

# Developing a framework of institutional risk culture for strategic decision-making

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Although practitioners have long sought to define risk culture, its role in strategic decision-making is not yet well understood. This paper addresses this gap from an institutional theory and organisational culture perspective. Findings from a qualitative study in the automotive industry provide insights into the importance of risk culture in strategic decision-making. Based on the findings, we propose a framework for understanding the different factors of risk culture that affect strategic decision-making. This yields insights into the facets of risk culture and highlights the role that both the board as well as management play in driving a risk culture and fostering the values and behaviours required for enabling risk appropriate strategic decisions. Management may use the findings to define a culture that will drive risk-appropriate behaviour, create alignment for the organisation, allow for transparency and accountability and foster improved strategic decision-making.

**Keywords:** Risk culture; risk management; board responsibility; management responsibility; strategic decision-making.

## **1. Introduction**

The importance of risk attitudes and culture in organisations has once again come to light in the wake of the recent global financial crisis (Pan, Siegel, and Wang 2017). Effective risk management is also a prerequisite for organisational success and good share price performance (Cagliano, Grimaldi, and Rafele 2014). With this there is a growing need to understand risk culture in organisations (Ring, Bryce, McKinney, and Webb 2016) as well as behavioural aspects of risk in decision-making (Wright 2018). Risk culture describes ‘the shared preferences towards risk and uncertainty of those at the top of the firm’ (Pan et al. 2017, 2328).

Even though the relationship between risk behaviour and organisational culture has been investigated (Brettel, Chomik, and Flatten 2015), the actual value of risk culture in strategic decision-making is still poorly understood. This study thus contributes to an understanding of the dimensions of risk culture in strategy. Palermo, Power and Ashby (2017) described risk culture in relation to two opposing logics within institutional complexity. Institutional risk management may follow a logic of precaution aimed at avoiding the potential harms of risks, and simultaneously it may follow a logic of opportunity, where risk-taking is embedded in innovation and entrepreneurial activities.

This paper explores the cultural elements that result from organisational logics development specifically in relation to strategic decision-making. The study therefore contributes to an understanding of risk culture within the shared domain of institutional theory and organisational culture theory. It describes the patterns, systems and orders in an organisation that enable a shared approach to risk and strategic decision-making.

We know that strategic decision-making requires a trade-off between risk and returns (March and Shapira 1987) and involves both exploitation and exploration that implies risk-taking (Brunswick and Vanhaverbeke 2015). At the same time, decision makers need to alleviate risk through robust strategic planning (Dibrell, Craig, and Neubaum

2013). Leaders are compelled to identify risk and set mitigating controls to reduce risk through decision-making. Although literature explains the relationship between risk and strategic decision-making, a clearer understanding of the nature of strategic decision-making within risk culture is required.

In response to this need, this research develops a framework of risk culture within the common domain of institutional theory and corporate culture literature. First, we provide a review of literature that shows the intersection of theories of institutional logics and organisational culture. We then discuss decision-making in organisational culture, as well as the nature of risk in order to conceptualise risk culture. Third, we articulate the context and the method of analysis used. Next, we analyse the findings identified in this qualitative study in the automotive industry. Finally, we present the findings and framework that identify factors pertaining to the importance of risk culture, and board and management's responsibility for fostering a risk culture for better strategic decision-making.

## **2. Literature review**

### ***2.1 Institutional logics and organisational culture***

There are two dominant theoretical perspectives from which we may understand risk culture, namely institutional theory and organisational culture. Within institutional theory that describes the social structure of firms (Cardinale 2018), the notion of institutional logics recognises that agents play a role in shaping institutions (Dobbin and Vican 2015). Accordingly, organisational practices are influenced by often contradictory institutional logics (Alford and Friedland 1985). Institutional logics are the patterns of activities or symbolic systems by and in organisations that organise behaviour, time and space.

Agency means that organisational actors can overcome the limitations of these patterns through their own thoughts, identities and interests (Dobbin and Vican 2015). Individual members may adopt different approaches to risk based on the multiplicity of logics they have been exposed to, however a dominant logic (or culture) may exist according to which the organisational agents align their behaviours, including decision-making approaches (Palermo et al. 2017). This research sought to find the logic-consistent schemas that explain risk culture and strategic decision-making in an organisation.

A complementary perspective to position risk culture comes from organisational culture literature. What the organisation values ultimately determines the collective thoughts, behaviours and decisions of organisational members, or its organisational culture (Schein 2010). Organisational culture is thus influenced by leaders' values (Gao 2017) and styles (Ogbonna and Harris 2000). This echoes the idea that groups learn communal assumptions in the process of adapting to external changes, as per institutional theory.

Culture consists of dimensions of artefacts (visible structures, processes and behaviours), adopted beliefs and values (shared ideas, thoughts and ideologies), and the subconscious assumptions of organisational members. How these elements interplay is dependent on the context, frequency of communication, nature of relationships and ultimately the power structures that determine decision-making processes (Pearse and Kanyangale 2009).

Anthropologist Mary Douglas theorised that the strength of organisational culture is determined by varying degrees of social integration and regulation. Four cultural types, i.e. hierarchy (driven by status), individualism (driven by market forces and competition), egalitarianism (resulting from group solidarity) and fatalism (due to blocked mobility), determine the values and behaviours of organisational members (Matheson 2018).

Theorists have long called for the unification of institutional theory and theory of individuals, as together these schools explain how organisational decision-making becomes institutionalised (Westenholz, Pedersen, and Dobbin 2006). Although neo-institutionalists focused on the communalities among organisational cultures and culture theorists focused on the distinctiveness of organisational culture, these represent two sides of the same coin (Pederson and Dobbin 2006). Both schools of thought recognise that social processes create collective meaning and that rational models cannot explain human influences, such as emotions, values or beliefs, on logics in organisations. Aten, Howard-Grenville and Ventresca (2012, 81) concurred that there is ‘common and complementary ground between studies of culture and of institutions’.

Since organisational logics make up culture, decision makers’ attention can be structured in alignment to specific issues and solutions, also known as logic-consistent decisions (Thornton 2002). Even though we know that a risk culture is constructed by social agents in institutions, we are yet to discover the elements of risk culture that enable strategic decision-making.

## ***2.2 Strategic decision-making and organisational culture***

Research suggests that an organisation’s systems, structure, leadership and culture interrelate (Hartnell, Ou, Kinicki, Choi, and Karam 2019). In addition, organisational structure, which includes the degree of centralisation of decision-making, has an effect on organisational culture. For instance, a market culture favours decentralised decision-making. Likewise, a clan culture brings about relational leadership and relational leaders in market and hierarchy cultures encourage participative decision-making (Hartnell et al. 2019). Therefore, in order to understand the nature and development of risk culture, it is important to understand strategic decision-making.

Strategic decisions are ‘those decisions that determine the overall direction of an enterprise and its ultimate viability in light of the unpredictable and the unknowable changes that may occur in its most important surrounding environments’ (Shivakumar 2014, 83). The ability to assess and respond to environmental uncertainty is an important component of strategic decision-making and organisational success (Blake and Moschieri 2016).

There are internal and external influences on strategic decision-making. Papadakis and Lioukas (1998) identified three factors that impact strategic decision-making: (1) managers’ characteristics and group dynamics; (2) internal aspects of an organisation; and (3) environmental/external factors. The nature of the decision itself is a primary factor in strategic decision-making. According to Sibony, Lovallo and Powell (2017, 8), decisions stem from ‘a range of socio-cultural and behavioural forces’. Managerial decision competence also necessitates effective strategic issue diagnosis at the ‘upper echelon’ of the organisation (Elbanna and Child 2007), although strategic decision-making is required throughout the organisation (Smith 2014). Environmental determinism dictates that managers adapt their strategic decision-making to the environment to which they are accustomed (Papadakis and Lioukas 1998). Firm survival depends on how well the environmental factors are managed and the quality of the resultant decisions (MacKay and Chia 2013). Lastly, organisational characteristics impact strategic decision-making through the size, performance, internal systems and controlling structures of the organisation (Papadakis and Lioukas 1998, 118).

Given the complexity of the factors of strategic decision-making, it is important to understand the role of risk, uncertainty and risk management in strategic decision-making.

### ***2.3 Risk, uncertainty and risk management***

Risk refers to uncertainty for which probable outcomes can be measured, as opposed to uncertainty where the future may be estimated from current or past trends, or Knightian uncertainty, where the future is unknowable (Knight 1921). It relates to contexts ‘where one not only knows in advance the full set of options, consequences, and probabilities but also can compute the optimal course of action’ (Mousavi and Girgerenzer 2017, 362).

Risk management incorporates the culture, processes and resources that organisations direct to aid in their management and create possible opportunities (Bromiley, McShane, Nair, and Rustambekov 2015). This highlights that culture is an integral part of risk management.

Enterprise risk management (ERM), which comprises the processes and methods used by organisations to manage risks, is key to governance within organisations (Mikes and Kaplan 2013). Organisational sustainability depends on effective risk management, budgeting, planning, strategy and processes (Power 2009). Although risk propensity is difficult to measure (Cain and McKeon 2016), ERM assumes that a risk culture can be enforced consistently across different levels of the organisation (Bromiley et al. 2015).

Risk behaviour does not only depend on systems, but can result from other factors such as the incentivisation of risk taking behaviour (Calomiris and Carlson 2016), senior management characteristics, human resource-related activities, and even business types (Yaraghi and Langhe 2011). Attitudes towards risk are central to organisational decision-making with risk-taking behaviours depending on personal or situational factors, recency of loss, and the domain in which risk is measured. Interestingly, competition between organisational agents increases risk-taking behaviour (To, Kilduff, Ordoñez, and Schweitzer 2018), which implies that risk culture goes beyond risk management systems.

## ***2.4 Risk culture***

The question, 'How do we create a risk culture?', is not new (Clarke and Varma 1999). Bui, Fang and Lin (2018, 293) defined a risk culture as 'some shared values and beliefs held by a firm's employees (decision makers) toward risk taking', putting decision-making at the centre thereof. Pan et al. (2017) indicated that a common risk preference among corporate leaders develops the risk culture of the organisation. This in turn determines the appetite for risk in corporate investment decisions (Li, Griffin, and Yue 2013).

From an interpretivist viewpoint, a risk culture is the product of the interrelationships of people and groups, however from a rationalist viewpoint, it results from the systems and structures of firms. Together these viewpoints account for the complexity of firms (Ring et al. 2016). This provides further support for the integration of institutional theory and culture theory to define risk culture.

Clearly, risk culture consists of human and structural elements. Historically, research on risk culture has relied on practitioner models, which emphasises the need for a framework to define the elements of risk culture in relation to strategic decision-making. Fritz-Morgenthal, Hellmuth and Packham (2015) described risk culture according to the Financial Stability Board framework, which encompasses elements of 'the top', accountability, effective communication and challenge, and the incentivisation of risk appropriate behaviours. The authors argued that risk culture can be gauged through nine indicators in institutions, namely meeting regulatory requirements; having a defined and sustainable business strategy; governance; relevance of portfolios; training of employees; risk strategy; reputation statements; other once-off effects; and visible behaviours and attitudes.

Ring et al. (2016) studied a case of risk culture using the IRM Risk Culture Aspects Model, which refers to the overarching dimensions of risk culture as 'tone at the top',



governance, managerial competency, and decision-making. When it comes to ‘tone at the top’, board directors build a risk culture by monitoring management and providing decision-making resources (Munisi, Hermes, and Randøy 2014). As leaders are required to create a safe environment for risk reporting (Sax and Torp 2015), this study focuses on decision makers that lead organisations.

Corporate governance shapes risk culture as risk disclosure results from strong governance processes and robust risk information (Elshandidy and Neri 2015). Governance considerations are key risk processes within ERM (Mikes and Kaplan 2013).

Having individuals with the required competencies (experience and qualifications) and appropriate positions is a further component of good risk-related decisions. The loss of knowledgeable and skilled employees may lead to increased risk (Clarke and Varma 1999).

Decision-making is a further element of risk culture. According to Ring et al. (2016, 368), ‘decision-making is linked to information flows in the sense that it seeks to confirm risk decisions are informed decisions’. Risk management and decision-making are thus interrelated (Goerlandt and Montewka 2015). The reliability of risk decisions stems from strong and well-managed enterprise-wide risk management (Ring et al. 2016) and a positive ERM process with a strong risk culture (Wood 2017). Proper risk-informed decisions require processes that involve both a risk assessment of situations and a ‘deliberative group exercise’ with consensus among decision makers (Zio and Pedroni 2012).

## ***2.5 Research gap***

We know that logic-consistent schemas determine the culture of organisations (Pederson and Dobbin 2006) and the strength of the culture depends on social integration and regulation (Matheson 2018). The logics of strategic decision-making are influenced by

internal and external forces and require the management of risk; strategic decision-making is integral to the culture of the organisation (Hartnell et al. 2019). Yet while a risk culture defines the logics in the organisation (Palermo et al. 2017), there are disparate insights into the nature of risk culture and we are yet to understand how it relates to strategic decision-making. Given the importance of risk culture in organisational success (Pan et al. 2017), it is therefore important to build a more in-depth understanding of the elements of risk culture and to ascertain how risk culture informs strategic decision-making.

### **3. Materials and methods**

This study followed a qualitative, inductive design to explore the nature and role of risk culture in strategic decision-making. The sample of informants represented diverse companies and positions with different role-specific decision-making requirements within the automotive industry. This diverse industry, which faces peculiar risks such as a mismatch in supply and demand emanating from sources such as environmental and industry uncertainty (Ceryno, Scavarda, and Klingebiel 2015) offers a good ‘laboratory’ to study risk culture and strategic decision-making.

A non-probability, purposive sampling technique was followed to target specific individuals with strategic decision-making responsibility within the ‘upper echelon’ of the organisation. The research followed a bottom-up approach, which entailed interviewing 14 strategic decision makers from executive committees to obtain rich data on their insights. The interviewees represented an automotive industry conglomerate head quartered in South Africa that employs more than 51,000 people, with operations extending into the rest of Africa, Europe, the UK, the USA and Australia, with annual revenue of approximately ZAR128,700 million at the time of the research. Table 1 reflects the demographics of the interviewees, which included CEOs, commercial

executives, a head of strategy, a Chief People Officer and a Chief Internal Audit, Risk and Sustainability Officer.

**Table 1. Characteristics of the informants**

#	INFORMANT	PART OF MOTOR INDUSTRY	AGE	YEARS OF EXPERIENCE	YEARS OF EXPERIENCE: SENIOR MANAGEMENT
1	CE1	Motor industry head office	42	20	15
2	CEO1	Motor retail	58	37	33
3	CE2	Motor industry head office	63	38	25
4	CIARSO	Motor industry head office	46	26	15
5	CIO	Motor industry head office	56	33	25
6	CEO2	Motor rental	42	18	12
7	CEO3	Original equipment manufacturer	43	20	14
8	CEO4	Motor financial services	45	22	10
9	CPO	Motor industry head office	47	25	20
10	CEO5	Original equipment manufacturer	42	20	15
11	STRY	Original equipment manufacturer	47	25	15
12	CEO6	Original equipment manufacturer	46	17	6
13	CEO7	Motor parts	59	38	30
14	CEO8	Original equipment manufacturer	59	36	25

\* CEO = Chief Executive Officer; CE = Commercial Executive; STRY = Head of Strategy; CPO = Chief People's Officer; CIARSO = Chief Internal Audit, Risk and Sustainability Officer

### ***3.1 Context and data collection***

We followed an inductive approach as risk culture in strategic decision-making is under-explored and current theory did not provide adequate grounds for hypothesis development (Kownatzki, Walter, Floyd, and Lechner 2013).

The sample specifically targeted individuals within the automotive industry, due to accessibility requirements. The industry was suitable as it plays an important role in the global economy and operations in the industry comprises the entire value chain, from raw materials to the disposal of a vehicle (Townsend and Calantone 2013).

We undertook a cross-sectional study, which consisted of semi-structured interviews that explored the individuals' understanding of risk culture and their strategic decisions regarding large projects, capital expenditure and acquisitions. Before the interviews, each

participant was adequately informed of the nature of the research via email, telephone or face-to-face discussions. This allowed for richer and more fruitful conversations, which formed the basis of the study's findings.

Confidentiality was assured, as was the option to exit the interview at any time during the process, however all interviews were completed. The interview questions focused on risk culture, its importance, how strategic decision makers factor risk into strategic decisions and whether risk culture plays any role in the process. The interviews lasted up to 35 minutes, depending on the depth of the interviewees' responses and knowledge. Salient points from the conversation were written down and audio recordings were used.

To ensure research quality, interviews were conducted with knowledgeable, experienced, executive committee members who make strategic decisions within their respective organisations and who help steer the organisation forward. This allowed neutrality in the research findings and ensured confirmability. The inductive approach followed, assisted by the literature, which aided in refining the findings. The confidentiality offered was relevant for the credibility and trustworthiness of the research. All the interviewees represented executive committees and therefore the information provided were from credible, experienced sources. Given that the interviewees were from diverse backgrounds in terms of experience and their positions held within the organisation, the data were not one-dimensional, which ensured the dependability of the findings. The key findings indicated fit with the literature reviewed.

Saturation was reached at 14 interviews. Due to this, as well as the length and depth of each interview, we were able to extract good, in-depth themes offering a degree of generality. The sub-research questions were ethically correct and non-threatening to the interviewees and the questions were answered openly and without being filtered, which allowed for integrity of the study. Risk culture, as provided by the literature, is important

for all organisations. This ensures the transferability of the results and learnings to be shared.

Although the sample for the research was limited to the automotive industry, the interview protocol could easily be replicated to other individuals within other sectors and organisations.

### ***3.2 Data analysis***

We used a thematic analysis approach to analyse the data. This is a suitable method for any qualitative research using interpretations as well as for understanding current practices by individuals (Braun and Clarke 2006). The transcribed data from audio were used in a manual analysis using Microsoft Word. A six-stage process was followed, which inherently progressed from familiarisation with the initial raw data to a final report write-up, to allow for accuracy (Braun and Clarke 2006).

The first stage of the data analysis involved familiarisation with the data to gain deeper understanding. This entailed sifting through the transcribed notes and identifying information from the 14 interviews that fit within the study. The second stage involved identifying 'first order codes', i.e. understanding what the interviewees were saying that fit both the context of the study and the probing questions. The first author coded using words and short descriptions. Using literature, we identified codes that linked to practitioner models within the 'first order codes', which were used in understanding the fit within the ambit of our research. Utilising current literature and grouping thematically, we found 38 first order codes, as shown in Figure 1.

What is the role of risk culture in strategic decision-making?

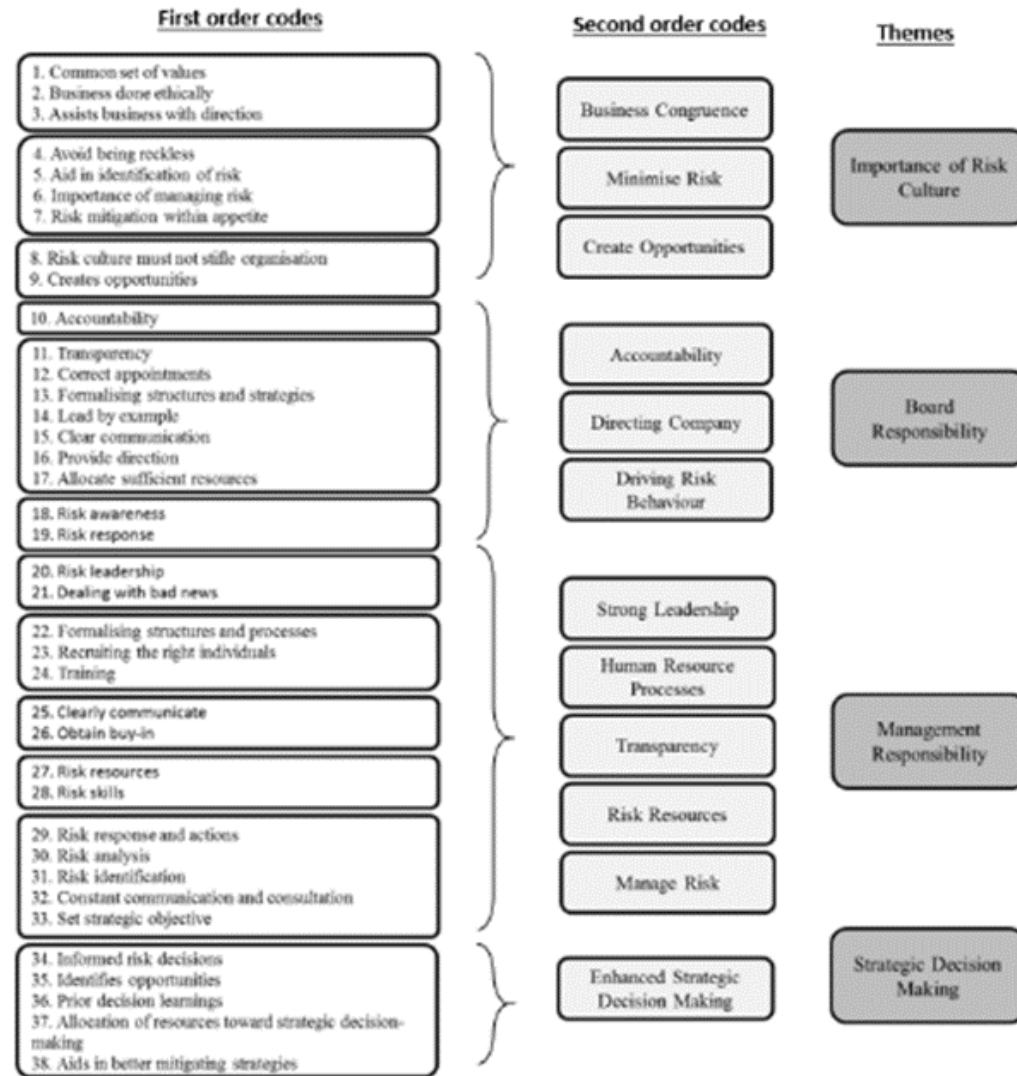
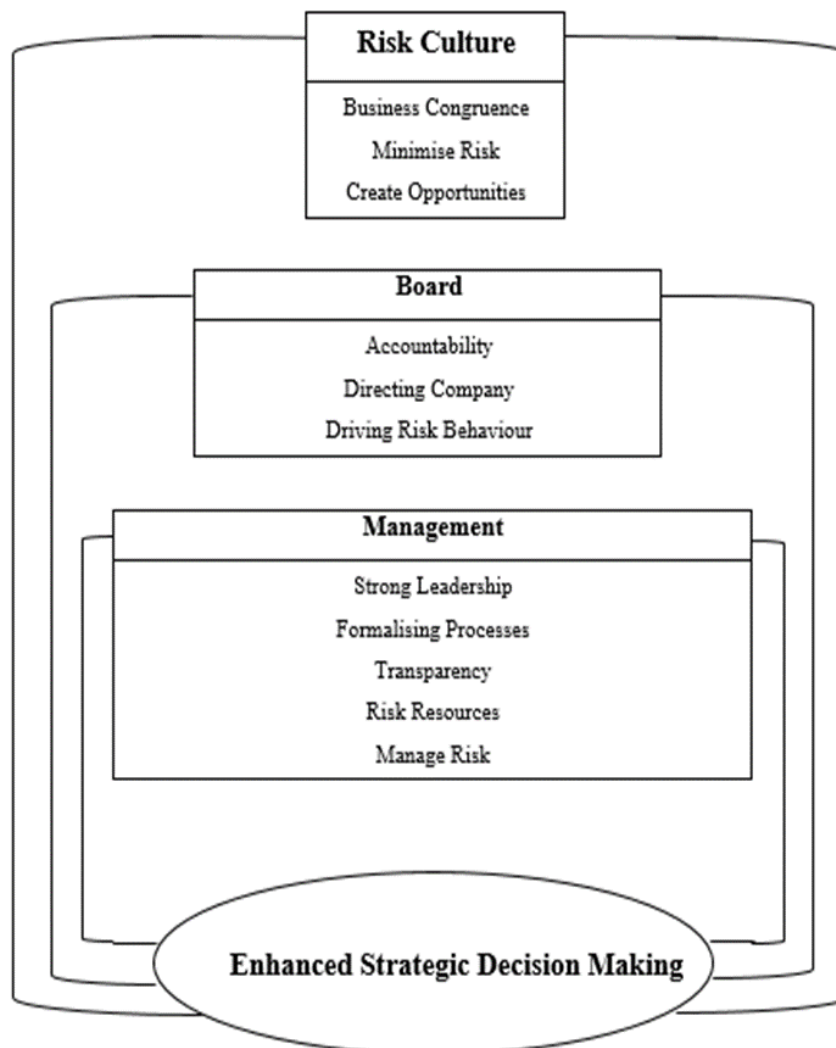


Figure 1. Structure of data

We revisited the transcribed documents more than once to ensure that all the relevant information fit within the ‘first order codes’ appropriately. The third stage involved searching for themes from the ‘second order codes’, again using words and short descriptions (Figure 1). The fourth stage entailed properly reviewing the themes to the second order codes and thereafter back to the first order codes for completeness. The fifth stage entailed creating the themes based on the continuous analysis of the data and codes. The themes created allowed us to gain a deeper insight into the role of risk culture in strategic decision-making. The sixth stage of the analysis led to the formation of the model seen in Figure 2.



**Figure 2. Risk culture in strategic decision-making**

Finally, we used existing theory to ensure that the constructs identified linked to the theory.

#### **4. Results and discussion**

The aim of the study was to determine the role that risk culture plays in strategic decision-making. The themes that emerged from the interviews indicate specific systems and institutional logics that define risk culture. Figure 1 indicates the importance of risk culture and shows that risk culture requires that specific roles be played by board members and management. The board shapes risk culture through accountability, directing the company, and driving risk behaviour. Management shapes risk culture through leadership, transparent communication, and risk management with appropriate processes and resources. Together these form the institutional logics that are supportive of risk appropriate strategic decision-making.

##### ***4.1 Importance of risk culture***

The findings show that risk culture is important as it builds business congruence through a common set of values, based on ethicality and a clear direction. It also helps to minimise risk and create opportunities, confirming the dual logics of precaution and opportunity found by Palermo et al. (2017).

Many of the interviewees identified the *importance of having a strong risk culture*. Related themes included the way a strong risk culture allows individuals to share in a common set of values with a drive to being ethical as well as guidance and direction for decisions made. According to Unterrheiner (2017), an appropriate risk culture is aligned to an organisation's strategy, ensures that the approach to risk is followed by all within an organisation, and aligns to that of the senior executives and the board. Top management is required to set a strategy and direction for the future sustainability of the



organisation; they need to ensure the risk culture they have will set the values of the organisation in terms of risks they are willing to take. As recognised in the literature, the data gave support for the 'strategic or management choice' factor, due to top management's driving of the strategic decision-making of the organisation. Many of the interviewees identified the importance of having a strong risk culture. One interviewee claimed:

So, a risk culture speaks to understanding ourselves honestly as an organisation, where our success has been, what risks we have taken that we've been successful in, our assessment of risk, our ability to assess risk well and our understanding around our appetite for risk, or we are going to feed into strategy and where we focus our energy, resources and look to execute. (CEO3)

The management of *risk within the risk appetite* was an important theme that emerged from the interviews. The individuals acknowledged the importance of a risk culture in identifying risk and the way it supports organisations to not take unnecessary chances and to not be reckless when it comes to making decisions. If an organisation can identify, assess and evaluate risk, and then incorporate mitigations to reduce uncertainty risk, the potential loss to the organisation will be greatly reduced (Choi et al. 2016).

So, remember, risks around the decisions are about the risks we take in terms of reaching our organisational objectives. And if everyone is aligned in terms of understanding, what are the risks that need to be taken, and what are the decisions that need to be taken, and what appetite we have for it ... risk defines what's acceptable and what's not. (CE1)

With risk comes *possible opportunities*. When Professor Mervyn King wrote King 4, he included an important component that addresses opportunity management. He

further noted that individuals previously identified only the negative aspect of risk and always left out the opportunity of risk, which now needs to be considered (IDCSA 2016). Wood (2017) has, however, suggested that for a business to minimise risk and take advantage of any opportunities, there needs to be a strong ERM framework, which includes a strong risk culture.

I'm in the retail side of business, so I'm looking for opportunity and reasons to do business and have a fairly conservative view about how I view the risk function within that structure. So, we are looking for reasons to close deals and create business and not for reasons as to why not to do it. (CEO1)

#### ***4.2 Board responsibility***

The findings show that the board is accountable for the common risk behaviour of the organisation and directs the company and drives risk behaviour *inter alia* through setting an example, communicating risk priorities, allocating resources, and ensuring appropriate risk awareness and responses.

The interviewees identified the *important role the board plays in driving the risk behaviour* within the organisation, pertaining to accountability, directing the company and driving risk behaviour. According to Ring et al. (2016), governance creates an appropriate risk culture whereby information required is produced in a transparent, timely and appropriate manner to the relevant individuals. Similarly, through our interviews, we found that the board is ultimately responsible for *driving the correct risk behaviour, directing the organisation forward through the implementation of formal structures and processes and by holding individuals accountable*. Their accountability pertains to the actions they take and the decisions they make that are construed to be outside the

parameters set by themselves and which inevitably cost the organisation financially and/or impacts its reputation.

So it was always linking, having those *conversations at the appropriate level* and then *holding people accountable* for what they had said that they were going to do.  
(CPO)

Others referred to the necessity of implementing *structures and mandates*, acknowledged within the ‘firm characteristics’ in strategic decision-making, which will assist in driving the relevant risk culture:

The second thing is obviously mandates; very, very clear mandates about who can do what. So, again you are limiting the business exposure. I think *forcing a level of reporting* makes people think about risk in their business. So it enforces risk discipline, but again it should not be overdone because the minute you over do it, you actually break the usefulness and you turn it into a tick box exercise. (CEO4)

There are many different ways the board can drive the risk behaviour of an organisation, for example they can use *policies and frameworks* to do this:

I think through actions, *through document or structured documents when typical limits of authority apply*, those type of documents. Making sure people understood what needs to happen and what they are required to do or not. (CEO2)

However, in a poor economy where people are struggling to make ends meet, individuals are likely to experiment with solutions that will cause losses for the organisation. Opportunities and threats identified under ‘environmental determinism’ will hamper decision-making, therefore the *correct systems* also need to be implemented for these items to be brought to light.

So I think what the board can do is, obviously to set the framework of the risk process. So I said the anonymous tip-offs and *setting up those type of avenues* where people can, with the safety of being anonymous, report fraud and risk and those types of things to an independent party is key. (CEO5)

### ***4.3 Management responsibility***

Management has the responsibility to provide strong risk leadership, align human resource processes in relation to risk priorities, be transparent about risk-related issues, allocate appropriate resources, and manage risk.

Pan et al. (2017) identified ‘tone at the top’ as a key element of risk culture, i.e. individuals at the top of the organisation are ultimately responsible for strategic decisions made even though decisions are made at all level. Harrison (1995) posited that the most important strategic decisions happen at the top of the organisation, which then impact the less important decisions that are made at the lower levels of the organisation. This highlights that *leadership is a critical component* of a business; the way leaders ‘practise what they preach’ will affect the company’s values and drive the behaviour necessary for a strong risk culture. The way in which strategic decision makers or leaders, *direct and co-ordinate individuals* is thus critical.

*There needs to be awareness, employee awareness, of the responsibility and roles that they play and why they exist and how they help the organisation to manage the risk that comes with their roles. (CIARSO)*

There must also be ongoing communication, buy-in and consultation between senior individuals and their direct reports so that all individuals fully understand and feel part of the decisions that are made. According to Ring et al. (2016), ‘governance’ creates an

appropriate risk culture whereby the information required is produced in a *transparent, timely and appropriate manner* to the relevant individuals.

I think the important thing is that the difficult questions need to be asked and there has to be a voice around risk ... So the *culture of transparency*, the culture of debate, the culture of challenging must be there. (STRY)

As identified above, the board plays an important role in the governance of an organisation, however the top management are responsible for the day-to-day processes and therefore have an even bigger role to play. They thus need to ensure that the organisation is moving forward and *implement formalised processes* to do so. These processes include training the right individuals, following the correct recruitment process and implementing the necessary structures that will aid in organisational congruency and alignment of people.

It's about the mandates, it's about the recruitment of the right individuals and it's about the *disciplines of risk reporting*. (CEO4)

To train the right individuals, it is imperative that one first recruit the right people. The *risk resources* appointed need to fit the organisation's culture, not only in a risk-specific role, but in all roles within the organisation, and are required to have the necessary 'competency'. Individuals need to understand that it is not only the risk management function that is responsible for managing risk, but every single person within the organisation. If the process works effectively, it will assist with the better management of risks in the organisation. Mikes and Kaplan (2013) posited that merely having a risk department is not enough, as it will not guarantee that the risk function will enjoy the essential support of the board to aid in the roll-out of risk-related processes as

well as to adequately provide resources and leadership to mitigate the primary risks identified. One interviewee articulated two salient points regarding the above:

To ensure that sufficient resources, time and skills spent in the preparation phase and the lead up to making that decision ... And obviously there are going to be many times when you need to make a decision quickly but make sure that you then apply extra resources, extra time, extra people to ensure that you make an informed decision.

Don't allow a drop dead deadline to allow you to compromise the quality of the decision you're making. (CEO8)

#### **4.4 Strategic decision-making**

In the preceding discussion it was made clear that risk culture plays a role in strategic decision-making. The interviewees spoke about the importance of making informed risk decisions, as well as how awareness of risk helps with making strategic decisions for the identification of opportunities, the allocation of resources and mitigating choices. The respondents acknowledged risk and risk culture as crucial components within the strategic decision-making process. As CEO8 acknowledged:

It's critical. So I think to take risk, without assessing what that risk is, is irresponsible not only to the company but also to stakeholders in the company. So what I'm getting at and really where I'm coming from is: I believe in having a risk culture providing one can quantify and understand what you are going into.

Occasionally, decisions need to be made quickly and efficiently by leaders of the organisation to mitigate risk:

At a point in time ... all information has been put together, somebody's got to make a decision ... So I think the information is never, information or risk information whatever ... information is never going to make the decision. *It is an enabler; at the end of the day experience, leadership, risk appetite, they've got to come into the final decision.* And I think you can do many, many what-if models and scenarios. But it still comes down to someone still going to have to make the decision. (CEO14).

Figure 2 above shows the integration of these findings in a framework of the importance and development of risk culture towards improved strategic decisions.

## **5. Conclusion**

This research aimed to identify the role that risk culture plays in the making of strategic decisions. Figure 2 illustrates the importance of risk culture in strategic decision-making and identifies both a board's and management's role in driving and formalising processes to entrench the right culture within an organisation, i.e. the board is tasked with overseeing governance and driving the right behaviours, while management are required to recruit suitable individuals, train them, and make them aware of their role to embed risk culture. The findings further show the importance of risk culture in that it minimises risk and creates a common set of values among employees. Moreover, a risk culture serves as a driver of ethical behaviour and strategic decision-making.

Risk is becoming increasingly prevalent in business from a strategic, operational and reputational perspectives. We have seen the reputational issues brought about by poor decision-making and a lack of risk assessment, affecting companies such as KPMG, McKinsey and Steinhoff to name a few (Cohen, Gumede, and Vecchiatto 2017). Power (2009) identified the need for risks to be managed and the incorporation of mitigating controls to keep the residual risk of the organisation within the risk appetite.

Beyond this, this research shows that transparency and clear communication from the board can help drive appropriate risk behaviour. The organisational logics are subject to individual agency and therefore conflicting interests may still become an issue, however we argue that a strong culture with good social integration and regulation, as proposed by Mary Douglas (Matheson 2018), can overcome unethical risk behaviour and conflicts of interest.

Organisations can use the framework of this study as a discussion guideline to develop a stronger risk culture that will assist them with their strategic decision-making. Organisations must drive the correct risk culture by being transparent and continuously communicating with their employees. To embed the correct risk culture, the process has to be driven from the top of the organisation. An entrenched risk culture characterised by congruence across the organisation, risk minimisation and opportunities for risk management will enable better strategic decision-making provided the board and management support the risk culture.

The limitations of this research include the cross-sectional design used within a single context. Moreover, the study focused on the insights of a small selection of executives, and therefore further research should incorporate a broader review of multiple perspectives from different organisational levels and industries. As we sought rich data, some of the constructs applied to more than one theme. We recommend that future research examines the nature of risk cultures across different organisations and industries. Case-based studies can further deepen our understanding of the nature of risk culture in strategic decision-making. Moreover, further research can explore how organisational culture can prepare strategic decision makers to respond effectively to opportunities and threats in the environment.



## References

- Alford, R. R., and R. Friedland. 1985. *Powers of Theory: Capitalism, the State, and Democracy*. Cambridge: Cambridge University Press.
- Aten, K., J. Howard-Grenville, and M. J. Ventresca. 2012. "Organizational Culture and Institutional Theory: A Conversation at the Border." *Journal of Management Inquiry* 21 (1): 78–83.
- Blake, D. J., and C. Moschieri. 2017. "Policy Risk, Strategic Decisions and Contagion Effects: Firm-specific Considerations." *Strategic Management Journal* 38 (3): 732–750.
- Braun, V., and V. Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101.
- Brettel, M., C. Chomik, and T. C. Flatten. 2015. "How Organizational Culture Influences Innovativeness, Proactiveness, and Risk-Taking: Fostering Entrepreneurial Orientation in SMEs." *Journal of Small Business Management* 53 (4): 868–885.
- Bromiley, P., M. K. McShane, A. Nair, and E. Rustambekov. 2015. "Enterprise Risk Management: Review, Critique, and Research Directions". *Long Range Planning* 48 (4), 265–276.
- Brunswick, S., and W. Vanhaverbeke. 2015. "Open Innovation in Small and Medium-Sized Enterprises (SMEs): External knowledge Sourcing Strategies and internal Organizational Facilitators." *Journal of Small Business Management* 53 (4): 1241–1263.
- Bui, D. G., Y. Fang, and C.-Y. Lin. 2018. "The Influence of Risk Culture on Firm Returns in Times of Crisis." *International Review of Economics & Finance* 57 (September): 291–306.
- Cagliano, A. C., S. Grimaldi, and C. Rafele. 2015. "Choosing Project Risk Management Techniques. A Theoretical Framework." *Journal of Risk Research* 18 (2): 232–248.
- Cain, M. D., and S. B. McKeon. 2016. "CEO personal Risk-Taking and Corporate Policies." *Journal of Financial and Quantitative Analysis* 51 (1): 139–164.
- Calomiris, C. W., and M. Carlson. 2016. "Corporate Governance and Risk Management at Unprotected Banks: National Banks in the 1890s." *Journal of Financial Economics* 119 (3): 512–532.
- Cardinale, I. 2018. "Beyond Constraining and Enabling: Toward New Microfoundations for Institutional Theory." *Academy of Management Review* 43 (1): 132–155.
- Ceryno, P. S., L. F. Scavarda, and K. Klingebiel. 2015. "Supply Chain Risk: Empirical Research in the Automotive Industry." *Journal of Risk Research* 18 (9): 1145–1164.
- Choi, Y., X. Ye, L. Zhao, and A. C. Luo. 2016. "Optimizing Enterprise Risk Management: A Literature Review and Critical Analysis of the Work of Wu and Olson." *Annals of Operations Research* 237 (1–2): 281–300.
- Clarke, C. J., and S. Varma. 1999. "Strategic Risk Management: The New Competitive Edge." *Long Range Planning* 32 (4): 414–424.

- Cohen, M., A., Gumede and P. Vecchiato. 2017. *KPMG, McKinsey feel the Heat over South Africa Graft Scandal*. Bloomberg, September 18 2017. <https://www.bloomberg.com/news/articles/2017-09-18/kpmg-mckinsey-feel-the-heat-as-graft-scandal-rocks-south-africa>
- Dibrell, C., J. B. Craig, and D. C. Neubaum. 2014. Linking the formal Strategic Planning Process, Planning Flexibility, and Innovativeness to Firm Performance. *Journal of Business Research* 67 (9): 2000–2007.
- Dobbin, F. 1994. “Cultural Models of Organization: The Social Construction of Rational Organizing Principles”. *The Sociology of Culture: Emerging Theoretical Perspectives*, edited by Diana Crane: 117–141. Oxford: Basil Blackwell.
- Dobbin, F., and S. Vican. 2015. “Organization and Culture”. *International Encyclopedia of the Social and Behavioral Sciences (Second Edition)*, edited by James D. Wright: 390–396.
- Drucker, P. F. 2009. *The Effective Executive*. New York: HarperCollins.
- Elbanna, S., and J. Child. 2007. "The Influence of Decision, Environmental and Firm Characteristics on the Rationality of Strategic Decision-Making." *Journal of Management Studies* 44 (4): 561–591.
- Elshandidy, T., and L. Neri. 2015. "Corporate Governance, Risk Disclosure Practices, and Market Liquidity: Comparative Evidence from the UK and Italy." *Corporate Governance: An International Review* 23 (4): 331–356.
- Friedland, R., and R. R. Alford. 1991. “Bringing Society Back in: Symbols, Practices, and Institutional Contradictions”. in *The New Institutionalism in Organizational Analysis*, edited by W. W. Powell and P. J. DiMaggio, pp. 232-266. Chicago: University of Chicago Press.
- Fritz-Morgenthal, S., J. Hellmuth, and N. Packham. 2015. “Does Risk Culture Matter? The Relationship between Risk Culture Indicators and Stress Test Results.” *Journal of Risk Management in Financial Institutions* 9, (1): 71–84.
- Gao, Y. 2017. “Business Leaders’ Personal Values, Organisational Culture and Market Orientation.” *Journal of Strategic Marketing* 25 (1): 49–64.
- Goerlandt, F., and J. Montewka. 2015. "Maritime Transportation Risk Analysis: Review and Analysis in Light of Some Foundational Issues." *Reliability Engineering & System Safety* 138: 115–134.
- Hartnell, C. A., D. Ou, A. J. Kinicki, A. Y., Choi, and E. P. Karam. 2019. “A Meta-Analytic Test of Organizational Culture’s Association with Elements of an Organization’s System and its Relative Predictive Validity on Organizational Outcomes.” *Journal of Applied Psychology* 104 (6): 832–50.
- Institute of Directors in Southern Africa (IoDSA). 2016. *King 4 - Report on Good Corporate Governance*. Johannesburg: IoDSA.
- Institute of Risk Management. 2012. *Risk Culture: Under the Microscope Guidance for Boards*. London: IRM.

- Harrison, E. F. 1995. *The Managerial Decision-Making Process*. Vol. 4. Boston, MA: Houghton Mifflin.
- Knight, F. H. 1921. *Risk, Uncertainty and Profit*. Boston, New York, Houghton Mifflin Company.
- Kownatzki, M., J. Walter, S. W. Floyd, and C. Lechner. 2013. "Corporate Control and the Speed of Strategic Business Unit Decision-making." *Academy of Management Journal* 56 (5): 1295–1324.
- Li, K., D.Griffin, H. Yue, and L. Zhao. 2013. "How Does Culture Influence Corporate Risk-Taking?" *Journal of Corporate Finance* 23: 1–22.
- MacKay, R. B., and R. Chia. 2013. "Choice, Chance, and Unintended Consequences in Strategic Change: A Process Understanding of the Rise and Fall of Northco Automotive." *Academy of Management Journal* 56 ( 1 (2013): 208–230.
- March, J. G., and Z. Shapira. 1987. "Managerial Perspectives on Risk and Risk Taking." *Management Science* 33 (11): 1404–1418.
- Matheson, C. 2018. "Four Organisational Cultures in the Australian Public Service: Assessing the Validity and Plausibility of Mary Douglas' Cultural Theory." *Australian Journal of Public Administration* 77 (4): 644–57.
- Mikes, A., and R. S. Kaplan. 2013. *Towards a Contingency Theory of Enterprise Risk Management*. Boston, Mass.: Harvard Business School.
- Mousavi, S., and G. Gigerenzer. 2017. "Heuristics Are Tools for Uncertainty." *Homo Oeconomicus* 34 (4): 361–379.
- Munisi, G., N. Hermes, and T. Randøy. 2014. "Corporate Boards and Ownership Structure: Evidence from Sub-Saharan Africa." *International Business Review* 23 (4): 785–796.
- Ogbonna, E., and L. C. Harris. 2000. "Leadership Style, Organizational Culture and Performance: Empirical Evidence from UK Companies." *International Journal of Human Resource Management* 11 (4): 766–788.
- Palermo, T., M. Power, and S. Ashby. 2017. "Navigating Institutional Complexity: The Production of Risk Culture in the Financial Sector." *Journal of Management Studies* 54 (2): 154–181.
- Pan, Y., S. Siegel, and T. Y. Wang. 2017. "Corporate Risk Culture." *Journal of Financial and Quantitative Analysis* 52 (6): 2327–2367.
- Papadakis, V. M., S.Lioukas, and D. Chambers. 1998. "Strategic Decision-Making Processes: The Role of Management and Context." *Strategic Management Journal* 19 (2): 115–147.
- Pearse, N., and M. Kanyangale. 2009. "Researching Organizational Culture Using the Grounded Theory Method." *Electronic Journal of Business Research Methods* 7 (1): 67–74.
- Pedersen, J. S., and F. Dobbin. 2006. "In Search of Identity and Legitimation: Bridging Organizational Culture and Neoinstitutionalism." *American Behavioral Scientist* 49 (7): 897–907.
- Power, M. 2009. "The Risk Management of Nothing." *Accounting, Organizations and Society* 34 (6–7): 849–855.

- Ring, P. J., C. Bryce, R. McKinney, and R. Webb. 2016. "Taking Notice of Risk Culture: The Regulator's Approach." *Journal of Risk Research* 19 (3): 364–387.
- Sax, J., and S. S. Torp. 2015. "Speak up! Enhancing Risk Performance with Enterprise Risk Management, Leadership Style and Employee Voice." *Management Decision* 53 (7): 1452–1468.
- Schein, E. H. 2010. *Organizational Culture and Leadership* (Fourth Edition). San Francisco, California: Jossey-Bass.
- Shivakumar, R. 2014. "How to Tell Which Decisions are Strategic." *California Management Review* 56 (3): 78–97.
- Sibony, O., D. Lovallo, and T. C. Powell. 2017. "Behavioral Strategy and the Strategic Decision Architecture of the Firm." *California Management Review* 59 (3): 5–21.
- Smith, W. K. 2014. "Dynamic Decision-making: A Model of Senior Leaders Managing Strategic Paradoxes." *Academy of Management Journal* 57 (6): 1592–1623.
- Thornton, P. H. 2002. "The Rise of the Corporation in a Craft Industry: Conflict and Conformity in Institutional Logics." *Academy of Management Journal* 45 (1): 81–101.
- To, C., G. J. Kilduff, L. Ordoñez, and M. E. Schweitzer. 2018. "Going for It on Fourth Down: Rivalry Increases Risk Taking, Physiological Arousal, and Promotion Focus." *Academy of Management Journal* 61 (4): 1281–1306.
- Townsend, J. D., and R. J. Calantone. 2014. "Evolution and Transformation of Innovation in the Global Automotive Industry." *Journal of Product Innovation Management* 31 (1): 4–7.
- Unterrheiner, S. 2017. *The Importance of Risk Culture to Your Risk Management Structure*. Gen Re, January 10, 2017. <http://www.genre.com/knowledge/blog/the-importance-of-risk-culture-en.html>
- Westenholz, A., J. S. Pedersen, and F. Dobbin. 2006. "Institutions in the Making: Identity, Power, and the Emergence of New Organizational Forms." *American Behavioral Scientist* 49 (7): 889–896.
- Wood, A. 2017. *What Is Risk Culture?* Willis Towers Watson Wire, May 11, 2017. <https://blog.willis.com/2017/05/what-is-risk-culture/>
- Wright, J. F. 2018. "Risk Management: A Behavioural Perspective." *Journal of Risk Research* 21 (6): 710–724.
- Yaraghi, N., and R. G. Langhe. 2011. "Critical Success Factors for Risk Management Systems." *Journal of Risk Research* 14 (5): 551–81.
- Zio, E., and N. Pedroni. 2012. "Overview of Risk-Informed Decision-Making Processes". Number 2012-10 of the Cahiers de la Sécurité Industrielle, Foundation for an Industrial Safety Culture. Toulouse, France (ISSN 2100-3874)."