

## Causal data categories - matrix

Understanding the Root Cause of operational losses is key to managing operational risk

Cause is different to "event category" such as the Basel category. Cause is often the the result of investigation.

Cause can strike through an organisation and can be a cultural issue.

Quality, enterprise-wide MI is key, especially as the cause can be the same from one business unit to another without each other necessarily knowing

<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>People</b>	Training Competence Knowledge Culture/Behaviour Inadequate resources Other	Calibre of recruits Human Error Misinterpretation Poor relationship management Lack of communication Not meeting customers reasonable expectations Senior mgt awareness Key person/knowledge dependency Unaware of change Senior mgt knowledge Product too complex Inappropriate customer/product fit Regional/international differences Succession planning
<b>Process</b>	Inadequate operational procedure Inadequate policies Product design Inadequate monitoring / reporting Process change / implementation Other	Dealing with change Spreadsheet workarounds Lack of documentation Lack of due diligence Poor contract/SLA Management decision/change not implemented MI not used effectively Staff impact not monitored MI inadequate Inadequate checks/balances on senior individuals Inadequate allocation of accountabilities

**System (IT)**

Coding  
Testing  
IT strategy  
Complexity of interfaces  
Maintenance  
Investment  
Data Integrity  
Resilience  
Other

Software design  
Virus  
Hardware failure  
Security  
Poor User Acceptance Testing/Regression Testing  
Legacy systems

**External event**

Trade counterparty  
Customer  
Regulatory / political  
Infrastructure failure  
Service provider  
Other

Lack of understanding of third party data  
Third party situation beyond firm control (power/telephony/water/services)  
Reliance on third party data  
Lack of understanding of implications of a change to third party system  
Increase in transaction volume  
Unrealistic customer expectation  
Disgruntled employee