

Enterprise Risk Management: an Institutional Work Perspective

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Appendix B

B.1 Typology of institutional work forms*

Disrupting Disconnecting sanctions/rewards Disassociating moral foundations Undermining assumptions and beliefs	Working through state apparatus to disconnect rewards and sanctions from some set of practices, technologies, or rules. Disassociating the practice, rule, or technology from its moral foundation as appropriate within a specific cultural context. Decreasing the perceived risks of innovation and differentiation by undermining core assumptions and beliefs.
Creating Advocacy Defining Vesting Constructing identities Changing normative associations Constructing normative networks Mimicry Theorizing Educating	The mobilisation of political and regulatory support through direct and deliberate techniques of social suasion. The construction of rule systems that confer status or identity, define boundaries of membership or create status hierarchies within a field. The creation of rule structures that confer property rights. Defining the relationship between an actor and the field in which that actor operates. Re-making the connections between sets of practices and the moral and cultural foundations for those practices. Constructing interorganisational connections through which practices become normatively sanctioned and which form the relevant peer group with respect to compliance, monitoring, and evaluation. Associating new practices with existing sets of taken-for-granted practices, technologies, and rules in order to ease adoption. The development and specification of abstract categories and the elaboration of chains of cause and effect. The educating of actors in skills and knowledge necessary to support the new institution.
Maintaining Enabling Policing Deterring Valourizing/demonizing Mythologizing Embedding and routinising	The creation of rules that facilitate, supplement, and support institutions, such as the creation of authorizing agents or diverting resources. Ensuring compliance through enforcement, auditing and monitoring. Establishing coercive barriers to institutional change. Providing for public consumption positive and negative examples that illustrate the normative foundations of an institution. Preserving the normative underpinnings of an institution by creating and sustaining myths regarding its history. Actively infusing the normative foundations of an institution into the participants' day to day routines and organisational practices.

* Lawrence and Suddaby (2006)

B.2 Examples of disruption, creation and maintenance work in accounting research

Examples of disruption work in accounting include Farooq and de Villiers (2020), who showed how the management report served to disrupt senior managers and board members confidence in their sustainability reporting, creating demand for new institutions exemplified by more assurance and broader scope of the assurance engagement. Canning and O'Dwyer (2016) demonstrated how members of the Review Group on Auditing engaged in work directed towards undermining the assumptions and beliefs supporting self-regulation via their continuous mobilisation of media and political support and confrontational behaviour.

Other examples draw attention to creation and maintenance work. Hayne and Free (2014) found that, in response to environmental changes increasing interest in risk management, COSO developed the ERM framework that adopted a similar style and language to the previous internal control framework, which minimised the adoption risk/cost. Nyland et al. (2017) found that the department manager and coordinators contributed to balancing a mixture of controls, thereby facilitating coordination between hospital departments. The coordinators created cross-unit cooperation and on-the-spot decision-making. They maintained professional logics by continuously re-scheduling medics across theatres in response to new/changing circumstances. Farooq and de Villiers (2019) showed that educating and advocacy work is undertaken as companies transition towards a higher maturity level and deeper embedding and routinisation of sustainability reporting.

B.3 The interviewees and their codes

Interviewees	Code	Appointment year
Chief Risk Officer	CRO	2003 (as a CRO) (around 20 years with the company)
Chief Underwriting Officer	CUO	2006
Chief Underwriting Regional	CUR	2010
Chief Actuary	CAC	2007
Operations Manager	OM	2007
Chief Accountant	CA	2006
Actuarial Analyst 1	AA/1	2009
Risk Manager, 1	RM/1	2011
Chief Financial Officer	CFO	2010
Actuarial Analyst 2	AA/2	2010
Risk Manager, 2	RM/2	2011
Chief Operating Officer	COO	2007
Executive Operations Officer	EOO	2006
Management Accountant	MA	2007
Senior Corporate Underwriter	SCU	2007

B.4 Data Collection

The analysis began in 2002, although the ‘on site’ data collection was conducted over a 14-month period in 2011-2012. Semi-structured interviews and extensive documentary evidence were used, which capture contextual complexity (Benbasat et al., 1987). Internal documents include ERM policies and framework, the business plan, operating performance records, a CFO report, management analysis reports, and training program documents. Documents were made available to us during and after the interview process, however due to its sensitivity, the corporate plan was redacted. Access to computerised processes was granted during the interviews only. Publicly available data (e.g., annual reports and published information) were reviewed prior to and during the interview period. Internal and external documents were consulted during the data analysis process. Data triangulation enhanced research credibility. Reviewing and analysing annual reports facilitated a broad understanding of Alpha's history and supported the plan for and analysis of interviews. We conducted 15 face-to-face semi-structured interviews which lasted one hour on average. The interview schedule was tailored to interviewees' roles and any new issues raised in prior interview(s) that required further investigation. The interviews were audio recorded, transcribed, and subsequently validated by interviewees.

The CRO, our initial contact, connected us to other relevant officers. We were then connected to staff in different departments (snowballing). We recruited participants mainly via e-mail. After calling once, an e-mail was sent to schedule a second interview. Interviewees were recruited at various points in time over ERM implementation period. We interviewed staff with risk responsibilities from senior and non-senior levels and almost all functions. This is because we focus on other professionals and risk managers, who often have different motivations, interests, and are from different functions, whose work combines to create a desired outcome. Thus, the agency in our case is bounded by the enterprise borders and

distributed to functions outside the risk management's, including underwriting, actuarial, operations, and accounting, working together and with the risk management function to institutionalise ERM. The first line of defence includes departments close to and distant from the risk management function. Thus, we extend the scope of first-line actors working towards institutionalising ERM to go beyond accountants and to get a comprehensive understanding of the interactions between the second and first lines of defence and within the first line of defence in ERM development.

Longitudinal research involves retrospective questions (Ruspini, 1999). The purpose of the interviews was to elicit retrospective accounts of ongoing ERM developments. This allowed covering diverse perspectives on ERM development and related work. Our overall research approach is aligned with Scapens (2004) who discusses the importance of the researcher's role and data triangulation when undertaking case study research. Several aspects of our data collection effort was aimed at enhancing the reliability of the data collected. The interviewees were able to reflect on all or specific key changes/stages over the period of investigation due to their significant involvement in ERM processes and/or the impact the change process had on their work. The majority of informants provided information about the time periods preceding and following their appointments. To overcome the limitation of using retrospective data to construct the past, where possible, we verified individual reports by asking similar questions to multiple participants and gathered various perspectives on similar issues. We also supplemented the interviews with documentary data, and observed some computerised processes (e.g., capital modelling). This strengthened the analysis credibility (see Giovannoni et al., 2016; Scapens, 2004).

Retrospective interviews entails some challenges. There may be recall errors and recent changes are more likely to be recalled in detail. Some events may not have been considered important when they occurred, lessening the likelihood of being recalled afterwards (Berg &

Madsen, 2020). We minimised these errors by focusing the interview on the key changes that tend to be recalled more reliably, and interviewing senior managers, who by virtue of their positions, are involved in or close observers of the processes they are reporting on (Huber & Power, 1985). We also asked them to elaborate on their responses and suggest other contacts who could provide further information on different aspects of the discussion from both senior and operational levels. Recall errors were minimised by comparing the retrospective events accounts given by various actors, seeking additional opinions in subsequent interviews, and checking documentary evidence. These methods can minimise errors of recall (Huber & Power, 1985), ensure appropriate representativeness across different organisational levels, and provide robust quality insights from interviewees (Parker & Northcott, 2016). During the analysis we were also aware that the amount of data collected on one occasion can be limited and therefore conducted a follow-up interview. Our overall research approach therefore enabled us to provide an authentic, plausible, and explanatory narrative about the context under study (Parker & Northcott, 2016).

B.5 Data Analysis

Interviewees' insights assisted us in identifying ERM development stages (2002-2004; 2004-2006; 2006-2012). From this, we formed a chronological timeline of ERM development, identifying key change elements and actors' work in each stage. Changes may overlap in these stages and there is no clear demarcation between when each change occurred. The transcript data was then coded according to predefined theory-based categories (institutions and actions), allowing us to analyse the first stage of forming the field. Filtering was applied iteratively and data most relevant to the research question was used. Both Nvivo¹ (interview data) and manual-coding (interviews and documents) were used to codify the text in terms of institutions and actions, which organisational level they exist in, when the changes occurred (i.e., to processes, practices and actors' roles), and which actors/factors drove change. We identified disrupting, creating, and maintaining work. Thematic analysis was used to identify emergent themes and link them to existing categories, connect those categories, summarise the categories into themes, and refine the categories according to explanatory concepts. Then, evidence from the data was linked to the latter concepts. This supported comparisons with prior research and building links with theory.

The transcripts were sent to interviewees to ensure their accuracy². The transcript data was then cross-checked with internal documents and publically available information. The internal documents were the most recent ones (2011-2012), while the external documents covered a longer period (2000-2001; 2008-2012), created context, and were related to availability.

¹ Nvivo supported the textual analysis of the data via the use of mapping techniques for data structuring. However, it was a helping hand tool because the researchers kept returning to transcripts.

² In one case, an interviewee was not fully happy with the transcription. She/he was offered to look at and amend some parts/quotations, which were subsequently used.