

Pragmatic Risk Quantification for the Enterprise

Risk plays a factor in every business decision. Whether it is a new product launch, an acquisition, an entrance into a new market, or dealing with a new regulation or security threat, decision-makers must weigh the pros and cons, the risks and rewards, and the impact on the organization's strategic business goals before deciding to act. While decisions regarding potential risks can significantly impact the organization's ability to succeed, many of these major decisions are too often based on incomplete data, personal experience, hunches, and sometimes outright guesses as to the outcome.

Given the uncertainty in the market today, the assessment of the risk is not taken lightly. Rather, many business leaders and decision-makers lack the proper tools and capabilities to assess, quantify, and monitor business risk accurately. Without a solid understanding of which risks are most important to the business, decision-makers cannot identify the best course of action, prioritize issues, or steer the business in the right direction through informed decisions. This challenge applies to individual business decisions but more importantly, has a significant impact on broad risk categories at the enterprise level. Risk management must result in a nuanced business discussion rather than broad strokes of analysis that categorize risks into ambiguous buckets.

Risk management teams are continually challenged in managing scattered lists of risks and internal controls documented in diverse ways in various areas of the organization. These teams can be fighting uphill with inconsistent risk assessment methodologies, varied rating scales and manual processes leading to limited visibility or accountability in addressing risks. In addition, traditional methods of risk measurement, such as risk heat maps, have fundamental flaws or limit the organization's ability to understand their exposure or opportunity. Too many organizations are simply "reporting" on risks - 'we have X reds and Y yellows.' This does not tell the business where to invest to mitigate risk or where it could exploit an opportunity.

When the risk analysis process misrepresents the potential exposure, risk can be underestimated - leading to disruptions and losses - or overestimated - leading to excessive investment and wasted efforts. This is a dangerous position given the uncertainty of today's highly competitive market.

Enterprises are missing a critical layer of detail in the actual exposures related to risk needed to prioritize activities and inform decision making.

Merge Method with Math

Enterprise Risk Management (ERM) programs seek to create a common language and measurement of risk so the business can govern and manage potential negative events, disruptions, or adverse situations. Most organizations have established some semblance of a depiction of risk across the business. Many organizations leverage qualitative measurements for most risk domains. In some cases, these views are siloed into functional, geographical or organization boundaries. Even if the organization has created a view across categories of risk, the output is presented in general terms, culminating many times in some type of risk heat map. While qualitative or semi-quantitative risk analysis helps establish a dialogue around risk, the lack of detail and differentiation between risks is an obstacle when it comes to making important business decisions.

The flaws in subjective, qualitative risk analysis result in misunderstanding of how risks interact with one another and how they collectively affect the business objectives. For example, broad categorizations of risk into qualitative terms such as a Low to High scale fail to differentiate between risks and are subject to interpretation. While these approaches may fulfill current obligations, qualitative analysis lacks a concise, tangible, and defensible articulation of the business impact. Decision-makers are driving blind without the ability to differentiate risks due to qualitative analysis. They lack insight into key details like financial exposures or frequency of risk events and are challenged when confronted with critical business decisions.

Establishing a central repository for risk- and control-related data is the first step in ensuring you have an accurate and comprehensive view of risk that can be readily conveyed to your executive team and board. This effort establishes a common taxonomy to document and assign accountability for risk. Enterprise Risk Management programs provide the METHOD organizations use to govern and manage risk. However, this capability is just the first component in truly managing risk in today's complex environment. Organizations do not need to just report on risk – they need to understand it.

What organizations need now is a thorough and in-depth analysis of risk through risk quantification that can scale to the enterprise – not just be applied in pockets of operations or on an ad hoc basis. Risk quantification creates a more faithful representation of the exposures the organization faces, informs the business, and meets the main goal of risk management - mitigating risk and addressing constraints that hinder business goals that grow corporate and shareholder value.

Within the enterprise, there are several layers of complexity that can affect risk. The wide variety of potential risk drivers, controls and consequences can create an intricate web of relationships. Archer Insight brings the MATH to the process with a consistent way to analyze these relationships and utilize statistical and mathematical principles to bring the risk narrative to life. Most importantly, Archer Insight weaves quantification into your ERM program, standardizing the measurement of risk and transition from qualitative to quantitative reporting without the need for a cadre of mathematicians and statisticians.

The Archer Insight Advantage

Archer Insight enables scalable enterprise-wide risk quantification capabilities designed to deliver richer detail on the impact of risk and the effect of risk mitigation activities in business relevant terms giving management the inputs necessary to make risk-informed business decisions. Archer Insight brings risk quantification to enterprise risk management programs by standardizing the calculation and aggregation of financial and non-financial risk exposures. The result is a view of risk that differentiates risk in more granular terms and articulates the economic impacts both aggregated and individually. By enabling risk management teams to calculate aggregated risk exposure, differentiate risks in terms of frequency and magnitude, measure the value of controls and communicate risk based on the relative impact to the business, management is more informed of potential exposures and can make better risk informed business decisions.

Establish an enterprise view of risk

Enterprise risk management requires collaboration between senior management, business functions and risk specialists. Most organizations have some concept of a corporate risk register but may struggle with achieving a consistent process to ensure proper accountability and definition of risk management requirements. Archer can enable your teams to work together to establish the common language around risk and ensure roles are clearly defined. Business management can work with risk teams to design effective controls and control owners can clearly understand the requirements to mitigate or reduce risk.

Systematically analyze risk

Within the enterprise, there are several layers of complexity that can affect risk. The wide variety of potential risk drivers, controls and consequences can create an intricate web of relationships. Archer Insight delivers a consistent approach to analyze these relationships and utilize statistical and mathematical principles at scale. Archer Insight enables you to apply a systematic approach to quantify all types of risks with a common, scalable approach. Risk analysts can then articulate explicit economic impacts of risk, embrace a more nuanced methodology of risk analysis, deliver granular comparison of risks and aggregate risk in a consistent way that reduces uncertainty and assessment errors. The good news is Archer Insight makes this process easy with the mathematics and models integrated into the process.

Create decision ready business insights

Enterprise risk management has been part of organizations for years in some manner and in some cases, organizations have created substantial approaches. However, most of those programs are built on qualitative approaches that obfuscate the differentiation between risks. While those methods may establish the conversation, a purely qualitative approach falls short on the tough questions being asked around the boardroom table. Risk quantification allows risk teams to utilize the data and experience they already have to deliver cost benefit considerations taking into consideration the full-range of outcomes and multiple impact dimensions, Business stakeholders can evaluate risks with a granular comparison for clearer prioritization and the ability to aggregate and provide clarity on distribution of risks with a view to deciding distribution of resources and prioritization of treatment.. Risk can be analyzed, aggregated, and visualized in ways that speak to the business. Archer can take your risk team from 'reporting risk' to actually 'communicating risk' through the power of quantification.

Managing Enterprise Risk with Archer

Archer **Top-Down Risk Assessment** provides the foundation to record and track risks across your enterprise and establish accountability for risks. Risk owners can document risks along with controls and associate risks and controls. Risks can be assessed on an inherent and residual basis. With Archer Top-Down Risk Assessment, your organization can catalog a consolidated view of risks and internal controls within the organization, map risks to business processes, controls, and higher-level risk statements, and monitor risks against established tolerances and risk appetite. This enforces a consistent terminology, risk assessment methodology and rating scale and improves visibility into risk and control inventory and assessment progress via predefined reports and risk dashboards.

Archer Insight then standardizes the calculation and aggregation of risk exposure and weaves risk quantification into the ERM program leveraging existing data and processes while delivering a consistent, mathematically sound methodology built into the solution. By enabling a transition to a quantitative approach, Archer Insight enables your risk team to deliver business relevant, defensible risk analysis to improve decision making and increase the potential to achieve strategic goals. Archer Insight creates the right output for management to be more informed of potential exposures and can make better risk informed business decisions.

With Archer Insight, you can transition qualitative risk likelihood and impact ratings into quantitative values, utilize the Bowtie method to illustrate risk events using drivers, preventative and mitigating controls, and consequences, and calculate economic impacts of risks Individually and at aggregated level. With this insight, you can also derive the value of controls to measure costs of control against risk management effectiveness. Archer Insight calculates and aggregates financial and non-financial risk exposure for the Board, executives, and decision-makers allowing them to easily see and understand how risks interact with each other.

Archer Insight enables explicit articulation of the economic impact of risks, both individually and in aggregate, both in terms of year-on-year average losses and in terms of downside losses, This allows you to make informed business decisions about investments in risk mitigation and about whether the risks to which you expose yourself in the pursuit of value are warranted by that value. More succinctly, quantification informs discussion of cost versus benefit and risk versus reward

Additionally, Archer Insight can help you facilitate a more nuanced assessment methodology, capturing the full range of outcomes across all impact dimensions with associated uncertainty. This allows for a more granular comparison of risks since risk is on a broad, continuous order-of-magnitude (logarithmic) scale both in terms of how often they occur and what the impact is when they do. Risks or collections of risks may be sorted and prioritized as well as much greater ability to differentiate than that allowed by a five-point scale.

Finally, Archer Insight allows you to aggregate risks in a consistent way that reduces uncertainty and reduces assessment error. You can articulate the risk landscape and enable risk owners in the first line to better assess risk allowing for the distribution of risk exposure to be understood in different contexts; across business and operational units, across functions, across products.

Archer Insight is a suite of enterprise-wide risk quantification capabilities designed to deliver richer detail on the impact of risk and the effect of risk mitigation activities in business relevant terms giving management the inputs necessary to make risk-informed business decisions.

Archer Insight Workbench is a risk modeling tool that enables risk analysts to build and analyze risk models using quantitative techniques such as Monte Carlo simulations. When the business looks to analyze critical risks in greater detail, they turn to risk management functions for help and in many cases, risk models are built using approaches to mathematically calculate the uncertainties and potential exposures. Risk modeling can be a vital tool to support deeper analysis of risks in support of the risk management strategy, but many organizations are using haphazard approaches to create and manage these models. For critical areas of risk, Archer Insight Workbench allows analysts to expand into details that further analyze uncertainty around key decisions. Archer Insight Workbench allows your risk team to answer questions using a much richer set of tools enabling a flexible approach to risk modeling based on sound, mathematical methodologies.

Invariably, issues will arise as risks are identified, assessed, and tracked. Archer Issues Management allows you to capture and consolidate findings from your analysis. Archer orchestrates the workflows needed to ensure proper follow up, remediation or management reviews. Dashboards and reports enable visibility into critical issues that need to be addressed by business operations and risk and control owners.

With Archer, you can scale your enterprise risk management strategy and introduce a simple, prescribed but robust model to represent the uncertainties of risk. Managing your Enterprise Risk Management program with Archer provides a clear and consolidated view of risk that allows you to prioritize risks, efficiently deploy resources to address the most critical problems and elevate risk management as a new source of competitive advantage.

Discover More

Archer is a leading provider of integrated risk management (IRM) solutions that enable customers to improve strategic decision-making and operational resilience with a modern technology platform that supports qualitative and quantitative analysis driven by both business and IT impacts. As true pioneers in GRC software, Archer remains solely dedicated to helping customers manage risk and compliance domains, from traditional operational risk to emerging issues such as ESG. With over 20 years in the risk management industry, the Archer customer base represents one of the largest pure risk management communities globally, with more than 1,200 customers including more than 50% of the Fortune 500.

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