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# The Integration of ERM and Strategy: Implications for Corporate Governance

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**SYNOPSIS:** Since the early 2000s, expectations have increased for organizations to strengthen corporate governance with enterprise risk management (ERM) processes, with the accounting profession playing a major role in these efforts. The ultimate goal of an effective ERM process is to help boards and senior executives to manage risks in the context of strategy so that the organization is more likely to achieve its key objectives. We conduct semi-structured interviews of 15 ERM champions to provide insights about whether the ERM process is integrated with the strategic-planning and execution processes of the firm. We find that while the decision to launch ERM often is based on a desire for ERM to provide strategic value, the integration of ERM with strategy typically is limited. We then examine the ERM implementation process to identify possible ERM implementation practices limiting ERM's integration with strategy. We find that organizations' (1) culture and approach to preparing for ERM's launch, (2) ERM leadership structure, and (3) management of key risks appear to limit the intersection of ERM and strategy. Our summary of key findings highlights important considerations for boards of directors, executive management, and auditors as they assess the effectiveness of their risk oversight efforts in overseeing the strategic direction of the enterprise.

**Keywords:** risk; ERM; risk assessment; risk governance; strategy; strategic risk management; corporate governance.

We [in ERM] have a seat at the [strategic-planning] table. We listen, but they're still not taking our input yet. —Quote from an ERM champion interviewed for this study

It depends who you're asking [about ERM and strategy]. If you're asking just me, I would say [ERM is] more strategic. It goes towards the five-end of the spectrum [on a five-point scale], maybe a four. We're not quite at the top of the ladder but we're getting there, and we've seemed to progress every year. If you ask the people at the middle management or the operations folks, I think they see it as a compliance type of thing. It depends where you sit.

-Quote from an ERM champion interviewed for this study

# **INTRODUCTION**

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xpectations for enhanced enterprise-wide risk oversight have increased since the early 2000s as a number of corporate governance reform proponents have called for more effective strategic governance of the enterprise (Nocco and Stulz 2006; Power 2007; Baxter, Bedard, Hoitash, and Yezegel 2013). The accounting profession has played a major role in

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Submitted: July 2015 Accepted: December 2016 Published Online: February 2017 the development of principles and best practices for effective enterprise risk oversight. For example, in 2004, COSO issued *Enterprise Risk Management—Integrated Framework* (COSO 2004) to help boards of directors and management to design and implement effective enterprise risk management (ERM) processes.

The ultimate goal of an effective ERM process is to strengthen the entity's ability to identify, manage, and monitor risks that might affect the organization's ability to achieve its core objectives. ERM is designed to help the board of directors, senior executives, and other key leaders to more effectively manage and monitor risks that may impact, positively or negatively, the entity's business model and strategic initiatives that are designed to protect and enhance value. That is, ERM should be an important strategic tool.

Boards of directors have ultimate responsibility to oversee management's pursuit of value by helping to advise management regarding strategic alternatives and by overseeing management's risk taking in the pursuit of those alternatives. Most boards delegate responsibility for evaluating and approving management's ERM processes to the audit committee (Beasley, Branson, and Hancock 2015a). The New York Stock Exchange's governance rules assign specific requirements to audit committees to assume responsibilities for "risk assessment and risk management" (NYSE 2004). Audit committees often turn to members of management in financial reporting roles to oversee the design and implementation of ERM processes for the organization. Additionally, best practices surrounding the design and implementation of internal controls, which are often the responsibility of those in financial accounting roles, emphasize a risk-based approach.<sup>1</sup> Therefore, knowledge and understanding about how organizations implement and operate their risk management processes, and challenges they observe with obtaining value from those processes, are highly relevant to the accounting profession and the accounting literature.

Some large-sample archival studies (e.g., Beasley, Pagach, and Warr 2008; Gordon, Loeb, and Tseng 2009; Hoyt and Liebenberg 2011; McShane, Nair, and Rustambekov 2011; Baxter et al. 2013) document an association between ERM and certain organizational performance measures (i.e., Tobin's Q, return on assets, or abnormal/excess returns). However, these association studies are not able to determine the cause of the association between ERM and firm performance measures, including any role played by linking ERM to strategy.

The opening quotes above highlight challenges of two organizations in integrating ERM and strategy, as the first quote indicates that those in strategic planning do not yet listen to ERM insights. The second quote reveals that the ERM champion views ERM as strategic, but s/he acknowledges that others in the organization tend to see ERM as more compliance focused. In addition, practitioner surveys (Beasley et al. 2015a) and recent academic research (Beasley, Branson, and Pagach 2015b) highlight the difficulty of linking ERM and strategic management. Reasons for this difficulty have not been the focus of recent qualitative research that provides insights about details of ERM processes. Specifically, survey-based research (Gates 2006; Beasley et al. 2015b) and ERM-focused qualitative research (Cohen, Krishnamoorthy, and Wright 2017) to date provide limited insights about whether and how ERM is integrated with strategic planning and what specific ERM implementation practices may affect this integration. To address this gap in the literature, we explore the extent that organizations integrate ERM with strategic planning and then provide insights about how certain practices in implementing ERM, which are not measurable in public data sources, might explain why ERM may (or may not) be integrated with strategic planning.

We use a qualitative, detailed interview approach to obtain insights from 15 "ERM champions" at 14 organizations. The champions are those individuals who have been or currently are involved with an ERM implementation within their organization in a manner that gives them insight into the entire ERM process. The interviews reveal details about processes related to the decision to launch ERM, the leadership structure of that internal process, and how the organizations engaged in activities to identify, assess, and respond to risks. While both large-sample studies/surveys and individual company case studies provide needed contributions to the ERM literature (which is still relatively new), we believe our qualitative, detailed, semi-structured interview approach with 15 ERM champions helps to fill a significant gap in the understanding of ERM implementation practices that affect the strategic integration of an ERM process. Thus, this study provides an intermediate approach to gaining insights about detailed, internally observable ERM issues that have not been examined in prior research because of a lack of data access.

The interviews indicate that most of the organizations undertook an ERM implementation to meet strategic needs, often at the encouragement of the board of directors and audit committee. However, even though the ERM process is initially envisioned to be a key part of the strategic-planning process, ERM has not notably impacted the strategic direction of these organizations, and its integration with strategic planning and execution is limited in many of the organizations.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Given this journal's purpose to "bridge academic and professional audiences," we do not employ theory throughout the analysis. However, the overall results reveal a primary tension between resource dependence theory (ERM is focused on strategic risks and helping the organization to meet its strategic objectives) and (1) agency theory (ERM is focused on reducing information asymmetry and constraining managerial opportunism) and (2) institutional theory (ERM efforts reflect best practices and normative or coercive elements). While ERM often begins with a strategic, resource dependence focus, the actual implementation of ERM yields outcomes closer to the agency and institutional perspectives (see Cohen et al. 2017).



<sup>&</sup>lt;sup>1</sup> Additionally, auditing standards require the external auditor to obtain an understanding of an entity's risk assessment processes as part of the consideration of the risk of material misstatement in the financial statements (PCAOB 2007; AICPA 2014). Auditors of large, publicly traded firms also must express an opinion on internal control over financial reporting.

Next, we explore the actual launch and implementation of ERM in the 14 organizations to determine whether there are ERM implementation practices that might provide some explanation about the limited connection of ERM and strategic planning. We find that organizations' culture and an informal approach to preparing for ERM's launch may have contributed to its limited connection with the strategic leadership of the firm. Additionally, we find that the manner in which organizations have structured the leadership of ERM may be limiting the perceived relation of ERM to the strategy of the organization. Finally, we note that the approach used to manage and respond to key risks may overlook the benefit of embedding those considerations in the context of the organizations' core business model and strategies. We discuss implications related to each of these areas.

The next section provides background information and develops the research question. The sections that follow present the method, findings, and discussion and conclusion.

# **BACKGROUND AND RESEARCH QUESTION**

COSO (2004) emphasizes that ERM is designed to be "applied in strategy setting" as a process "to provide reasonable assurance regarding the achievement of entity objectives."<sup>3</sup> This positioning of ERM in the context of strategy demonstrates the need for integrating ERM processes with an entity's business model and strategic initiatives. Because risks are constantly changing and evolving, an organization's core business model and strategic initiatives may be affected, positively or negatively, by emerging opportunities and threats. Given this reality, risk oversight should not be a static process. Rather, ERM is designed to be an evolving process that provides management and the board information about risks that may be on the horizon that might affect the organization's core business model or its current or future strategic initiatives. Thus, output from an ERM process should be an input to strategic planning and execution.

Despite COSO's view, large-sample, survey-based research often reveals a limited focus on strategic risks in the ERM process.<sup>4</sup> For instance, in an early study, Gates (2006) finds that only 16 percent of surveyed companies have integrated ERM with strategic planning. He calls for additional research, including studies to address the strategic impact and value of ERM, as well as how factors such as ERM leadership (i.e., by an auditor, CRO, or strategic-planning committee) affect how well companies manage strategic risks.

More recently, Beasley et al. (2015a) find in a survey on the current state of ERM that 36 percent of respondents do not have any process or a minimal process in place to identify and monitor strategic risks. Beasley et al. (2015b) examine surveybased data from a large sample of executive respondents and find higher assessments of ERM as "an important strategic tool" when the organization articulates and links its risk appetite to strategic planning and when management regularly reports top risks to the board. In addition, the strategic role of ERM is viewed more positively when there is a management-level risk committee, formal risk management training, an updated risk inventory, a link between executive compensation and risk management, and when the company is larger or private. Further, a recent qualitative study (Cohen et al. 2017) considers the strategic role of ERM in an examination of the linkage between ERM and financial reporting in 11 companies. The authors find that CFOs and audit committee members focus much more on the strategic dimension of ERM than do auditors, which is understandable given the auditor's responsibilities versus those of management and directors. However, the authors question whether auditors are failing to use ERM effectively to highlight strategic risks that could be important to the audit process.

The literature does not seem to support that firms are successfully linking ERM to strategy, but beyond the survey results in Beasley et al. (2015b), the reasons for this challenge have not been explored in depth. Specifically, prior research does not provide current, detailed insights from ERM champions that can promote our understanding of the efforts to link ERM with strategy, the success of these efforts, and any ERM implementation practices that may affect the ability to integrate ERM and strategy. Gates (2006) provides survey evidence that is now over a decade old, and Cohen et al. (2017) focus on high-level participants in the financial reporting process, not on ERM champions and a broader setting than financial reporting.

The present study uses detailed interviews of ERM leaders to complement prior research and to provide rich insights about ERM implementation practices affecting the connection between strategy and ERM. Such insights are based on a smaller sample than is examined in survey studies, but the depth of analysis can be more extensive.

Based on the discussion above, this study seeks to extend the literature by providing detailed insights about the extent to which ERM is integrated with strategy, and it explores a number of specific implementation processes that might affect ERM's



<sup>&</sup>lt;sup>3</sup> In June 2016, COSO released an exposure draft of a revision to its *Enterprise Risk Management—Integrated Framework* (COSO 2004). One of the key elements of that revision is to strengthen the emphasis on the intersection of ERM and strategy, as evidenced by the proposed new title of the framework, *Enterprise Risk Management: Aligning Risk with Strategy and Performance* (COSO 2016). The comment period ended September 30, 2016. COSO anticipates release of its revised framework in mid-2017.

<sup>&</sup>lt;sup>4</sup> There also is an extensive "how-to" ERM literature in various practitioner journals. Much of this literature involves ERM professionals offering tips to others who may be considering ERM adoption.

integration with strategic planning and execution (Gates 2006). The ultimate goal of this study is to address this broad research question:

**RQ:** To what extent is ERM integrated with strategy, and what ERM implementation practices may affect the integration of ERM and strategy?

# METHOD

The data for this research were collected through a series of semi-structured interviews conducted by one of the coauthors. The interview method was chosen because it allows for the collection of rich, descriptive insights that are not possible when using only publicly available data or survey data. The semi-structured interview method used included a list of predetermined questions to be asked during the interview to ensure all areas were covered, with flexibility to clarify the answers when necessary and identify areas that may not have been anticipated when structuring the questions. The questions were developed using COSO (2004), Frigo and Anderson (2011), and other ERM literature. The interviewees were told that the questions would address the following areas:<sup>5</sup>

- · Your background, which will include your experience with risk management processes
- · Company demographic information
- · How your organization decided to implement an enterprise-wide risk management process
- The process that was used to implement ERM, including training provided, resources used, and structure of organization responsible for the implementation of ERM
- · Process used to identify, assess, manage, and monitor key risks
- · Current leadership of the ERM process
- Overall perspective on ERM
- Impact of ERM on your firm

The study's participants were 15 individuals from 14 organizations (two individuals from one organization were interviewed together) who had been or are currently involved with implementation of ERM at their firm (ERM champions), and who were willing to discuss their experiences.<sup>6</sup> We used our professional contacts in the ERM area to identify the participants, and we sought to have representation from a range of organization types and industries. The ERM champions interviewed are likely the ones most knowledgeable about the detailed ERM processes and impacts in their organization. Thus, by interviewing this group, we are likely to obtain rich insights about specific tasks that comprise ERM that we could not learn from interviews of other individuals less involved in the ERM process. We believe that this research based on ERM champions will provide a foundation that can then be used in future studies that may involve interviews of others (i.e., management, board members) involved in the ERM process. We recognize that there is some potential for these ERM champions to be biased toward a view that ERM is integrated with strategy. However, the extent that they do not express such sentiments may be especially insightful as we try to understand ERM implementation practices that may explain limited integration of ERM processes with strategic planning and execution.

The interviews took place between November 2012 and March 2013. Four of the interviews were conducted in person, while the rest took place over the telephone.<sup>7</sup> Twelve of the interviews were digitally recorded and professionally transcribed.<sup>8</sup> The 14 interviews lasted between 45 minutes and two hours (mean of 64.5 minutes; median of 62 minutes). The interviewees' names and companies are strictly confidential.

The data were analyzed using ATLAS.ti, a software package that supports qualitative analysis of large bodies of textual data. One coauthor used ATLAS.ti to perform coding of the detailed responses and quotes from the transcriptions into categories and themes. For the two interviews that were not transcribed, the hand-written notes were typed in the same format as the transcriptions and also used in ATLAS.ti. Many of the questions were designed to provide a list of items for response or to allow for short, concise answers, making the coding process easier.

<sup>&</sup>lt;sup>8</sup> At the point when the interview was to begin, two of the interviewees declined to be recorded (they had originally agreed to be recorded). The interviewing coauthor captured those two interviewees' responses through hand-written notes.



<sup>&</sup>lt;sup>5</sup> Readers may contact the authors for a copy of the interview script.

<sup>&</sup>lt;sup>6</sup> Lincoln and Guba (1986) and Guest, Bunce, and Johnson (2006) found that 12 interviews is usually enough to gather exhaustive data and reach the saturation point of themes, and we reached the point of saturation after examining 14 organizations.

<sup>&</sup>lt;sup>7</sup> Others have used a mix of in-person and telephone interviews, including Hermanson, Tompkins, Veliyath, and Ye (2012), and Clune, Hermanson, Tompkins, and Ye (2014).

#### **Interviewees and Organizations**

The interviewees are primarily male (87 percent), and many have professional certifications, most commonly the CPA. Eight of the interviewees have received formal ERM training, and seven interviewees have ERM experience from previous positions. The interviewees' average age is 51 years, and they have an average of eight years of ERM experience, including nearly five years in their current ERM role. Ten of the organizations are publicly traded (nine traded on the NYSE), three are privately held, and one is a government entity. One organization uses a state auditor, while the rest use a Big 4 auditor. The mean revenues for the organizations are \$20 billion (median of \$7 billion). Thus, the organizations represented are quite large, and the industries represented by the organizations are diverse: two in transportation, two in education, two in technology, and one each in energy, healthcare, pulp and paper, banking, retail, mining, contract research, and aerospace and defense.<sup>9</sup>

#### FINDINGS

Our overall research question posed above is, "To what extent is ERM integrated with strategy, and what ERM implementation practices may affect the integration of ERM and strategy?" We examine this research question by considering the interviewees' responses to four specific questions that we discussed in the interviews:

- 1. What were the reasons the organization implemented ERM?
- 2. To what extent is ERM integrated with strategy?
- 3. What impact (positively and negatively) has ERM had on the organization and its strategy?
- 4. What is the overall level of satisfaction with ERM?

In addition, we gathered extensive information on the ERM implementation process in order to consider key ERM implementation practices that may affect the integration of ERM and strategy.

The following sections provide key findings and insights related to the four questions above, with particular focus on strategy-related issues. The fifth section below examines ERM implementation practices that may affect ERM's integration with strategic planning and execution in the organization.

#### 1. Reasons for Undertaking an ERM Implementation

When asked why the organization undertook ERM, the reason given by the majority of interviewees is that there was a strategic need to better identify risk. One interviewee stated that ERM had been a part of the organization's strategic desire to better identify risk:

Yes, since the inception of it. We had something called the strategic imperative and critical initiative out of our strategy group. We had a niche area that we were really missing and that was strategic risk management.<sup>10</sup>

Another interviewee described the organization's efforts, during apparently successful times, to avoid overconfidence and to identify risky strategic areas:

In our peak, we wanted to make sure that we weren't overconfident, so we were looking for those strategic areas that might cause us issues going forward.

Most of the interviewees stated that their ERM process was envisioned as part of their strategic management process. One interviewee stated:

From the very beginning, ERM and strategy were viewed as being connected at the hip.

These quotes illustrate an initial desire on the part of the ERM leadership to implement ERM for strategic benefits.

About half of the interviewees cited encouragement from the board, particularly the audit committee, and from top management as reasons for pursuing ERM. One interviewee described the board and audit committee as being very supportive:

The board and the audit committee provided encouragement. They were very supportive of the process.

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<sup>&</sup>lt;sup>9</sup> Eleven of the participating organizations revealed the year of ERM adoption, which was as follows: 2000 = 1 organization; 2004 = 2 organizations; 2005 = 4 organizations; 2006 = 1 organization; 2009 = 2 organizations; and 2010 = 1 organization. Thus, most of the ERM adoptions coincided with COSO's (2004) release of its ERM framework or the financial crisis. At the time of our interviews, most of the organizations had multiple years of experience with implementing ERM processes, with one organization 13 years post ERM launch. Thus, the participating organizations are relatively experienced in ERM, especially in light of the relative immaturity of ERM as a business paradigm in the U.S.

<sup>&</sup>lt;sup>10</sup> The quotes have been lightly edited throughout the paper to make them more readable, with minor grammar changes.

Other interviewees cited outright pressure, rather than just encouragement, from the board or audit committee to adopt ERM. One interviewee used the word "relentless" to describe the audit committee's ERM-related overtures:

I can't emphasize this enough that the primary and even secondary push on ERM was through the audit committee of the board. I'll use, probably, an operative word that'll help to describe their interest in it from 2004 to now: "relentless."

Few of the interviewees mentioned regulation as a reason to implement ERM. This could be the result of only a few organizations being in highly regulated industries (e.g., energy, banking, and aerospace and defense). Overall, it appears that regulatory requirements are less important to these 14 organizations, at least as described by the interviewees, than strategic and governance/monitoring (board, audit committee) factors in causing organizations to pursue ERM implementation.

#### Key Findings

A key takeaway from our interviews is that there was an initial desire to embrace ERM given its potential for providing strategic contributions for the benefit of the board and senior management. Moreover, the board appears to be a major driver of the decision to embrace ERM. We have summarized the paper's key takeaways in Appendix A.

#### 2. ERM Integration with Strategy

The majority of the interviewees said that ERM is considered part of the strategic-planning process, but several wished it were a bigger part of the process, as reflected in the two quotes at the beginning of the paper. Another interviewee described the limited, but growing integration of ERM with strategic planning and execution:

Awareness of the ERM effort is building, and the CEO is thinking about it in the strategic plan.

One interviewee said that ERM is very much integrated with strategic planning, as the manager of ERM writes the risk section for the organization's planning guidance memo:

Yes, we are very integrated with strategic planning at this point. I actually write the risk section for the planning guidance memo that they send out to the businesses. We're very integrated with the strategy office.

Another interviewee mentioned that the ERM information was being used, but the process could be more closely tied to strategic planning:

Not really, because I think we would be more closely tied. The strategic planning uses this [ERM] information. There's a lot more talk about how they're managing the risks to make sure that it will work.

One interviewee mentioned that they were still dealing with silos of ERM and strategy:

No, [ERM and strategy are] not linked, but they probably should be. We have some silos at the organization.

The interviewees were also asked how ERM was viewed on a continuum from compliance focused to strategic focused in their organizations. Nine of the 14 interviewees rated ERM a 4 or higher on the scale of 1 = compliance and 5 = strategic, despite the responses above suggesting limited strategic integration. One interviewee said it was a 4 because ERM was relatively new, but moving toward a 5:

I'd say probably a four. The integration with strategic planning has just happened in the last year. This will be the first full year where we see the results of that integration. I think we're a four headed to a five, but we're not quite to five yet.

#### Key Findings

Most interviewees note that the ERM process is viewed as being part of the strategic-planning process of the organization, but that connection is not as strong as desired. It appears that organizations are struggling to some extent to determine how to effectively integrate ERM processes within the context of the organization's strategy execution. In some cases, ERM may be viewed more as a compliance initiative than a strategic initiative, which may be limiting the desire to connect ERM to the strategic-planning process.

#### 3. Impact on Organization and Strategy: Both Positive and Negative

While almost all of the interviewees said the ERM effort has impacted the organization's strategic processes, several said the impact is limited. By not being part of the formulation of new strategies, ERM's impact was limited, as two interviewees explained:



I think that it has impacted the strategic direction in that it has successfully evaluated existing strategies and success of those existing strategies. It's not part of the formulation of new strategies formally.

As far as the strategic impact [of ERM], I don't think we've seen that yet. Again, I'd say we've increased the awareness of the key risks. We have validated, if you will, our corporate strategy against where we see the key corporate risks are and say there's alignment there, where our strategic plans are targeting those key risks adequately. If you're looking for, "Has there been a huge change in the strategy as a result of risk management," or something like that, I don't think we've seen that.

Similarly, the interviewees who said that ERM has not impacted strategic direction mentioned that it has enabled them to evaluate *existing* strategies, but has not impacted the process of setting *new* strategies. One interviewee elaborated on the lack of strategic impact:

I'm not sure the ERM program has influenced the strategic direction. I view it more as the ERM program has enabled the achievement of our strategy or strategic objectives.

While these findings suggest that ERM is helping organizations to evaluate risks to existing strategies, the finding that ERM is not playing a significant role in the development of new strategies illustrates a limitation of these ERM implementations. Conceptually, ERM is designed to be helpful in regard to both current and future strategic initiatives (COSO 2004).<sup>11</sup> That is, ERM should help management and the board to identify risks that might impact the success of existing strategies, and output from the ERM process that includes information about new and emerging risks should also inform management about the need for new and different strategies in light of the emerging risk environment. Thus, ERM's output should be an important input to an organization's next phase of strategic planning. Unfortunately, our findings suggest that organizations are not fully realizing these benefits. In fact, only one interviewee indicated that ERM has identified a strategic flaw, and only one indicated (when describing changes to the organization as a result of adopting ERM) that ERM had caused the strategic-planning process to change.

Several of the interviewees mentioned positive organizational impacts of ERM. Most of the interviewees mentioned greater awareness of risk as a key positive impact. As one interviewee described it, there is a better understanding of risk and risk implications:

Positive number one is that we understand our risks and risk implications. We manage those risks while allowing us to pursue our operational and strategic objectives. Very seldom have we turned off or shut down, or opposed, a project or initiative as a result of risk. We've always found a way to do it through proper mitigation of the risks.

Moving from a reactive to a proactive approach to risk management is the next-most mentioned positive impact of ERM, as one interviewee described:

It's a culture change, and so it's hard to do this. We somewhat changed from being a bunch of firefighters so that when something comes up, we go into firefighting mode and we attack the problem after it's happened. And really the way that I sold this to the organization is that we really want to change from being reactive to proactive on the issues that we have. What we've done going forward is really trying to get in front of the issues before they've happened to understand if there's something that happened, what's the cause and effect, and do we know what's causing this and why, and have we gotten to the root problem?

Another commonly cited positive impact is improvement in communication, collaboration, and coordination across functional silos, as one interviewee stated:

I think what the ERM function and process that this organization [have done for this organization], is to really drive a level of transparency and coordination and communication. We really do play almost a clearinghouse type role in terms of reaching across all the functional silos and sharing information.

One interviewee described changing the focus of risk management in the audit function from compliance to risk based and strategic:

Ten years ago I think it was more of a compliance-type audit function. Now it's very much a risk-based audit function, and it's focused on strategy heavily.



<sup>&</sup>lt;sup>11</sup> This is emphasized to an even greater extent in COSO's (2016) exposure draft, *Enterprise Risk Management: Aligning Risk with Strategy and Performance*, which reflects COSO's proposed revision of its *Enterprise Risk Management—Integrated Framework* (COSO 2004).

Another mentioned providing tools to the board that aid in risk oversight:

From a positive standpoint, I think we have made very big inroads in providing our board of directors with the tools they need to fulfill their risk oversight responsibilities. The things in the proxy statement are true, and we have played a very big role in making sure that is the case.

In terms of negatives, a few interviewees mentioned questions from others about the value proposition of the ERM effort, the most commonly cited negative factor (other than "none"). One interviewee pointed to the lack of a communicated value proposition:

If there's any negative it would be with people, again, going back to the value proposition, where there hasn't been a clearly articulated or communicated value proposition.

Another questioned whether the organization would be unaffected if the ERM process stopped:

A negative? Again I struggle with the value proposition. I'll go back to, "Should we be doing something that if we stopped doing it, there would be no change in the business?"

# Key Findings

ERM is having an impact on the organizations' strategic direction, although that impact often is limited. On the positive front, ERM is helping organizations to evaluate risks to existing strategies, and it is leading to greater overall risk awareness across the silos within the organizations. ERM has helped to increase transparency about risk and the timeliness of that information being shared across the organizations. That is helping business unit leaders to better understand the impact of risks across the organization, allowing them to proactively versus reactively manage risks. It also has helped to shift the focus of key governance players, including internal audit and the audit committee, more toward strategic risks. However, ERM is not helping the organizations to identify new strategies, and its value proposition can be unclear.

# 4. Level of Satisfaction with ERM

On a scale of 1 = not satisfied to 5 = very satisfied, only one interviewee is not satisfied with ERM. Of the remaining 13, seven are somewhat (i.e., a 4 on our scale) or very satisfied (i.e., a 5 on our scale) with the effort, and six provided middle ratings (i.e., a 3 on our scale). One interviewee was especially satisfied because of the impact of ERM on the organization and the personal opportunity ERM has afforded:

Personally, I've been very satisfied. I think we've seen a lot of improvement in the process. I think we've seen increased engagement in the businesses in the processes. From a career perspective it's been a great move for me, just from the exposure to the corporation, and I think we're starting to help make a difference in the way the corporation is actually run, how it manages its strategy and how it deals with these risks. I'm happy with where we are, and I'm happy with the direction we're moving.

Interestingly, of the eight organizations that started the ERM process because of the strategic need to better identify risk, seven are somewhat or very satisfied with the ERM effort. Thus, there appears to be a linkage between the reason for the ERM implementation and the subsequent level of satisfaction with ERM.

When the interviewees were asked where they saw their ERM process three to five years from now, the most common responses related to further improving the process and making ERM more integrated with strategic planning and execution. As one interviewee stated, the changes would be more tweaking of the existing framework:

I think that we are at a point where we will tweak it going forward. We will look at whether we need to change what our operating categories are. We may believe at some point we need to pull some things apart and have more specific heat maps. But I think that the basic framework of it will continue to be in place.

From a strategic viewpoint, two interviewees cited bringing ERM principles into the strategy-setting process and ERM being seen as a strategic partner, enhancing ERM's strategic role:

Continue what we're doing, which has been very successful, and find a way to bring the ERM principles into strategy setting.

Closing the gap on the ERM process being a strategic partner.

#### Key Findings

Despite a number of noted limitations, there is a moderate-to-strong overall positive impression of ERM in the organizations represented. The interviewees from organizations that pursued ERM implementation for strategic risk reasons are more likely to be highly satisfied with the ERM effort. There appears to be a commitment to moving ERM forward, with many interviewees focused on strengthening ERM's connection to strategy so that ERM provides a more direct value-adding benefit.

# 5. Consideration of Different ERM Implementation Practices

As noted above, we find that the integration of actual ERM implementations with strategic planning and execution has been limited in the organizations examined in this study. To provide additional insight about this key finding, we examined a number of different ERM practices to consider how those practices might influence the extent of integration of ERM with strategy. Below we discuss several ERM practices that might explain the limited intersection of ERM and strategy.

#### 5.1. Culture and Top Management Support

Some interviewees mentioned organizational structure or culture as an ERM implementation problem. One interviewee described the culture issue in terms of a member of management not wanting to reveal a potential weakness in his/her ability to manage responsibilities from a risk perspective:

For us, it's extremely strong culture. There just wasn't a real desire to self-identify when somebody has an issue or problem that they need help with, kind of a "work hard, play hard, I've got this." If it is a management person, you don't [want to show] weakness.

Two interviewees mentioned the level of top management support as an issue, with one interviewee stating that having a higher level of management support, with emphasis by the board, would have made life a little easier:

We started out with the senior executives. It was primarily a good healthy discussion, but if I had to do it all over again, getting that charter, that hall pass, that mission, that sort of directive if you will from the board of directors and cascading it down, I think would make life a little bit easier. It's almost like we're backing into it right now and we'll get there, but it's just harder to do.

Two of the interviewees also mentioned a better fit of the process to the organization as an area to improve. A rush to respond to a request from the board resulted in some groundwork not being performed, as one interviewee said:

They were trying to respond quickly to the request from the board. They picked up a process that was being used by another company and just plopped it in. In large measure, it probably worked okay, but in doing that I don't think we did all the groundwork necessary to lay a solid foundation for the ERM program.

Overall, the organization's culture may not be supportive of individuals sharing information about key risks, and some interviewees described the lack of sufficient leadership and support from senior management about the importance of ERM for the organization. Each of these issues may limit ERM's integration with strategic planning and execution. Thus, failure to understand and consider key aspects of the organization's culture may lead to resistance to ERM's integration with strategy. Explicit support and endorsement of ERM by senior management and the board may strengthen the embrace and impact of ERM on the strategic-planning and execution processes.

#### 5.2. ERM Education

In these 14 organizations, education on ERM was primarily provided through informal discussions or conversations with the board and senior management. Many parties would begin meetings with an informal discussion of what ERM was or what they were trying to accomplish with the implementation. In the role of facilitator of group meetings, one interviewee described explaining different types of risk management strategies:

Not formally. But as I was facilitating groups, I would have to explain at the beginning what was the prevention strategy, what was the mitigation strategy. We had a situation where we did not have an adequate response strategy. We would get into the discussions of what those were, what it meant, and so forth. As I pulled together people to develop operating risks, I would have to explain to them what's a heat map, what are we trying to do, what's a mitigation strategy. I would educate them as part of the facilitation process.

Overall, most organizations took a fairly informal approach to preparing for the launch of ERM. Perhaps the decision to not engage in more extensive training and education about the objectives and benefits of ERM may have led to greater confusion



and less precision about important details necessary for ERM to be effectively integrated with strategy. Formal training and education about ERM and its potential strategic value may promote top management and board support for ERM as a strategic tool.

#### 5.3. Key Players in ERM

There are many parties involved in the ERM process. Internal audit and the general counsel are the most common major players in the organization's ERM process, followed by the audit committee and CFO. The day-to-day leadership of ERM in the organizations represented in this study is aligned mostly with operational and compliance-related functions (internal audit or the general counsel) versus more strategically focused functions. While operational and compliance-related functions are important to all organizations, the heavy reliance on these functions in the leadership of ERM may explain ERM's limited connection with the strategy of the organization. ERM leaders may want to carefully consider decisions about ERM leadership, especially the strategic orientation of the ERM leader.

# 5.4. Lines of Reporting for ERM Owners

A few of the organizations have the ERM process owner report to the audit committee, while some others have the owner report to another board committee. Most organizations have the ERM process owner reporting to an executive, such as the CEO or general counsel. Thus, there is no consistent approach to how organizations align the reporting structure for the day-to-day leadership of ERM. Further, what we typically did not hear is a line of reporting that links the ERM leadership with individuals most responsible for the strategic direction of the enterprise. Perhaps aligning the ERM champion with the executive with primary strategic responsibility may help to integrate ERM with strategy.

#### 5.5. Identifying Significant Risks

The predominant approach to identifying risks is the creation of an initial list of risks identified by the ERM process owners, which they then used to prompt other members of management to evaluate and potentially identify other risks. One interviewee described how the process was started by focusing on what keeps people awake at night:

We would talk to our senior executives, the top 50, the top 75, and it was a fairly simple conversation, "What keeps you awake at night? What are our most important risks?" That essentially created sort of a 1.0 version of our risk universe.

Open-ended questions are used the most to help participants think about unknown, but possible, risks followed by reviewing the existing portfolio of risks, and black swan or scenario discussions. The open-ended questions are designed to broaden the discussion of risks. Some questions used in the interviewees' organizations are:

- Have you guys thought of ...?
- What catastrophic event would bring the organization down?
- What do you think are the biggest challenges or opportunities?
- What gets in the way of achieving your objectives?
- What opportunity are we missing?

What is unclear is whether and, if so, how the list of risks explicitly relates to the organization's business model and strategy. A lack of using a strategic lens as a foundation for generating ideas about potential risks likely has a major impact on restricting ERM's consideration of risks directly tied to the organization's strategy. Rather than developing a list of risks, organizations may consider beginning with key business drivers and strategic initiatives and then have management consider risks that may impact (positively or negatively) the success of those drivers and initiatives.

# 5.6. Prioritizing Risks

The techniques used by most of the participating organizations represent common approaches to rank-ordering risks that are based on the traditional assessments of probability and impact. Some organizations also consider other factors, such as the velocity of a risk. For example, one interviewee indicated that during a risk assessment process, likelihood, impact, and velocity are assessed as the primary factors for prioritization and are then fed into a proprietary formula that provides the prioritization:

We do have a risk assessment process. We assess likelihood, impact, velocity. We've used other factors in the past. We've asked about management effectiveness, or effectiveness of control. Those are the three primary parameters that



we assess risk against, and we have a secret formula for evaluating; weighting each of those and coming up with an overall risk rating that we use to prioritize them.

While traditional risk assessment measures are being used, we do not know the extent to which impact measures prompted individuals to consider impact on the strategy of the organization. A contributing factor to ERM's limited integration with strategy may be that the assessment scales fail to explicitly prompt individuals to consider the impact of a risk on the organization's business model and strategy. Thus, risk prioritization scales or guidance may need to include prompts for management to consider the impact of a risk on the organization's business model and key strategies.

#### 5.7. Defining Risk Appetite

Rittenberg and Martens (2012) state that for organizations to embrace risk while pursuing their goals, they must understand how much risk they are willing to accept. "Risk appetite" is a term used to capture the notion of how much risk is acceptable. However, most of the organizations said they have not defined their risk appetite. One of the interviewees said they knew risk appetite when they saw it:

We believe that there's a balance between risk and mitigation, that if we try to be too risk averse, we would bring everything to a halt, and in an environment like [ours], there's a lot of individual decision making and a lot of ability to do things, which creates risk. While we can't objectively articulate that, we know it when we see it.

Another interviewee stated that they understood their risk appetite, but had not defined it:

As risk appetite is defined, I think, we'd say, "Do we have a risk appetite statement?" I'd say no to that. Do we know what it is? Yes. Do we understand what our appetite for a certain risk is? I'd say yes, but whether it's specifically defined, I think it's based on an individual risk.

A few organizations have an informal definition of risk appetite, and two have formal definitions. One interviewee whose definition was informal said the following:

What we have done is we have said, "We don't necessarily have a risk appetite statement, but through our statements or strategic objectives and things like that, we have defined our risk appetite." We look to those things like a stated strategic objective and say, "What does that say about our risk appetite?"

One of the ERM champions from an organization with a formal definition stated that the process to identify a risk appetite definition was difficult and time consuming:

Painfully. It took us seven years. In the early stages we quickly identified the things that were intolerable. Over time though you, management, subjectively knew what was uncomfortable, and we reacted that way. Not until this year, seven years later, were we able to codify that in a risk tolerance policy.

Overall, it is apparent that most organizations are struggling to articulate their appetite for risk taking. Some organizations have attempted to define risk appetite, and they often find that process difficult and time consuming. Others have taken a more informal approach to describing their risk appetite, or they have made little, if any, effort to do so. They struggle to arrive at descriptions of an entity's willingness to take certain risks, while avoiding others, in the pursuit of strategic value. Such difficulties may contribute to ERM's limited connection to the strategic leadership of the enterprise. Understanding an organization's overall appetite for taking risks may inform management in their design of strategic initiatives, and it may help the board in its efforts to monitor management's risk-taking actions.

#### 5.8. Communicating Information about Top Risks

Risk information is being summarized and reported by most organizations to the board of directors, or the audit committee, and a number of the organizations are including key risk indicators as a part of the board information packet. One interviewee described providing updates on risk to the board:

We communicate to the board quarterly, using the quarterly report that goes to the audit committee. It includes in it an ERM report, usually with our risk heat map, if it's been updated, as well as the risk dashboard representing the state of the risk action plans.

What is unclear is how the organizations are presenting risk information in those reports. It is possible that some may be presenting descriptions of risks in rank order. Perhaps presenting the information in the context of the impact of each risk on the organization's business model or key strategic initiatives may strengthen the connection of ERM and strategy. Explicitly



linking top risks to key business drivers and strategic initiatives may help management and board members to better recognize the intersection of risks and the business model and strategies.

# DISCUSSION AND CONCLUSION

Based on interviews of 15 ERM champions, we find that most firms undertake ERM implementation to meet the strategic need to better identify risk, with few of them citing regulatory or compliance reasons as a primary motivation for launching ERM. What we find most interesting is the struggle most organizations are having to integrate ERM with the strategic planning of the organization. How does an organization begin the ERM process with a strong desire to link ERM and strategy and then later realize only limited intersections of ERM with strategic planning and execution? Several ERM implementation practices appear consistent with a limited strategic connection: (1) culture and approach to preparing for ERM's launch, (2) ERM leadership structure, and (3) management of key risks. Also, the lack of extensive integration of ERM with strategic planning may be impacted by the reality that ERM had only been in place in these organizations typically since the mid-2000s (see footnote 9). Thus, the lack of full integration of ERM with strategy may reflect ERM's overall level of immaturity as a business concept. This also could, of course, reflect limitations of the ERM concept itself, at least as applied in these 14 organizations. Despite the challenges of integrating ERM with strategy, almost all interviewees indicate that their organizations are finding benefits in ERM, and they are committed to continuous improvements in their ERM processes as they find what works and does not work effectively.

There are limitations associated with this study. The participant group was primarily drawn from the authors' professional contacts. Also, it is possible that the interviewees were not always forthcoming. To address this possibility, the interviewees were ensured that all information would be held in strict confidence and that their names would not be stored with their responses. We did not encounter any reluctance to answer a question, only a desire by two interviewees not to have an audio recording made of the interview. As the interviewees were the champions of ERM in their organizations, they may have overstated the relative effectiveness and maturity of ERM because of their pride of ownership. However, given the finding that a number of organizations are struggling to effectively integrate ERM with strategy, we believe interviewees were relatively transparent in their responses. However, future research that involves other key players in the ERM process is warranted. Finally, the analysis required the coding of response categories and themes, which involves professional judgment and an iterative process. To facilitate this effort, ATLAS.ti software was used in the analysis. Despite these limitations, we believe that this study provides important insights into the integration of strategy and ERM.

There are a number of future research opportunities related to the integration of ERM and strategy. For example, further research is needed on organizations that have been successful at integrating ERM and strategic planning to pinpoint key characteristics of those processes most often linked to effective integration. Additionally, research is needed that addresses how organizations are using output from the ERM process as input to strategic planning.

From a governance perspective, research is needed on how organizations are aligning executive leadership of their strategic-planning process with the executive leadership of their ERM process and how those organizations are structuring compensation plans for those executive leaders to build in accountabilities for the management of their assigned strategies and risks.<sup>12</sup> Furthermore, research is needed to examine how organizations are integrating the reporting of information about strategic performance (e.g., measured and reported by key performance indicators [KPIs]) and emerging risks (e.g., measured and reported by key risk indicators [KRIs]). Insights about how organizations are integrating KPIs and KRIs in their accounting information systems and management information dashboards are needed. Because ERM-related research is still relatively immature, there is a need for a number of different types of research approaches to these and other questions.

#### REFERENCES

American Institute of Certified Public Accountants (AICPA). 2014. Understanding the Entity and Its Environment. AICPA Professional Standards 1, AU-C 315. New York, NY: AICPA.

Baxter, R., J. C. Bedard, R. Hoitash, and A. Yezegel. 2013. Enterprise risk management program quality: Determinants, value relevance, and the financial crisis. *Contemporary Accounting Research* 30 (4): 1264–1295. doi:10.1111/j.1911-3846.2012.01194.x

Beasley, M. S., D. Pagach, and R. Warr. 2008. Information conveyed in hiring announcements of senior executive overseeing enterprisewide risk management processes. *Journal of Accounting, Auditing & Finance* 23 (3): 311–332.

<sup>&</sup>lt;sup>12</sup> Also see Viscelli, Beasley, and Hermanson (2016) for a literature review of ERM, including numerous avenues for future governance and ERM research.



- Beasley, M. S., B. C. Branson, and B. V. Hancock. 2015a. Report of the current state of enterprise risk oversight. In *Management Accounting Research Series*. 6th edition. Durham, NC: North Carolina State University.
- Beasley, M. S., B. C. Branson, and D. Pagach. 2015b. An analysis of the maturity and strategic impact of investments in ERM. *Journal of Accounting and Public Policy* 34 (3): 219–243. doi:10.1016/j.jaccpubpol.2015.01.001
- Clune, R., D. R. Hermanson, J. G. Tompkins, and Z. Ye. 2014. The nominating committee process: A qualitative examination of board independence and process formalization. *Contemporary Accounting Research* 31 (3): 748–786. doi:10.1111/1911-3846.12044
- Cohen, J. R., G. Krishnamoorthy, and A. M. Wright. 2017. Enterprise risk management and the financial reporting process: The experiences of audit committee members, CFOs, and external auditors. *Contemporary Accounting Research* (forthcoming). doi:10. 1111/1911-3846.12294
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). 2004. Enterprise Risk Management—Integrated Framework. New York, NY: American Institute of Certified Public Accountants.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). 2016. Enterprise Risk Management: Aligning Risk with Strategy and Performance (Exposure Draft). New York, NY: American Institute of Certified Public Accountants.
- Frigo, M. L., and R. J. Anderson. 2011. *Practical Approaches for Getting Started*. Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation.
- Gates, S. 2006. Incorporating strategic risk into enterprise risk management: A survey of current corporate practice. *Journal of Applied Corporate Finance* 18 (4): 81–90. doi:10.1111/j.1745-6622.2006.00114.x
- Gordon, L. A., M. P. Loeb, and C.-Y. Tseng. 2009. Enterprise risk management and firm performance: A contingency perspective. *Journal of Accounting and Public Policy* 28 (4): 301–327. doi:10.1016/j.jaccpubpol.2009.06.006
- Guest, G., A. Bunce, and L. Johnson. 2006. How many interviews are enough? An experiment with data saturation and variability. *Field Methods* 18 (1): 59–82. doi:10.1177/1525822X05279903
- Hermanson, D. R., J. G. Tompkins, R. Veliyath, and Z. Ye. 2012. The compensation committee process. *Contemporary Accounting Research* 29 (3): 666–709. doi:10.1111/j.1911-3846.2011.01118.x
- Hoyt, R. E., and A. P. Liebenberg. 2011. The value of enterprise risk management. *The Journal of Risk and Insurance* 78 (4): 795–822. doi:10.1111/j.1539-6975.2011.01413.x
- Lincoln, Y. S., and E. G. Guba. 1986. Naturalistic Inquiry. Newberg Park, CA: SAGE Publications, Inc.
- McShane, M. K., A. Nair, and E. Rustambekov. 2011. Does enterprise risk management increase firm value? *Journal of Accounting*, *Auditing & Finance* 26 (4): 641–658. doi:10.1177/0148558X11409160
- New York Stock Exchange (NYSE). 2004. NYSE Corporate Governance Rules. New York, NY: NYSE.

Nocco, B. W., and R. M. Stulz. 2006. Enterprise risk management: Theory and practice. *Journal of Applied Corporate Finance* 18 (4): 8–20. doi:10.1111/j.1745-6622.2006.00106.x

- Power, M. 2007. Organized Uncertainty. New York, NY: Oxford University Press, Inc.
- Public Company Accounting Oversight Board (PCAOB). 2007. An Audit of Internal Control over Financial Reporting That Is Integrated with an Audit of Financial Statements. Auditing Standard No. 5. Washington, DC: PCAOB.
- Rittenberg, L. E., and F. Martens. 2012. Understanding and Communicating Risk Appetite. New York, NY: COSO.
- Viscelli, T. R., M. S. Beasley, and D. R. Hermanson. 2016. Research insights about risk governance: Implications from a review of ERM research. *SAGE Open* 6 (4). doi:10.1177/2158244016680230

# APPENDIX A Summary of Key Insights Integration of ERM and Strategy

- 1. What were the reasons the organization implemented ERM?
  - The decision to implement ERM often is motivated by the perceived strategic benefits ERM might provide.
  - Boards of directors, particularly audit committees, appear to be one of the major drivers in an organization's decision to implement ERM.
- 2. To what extent is ERM integrated with strategy?
  - The ERM process is viewed as being part of the strategic-planning process of the organization, but the connection to strategy often is limited and less than desired.
- 3. What impact (positively and negatively) has ERM had on the organization and its strategy?
  - ERM is helping organizations to evaluate risks to existing strategies, and it is leading to greater overall risk awareness across the silos within the organizations.
  - ERM has helped to increase transparency about risk and the timeliness of that information being shared across the organizations, allowing for more proactive risk management.



- ERM is not helping the organizations to identify new strategies, and its value proposition can be unclear.
- 4. What is the overall level of satisfaction with ERM?
  - Despite a number of noted limitations, there is a moderate-to-strong overall positive impression of ERM in the organizations represented.
  - Interviewees from organizations that pursued ERM implementation for strategic risk reasons are more likely to be highly satisfied with the ERM effort.
- 5. Consideration of different ERM implementation practices (i.e., how may various ERM practices affect the integration of ERM and strategy?).
  - 5.1 Culture and Top Management Support: The culture may not be supportive of sharing risk information, and a lack of sufficient leadership and support from senior management may hinder ERM's integration with strategic planning and execution.
    - Failure to understand and consider key aspects of the organization's culture may lead to resistance to ERM's integration with strategy.
    - Explicit support and endorsement of ERM by senior management and the board may strengthen the embrace and impact of ERM on the strategic-planning and execution processes.
  - 5.2 ERM Education: An informal approach to preparing for the launch of ERM may reduce the integration of ERM and strategy.
    - Formal training and education about ERM and its potential strategic value may promote top management and board support for ERM as a strategic tool.
  - 5.3 Key Players in ERM: Leadership of ERM is aligned mostly with operational and compliance-related functions versus more strategically focused functions, which may limit the integration of ERM and strategy.
    - ERM leaders may want to carefully consider decisions about ERM leadership, especially the strategic orientation of the ERM leader.
  - 5.4 Lines of Reporting for ERM Owners: There is no consistent effort to link the ERM leadership with individuals most responsible for the strategic direction of the enterprise.
    - Aligning the ERM champion with the executive with primary strategic responsibility may help to integrate ERM with strategy.
  - 5.5 Identifying Significant Risks: It is unclear whether/how the list of risks explicitly relates to the organization's business model and strategy.
    - Rather than developing a list of risks, organizations may consider beginning with key business drivers and strategic initiatives and then have management consider risks that may impact (positively or negatively) the success of those drivers and initiatives.
  - 5.6 Prioritizing Risks: It is unclear the extent to which risk impact measures prompt individuals to consider impact to the strategy of the organization.
    - Risk prioritization scales or guidance may need to include prompts for management to consider the impact of a risk on the organization's business model and key strategies.
  - 5.7 Defining Risk Appetite: Most organizations are struggling to articulate their appetite for risk taking.
    - Understanding an organization's overall appetite for taking risks can inform management in their design of strategic initiatives, and it may help the board in its efforts to monitor management's risk-taking actions.
  - 5.8 Communicating Information about Top Risks: It is unclear how the organizations are presenting risk information (i.e., whether risks are linked to the business model or key strategic initiatives).
    - Explicitly linking top risks to key business drivers and strategic initiatives may help management and board members to better recognize the intersection of risks and the business model and strategies.



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