Relevance of GRC in Expanding the Enterprise Risk Management Capabilities

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***Abstract*—This research explored the need for enhancing the Enterprise Risk Management concept. Thus, delved into challenges and drawbacks to acknowledge levels of maturity. In addition, it studied the reasoning for a paradigm shift, which aggregates "GRC" (Governance, Risk and Compliance) under its umbrella to increase concept capabilities to not only align or comply but to foresee, adapt, and create future-oriented risk strategies. Overall, the key findings from 15 qualitative interviews indicated that Enterprise Risk Management maturity has yet to achieve its full potential. It was found that in practice Enterprise Risk Management no longer suffice to an organisation's needs. Stakes and risk-return have consequently become considerably higher and broader in scope so the need to orchestrate the disjointed risk functions is higher. Given the significant drawbacks identified, this article suggests a value proposition of integrating GRC into Enterprise Risk Management to increase organisational risk capabilities. The joint approach is suggested to reinforce the effects of Enterprise Risk Management, and last but not least, enable maturity of the concept.**

Keywords—Enterprise Risk Management, GRC, align, risk compliance, maturity.

I. Introduction

Given the increase in the number of organisational failures, previous studies have reported that managing risk has become essential for an organisation's success [1][2]. Additionally, globalisation, uncertainties in the business environment, hyper-competition within industries, political risks, increased demand for compliance and governance, and heightened stakeholders' expectations have articulated the necessity for strengthening a cross-dimensional risk function [2]-[4].

Risks are continually evolving, and the ramifications of these changes have increased organisations' interest in shifting from the traditional silo perspective that comes with conventional Risk Management (RM) towards the holistic approach of Enterprise Risk Management (ERM) in order to deal with risk in a more all-encompassing way [4]-[6]. Intrinsically desirable, ERM has been recognised as an integrative risk oversight approach that helps organisations manage an extensive range of risks in a coordinated and comprehensive manner. Even though risk governance efficiency has been improved in recent years, attaining enterprise-wide risk governance remains a complex challenge for many scholars. ERM has a long history stemming from its capability to shift into aligning various organisational functions in a multi-strategy approach [7][8]. Likewise, successful ERM is driven by the alignment of risk oversight with strategic planning, respectively organisation strategy [5][8]-[10].

ERM concentrates on 'risk oversight' value, articulating and embedding due diligence within an organisation's strategy to establish a risk mindset across the organization [11]. Research on risk oversight has been growing, and there is clear evidence that the siloed practice of RM is being abandoned as an effect of the post-global financial crisis of 2008 [12]-[14].

Overall, the paradigm shift towards ERM supports a change in emphasis from tactical to strategic [1]. Moreover, the concept provides organisational effectiveness and preserves shareholder value on a continual basis [1][7]. The output of such a trend in recent years reinforces the value of a holistic approach delivered by ERM. Thus, this paper investigates the aptness of strategic planning and effectiveness of managerial risk control for improving resiliency, customised to an organisation's specific needs and objectives rather than being a mere compliance burden or serving the tick-box approach.

The benefits of ERM have been thoroughly discussed by many researchers [15]-[24]. However, questions regarding how mature/effective ERM implementation is, and how successful ERM has been in yielding its proactive capacity/maturity entirely, remain valid [9][10]. In spite of the ERM implementation, prior research has thoroughly investigated ERM adoption, implementation, and measurement. Nonetheless, little research has been conducted to show the limitations and challenges of ERM as encountered by organisations. A majority of prior researchers have failed to evaluate and identify ERM maturity, future direction, and potential solutions [21].

Despite substantial theoretical legacy, ERM is still in a developmental stage in terms of alignment to an organisation's strategic planning. Thus, several studies such as [6][8][9][14][24]-[26] have advocated a call for improvements in the designing and implementation processes due to a lack of strategic alignment, a lack of understanding of ERM benefits, an inappropriate understanding of risk, inadequate ways to report risks, an undeveloped risk culture, a lack of an ERM framework fit with organisations' needs, a lack of accurate and unbiased data on corporate risk management activities, a lack of a constantly updated and reliable risk control system, a lack of constant environmental scanning, a lack of compliance with numerous and changing regulations, and an inability to capture risks holistically.

While ERM has been a growing field over recent years [14][27], studies concerning why ERM remains immature are few. Surprisingly, there are only a few articles (e.g., [7][9][28]) that, apart from identifying the limitations of ERM, also open a debate to discuss whether ERM is sufficient to support an organisation's vision and mission. For instance, [28] emphasises that the main success factors in implementing ERM are human factors, clearer guidance, the proper definition of risk appetite, proper performance metrics, and adaptability to challenging environments [29]; all of which contribute towards beneficial risk governance practices [25][28]. Additionally, some potential solutions have been suggested by [30], focusing on communication, articulated objectives, and understanding of potential impact and probability in order to render risk governance optimisation and risk functions prioritisation [30]. Moreover, [8] discusses that setting up a reliable risk control system along with continuous environmental scanning helps for more effective ERM implementation [8]. Similarly, it has been argued by [10] that organisations' competitive advantage is contingent upon having their risk management integrated with a robust risk control system. Indeed, organisations with reliable risk control systems are more able to deal with today's uncertainties [10].

Consequently, this paper investigates challenges among ERM practices. Despite its effectiveness, ERM remains immature in implementation (e.g., repeatability, processes, effectiveness, sophistication) [31]-[33]. Additionally, the immaturity of ERM encourages an extension of its principles and broadens further to GRC that incorporates ERM principles under its umbrella [24][34] along with additional functions of 'risk governance'. There is scarce evidence in terms of ERM and GRC similarities [32]. ERM maturity has previously been analysed through the lens of practicality and not much attention has been paid to the ERM paradigm's maturity conceptually [3]. Most existing literature has been based on descriptive and prescriptive aspects of how and why implementation should be achieved [20][35]. Whether ERM is theoretically mature is a question addressed in this paper.

Based on the points presented so far, this paper argues that understanding ERM's current conceptual maturity helps authors to enrich further their theory and better understand the dynamic capability of the new school of thought regarding 'risk control', 'risk oversight', and 'risk governance', in other words, the industry trend towards GRC. This paper corroborates ERM's drawbacks to justify the necessity of ERM maturity for assuring the fulfilment of organisation strategy and objectives [32]. In this regard, this paper aims to explore the challenges and drawbacks of ERM, consciously acknowledge current maturity as well as exploring the justification rationality for a paradigm shift towards GRC. In the next section, a thorough analysis of the research background is provided. We will then delve into the research methodology and research findings. Lastly, we will contextualize the research results and discuss their implication and future work.

II. BACKGROUND

ERM's increased importance and popularity have ensued due to the Global Financial Crisis (GFC), 2008-2009, when organisations realised that business operations were becoming more complex and the number of risks in business markets were, and indeed still are, increasing.

Moreover, numerous corporate fraud and financial scandals leading up to the GFC pressured institutional investors, rating agencies, legislators, and regulators into pushing organisations towards advancing their commitment to ERM and taking a more effective approach for dealing with risks that affect performance [3][4][8][36]. Accordingly, the catastrophes of the GFC have highlighted that silo RM needs to move towards a more holistic ERM [4][14][32]. The economic environment encounters rapid internal and external changes due to globalisation and increasing complexity of risks that can positively or negatively affect the achievement of an organisation's strategic objectives [3][37]-[39]. The highly volatile post-crisis period revealed the ineffectiveness of past RM approaches and proved that relying on a traditional approach of RM is no longer appropriate [3][8]. As a result, regulators, institutional investors, and rating agencies demanded organisations to evaluate their RM approaches and focus on more transparent and effective RM practices [8][30][40]. A more holistic approach of RM was encouraged to enhance effectiveness across organisations. Thus, over time, old practices of silo RM advanced to modern ERM practices, considered more accurate and multi-faceted [29]. Moreover, ERM has developed as an approach that incorporates existing strategies, resources, technology, and knowledge in order to evaluate and manage uncertainties that many organisations encounter [14][41][42]. The central focus of ERM is to identify, measure, mitigate, and manage risks that would otherwise hinder the achievement of organisational objectives [14][41][43].

Most researchers in the field agree that the implementation of ERM is driven by various determinants (i.e., internal and external, mandatory or discretionary) such as an organisation's own willingness to improve its risk oversight, pressure from regulators, rating agencies and organisation executives, academic research, industry norms, stakeholders' encouragement, technology shifts, and marketing competition [30][44][45]. Consequently, several studies have focused on the factors associated with effective ERM implementation. For instance, [15] proposes a framework of ERM and performance and reports that successful ERM implementation is conditioned by several internal and external factors such as business environment uncertainty, competition in the business area, organisation complexity, organisation size, and monitoring by senior managers and directors. The research presented in [46] in a financial firm that used S&P's risk management rating found that having a reliable risk control system leads to effective organisational risk management. Likewise, [47] emphasises that the organisations where their Chief Executive Officers (CEO) pay more attention to the importance of risk and have an inclination towards effective risk management are more likely to employ Chief Risk Officers (CRO) and develop appropriate risk governance. Nonetheless, [48] outline factors such as an organisation's size, type of ownership, income and profitability, leverage, and CRO employment as significant determinants that influence effective ERM implementation. Similarly, [49] argues that CRO appointment is a prerequisite of effective ERM implementation.

Although the concept of ERM has evolved significantly over recent years a review of existing subject literature reveals the ineffectiveness of current ERM practices in protecting enterprise value. Existing literature on ERM includes some studies that have focused on different dimensions of ERM. For instance, several research works, such as [14][38][47][50], explore the factors that lead organisations to decide to implement ERM. Others, such as [10][49][51], evaluate the approaches of ERM implementation. Moreover, researchers such as [3][8][15], [17][33][38][50] evaluate the effect of ERM implementation on organisations' value. Most of these researchers agree that ERM is stuck at its development stage and moving forward from this stage to become the driving force of organisational value and effectiveness requires more research and understanding. In fact, though the importance of ERM and its strategic role in organisations' objective achievement has been admitted by previous researchers, the question of how the implementation of ERM can yield to organisations' sustainability and increased value, still needs more attention. For instance, research carried out by [4] found a positive relation between ERM adoption and organisational value through empirical investigation in 649 firms from 2004 to 2013, however, in this investigation, ERM is mostly considered as a close internal control activity rather than a risk management practice.

COSO [52], as one of the most common ERM practices, positions ERM in the context of strategy by emphasising that ERM needs to be "applied in [a] strategy setting" in order to "provide reasonable assurance regarding the achievement of entity objectives". Indeed, COSO highlights that ERM needs to be integrated into organisations' strategic initiatives [10]. Risks are changing continually, and this brings both challenges and opportunities for organisations regarding the achievement of their strategic objectives [53][54]. Therefore, a continuous risk oversight is required as an evolving process for a critical assessment to provide updated information regarding emerging risks that might be considered as opportunities or threats towards an organisation in accomplishing its strategic objectives and ultimate goals. Hence, the output of an organisation's ERM process should be used as an input for its strategic planning [53][55]. Despite this view, survey-based studies show that focus on strategic risks in organisations' ERM process has been narrow and limited. For instance, a study by Gates [44], which is now over a decade old, concludes that only 16% of organisations under investigation have aligned ERM and strategic planning.

Moreover, [51] carried out a survey that concluded 36% of surveyed organisations do not have any process for monitoring and identifying strategic risks. [51] have come to understand from a large sample of participants (who are seniors and executives) that ERM's strategic role is more effective when an organisation has a risk management committee, regular risk management training, a centrally updated risk system, and link among risk management and executive compensation. Research done by [20] focuses on high-level participants working in financial reporting process of 11 organisations. Based on [2] findings, Chief Financial Officers (CFOs) and members of audit committees pay much more attention to strategic risk management than do auditors. It was concluded that this is due to responsibilities being taken by seniors and directors versus auditors. Much progress has been made in managing risk, however, intervention to date has only moderated the siloed and reactive practice of managing risks and draws fundamental criticism. In the same vein, previous literature indicated limitations.

While adoption of ERM is an approach to lower risk or to exploit opportunities, practice shows that one does not always leverage the expected results (unfit for purpose) [24][49]. Henceforth, it is believed that currently, ERM does not suffice an organisation's needs. Consequently, the stakes and risk-return have become considerably higher and broader in scope. Recent years have shown that organisations are more and more concerned about finding a catalyst for risk foresight, thus exerting higher pressure to create holistic risk governance to predict risks [56]. Attaining enterprise-wide risk governance is a complex issue requiring the alignment of multiple functions and ramifications of an organisation. The problem is that the relational mechanism that manages risks and aligns with the business is missing or is partially applied/decentralised, and thus the risk is managed reactively and randomly, and most often it omits to correlate all functions.

Even though risk governance efficiency has been improved recently, in many financial organisations, the benefits derived from ERM are not fully gained. This represents a mismanagement of risk, a siloed approach, duplication of risk management outlay, misuse of resources, duplication of effort and time, and/or inefficient capital allocation.

Indeed, it is concluded from literature that organisations acknowledge the importance of ERM alignment with business strategy. However, the implementation of this alignment has remained a challenge for senior managers. The factors and challenges of failure of this alignment have not been investigated in depth. Additionally, existing researchers do not provide ERM champions' insight that can help to better understand the efforts required to be able to align ERM with strategy.

Moreover, the immaturity of ERM has encouraged an extension and incorporation of its principles and GRC [24]. GRC compounds different disciplines (governance, risk and compliance), which were initially adopted to deal with IS/IT management [57] and later evolved to 'incorporate' GRC. Perceived as an advancement of an organisation's risk capability, with the aim of synchronising strategy, processes, technology, and people to enable organisations to function more efficiently [34][58]. GRC not only supports achieving an organisation's objective, but also addresses uncertainty and integrity at a strategic level [26][59]. A lot of available evidence highlights that GRC is driven by principles of (G) 'directing, controlling and evaluating', (R) 'managing processes and resource', and (C) 'proving fulfilment of requirements' [24][59][60].

Evidence shows that GRC emerged within industry practices because specific software systems were adopted. Besides, laws and guidelines such Sarbanes Oxley Act (SOX) and Basel II, among others, recommend adoption [61][62] and proliferation of systems vendors and thus innovation and propulsion of the domain. The term was initially proposed by PricewaterhouseCoopers in 2004 [61] as an automated solution. Moreover, frameworks such as OCEG Capability Model further promote GRC practices.

The discussion above enables an understanding of risk practices evolution in terms of strategic approaches. Furthermore, Figure 1 compares the risk philosophy and the centrality of each approach towards risk mitigation and resiliency.

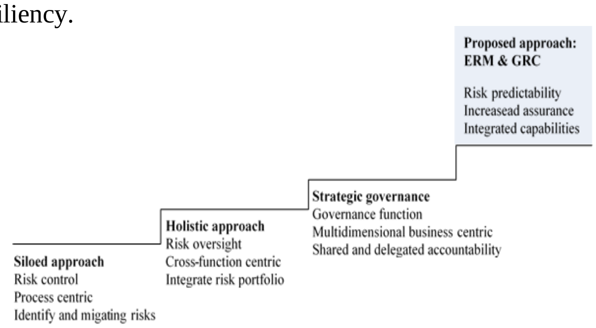

Figure 1. Conceptual risk mitigation evolution

As Figure 1 above illustrates, the approaches dealing with risks and threats have evolved in terms of practice. Both ERM and GRC disciplines are recognised within industry practices [63]. Even though ERM has been extensively researched both theoretically and empirically, GRC shows signs of being significantly adopted by practitioners [61], [64].

Confusion in terms of what ERM and GRC can offer to organisations has been highlighted since early 2013 by the empirical findings of the Institute of Internal Auditors Research Foundation (IIARF) [63]. It has been found that 60% of respondents perceive GRC as an umbrella for ERM, while the other 40% was unable to differentiate between the concepts. Referring to GRC as an umbrella function, Von [64] states that GRC sets the tone through its normative basis (rules, principles, conventions, roles). ERM applies the descriptive normative basis of GRC model in process and structure to address the mitigation response directly, cohesively, and holistically. In this regard, it explores why ERM encounter challenges and drawbacks in practice given that there is significant theory in place. This shall be done through the lens of interviews with ERM managers, discussed in Section 4, to complement the existing open debate found within literature and to explore ERM's immaturity.

III. METHODOLOGY

The research approach is qualitative and aims to explore challenges and drawbacks of ERM, whilst exploring the paradigm shift towards GRC.

Evaluating prior research allowed the authors of this paper to create a list of main concepts relevant to the research questions. Exploration of the phenomenon was driven by the need to understand the current state of ERM, challenges of ERM and strategy alignment, and key factors for enterprise-wide implementation. Data was obtained from 15 upper management individuals from UK small-medium enterprises organisations, who either were involved in the adoption or implementation process with ERM. Also, another important aspect in sample selection was the respondents' years of experience.

The primary data was analyzed through Nvivo software and thematic analysis.

IV. RESEARCH FINDINGS

The research findings are grouped to respond to the three main questions below:

(1) - What is the state of ERM and business strategy alignment?
(2) - What are the challenges of ERM and strategy alignment?
(3) - What are the organisational factors/initiatives critical for this alignment?

The following subsections illustrate the key findings of the research.

A. *Maturity of ERM Alignment with Strategy*

The majority of the interviewed participants stated that their ERM alignment with strategic planning is limited and that ERM needs to be considered as a bigger part of an organisation's strategic planning. Others agreed on the limitation of ERM alignment with strategy, but they mentioned signs of recent growth.

Few participants stated that ERM is not properly aligned with strategic management as those in strategic planning sectors do not pay enough attention to insights provided by those in the ERM process even though they should. They stated that if organisations would like to achieve their ultimate objectives, they need to consider the result of ERM process in their strategic planning. Indeed, organisations need to employ the outcomes of their ERM process as input for their strategic planning.

It was discussed by a few participants that different organisational departments mostly seek ERM when making decisions related to compliance matters. Indeed, the fact that ERM can support organisational strategic decisions and yield to value creation is admitted yet ignored in practice. Few others stated that ERM and strategy are still being dealt with separately and in silos. Organisations' seniors claim that they align ERM with strategic planning but in practice these two are not integrated and risks are managed in silos. This is because seniors do not know how to align ERM with the organisation's strategy in practice. Three participants mentioned that ERM was recently aligned in the process of strategic planning, and then the outcomes of ERM are considered in strategic planning in a way that risk reports written by ERM committee affect the strategic decisions of their organisation.

Key Findings

Most of the participants discussed that, in theory, ERM is considered an important part of their organisation's strategic planning, but alignment is not strong enough. In fact, organisations adopt ERM mostly to respond to policies insisted upon by regulators and rating agencies. It seems that senior managers also struggle to understand the concept of ERM and the benefits of ERM alignment with organisational strategies and to find appropriate techniques for effective ERM alignment within the context of business strategy in practice. In some organisations, ERM might be considered more as an initiative of compliance than strategy.

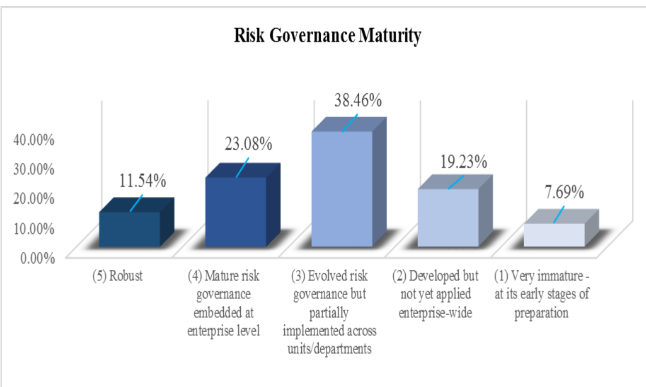

Figure 2. ERM maturity

As shown in Figure 2, 38.46% of respondents consider that risk governance is evolved but, partially implemented across units/departments (3). 23.08% state that mature risk governance is embedded at an enterprise level (4). 19.23% of respondents define maturity as developed, but not yet applied enterprise-wide (2), whilst only 11.54% declared themselves to be robust (5).

The next section segregates findings into two paths, A) challenges of ERM and strategy alignment and B) critical factors in ERM and strategy alignment.

A) Challenges of ERM and Strategy Alignment

While almost all the research participants agreed on the benefits of ERM implementation and its alignment with business strategy, most of them stated that their organisations are struggling with challenges associated with effective ERM implementation and its successful alignment with strategic planning.

Senior Managers' Support

Most of the interviewees considered the lack of senior managers' proper understanding of ERM concepts and benefits as well as appropriate knowledge of right principles as two challenging issues.

Interviewees stated that implementation and success of any new managerial process need strong backing of boards and senior managers. Nonetheless, they argued that their seniors do not support this alignment strongly enough due to poor understanding of ERM benefits and inadequate knowledge regarding approaches of ERM and strategy alignment.

Organisation Culture

The existence of a silo risk mindset was also stated by the vast majority of participants as a challenge of this alignment. Interviewees discussed that though ERM is progressively finding its place in organisations, a silo mindset of risk management remains a challenge for effective ERM implementation in organisations. Participants argued that, if a new process or function is being applied in the organisation, that function's culture also needs to be integrated along with the process itself. Seniors in many organisations still believe that risks are confidential and should not be communicated among different organisational layers because of security issues.

Another cultural issue mentioned by few participants was that people who hold top-level responsibility for specific tasks do not normally like to share their weaknesses and seek help. One reason might be the fear of losing power and position if others realize that they are not able to solve the upcoming problems.

Centralised Framework for ERM

Another issue discussed by one particular research participant was the lack of an appropriate, centralised and formal ERM approach that should be followed by organisations' C suites. Moreover, other participants mentioned the lack of extensive training regarding the benefits of ERM implementation and its influence on the achievement of business objectives. Interviewees discussed those organisations mostly take an informal approach to implement ERM, and they do not appoint a wide range of training on appropriate ERM implementation and the ultimate benefit it could yield. This prevents the effectiveness of ERM and hinders understanding of the necessity of ERM alignment with business strategy.

Fit of ERM into Organisation Structure

It was discussed by the interviewees that choosing the right ERM process to effectively fit into an organisation's current structure has been one of the challenges faced by ERM champions. They argued that when their organisations are called by regulators or rating agencies for ERM

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adoption, senior managers just rush to respond as fast as possible. Many organisations adopt one of the common existing ERM approaches/standards without examining its applicability in that specific organisation's structure. This leads to choosing and implementing a process used by other organisations without considering the difference in terms of many issues such as context, size, structure, etc. Indeed, it was believed by the participants that picking the right ERM process to fit an organisation's situation is the foundation of its efficiency yet is often overlooked.

Reluctance and Resistance to Change

The unwillingness to change in different business managerial sections was considered challenging by more than two-thirds of interviewees. Several interviews showed that top managers who are responsible for business strategic planning are not willing to let ERM oversight affect their process. ERM champions consider this process as strategic, but other initiatives view ERM as compliance-focused. This hinders the effective alignment of ERM and strategy.

Some others commented that sometimes managers are reluctant to accept and move towards change due to their weak understanding of new concepts. On the other hand, employees would not like to do more tasks than the ones they already do. This is because they do not consider themselves a part of the business and its success. Consequently, they prefer to apply minimum effort.

Risk Centralisation

Lack of appropriate ERM structure along with reliable and unbiased risk data among entire organisations' layers was another challenge mentioned by almost half of the participants. Interviewees argued that in order to have effective ERM implementation, organisations need to build a proper ERM committee that continually updates the system with reliable risks reports. Unfortunately, many organisations do not have a centralised risk system, which in turn makes it difficult to identify and manage organisational risks in time. It was evidenced that an accurate risk data system in an organisation is a crucial factor to understand the overall risk profile.

Participants further discussed that, for effective ERM and strategy alignment, organisations need to create (and continually update) a systematic list of key risk drivers identified by ERM processes based on the organisation's strategic objectives.

Real-world Alignment Guidance

A lack of practical guidance on how to align ERM and strategic planning was discussed by most of the participants. Indeed, several interviewees stated that having a practical guidance on how to align ERM process with their organisation strategic planning is a challenge and needs to be viewed accordingly. In fact, C suites need guidelines on how to shift from alignment theories (explored through several pieces of research) to practice. There is a need for a step-by-step implementation guide to enable the organisation to implement this alignment effectively.

B) Critical Factors in ERM and Strategy Alignment

After discussing the challenges of effective ERM alignment with strategy, research participants were asked to discuss the critical elements influencing the maturity of this alignment. A vast majority of interviewees considered strong support of senior management as a critical factor for effective ERM and strategy alignment. Almost all of the participants stated that if ERM does not receive strong support from senior managers, it becomes a risky process itself, losing its sustainability over time. This research revealed a lack of senior management involvement in organisations' effective ERM development due to a poor understanding of ERM's benefits pertaining to an organisation's sustainability and lack of sufficient knowledge regarding the effective implementation of ERM. Senior managers of many organisations do not have the necessary knowledge of risk management. They might be able to take basic steps of ERM implementation through using available universal risk management frameworks/standards, however, when it comes to critical stages of the process, there is severe need for an expert team with related skills and experience appears.

Therefore, in addition to the strong support needed from board directors, delegating a Chief Risk Officer (CRO) is also one of the most important factors of ERM and strategic alignment. The CRO is the most appropriate person and with relevant knowledge, skills, and experience to take responsibility of tackling these challenges; respectively, to execute, monitor, and ensure the effectiveness of organisational ERM process.

Another critical factor identified by the research participants is their organisation's culture. It is recognised that ERM awareness has been increasing over the years. However, in practice, organisations are still following their old ways of dealing with organisational risks. In order to have successful ERM and effectively align it with business strategy, organisations need to change their risk management culture proactively. The findings suggest that alignment of all managerial functions shall ensure holistic and collaborative oversight across business units, avoiding silos, as well as understanding at the enterprise level which areas need improvements.

Furthermore, participants considered 'ERM Bases' and 'Knowledge Management' as critical factors for overcoming the lack of ERM structure and lack of systematic reliable risk data. Participants explained that to have a successful ERM implementation, organisations first require 'ERM Bases'. This means developing organisational effective risk structures, policies and procedures, and a business continuity plan in order to enhance risk management capabilities. Secondly, it is necessary to have good 'Knowledge Management' to increase the understanding of businesses' emerging risks and thus support organisations' risk decision making. Other research works, such as [54][55][65]-[67], also demonstrate that 'ERM Bases' and 'Knowledge Management' are considered a strategic resource, increasing the success and sustainability of organisational risk management. 'ERM Base' helps C suites to build robust ERM infrastructure, leading to advance risk oversight, risk identification, and risk mitigation. 'Knowledge Management' adds value to organisations by achieving positive outcomes through systematically coordinating organisations' structure, people, technology, and the process. Individual's judgement can fail to foresee and recognise emerging risks as uncertainty is created. Knowledge sharing has an important influence on avoiding emerging risks and enables C suites to recognise risks associated with their strategic business objectives.

Literature has identified that much progress has been made in managing risk. However, intervention to date has only moderated the siloed and reactive practice of managing risk and draws fundamental criticism. Whilst it highlights the role of ERM, key benefits, and critical success factors, it continues to recommend a unified risk oversight. Nonetheless, within the applicability of ERM, the interview respondents stated that senior managers fail to understand ERM benefits. Nevertheless, literature also shows drawbacks in implementation (e.g., people expertise, training, culture, etc.), thus highlighting the rationale of practitioners that already adopt the GRC principles. Findings from both the empirical evidence (semi-structured interviews) and the literature review articulate that risk demands organisations to protect themselves proactively from greater risks. When GRC is adopted, the traditional ERM approach is integrated not only to ensure protection, but also to ensure performance and compliance assurance [59].

This research explored how ERM is perceived and what renders adoption and implementation, both in theory and practice. Table 1 below summarizes key findings from interviews and demonstrates that ERM has strategic, cultural and technical implications.

TABLE 1. SUMMARY OF KEY FINDINGS

What is the state of ERM and business strategy alignment?	Alignment is not strong enough
What are the challenges of ERM and strategy alignment?	Senior Managers' Support Organisation Culture Centralised Framework for ERM Fit of ERM into Organisation Structure Reluctance and Resistance to Change Risk Centralisation Real-world Alignment Guidance
What are the organisational factors/initiatives critical for this alignment?	Strong support of senior management Delegating a chief risk officer (CRO) Organisation's culture 'ERM Bases' and 'Knowledge Management' Knowledge sharing

As emphasized above, the governance, management, and assurance functions of GRC seem not only appropriate, but also imperative for enhancing an organisation' long-term resiliency and viability.

V. Conclusion and Future Work

This paper demonstrates that ERM maturity has yet to achieve its maximum. It presents evidence on deviations and the way in which organisations align risk functions remains a current challenge. Risks are continually evolving and the interrelated ramifications are thus increasing. Therefore, this research presents convincing arguments and contributes to the understanding of why the value proposition of ERM was not achieved due to various impediments in implementation, such as senior managers' support, organisational culture, centralised framework/ERM approaches and training, the appropriate fit of ERM into the organisation's structure, reluctance and resistance to change, appropriate ERM structure, central reliable risk data system and practical alignment guidance.

Additionally, this paper explores the ambiguity regarding ERM's successful factors, as investigated through the literature review and semi-structured interviews. The findings suggest that ERM needs to be consciously acknowledged in terms of its current level of maturity because there is evidence that organisations struggle with challenges associated with effective ERM implementation. As a result, the integrated approach of ERM is insufficient in today's business context. Therefore, in light of drawbacks regarding ERM implementation, the GRC paradigm is understood to cover an organisation's needs more efficiently. Despite the substantial focus on ERM value proposition and control, the extended risk oversight of GRC challenges the effectiveness of the ERM school of thought. As an all-encompassing strategic function, GRC plays a supervisory role (governance) that integrates both RM function and risk compliance function (audit). This undeniably better positions an organisation for ensuring improved performance, viability, and resiliency.

In conclusion, this research contributes to academia and the industry by shedding a contemporary light on the current state of literature and practice while suggesting an update to the body of knowledge that incorporates the lens of ERM and GRC. As such, GRC can play an important role in addressing the issue and ensuring maximisation in achieving organisational strategy, vision, and mission as well as helping to reduce/prevent the deficiencies of siloed controls, thus strengthening an organisation's security posture and building enterprise-wide risk resiliency and foresight of risks.

However, despite such advancement, more research is needed to determine the practicality of the alignment of ERM with GRC as a solution for risk complexity and challenges encountered by organisations.

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