End to End Operational Resilience

Stella Nunn  |  Stuart Fleming

September 2017
Resilience definition

The Bank of England defines resilience as: “An organisation’s ability to protect and sustain its most critical functions, and underlying assets, whilst adapting to expected or unexpected occurrences of operational stress or disruption.”
**Regulatory expectations have shifted**

**Challenges set by regulators**
- Organisational focus for operational resilience vs silo.
- Resilience requirements i.e. CEFs and end to end mapping not as advanced as needed and requires greater prioritisation.
- Greater testing of critical processes end to end.
- Need more granular RTOs with interdependencies.

**Outcomes**
- Firms undertaking increased number of infrastructure reviews to address IT resilience without fully taking in to account the shift to operational resilience.
- PwC development of the Operational Resilience Maturity Assessment tool (ORMA), utilising knowledge of Dear Chairman exercises.
- Firms developing Operational Resilience programmes and supporting tools.
## Resilience maturity model

### Business Continuity Management

<table>
<thead>
<tr>
<th>Undeveloped</th>
<th>Formalised</th>
<th>Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piecemeal and ad hoc plans, usually driven by a need to comply with legislation or regulation.</td>
<td>BCM policy is set, and business continuity plans developed for key sites and facilities.</td>
<td>Business Continuity is integrated with incident and crisis management, and emergency response. BCM is embedded in the organisation, with regular exercising.</td>
</tr>
</tbody>
</table>

### Operational Resilience

<table>
<thead>
<tr>
<th>Integrated</th>
<th>Optimised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience analysis has been done across the organisational silos, taking into account supply and value chain dependencies and risks.</td>
<td>Resilience is integrated within the overall risk management approach, and is embedded within the corporate governance processes.</td>
</tr>
</tbody>
</table>

### Developing Resilience
# Operational resilience framework

## 1. Strategy, approach & governance
- Definition of Resilience
- Service centric approach
- Skills and competencies
- Demonstrable board involvement
- Business and technology engagement
- Alignment of risk disciplines
- Clear 3LoD

## 2. Assess end to end resilience risk & exposure

### Operations & technology gap analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Critical Customer / Client Service Lines</th>
<th>End to End Business Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk appetite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controls &amp; Capabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metamodel</td>
<td>Golden Sources of Data</td>
<td></td>
</tr>
<tr>
<td>Management Information</td>
<td>KRI's &amp; board reporting</td>
<td></td>
</tr>
<tr>
<td>Culture &amp; Behaviours</td>
<td>Awareness, Skills, Knowledge &amp; Experience</td>
<td></td>
</tr>
</tbody>
</table>

## 3. Design & implement a change programme

- Design and execute a change programme to implement resilience
- Prioritise investment & resources to protect what matters most.

## 4. Sustainability

- Execute a testing and assurance strategy across 3LoD to drive continuous improvement and ensure capability and sustainability of resilience controls.
Top down approach

01 Establish a mandate for resilience
Board level mandate, a common definition and strategy for resilience

02 Understand the risks & set risk appetite
Top down from the board, applied at the firm and critical service level

03 Identify what matters most
Client first - alignment with firm’s strategy, commercial objectives and social licence to operate

04 Assess resilience of critical services E2E
Service ownership for resilience. Map & assess business process against critical dependencies E2E

05 RemEDIATE resilience gaps
Design & execute a change programme to remediate resilience gaps

06 Build & sustain an integrated operating model
Design & implement a operational resilience operating model

07 Governance & control environment
Measure, Report, Challenge– key performance and risk indicators, adequate & effective controls
End to end mapping

1. Identify critical customer journeys
   - Open a current account

2. End to end process mapping with SME validation
   - Open a current account

3. Overlay dependencies
   - Process
     - Dependency
       - Technology
       - Premises
       - People
       - Third Parties

4. Critical path definition

5. Overlay KRI to measure resilience
   - Process
   - Dependency
   - KRI

6. Aggregate resilience risk profile

Legend:
- Customer
- Business
- Low
This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers LLP, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2017 PricewaterhouseCoopers LLP. All rights reserved. In this document, “PwC” refers to PricewaterhouseCoopers LLP (a limited liability partnership in the United Kingdom) which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity.