, see [www.coso.org/newsroom.htm](http://www.coso.org/newsroom.htm)). The media event was hosted in New York (chosen because it is a major business hub) and major media players were invited (e.g., *The Wall Street Journal*, *The New York Times*, *Financial Post*).

Since the Project Advisory Council was brought together with the sole purpose of developing the ERM framework, the task force dissolved upon its completion. Interestingly, "some individuals on the Advisory Council... continued to have a personal interest and continued to be active in the marketplace in terms of attending conferences [and] speaking" (Frank Martens, Interview 14). These continued educational and promotional efforts from highly regarded individuals provided a further boost to the maintenance work performed.

PwC did not have a formal responsibility beyond writing the framework; however, they also helped to promote the framework after its launch by continuing to support it publicly and by developing aligned corporate tools (see, for

example, PwC (2009, pp. 10, 13, 15) where COSO's ERM-IF is highlighted throughout). In explaining PwC's role, Frank Martens recognized the firm's applied use of the framework to develop a range of commercial products: "... when I say we had a methodology that aligned into it [COSO's ERM-IF], to be clear what we did was we developed a methodology that was entirely supportive and integrated and consistent with it, but it was not framework dependent" (Frank Martens, Interview 14). To continue to gain market acceptance and market credibility, PwC flew in and met with other PwC executives from 12 or more countries to develop a methodology for how they could go to the market and help organizations implement and apply COSO's ERM-IF. As Frank Martens reflected, "Once it was out, we didn't stop talking about it, we didn't stop suggesting to the marketplace that they should go read it" (Interview 14). Speaking of other professional accounting firms, Frank Martens noted that:

Some accounting firms were fairly responsive to it [COSO's ERM-IF] and kind of did similar to us [PwC], kind of developed methodologies and things to go deliver services around it. There was also some who felt that they could build a better mousetrap or already had a better mousetrap. (Frank Martens, Interview 14)

Together, PwC and the professional accounting industry more generally supported ERM adoption and implementation by offering extensive training and education programming to embed ERM and routinize it as a taken for granted practice.

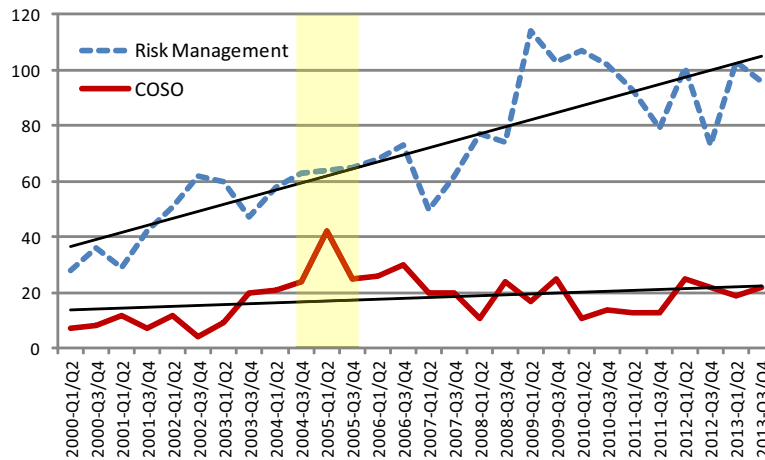
Consultants also helped furnish the risk management space with COSO's framework. Interview respondents pointed extensively to a network of private-sector consultants that guided firms in their implementation of COSO's ERM-IF, several complementing the framework with other proprietary frames of reference, guidelines and policies. As described by Consultant 1:

Most consulting firms want to have tools and frameworks that are branded their own so they can use them, even if it's just a slight change. I think everybody tries to come up with their own little process wheel, everybody tries to come up with their own framework for looking at it, everybody tries to come up with their own common risk language, it's just the way it is. (Consultant 1, Interview 10)

This quotation highlights the way that the interpretative viability (Benders & Van Veen, 2001) of COSO's ERM-IF opened it up to considerable applied adaptation (see, for example, Protiviti, 2006, 2007). Parallel to the accounting community, the consulting community served to embed the framework in client organizations through a diverse range of service offerings predicated upon, but often translating the ERM-IF. This idea was corroborated by Consultant 3: "Of course consulting firms have seized upon COSO's outputs. They're logical, resonate in the business community and speak to a space that most firms are struggling with..." (Interview 12). Numerous consultant respondents frankly noted the intense competition for consulting dollars in the emerging risk management space. As Consultant 3 put it,

<sup>21</sup> For example, see "The IIA COSO Resource Center" at <https://na.the-iaa.org/standards-guidance/topics/Pages/COSO-Resource-Center.aspx>.

<sup>22</sup> For example, in an article titled "COSO ERM Framework Released" in *The Internal Auditor* (Scott, 2004, p. 17), the IIA president is quoted on how the IIA and internal auditors have "been advocating for strong governance.... Thus the release of COSO ERM is a great opportunity for the internal audit profession". An IIA member is identified as already having embraced COSO's framework and he comments that COSO's ERM-IF is "the foundation for my recommendations on how to implement our enterprise-wide risk management" (pp. 17–18). A different article in *The Internal Auditor* refers to ongoing SOX implementations and suggests, "[T]he next logical step would be to leverage that investment [Section 404] and implement a total enterprise risk management (ERM) framework" (Matyjewicz & D'Arcangelo, 2004, p. 67). These authors go on to recommend COSO's ERM-IF and they also summarize the general process with the help of COSO's cube and other graphic aids. Similar announcements were published in the IMA's *Strategic Finance* (e.g., Levinsohn & Williams, 2004) and the AICPA's *Journal of Accountancy* (e.g., Anonymous, 2004).



**Note:** The highlighted time window refers to the release period of key COSO ERM-IF publications

**Fig. 3.** Bibliometric analysis (for each data point, we searched for “risk management” and “COSO” in the publications of AICPA’s *Journal of Accountancy*, IMA’s *Strategic Finance* magazine, IIA’s *Internal Auditor* magazine and FEI’s *Financial Executive* magazine. Our initial search also included “enterprise risk management” and “Committee of Sponsoring Organizations”; including the frequencies of these words does not change the bibliometric data, however, not including them eliminates redundancies).

There are a lot of mouths to feed and we were out hawking for work like everyone else. And COSO was a name that people knew ... Sure most of the big players refined this to develop their own proprietary tools, but the COSO model opened the door if you like. (Consultant 3, Interview 12)

Recently, the COSO Board has re-engaged in promoting COSO’s ERM-IF by publishing extensions, clarifications and implementation guidance in order to continue to educate existing and potential adopters. Two of these reports are focused on addressing the state of ERM (e.g., extent of implementation, level of satisfaction, successes experienced) and in doing so, highlight the need for greater adoption across firms and more extensive implementation within firms (COSO, 2010a, 2010b). The other reports elaborate on ERM improvements and advancements, for example, “to improve board oversight of management’s judgments” (COSO, 2012, p. 2) or to describe “a more

systematic integration of sustainability into COSO-based ERM programs” (COSO, 2013, p. 2). These reports also serve an important function of continuing to valorize success stories and best practices, while demonizing inadequate adoptions, failed implementations, and the inexorable growth of risk more generally. These “thought papers” are identified in Table 5.

In summary, COSO’s reputation for success and the unbounded geographic network it constructed prior to, and during the creation of, the ERM-IF were key components of COSO’s institutional work as a maintainer. The framework’s American feel and the international significance of US capital markets were important features that underlie the process of maintenance work. The combination of COSO’s Board, Advisory Council, and PwC in addition to the expansive membership bodies of the sponsoring organizations ensured that the various forms of promotional work spanned North America and beyond. Further, the hybridized nature of the COSO group

**Table 5**  
Continuous ERM rhetoric.

Title	Year of release
Demystifying Sustainability Risk: Integrating the triple bottom line into an enterprise risk management program	2013
ERM Risk Assessment in Practice	2012
Enterprise Risk Management for Cloud Computing	2012
Enhancing Board Oversight by Avoiding and Challenging Traps and Biases in Professional Judgment	2012
Enterprise Risk Management – Understanding and Communicating Risk Appetite	2012
Embracing Enterprise Risk Management: Practical Approaches for Getting Started	2011
Developing Key Risk Indicators to Strengthen Enterprise Risk Management	2011
Board Risk Oversight – A Progress Report: Where Boards of Directors Currently Stand in Executing their Risk Oversight Responsibilities	2010
COSO’s 2010 Report on ERM: Current State of Enterprise Risk Oversight and Market Perceptions of COSO’s ERM Framework	2010
Strengthening Enterprise Risk Management for Strategic Advantage	2009
Effective Enterprise Risk Oversight: The Role of the Board of Directors	2009



inoculated it from competition within the finance and accounting industries by capturing key organizations and individuals in the broad field. Much of the promotional work also served to educate potential adopters and existing users. The interpretative viability of the ERM-IF allowed PwC, other professional accounting firms, and consultants to take advantage of the framework's leeway for applied use, and to embed and routinize its use by developing aligned tools. To this day, COSO continues to educate and enable the marketplace by issuing additional guidance. Within these "thought papers", demonizing institutional work continues to impress upon failures and risk more generally, while valourizing work offers success stories and highlights the potential to benefit from the logics of enterprise risk management. The unique presence, expertise and resources of COSO, a hybridized professional group, meant that policing and deterring forms of institutional work were not required to maintain the preeminent status of the ERM-IF and the rhetoric of risk management more generally.

## Discussion

Our data highlights the critical roles played by COSO in the emergence and institutionalization of their ERM-IF. Commencing with disruption, the devolution of internal control led to an interest in risk; the inadequacies and failures of internal control systems created a space for the acceptance of risk logics. Within these new logics, a key element of the institutional work performed by actors within COSO was the way that the existing IC-IF model was problematized as insufficient to deal with a growing array of risks facing organizations. In so doing, the ERM-IF was positioned as offering a more thorough framework through which risk could be effectively understood and dealt with, while at the same time retaining a similar look and feel to the IC-IF which minimized the perceived burden, costs and risks of adoption. Discursively, this was achieved through an appeal to the prospect of reining in a growing and diverse band of risks and uncertainties. As Power (2009, p. 850) has pointed out, the discourse surrounding the arrival of the ERM-IF promised "that mistakes of the past will be mitigated, if not avoided, by a more rational and synthetic conception of risk management capable of a 'canopy-like' view of the organization." This process was marketed as positive, entrepreneurial and explicitly in the service of wealth creation.

As creators, the COSO group engaged in various forms of institutional work. Upon accessing consultants to confirm the need for a framework to help organizations manage risk, COSO defined the 'new' rule systems of risk management; drew upon, and further constructed, their identity as reputable "thought leaders"; and built support networks within the five sponsoring organizations. In the final version of the framework, COSO drew connections to their IC-IF with similar language and format; theorized an abstract and flexible framework that would appear relevant to all potential adopters; and problematized risk as something that must be addressed while emphasizing that the prescriptions of their ERM-IF are integral to the creation and preservation of value.

While each of these demonstrations of institutional work created awareness of, and interest in, the ERM-IF, the COSO group also conducted institutional work to maintain the ERM-IF as a lasting institution. The majority of studies investigating the diffusion and institutionalization of management tools have suggested that the individuals responsible for creating the practice tend to be different from the individuals who then promote and distribute it (see, for example, Ax & Bjornenak, 2005; Jones & Dugdale, 2002). What makes the diffusion of COSO's ERM-IF especially interesting is the fact that COSO (and their related membership groups) played a fundamental role in executing both the creation and maintenance of the emerging innovation. In addition to the rules and guidance included in COSO's ERM-IF to enable and support adoption, COSO's ERM-IF was actively valorized as a solution. It was developed and then delivered to potential adopters through accessible how-to guides and promotional work aimed at generating mass market awareness. The diffusion of COSO's ERM-IF benefitted not only from having various groups involved in delivering it to the marketplace across the US, but also from being spread through diverse mediums and channels of communication. Further, the loose nature of the framework provided enough leeway that the sponsoring organizations, accounting firms and consultancy groups could continue to maintain the ERM space by devising different services closely connected to the ideas of ERM.

Table 6 lists Lawrence and Suddaby's (2006) three types of institutional work to disrupt, nine types of institutional work to create, and six types of institutional work to maintain an institution. In the table, we summarize empirical examples of disruption, creation and maintenance institutional work carried out by COSO. Our empirical observations contain no evidence of disconnecting sanctions/rewards, policing, and deterring forms of institutional work, suggesting that COSO's ERM-IF diffused successfully without requiring any sanctioning or compliance work. We also note that mimicry and mythologizing share significant overlap in their definitions that institutions rise in part because of prior related institutions. Discursive practices and resources appear as a common theme underlying several forms of institutional work (e.g., advocacy, mimicry, enabling, valourizing, demonizing, mythologizing, undermining assumptions and beliefs). It is interesting to note that this commonality transcends Lawrence and Suddaby's disruption, creation and maintenance categories, highlighting the centrality of discourse in institutional work.

Our analysis thus demonstrates that although institutional work research provides a robust vehicle for explaining the rise of COSO's ERM-IF, the actual "work" performed in institutional work does not fit neatly into the categories suggested in prior research (i.e., Lawrence & Suddaby, 2006; Perkmann & Spicer, 2008). It is a mistake to envisage this as a step-by-step approach: first originating with an identified intellectual gap, then moving into the rationalized program of response finally implemented via technologies. Such sequential ordering offers an easy narrative but does not capture the fluidity of practice (see also Blacker & Regan, 2006; Malsch & Gendron,

**Table 6**  
Empirical examples of institutional work by COSO as a disruptor, creator and maintainer.

Category	Institutional work	Nature of work
COSO as a disruptor	Disconnecting sanctions/rewards Disassociating moral foundations Undermining assumptions and beliefs	<ul style="list-style-type: none"> <li>• Not observed</li> <li>• COSO argued that due to rapid changes in the operating environments of organizations, the pre-existing IC-IF was no longer sufficient to address key risks faced by firms</li> <li>• The perceived costs and risks of adopting the ERM-IF were minimized by ensuring that it had a similar style and language as the IC-IF, thereby providing organizations with a familiar template and manageable transition</li> </ul>
COSO as a creator	Advocacy	<ul style="list-style-type: none"> <li>• COSO's ERM-IF release heavily referenced the economic, corporate and regulatory shocks preceding its release as well as international "calls for enhanced corporate governance and risk management, with new law, regulation, and listing standards" (COSO, 2004, p. v)</li> </ul>
	Defining	<ul style="list-style-type: none"> <li>• COSO's framework promulgated widely quoted definitions as well as "key principles and concepts, a common language, and clear direction and guidance" (COSO, 2004, p. v)</li> </ul>
	Vesting	<ul style="list-style-type: none"> <li>• Not observed</li> </ul>
	Constructing identities	<ul style="list-style-type: none"> <li>• COSO was able to build upon their identity as "thought leaders" in the areas of fraud and internal control and remake themselves as leading ERM contributors</li> <li>• COSO was able to extend its existing expertise and, by extension, the boundaries of the sponsoring organizations (the membership bodies of AAA, AICPA, FEI, IMA and IIA) to incorporate risk management</li> </ul>
	Changing normative associations	<ul style="list-style-type: none"> <li>• With its vast member network, COSO was well positioned to promulgate ERM to the business community. The ERM-IF built upon the foundation provided by the IC-IF</li> </ul>
	Constructing normative networks	<ul style="list-style-type: none"> <li>• COSO's member organizations provided a strong, widely connected vehicle to distribute the framework, which opened up opportunities for applied use by a range of managers, consultants and related experts</li> </ul>
	Mimicry	<ul style="list-style-type: none"> <li>• COSO's ERM-IF leveraged its existing IC-IF by adopting all five of the original components (control environment, risk assessment, control activities, information/communication, and monitoring) and adding three components (internal environment, objective setting, risk response). It also adopted a similar format, graphical presentation and language</li> </ul>
	Theorizing	<ul style="list-style-type: none"> <li>• COSO recognized the need for a high level of abstraction or generalization facilitating adoption across a wide range of industries and geographies as well as a flexible and scalable model allowing adopters to incrementally implement aspects of the framework</li> </ul>
	Educating	<ul style="list-style-type: none"> <li>• The ERM-IF is available in an inexpensive, easy-to-access and understandable book. Purchasers of the framework also receive a CD of blank evaluation tools and templates which provided an additional medium to learn and apply ERM</li> <li>• COSO (and related organizations) also helped educate the marketplace through press releases, media tours and webcasts, and also by producing follow-up thought leadership on specific issues and problem areas</li> <li>• COSO (and related organizations) presented the ERM-IF at various conferences, and PwC continued to support the ERM-IF publicly and by developing market tools aligned with it</li> </ul>
	COSO as a maintainer	Enabling
Policing Deterring		<ul style="list-style-type: none"> <li>• Not observed</li> </ul>
Valourizing and demonizing		<ul style="list-style-type: none"> <li>• Not observed</li> <li>• COSO's framework was cast as progressive and useful in the face of growing and inexorable risks. In addition, member organizations and external players (e.g., consultants, media) played a role in foregrounding the dangers of risk, in valourizing organizations that had successfully followed best practice and demonizing organizations that had failed to adapt</li> <li>• COSO continued its valorizing and demonizing work throughout its additional "thought papers"</li> </ul>
Mythologizing		<ul style="list-style-type: none"> <li>• COSO publications provide extensive case studies of successful implementation and best practices promising to navigate enrolled organizations through dangerous and uncertain risks</li> </ul>
	Embedding and routinizing	<ul style="list-style-type: none"> <li>• COSO's member organizations as well as consulting practices offered extensive training and education programming to embed ERM in practice</li> </ul>

2013; Meyer, Gaba, & Colwell, 2005). For example, in this instance, the availability of a related technology enabled discussion of a potential framework in a way that would not have hitherto been possible. Much of this happened synchronously and non-linearly rather than sequentially. It is not a question of what came first: for example, defining, theorizing, educating, mythologizing, embedding and routinizing. Rather, they each enabled each other and led to practice as it came to be. In this way, we present a fluid depiction of diffusion, one that addresses the dialectical interaction between disrupting, creating and maintaining, while at the same time we seek to illuminate broader

processes of the development of knowledge and practice. Certain forms of institutional work persisted, others disappeared, while others in turn re-emerged.

Further, the diffusion of COSO's ERM-IF highlights the extra-organizational character of much work. To disrupt the logics of internal control, COSO commissioned a team of consultants to evaluate the need for a framework to manage risk. While creating the ERM-IF, COSO engaged with the marketplace by sharing an exposure draft for public comment. During this period, members of the COSO group also attended conferences and engaged in presentations to collect additional feedback and to make the mar-

ketplace aware of the impending release of the ERM-IF. This consultation and information gathering process is an important bridge between work to create and work to maintain because the former builds a network and creates awareness for the latter to eventually unfold. As originators of the ERM-IF, the COSO Board, Project Advisory Council and PwC authorship team held key roles in the promotional efforts and this promotion work was reinforced by the sponsoring organizations, other professional firms and various consulting groups. The project nature of much contemporary corporate activity draws attention to groups, coalitions and alliances, however temporary and shifting. The extra-organizational character of this work distinguishes it from some hagiographic accounts of heroic institutional entrepreneurship.

Rather than reflecting a “grand account” of institution-building or “heroic” account of institutional entrepreneurship, COSO’s institutional work takes shape, in Lawrence et al.’s (2011, p. 52) terms, as a “complex mélange of forms of agency” – simultaneously radical and conservative, strategic, and overlapping with a powerful set of interested member organizations. Our results show that COSO sampled and tested a variety of types of institutional work, at different points throughout the diffusion process and drew strategically on third parties. Several researchers have suggested that the effort of multiple actors is advantageous to institutionalization (e.g., Abrahamson & Fairchild, 2001; Perkmann & Spicer, 2008; Suddaby & Greenwood, 2001).

Scott (2008, p. 223) goes further to assert that professionals are “the most influential, contemporary crafters of institutions.” Interestingly, “profession” in our case does not refer to a group of experts in one particular knowledge area. Our paper thus introduces and offers empirical support for the concept of a hybridized professional group. Extant research has studied hybrid organizational forms (e.g., Boland, Sharma, & Afonso, 2008; Miller et al., 2008) and professional organizations with a homogenous composition (e.g., Cooper & Robson, 2006; Greenwood et al., 2002). Divergent from these examples, COSO is a professional group spanning multiple functional domains and defying strict definition. We define *hybridized professional group* as a collection of persons derived from heterogeneous sources. A hybridized professional group such as COSO thus brings together a variety of distinct professional entities. What characterizes COSO as an especially sound example of a hybridized professional group is that not only are members from various professional entities, but the substance of their day-to-day employment also varies widely (e.g., teaching, research, consulting, auditing, standard setting and working in industry). The activity of this cohort was central in explaining how COSO’s ERM-IF became the preeminent framework for managing risk. Moreover, we argue that a virtual, blended group of professionals who are otherwise not connected (i.e., they do not come from the same employer, background or even geographic location) make especially powerful suppliers of institutions. Our depiction of hybridized professionals responds to Lawrence et al.’s (2011) call for institutional work to consider distributed agency – referred to as a significant group of actors conducting

coordinated or uncoordinated activities employed to effect change.

## Conclusion

The arrival of COSO’s ERM-IF represents a major inflection point in the history of risk management throughout the world; ERM increasingly defines the language of governance and senior management responsibility. Since its release in 2004, COSO’s ERM-IF has had a significant impact on business practice. In a survey that asked respondents if they read specific publications related to risk and if so, to what extent did they read them, COSO’s ERM-IF was read by 74% of respondents and was also rated as the most well-read (Fraser et al., 2008). More recently, a 2010 report on the state of ERM found that nearly 65% of respondents were either ‘fairly familiar’ or ‘very familiar’ with COSO’s ERM-IF. In comparison, competing frameworks received very low ratings of familiarity (i.e., Australia/New Zealand AS/NZ 4360, Turnbull Guidance, ISO standards) (COSO, 2010b). Further, respondents identified COSO’s ERM-IF as “the overwhelming choice as the basis for implementing ERM... Very few respondents indicated that they used other frameworks as the basis for designing and implementing ERM processes” (COSO, 2010b, p. III). Despite criticisms of COSO’s ERM framework (see for example, Fraser et al., 2008; Quinn, 2006; Samad-Khan, 2005), Power (2007, 2009) confirms the embeddedness of COSO’s ERM-IF: “[w]hile ERM has numerous sources feeding the same basic idea, the COSO (2004) version has become a world-level template for best practice over a short period of time” (Power, 2009, p. 849).

Rather than map the large-scale transformations occasioned by the growing influence of risk management (see, for example, Hoyt & Liebenberg, 2011; Pagach & Warr, 2010), this article has sought to attend more closely to the relationship between a key risk management institution and the actors central in its formation and diffusion. Investigating the institutional work from the perspective of the supply-side of a management innovation helps us understand the nature of institutional work that led to the preeminent status of COSO’s ERM-IF. We emphasize that this work was non-sequential, at times simultaneous and heavily reliant on a web of member entities. The case dissolves conventional dichotomies between theorization and diffusion (Scarborough, 2002) and creation and conveying (Rogers, 1995) and demonstrates that when the supply-side fulfills both of these critical roles, diffusion and institutionalization may be strengthened. A hybridized professional group that performs a variety of disruptor, creator and maintainer activities is a strong force for diffusion and institutionalization. COSO was able to leverage its diverse composition, favorable geographic features and a collection of promotional activities to then fulfill a maintenance role of disseminating the framework across North America and beyond.

We believe that this paper opens up several interesting lines of future research. Specifically, hybridized professional groups comprising members from different professional accreditations and/or geographic locations remain under-researched. Particularly in realms that are contested

by multiple professional associations (such as risk management) we believe these groups will become increasingly significant actors in the diffusion of new ideas and techniques. Furthermore, theoretical work in the area of institutional work remains relatively nascent, particularly in the accounting literature. Future field-based studies have the potential to further refine and consolidate the theoretical categories and concepts in the area.

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### References

- Aabo, T., Fraser, J. R., & Simkins, B. J. (2005). The rise and evolution of the chief risk officer: Enterprise risk management. *Journal of Applied Corporate Finance*, 17(3), 62–75.
- Abrahamson, E. (1991). Managerial fads and fashions: The diffusion and rejection of innovations. *The Academy of Management Review*, 16(3), 586–612.
- Abrahamson, E., & Fairchild, G. (1999). Management fashion: Lifecycles, triggers, and collective learning processes. *Administrative Science Quarterly*, 44(4), 708–740.
- Abrahamson, E., & Fairchild, G. (2001). Knowledge industries and idea entrepreneurs: New dimensions of innovative products, services, and organizations. In C. B. Schoonhoven & E. Romanelli (Eds.), *The entrepreneurship dynamic: Origins of entrepreneurship and the evolution of industries* (pp. 147–177). Stanford, CA: Stanford University Press.
- AICPA Board of Directors (1993). Meeting the financial reporting needs of the future: A public commitment from the public accounting profession. *Journal of Accountancy*, 176(2), 17–19.
- Alcouffe, S., Berland, N., & Levant, Y. (2008). Actor-networks and the diffusion of management accounting innovations: A comparative study. *Management Accounting Research*, 19(1), 1–17.
- Altheide, D. (2003). Notes towards a politics of fear. *Journal for Crime, Conflict and the Media*, 1(1), 37–54.
- Anonymous (1997). How strong is your safety net? *Financial Executive*, 13(2), 47.
- Anonymous (2004). News digest. *Journal of Accountancy*, 198(6), 19–21.
- Arena, M., Arnaboldi, M., & Azzone, G. (2010). The organizational dynamics of enterprise risk management. *Accounting, Organizations and Society*, 35(7), 659–675.
- Ax, C., & Bjornenak, T. (2005). Bundling and diffusion of management accounting innovations – The case of the balanced scorecard in Sweden. *Management Accounting Research*, 16(1), 1–20.
- Beasley, M., Pagach, D., & Warr, R. (2008). Information conveyed in hiring announcements of senior executives overseeing enterprise-wide risk management processes. *Journal of Accounting, Auditing & Finance*, 23(3), 311–332.
- Benders, J., & Van Veen, K. (2001). What's in a fashion? Interpretative viability and management fashions. *Organization*, 8(1), 33–53.
- Bernstein, P. L. (1996). The new religion of risk management. *Harvard Business Review*, 74(2), 47–51.
- Bjornenak, T., & Olson, O. (1999). Unbundling management accounting innovations. *Management Accounting Research*, 10(4), 325–338.
- Blacker, F., & Regan, S. (2006). Institutional reform and the reorganization of family support services. *Organization Studies*, 27(12), 1843–1861.
- Bol, J. C., & Moers, F. (2010). The dynamics of incentive contracting: The role of learning in the diffusion process. *Accounting, Organizations and Society*, 35(8), 721–736.
- Boland, R. J., Jr., Sharma, A. K., & Afonso, P. S. (2008). Designing management control in hybrid organizations: The role of path creation and morphogenesis. *Accounting, Organizations and Society*, 33(7), 899–914.
- Bort, S., & Kieser, A. (2011). Fashion in organization theory: An empirical analysis of the diffusion of theoretical concepts. *Organization Studies*, 32(5), 655–681.
- Bridge, M., & Moss, I. (2003). COSO back in the limelight: Good practice for any organization, critical for SEC registrants. *Compliance Week*. <[www.complianceweek.com/](http://www.complianceweek.com/)>.
- Busco, C., & Quattrone, P. (2009). *How management practices diffuse: The balanced scorecard as a rhetorical machine*. HEC Accounting & Management Control Department, Research Seminar. <[www.hec.edu/hecontent/download/.../3/.../Quattrone\\_P\\_5-11-10.pdf](http://www.hec.edu/hecontent/download/.../3/.../Quattrone_P_5-11-10.pdf)>.
- Castka, P., & Balzarova, M. A. (2008). ISO 26000 and supply chains – On the diffusion of the social responsibility standard. *International Journal of Production Economics*, 111(2), 274–286.
- Chapman, C. (2003). Bringing ERM into focus. *The Internal Auditor*, 60(3), 30–35.
- Chenok, P. B. (1995). Fifteen years of meeting the challenges. *Journal of Accountancy*, 179(6), 66–70.
- Chua, W. F., & Taylor, S. L. (2008). The rise and rise of IFRS: An examination of IFRS diffusion. *Journal of Accounting and Public Policy*, 27(6), 462–473.
- Clark, T. (2004). The fashion of management fashion: A surge too far? *Organization*, 11(2), 297–306.
- Clark, T., & Salaman, G. (1998). Telling tales: Management gurus' narratives and the construction of managerial identity. *Journal of Management Studies*, 35(2), 137–161.
- Cooper, D. J., & Robson, K. (2006). Accounting, professions and regulation: Locating the sites of professionalization. *Accounting, Organizations and Society*, 31(4–5), 415–444.
- Corbett, C. J., & Kirsch, D. A. (2001). International diffusion of ISO 14000 certification. *Production and Operations Management*, 10(3), 327–342.
- COSO (n.d.). *About us*. Committee of Sponsoring Organizations of the Treadway Commission. <[www.coso.org/aboutus.htm](http://www.coso.org/aboutus.htm)>.
- COSO (1994). *Internal control – Integrated framework*. New York, NY: Committee of Sponsoring Organizations of the Treadway Commission.
- COSO (2004). *Enterprise risk management – Integrated framework*. New York, NY: Committee of Sponsoring Organizations of the Treadway Commission.
- COSO (2010a). *Board risk oversight – A progress report: Where boards of directors currently stand in executing their risk oversight responsibilities by Protiviti*. Committee of Sponsoring Organizations of the Treadway Commission. <[www.coso.org/guidance.htm](http://www.coso.org/guidance.htm)>.
- COSO (2010b). *COSO's 2010 report on ERM: Current state of enterprise risk oversight and market perceptions of COSO's ERM framework by Mark S. Beasley, Bruce C. Branson & Bonnie V. Hancock*. Committee of Sponsoring Organizations of the Treadway Commission. <[www.coso.org/guidance.htm](http://www.coso.org/guidance.htm)>.
- COSO (2012). *Enhancing board oversight: Avoiding judgment traps and biases by Steven M. Glover & Douglas F. Prawitt*. Committee of Sponsoring Organizations of the Treadway Commission. <[www.coso.org/guidance.htm](http://www.coso.org/guidance.htm)>.
- COSO (2013). *Demystifying sustainability risk: Integrating the triple bottom line into an enterprise risk management program by Craig Faris, Brian Gilbert, Brendan LeBlanc, Brian Ballou & Dan L. Heitger*. Committee of Sponsoring Organizations of the Treadway Commission. <[www.coso.org/guidance.htm](http://www.coso.org/guidance.htm)>.
- Currie, G., Lockett, A., Finn, R., Martin, G., & Waring, J. (2012). Institutional work to maintain professional power: Recreating the model of medical professionalism. *Organization Studies*, 33(7), 937–962.
- Dacin, M., Goodstein, J., & Scott, W. R. (2002). Institutional theory and institutional change: Introduction to the special research forum. *The Academy of Management Journal*, 45(1), 43–56.
- Davila, A., Foster, G., & Li, M. (2009). Reasons for management control systems adoption: Insights from product development systems choice by early-stage entrepreneurial companies. *Accounting, Organizations and Society*, 34(3–4), 322–347.
- Delmas, M., & Montiel, I. (2008). The diffusion of voluntary international management standards: Responsible care, ISO 9000, and ISO 14001 in the chemical industry. *Policy Studies Journal*, 36(1), 65–93.
- Delmestri, G. (2006). Streams of inconsistent institutional influences: Middle managers as carriers of multiple identities. *Human Relations*, 59(11), 1515–1541.
- Dennis, A. (2000). The downside of good times. *Journal of Accountancy*, 190(5), 53–55.
- Desender, K. A. (2007). On the determinants of enterprise risk management implementation. *2007 Information Resources Management Association Annual Meeting Paper*. SSRN: <<http://ssrn.com/abstract=1025982>>.

- DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L. G. Zucker (Ed.), *Institutional patterns and organizations: Culture and environment* (pp. 3–22). Cambridge, MA: Ballinger.
- Durand, R., & McGuire, J. (2005). Legitimizing agencies in the face of selection: The case of AACSB. *Organization Studies*, 26(2), 165–196.
- Edmondson, A., & McManus, S. (2007). Methodological fit in management field research. *Academy of Management Review*, 32(4), 1155–1179.
- Fraser, J. R. S., Schoening-Thiessen, K., & Simkins, B. J. (2008). Who reads what most often? A survey of enterprise risk management literature read by risk executives. *Journal of Applied Finance, Spring/Summer*, 73–91.
- Gardner, D. (2009). *Risk: The science and politics of fear*. London: Virgin Books.
- Goretzki, L., Strauss, E., & Weber, J. (2013). An institutional perspective on the changes in management accountants' professional role. *Management Accounting Research*, 24(1), 41–63.
- Greenwood, R., & Hinings, C. R. (1988). Organizational design types, tracks and the dynamics of strategic change. *Organization Studies*, 9(3), 293–316.
- Greenwood, R., & Suddaby, R. (2006). Institutional entrepreneurship in mature fields: The big five accounting firms. *Academy of Management Journal*, 49(1), 27–48.
- Greenwood, R., Suddaby, R., & Hinings, C. R. (2002). Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, 45(1), 58–80.
- Guler, I., Guillén, M. F., & Macpherson, J. M. (2002). Global competition, institutions, and the diffusion of organizational practices: The international spread of ISO 9000 quality certificates. *Administrative Science Quarterly*, 47(2), 207–232.
- Hall, M., Mikes, A., & Millo, Y. (2013). *How do risk managers become influential? A field study in two financial institutions*. Working Paper, Harvard Business School, October 17.
- Hoyt, R. E., & Liebenberg, A. P. (2011). The value of enterprise risk management. *Journal of Risk and Insurance*, 78(4), 795–822.
- Huczynski, A. (1993). *Management gurus*. London: Routledge.
- Hwang, H., & Colyvas, J. A. (2011). Problematising actors and institutions in institutional work. *Journal of Management Inquiry*, 20(1), 62–66.
- Jackson, B. (2001). *Management gurus and management fashions: A dramatic inquiry*. London: Routledge.
- Jones, T. C., & Dugdale, D. (2002). The ABC bandwagon and the juggernaut of modernity. *Accounting, Organizations and Society*, 27(1–2), 121–163.
- Kelly, P., & Kranzberg, M. (1978). *Technological innovation: A critical review of current knowledge*. San Francisco, CA: San Francisco Press.
- Kieser, A. (1997). Myth and rhetoric in management fashion. *Organization*, 4(1), 49–74.
- King, A. A., Lenox, M. J., & Terlaak, A. (2005). The strategic use of decentralized institutions: Exploring certification with the ISO 14001 management standard. *The Academy of Management Journal*, 48(6), 1091–1106.
- Kohlbeck, M., Mayhew, B. W., Murphy, P., & Wilkins, M. S. (2008). Competition for Andersen's clients. *Contemporary Accounting Research*, 25(4), 1099–1136.
- Landsittel, D. L., & Rittenberg, L. E. (2010). COSO: Working with the academic community. *Accounting Horizons*, 24(3), 455–469.
- Lapsley, I., & Wright, E. (2004). The diffusion of management accounting innovations in the public sector: A research agenda. *Management Accounting Research*, 15(3), 355–374.
- Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), *Handbook of organization studies* (2nd ed., pp. 215–254). London: SAGE Publications.
- Lawrence, T. B., Suddaby, R., & Leca, B. (2011). Institutional work: Refocusing institutional studies of organization. *Journal of Management Inquiry*, 20(1), 52–58.
- Lawrence, T. B., Suddaby, R., & Leca, B. (2009). Introduction: Theorizing and studying institutional work. In T. B. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations* (pp. 1–27). Cambridge: Cambridge University Press.
- Lee, F., & Peterson, C. (1997). Content analysis of archival data. *Journal of Consulting and Clinical Psychology*, 65(6), 959–969.
- Levinsohn, A., & Williams, K. (2004). How to manage risk-enterprise-wide. *Strategic Finance*, 86(5), 55–56.
- Lounsbury, M., & Crumley, E. (2007). New practice creation: An institutional perspective on innovation. *Organization Studies*, 28(7), 993–1012.
- Maguire, S., & Hardy, C. (2009). Discourse and deinstitutionalization: The decline of DDT. *Academy of Management Journal*, 52(1), 148–178.
- Maguire, S., Hardy, C., & Lawrence, T. B. (2004). Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal*, 47(5), 657–679.
- Malmi, T. (1999). Activity-based costing diffusion across organizations: An exploratory empirical analysis of Finnish firms. *Accounting, Organizations and Society*, 24(8), 649–672.
- Malsch, B., & Gendron, Y. (2013). Re-theorizing change: Institutional experimentation and the struggle for domination in the field of public accounting. *Journal of Management Studies*, 50(5), 870–899.
- Matyjewicz, G., & D'Arcangelo, J. R. (2004). Beyond Sarbanes–Oxley. *The Internal Auditor*, 61(5), 67–72.
- Mazza, C., & Alvarez, J. (2000). Haute couture and prêt-à-porter: The popular press and the diffusion of management practices. *Organization Studies*, 21(3), 567–588.
- Mendel, P. (2002). International standardisation and global governance: The spread of quality and environmental management standards. In A. J. Hoffman & M. J. Ventresca (Eds.), *Organizations, policy and the natural environment* (pp. 407–424). Stanford, CA: Stanford University Press.
- Meyer, A. D., Gaba, V., & Colwell, K. A. (2005). Organizing far from equilibrium: Nonlinear change in organizational fields. *Organization Science*, 16(5), 456–473.
- Mikes, A. (2008). Chief risk officers at crunch time: Compliance champions or business partners? *Journal of Risk Management in Financial Institutions*, 2(1), 7–25.
- Mikes, A. (2009). Risk management and calculative cultures. *Management Accounting Research*, 20(1), 18–40.
- Miller, P., Kurunmaki, L., & O'Leary, T. (2008). Accounting, hybrids and the management of risk. *Accounting, Organizations and Society*, 33(7–8), 942–967.
- Minter, F. C. (2002). Do you remember COSO? *Strategic Finance*, 83(8), 8–10.
- Modell, S. (2009). Bundling management control innovations: A field study of organisational experimenting with total quality management and the balanced scorecard. *Accounting, Auditing & Accountability Journal*, 22(1), 59–90.
- Naranjo-Gil, D., Maas, V. S., & Hartmann, F. G. H. (2009). How CFOs determine management accounting innovation: An examination of direct and indirect effects. *European Accounting Review*, 18(4), 667–695.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145–179.
- Oliver, C. (1992). The antecedents of deinstitutionalization. *Organization Studies*, 13(4), 563–588.
- Oliverio, M. E. (2001). Internal control – Integrated framework: Who is responsible? *Critical Perspectives on Accounting*, 12(2), 187–192.
- Olson, D. L., & Wu, D. D. (2008). *New frontiers in enterprise risk management*. Springer.
- Pagach, D. P., & Warr, R. S. (2010). *The effects of enterprise risk management on firm performance*. SSRN: <<http://ssrn.com/abstract=1155218>>.
- Patton, M. (1990). *Qualitative evaluation and research methods* (2nd ed.). California, USA: Thousand Oaks.
- Perkmann, M., & Spicer, A. (2008). How are management fashions institutionalized? The role of institutional work. *Human Relations*, 61(6), 811–844.
- Power, M. (2004). *The risk management of everything: Rethinking the politics of uncertainty*. London, UK: Demos.
- Power, M. (2007). *Organized uncertainty: Designing a world of risk management*. Oxford: Oxford University Press.
- Power, M. (2009). The risk management of nothing. *Accounting, Organizations and Society*, 34(6–7), 849–855.
- Power, M. (2013). The apparatus of fraud risk. *Accounting, Organizations and Society*, 38(6–7), 525–543.
- Power, M., Scheytt, T., Soim, K., & Sahlin, K. (2009). Reputational risk as a logic of organizing in late modernity. *Organization Studies*, 30(2–3), 301–324.
- Protiviti (2006). *Guide to enterprise risk management: Frequently asked questions*. Protiviti Inc. <[www.protiviti.ca/en-US/Documents/Resource-Guides/ProtivitiERM\\_FAQGuide.pdf](http://www.protiviti.ca/en-US/Documents/Resource-Guides/ProtivitiERM_FAQGuide.pdf)>.
- Protiviti (2007). *Enterprise risk management in practice: Profiles of companies building effective ERM programs*. Protiviti Inc. <[www.protiviti.com/en-US/Documents/Resource-Guides/Protiviti\\_ERM\\_Practice.pdf](http://www.protiviti.com/en-US/Documents/Resource-Guides/Protiviti_ERM_Practice.pdf)>.
- Protiviti (2013). *The updated COSO internal control framework: Frequently asked questions* (2nd ed.). Protiviti Inc. <[www.protiviti.ca/en-US/Documents/Resource-Guides/Updated-COSO-Internal-Control-Framework-FAQs-Second-Edition-Protiviti.pdf](http://www.protiviti.ca/en-US/Documents/Resource-Guides/Updated-COSO-Internal-Control-Framework-FAQs-Second-Edition-Protiviti.pdf)>.

- PwC (2009). *Extending enterprise risk management (ERM) to address emerging risks*. PricewaterhouseCoopers. <<http://www.pwc.com/gx/en/research-publications/pdf/pwcglobalriskserm.pdf>>.
- Qu, S. Q., & Cooper, D. J. (2011). The role of inscriptions in producing a balanced scorecard. *Accounting, Organizations and Society*, 36(6), 344–362.
- Quinn, L. R. (2006). COSO at a crossroad. *Strategic Finance*, 88(1), 42–49.
- Raz, T., & Hillson, D. (2005). A comparative review of risk management standards. *Risk Management: An International Journal*, 7(4), 53–66.
- Rogers, E. M. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
- Samad-Khan, A. (2005). Why COSO is flawed. *Operational Risk & Regulation*, January. <[www.opriskadvisory.com/docs/Why\\_COSO\\_is\\_flawed\\_\(Jan\\_2005\).pdf](http://www.opriskadvisory.com/docs/Why_COSO_is_flawed_(Jan_2005).pdf)>.
- Scarborough, H. (2002). The role of intermediary groups in shaping management fashion: The case of knowledge management. *International Studies of Management and Organization*, 32(4), 87–103.
- Scott, W. R. (2003). Institutional carriers: Reviewing modes of transporting ideas over time and space and considering their consequences. *Industrial and Corporate Change*, 12(4), 879–894.
- Scott, A. (2004). COSO ERM framework released. *The Internal Auditor*, 61(5), 17–18.
- Scott, W. R. (2008). Lords of the dance: Professionals as institutional agents. *Organization Studies*, 29(2), 219–238.
- Scott, R. A., Shenkir, W. G., & Walker, P. L. (2000). *Enterprise-wide risk management: Recommendations to COSO*. Consulting report.
- Semer, L. J. (1998). Disaster recovery planning. *The Internal Auditor*, 55(6), 40–47.
- Sharma, U. P., Lawrence, S. R., & Lowe, A. (2010). Institutional contradiction and management control innovation: A field study of total quality management practices in a privatized telecommunication company. *Management Accounting Research*, 21(4), 251–264.
- Slager, R., Gond, J.-P., & Moon, J. (2012). Standardization as institutional work: The regulatory power of a responsible investment standard. *Organization Studies*, 33(5–6), 763–790.
- Smith, M. (2003). *Research methods in accounting*. Thousand Oaks, CA: SAGE Publications Ltd.
- Spira, L. F., & Page, M. (2003). Risk management: The reinvention of internal control and the changing role of internal audit. *Accounting, Auditing & Accountability Journal*, 16(4), 640–661.
- Suddaby, R. (2010). Challenges for institutional theory. *Journal of Management Inquiry*, 19(1), 14–20.
- Suddaby, R., & Greenwood, R. (2001). Colonizing knowledge: Commodification as a dynamic of jurisdictional expansion in professional service firms. *Human Relations*, 54(7), 933–953.
- Suddaby, R., & Viale, T. (2011). Professionals and field-level change: Institutional work and the professional project. *Current Sociology*, 59(4), 423–442.
- Treadway (1987). *Report of the national commission on fraudulent financial reporting by National Commission on Fraudulent Financial Reporting*. Committee of Sponsoring Organizations of the Treadway Commission. <[www.coso.org/guidance.htm](http://www.coso.org/guidance.htm)>.
- Tucker, G. H. (2001). IT and the audit. *Journal of Accountancy*, 192(3), 41–43.
- Weber, R. P. (1990). *Basic content analysis*. Newbury Park, CA: SAGE Publications Ltd.
- Zahir ul Hassan, M. K., & Vosselman, E. (2010). *Institutional entrepreneurship in the social construction of accounting control*. NiCE Working Paper. <<http://www.ru.nl/economie/onderzoek/nice-working-papers/>>.