

November 6, 2020

Basel Committee on Banking Supervision
Bank for International Settlements

RE: Comments on the consultative document *Principles for Operational Resilience*

INTRODUCTION

Thank you for the opportunity to provide comments to the BCBS's Consultative Document on *Principles for Operational Resilience*. Starling (<https://starlingtrust.com>) is an innovative US-based RegTech startup that delivers analytics using internal bank data to improve non-financial risk governance, particularly with regard to risks that stem from firm culture.

Through our thought leadership and industry engagement, Starling has become recognized as an expert in our industry. Our annual white-paper, *Culture and Conduct Risk Management in the Banking Industry*¹, (aka the Starling 'Compendium'), has become a must-read reference on the latest trends and strategies taken by bank supervisors globally to address these non-financial operational risks.

Starling also offers an AI-driven technology platform that applies advances in behavioral science and network theory to the challenge of identifying and mitigating non-financial risk in banks – proactively.

Our comments are responsive to the following questions posed in the consultative document.

- Q2. Do you have any comments on the individual principles and supporting commentary?
- Q3. Are there any specific lessons resulting from the Covid-19 pandemic, including relevant containment measures, that the proposed principles for operational resilience should reflect?
- Q5. What kind of metrics does your organization find useful for measuring operational resilience? What data are used to produce these metrics?

BACKGROUND

Banks have significantly increased investments into systems and process to manage operational resilience. This has typically led to increased documentation, restrictive processes, and by removing people from decision making loops. At the same time, the introduction of Robotic Process Automation

¹ <https://starlingtrust.com/compendium/>

(RPA) has accelerated the move by firms to replace manual tracking and reporting activities with automation.

The BCBS has often emphasized the need to review processes, systems, *and people* when evaluating governance and operational risk management frameworks.² We believe this principle applies directly to the challenge of managing operational resilience and, further, that the *people* component of this approach has not received sufficient attention.

Lacking the behavioral context behind the firm, efforts to manage operational resilience tend towards rules-based efforts, primarily targeting visible activities and processes, and therefore risk becoming simple tick-box exercises. By focusing on outcomes rather than on the behavioral proclivities that drive organizational responses to crises, these tools are hopelessly backward looking.

Firms have invested in mapping and documenting *critical operations*, *respective functions*, and business continuity planning. However, these typically represent static views of the formal organization and offer minimal guidance as to the way people actually work. It is not unlike a doctor relying on a picture of a circulatory system in order to diagnose potential cardiovascular disease. Without seeing how blood actually flows freely in the body, and where it is blocked, it would be nearly impossible to correctly target an intervention correctly.

Similarly, operational resilience is only possible due to a complex web of personal interactions and critical behaviors among senior executives and middle management. Unfortunately, tools that rely on self-reported process updates, new layers of oversight committees, online surveys, and townhall meetings will struggle to handle such complexity. The result is a lot of extra documentation, and unnecessary cost, that ultimately ends up as shelfware.

WHAT'S MISSING

In each of these cases, the current supervisory approach encourages banks to focus on systems and processes. They have been far less inclined to address the people element – namely how to foster the necessary behaviors and cultural norms required to manage those systems and processes correctly.

This is understandable because, for a long time, the tools available for measuring and managing behavior have not lent themselves to effective supervision. They have been forced to rely on self-reporting systems, generalized staff communications programs, staff surveys, and layers of new management committees. These tools lack objectivity, specificity, and real-time responsiveness.

RECOMMENDATION

Advances in behavioral science and advanced analytics, principally machine learning, are now enabling new tools that generate real-time metrics that allow for proactive assessment of management and board oversight, effectiveness of audit and compliance systems and processes, and proactive identification and mitigation of non-financial risk.

² Sound Practices for the Management and Supervision of Operational Risk, BIS, February 2003

We believe that the BCBS can play a unique role in encouraging the adoption and further evolution of these promising technologies by banks, particularly among more operationally complex large and regional institutions, to deploy such tools to enhance their overall management capabilities and specifically their operational risk management. We also believe that the BCBS should proactively engage with behavioral science and advanced analytics firms and sponsor pilots and tech sprints to educate both themselves as well as the banks.

Q2. Do you have any comments on the individual principles and supporting commentary?

With respect to paragraphs 19 and 20 *Governance*, we would suggest that the BCBS go beyond encouraging senior management and boards of directors to providing timely reports and communicating the bank's objectives to key stakeholders. To the extent possible, banks should not rely solely on reporting on the adoption of operational resilience policies but should also incorporate metrics on their performance against such policies.

Regarding paragraph 22 *Operational Risk Management*, we support the BCBS's intention to encourage proactive efforts to prevent operational risk threats from affecting critical operations. Regular assessments and scenario planning are key steps. However, it is just as important for management to foster and manage behaviors that help employees to demonstrate resiliency in reaction to disruptions.

Finally, as regards Principle 4 *Mapping interconnections and interdependencies*, efforts to map interconnections and interdependencies should not be restricted only to processes and formal reporting relationships. Firms should also look to map the informal relationships, key behaviors, and inter-personal dynamics whereby firms actually operate. This provides a more dynamic image of the firm that would allow management to respond to disruptions more effectively.

Q3. Are there any specific lessons resulting from the Covid-19 pandemic, including relevant containment measures, that the proposed principles for operational resilience should reflect?

The current COVID-19 pandemic has provided a strong example of how operational resilience planning can fall short when they focus solely on formal systems, processes, and formal governance structures. During the pandemic, controls and surveillance systems that were established in a time when everyone worked together have been upended. The most effective way to provide resilience is to foster a culture where staff feels empowered and encouraged to step in to implement solutions the moment that a business disruption occurs – or even anticipate and proactively manage such disruptions before they cause harm.

With traditional tools for managing behavior and culture proving inadequate, and given the added pressures stemming from the COVID-19 pandemic, we would urge the BCBS to consider encouraging greater investment into scalable metrics that can help firms implement dynamic and responsive operational resilience programs.

Q5. What kind of metrics does your organization find useful for measuring operational resilience? What data are used to produce these metrics?

Advances in machine learning have made it possible to process vast troves of internal bank data at scale. By applying novel approaches in the field of “computational social science,” it is now possible to detect signals within those massive data sets that tie to particular behaviors of interest to management. In the context of operational resilience, these behaviors may be necessary for ensuring business continuity during a disruption. By incorporating network science, it becomes possible to determine the key influencers of such behavior.

Analyzing these signals leads to metrics that update continuously and reveal where specific behavioral propensities are likely to appear. Further, such tools can illuminate the pathways by which certain behaviors are most likely to spread – contagion-like – throughout an organization. Such ‘behavioral epidemiology’ positions management to operate from the front-foot. It also allows precision targeting of areas where resilience is vulnerable, enabling firms to react in a more timely, effective, and efficient manner.

A significant additional benefit is to be had once such technologies are established as industry-standard best practice: standardized risk metrics such as those we describe here may permit for horizontal reviews on an apples-to-apples basis, system-wide, across any given jurisdictional space. And the adoption of such metrics among regulators in other financial markets may permit for more efficient collaborative oversight of firms with an extensive global footprint. (e.g., the G-SIBs)