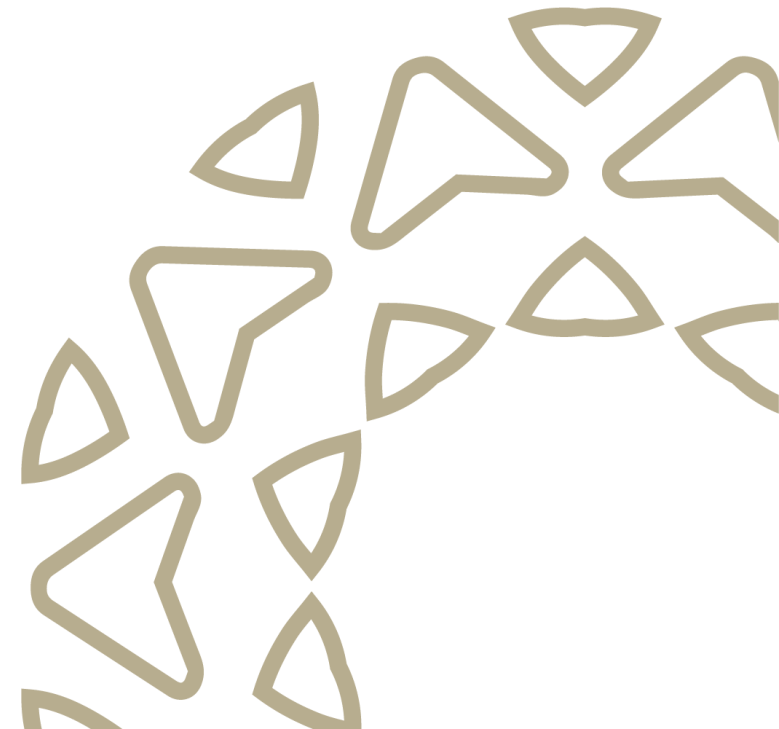




STATE TAX SERVICE
UNDER THE MINISTRY OF ECONOMY
OF THE REPUBLIC OF AZERBAIJAN

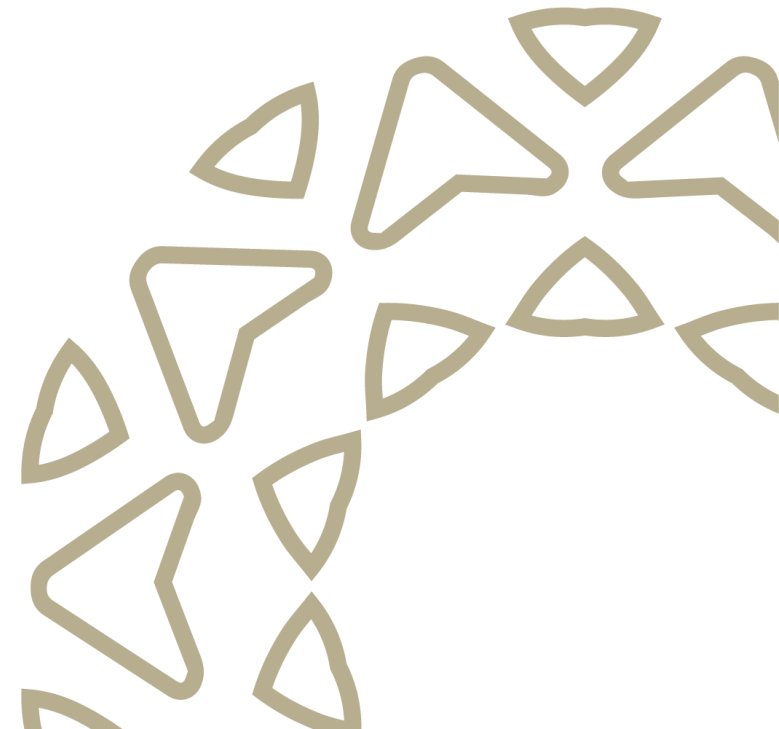
Behavioral Insights for Tax Administration





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Behavioral Insights for Tax Administration



“The economist may attempt to ignore psychology, but it is sheer impossibility for him to ignore human nature ... he will not thereby avoid psychology.”

- *John Maurice Clark (1918, “Economics and Modern Psychology”)*

Behavioral scientists refer to two 'systems' that we use to make decisions. These ideas were popularized by Daniel Kahneman in the book 'Thinking, Fast and Slow' (2011)

System 1

Fast,
automatic,
seemingly
effortless



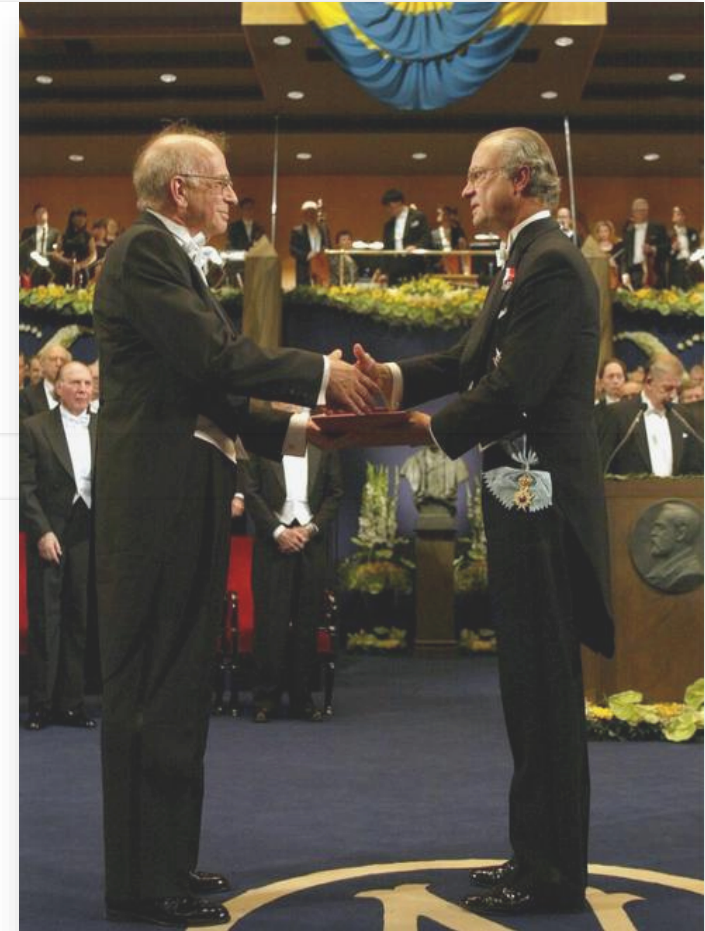
Thinking Fast: "System 1 Fast, intuitive, automatic, and emotional. It operates with little effort and drives most of our daily, reflexive choices"

System 2

Slow,
controlled,
effortful



Thinking Slow: "System 2 allocates attention to the effortful mental activities that demand it, including complex computations"



Key Features of Behavioral Insights



Focused on Behavior

Observes and measures actual behavior, as opposed to simply knowledge and beliefs.

Context-Driven

Behavioral interventions focus on understanding & changing contextual factors to change behavior.



Evidence-Based

Leverages understanding from academic and practical findings, and uses scientific methods, understand behavior and test solutions

Incremental

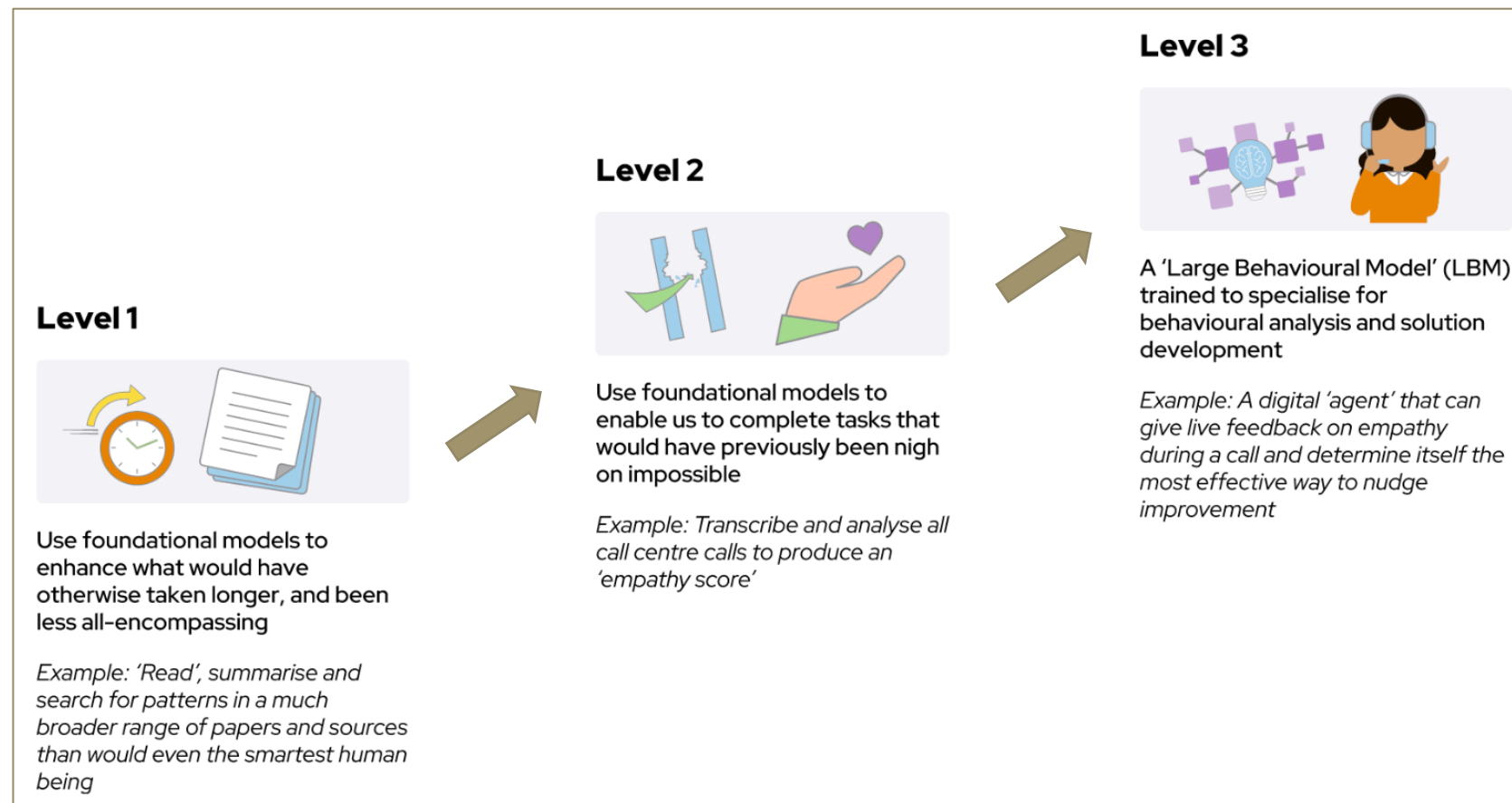
Embraces incremental, cost-effective approaches to complex problems & quick application of known behavioral solutions

Within the taxation sector, behavioral insights have proven to be a powerful tool to influence a range of outcomes; from increasing public tax revenue, to improving employee engagement

Domain of Taxation		Behavioral Driver	
Public Tax Revenue	The UK government brought forward £200 million in tax revenue by adding social norm cues to their tax letters.		Social Influence & Norms: people's behaviors are strongly influenced by norms and <u>behaviors of the surrounding population</u>
Timely submission of tax returns	In a European tax administration, timely submission of tax returns increased by 9.4% when non-compliant tax behavior was framed as a "deliberate choice" in reminder emails.		Presentation & Salience: people's behaviors are affected by the <u>way information and material are presented</u>

Behavioral AI is an approach to machine learning that focuses on **understanding, predicting, and responding to human actions & behavioral patterns.**

Organizations may choose to integrate AI at various levels. AI agents based on LBM logic analyse historic interactions to understand, predict and simulate the next human or machine actions.



Interventions in taxation are often designed for the 'average' taxpayer. **Behavioral AI introduces new dynamics to develop targeted solutions for diverse audiences.**

Personalization at Scale

- Some already existing advanced platforms convert taxpayer data into detailed behavioral profiles; predicting barriers & drivers specific to different segments and simulating how interventions will be received by audiences before they are rolled out.
- Intelligent behavioral data pre-filing systems help enhance the convenience and personalization of tax returns.

From Reactive Fixes to Preventative Solutions

- The UAE Federal Tax Authority's AI-powered 'TARA' system guides taxpayers through processes and uses predictive AI capabilities to identify common filing errors and send preventative guidance to taxpayers.

Behavioral AI is developing fast, meaning that **clarity on gaps & pitfalls is essential for ensuring reliable application** within the taxation sector.

Biases within the Data

AI learns from historical data, which is not always neutral.

For example, the US Government Accountability Office spotted biases in AI selecting returns for exams, whereby Black taxpayers were audited 3 to 5 times higher than others due to “possible algorithmic biases”.

Hallucinations

AI systems can generate outputs that are plausible but wrong, sometimes confidently so.

For example, in 2025, a collection of various tax & legal datasets logged nearly 800 cases of AI-related citation errors and hallucinations across 25 countries.

The Black Box Problem

Some AI systems cannot explain *where exactly* their responses are coming from in the data.

For example, in one of European tax administrations AI system was halted after it was found that recipients flagged as high risk of tax evasion could have no meaningful insight into their risk indicators.

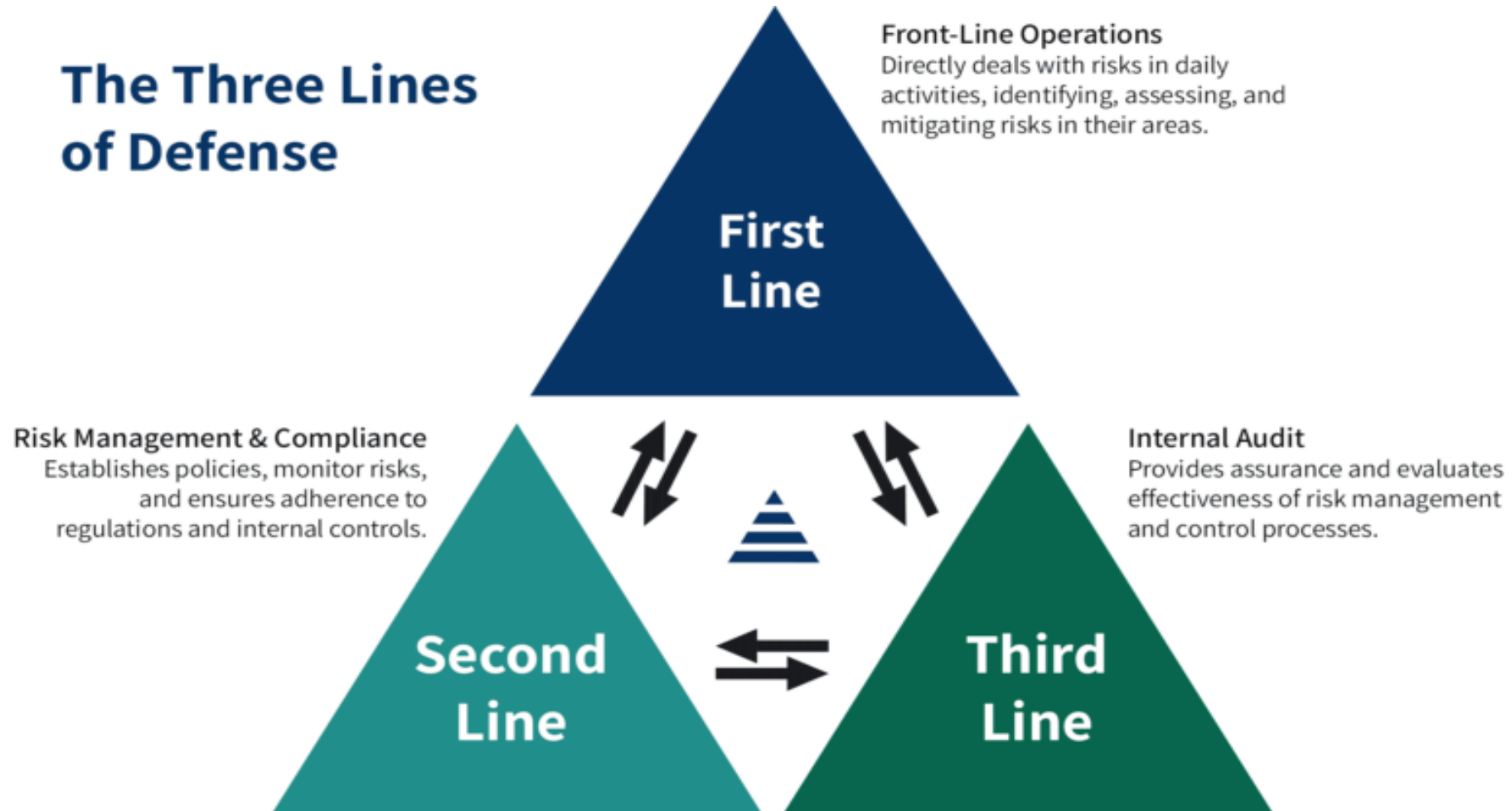
These challenges mean that Behavioral AI must be designed responsibly and tested rigorously with humans in the loop.



Behavioral insights in Enterprise Risk Management (ERM)



The Three Lines of Defense



How risk management framework in the State Tax Service shapes risk-aware behavior



Operating Model

Sets up who owns the particular risk (1st line management), who supports the process (ERM Unit), and where decisions must be made, so that risk ownership stays with management and risks are not treated as someone else's responsibility.

- ✓ Three Lines model
- ✓ 1st line risk ownership
- ✓ Risk Committee and Director-General's support

Policy

Creates the expected behavioral standard: speak up about risks in good faith, do not hide issues, and treat sensitive risks with due attention, establishing clear understanding that timely proactive escalation and raising risks are expected and encouraged.

- ✓ "No blame for raising risk"
- ✓ "Zero tolerance" for critical risks
- ✓ Clear roles and accountability

Methodology

Builds discipline through clearly established risk management cycle timelines, escalation rules and routes, approval paths, and traceability. This reduces the chance for delay and informal handling of risks, while also promoting openness and a "substance over form" approach.

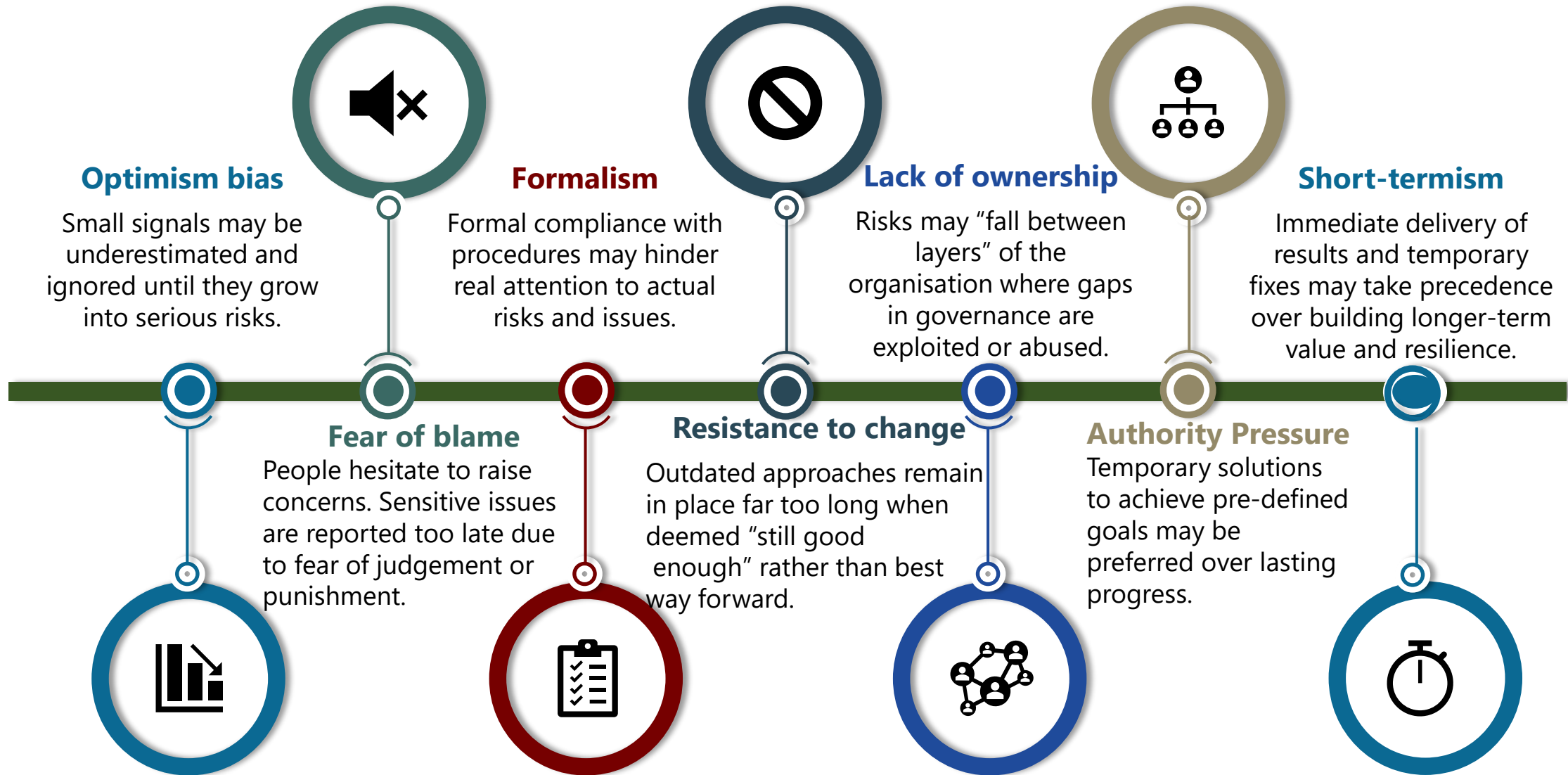
- ✓ Clear timelines and deadlines
- ✓ ERM Unit quality assurance and methodology support
- ✓ Escalation and approval rules

Procedure

Provides a practical instructions to the 1st line risk owners how to identify, assess, escalate, and monitor risks, helping employees move from formal compliance to consistent risk-based decisions.

- ✓ Unified templates, rules and approaches
- ✓ Practical tools and examples
- ✓ Risk Owner quality check-list

Typical behavioral traps that undermine risk management



Practical ways to address behavioral traps in risk management



Optimism bias

- Optimism shall be distinguished from recklessness, complacency or naivety. Every assumption should be made available for critical testing.



Fear of blame

- Encourage constructive methods of challenging "status-quo". Raising concern should be a right not privilege.



Formalism

- Make actions linked to outcomes- not outputs. Avoid "box-ticking" activities as a way of demonstrating progress or compliance.



Resistance to change

- Connect each change to a visible and tangible goal. Avoid creating the environment of constant change or endless transformations.



Lack of ownership

- Create sense of togetherness and environment of common risk/rewards space ("we are in this together").



Authority Pressure

- Create trusted channeling for raising concerns constructively, without compromising the disciplined and high-performance environment.



Short-termism

- Balance immediate priorities with lasting improvements.
- Strategic thinking should be backed up with operational excellence.

THANK YOU!

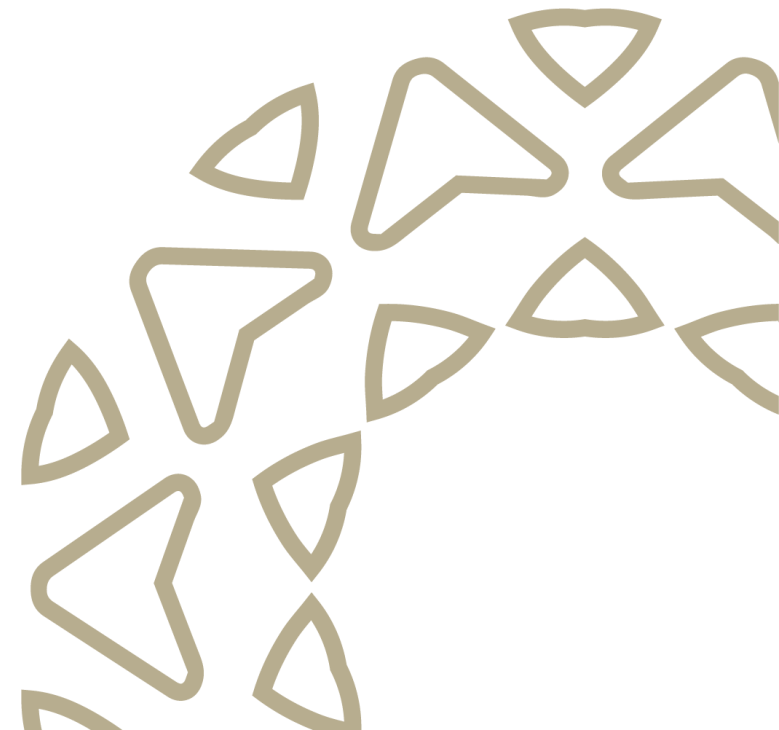
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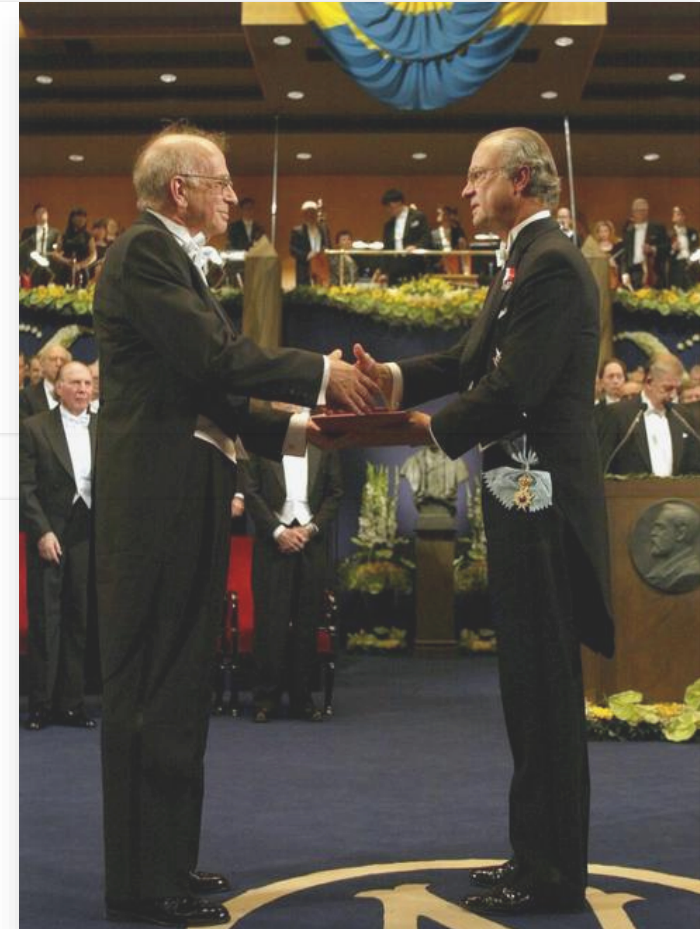
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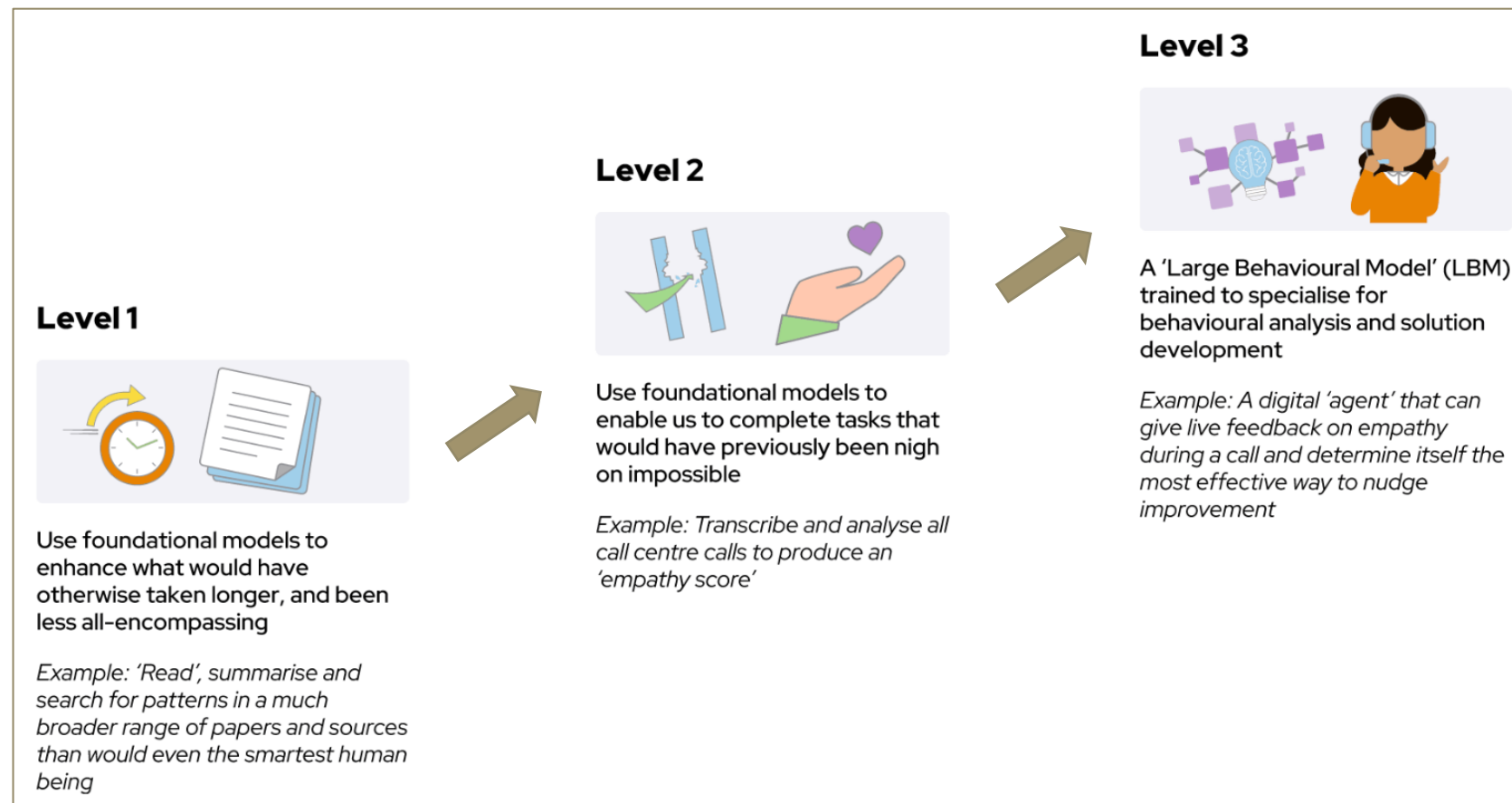
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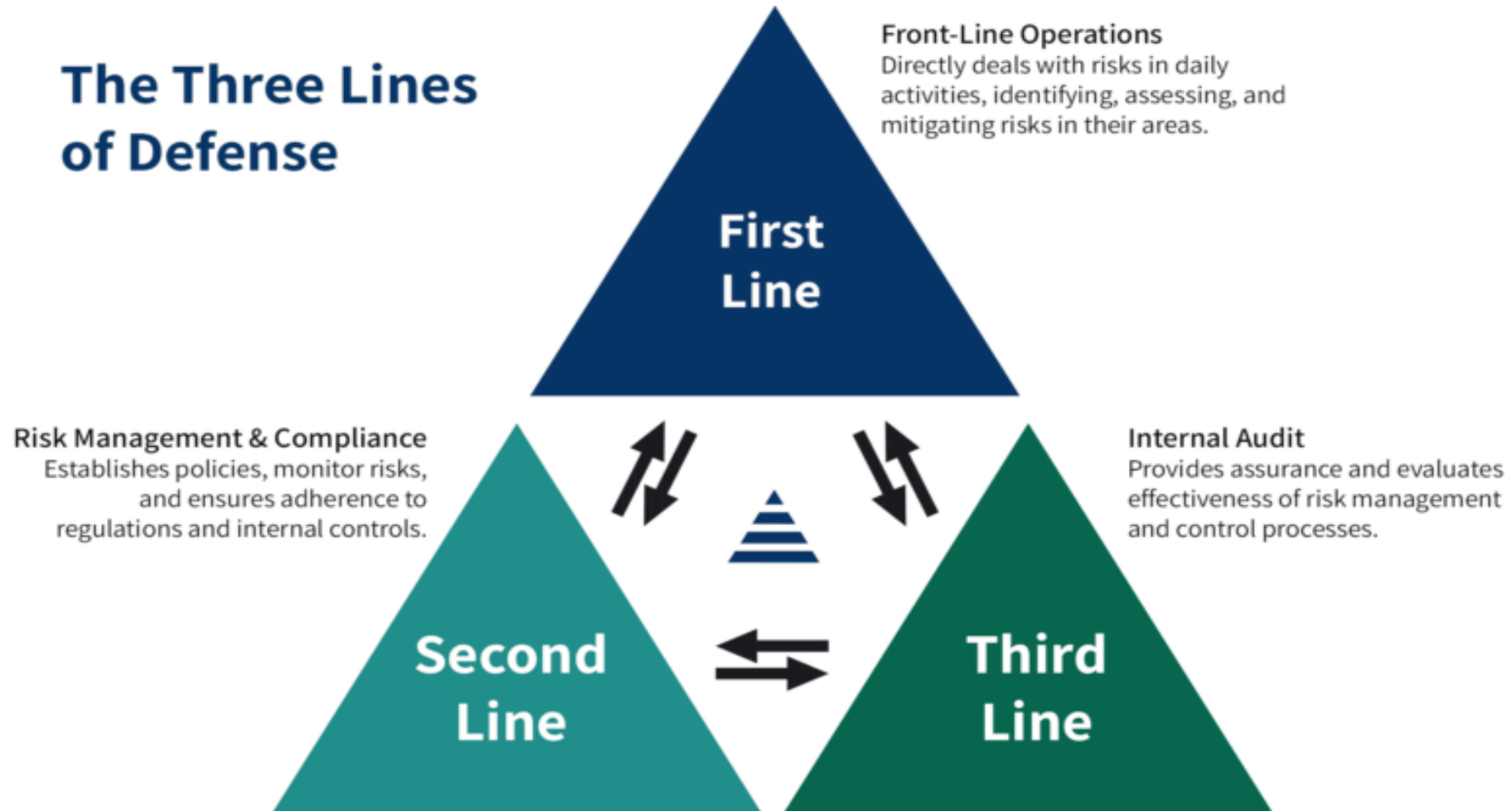
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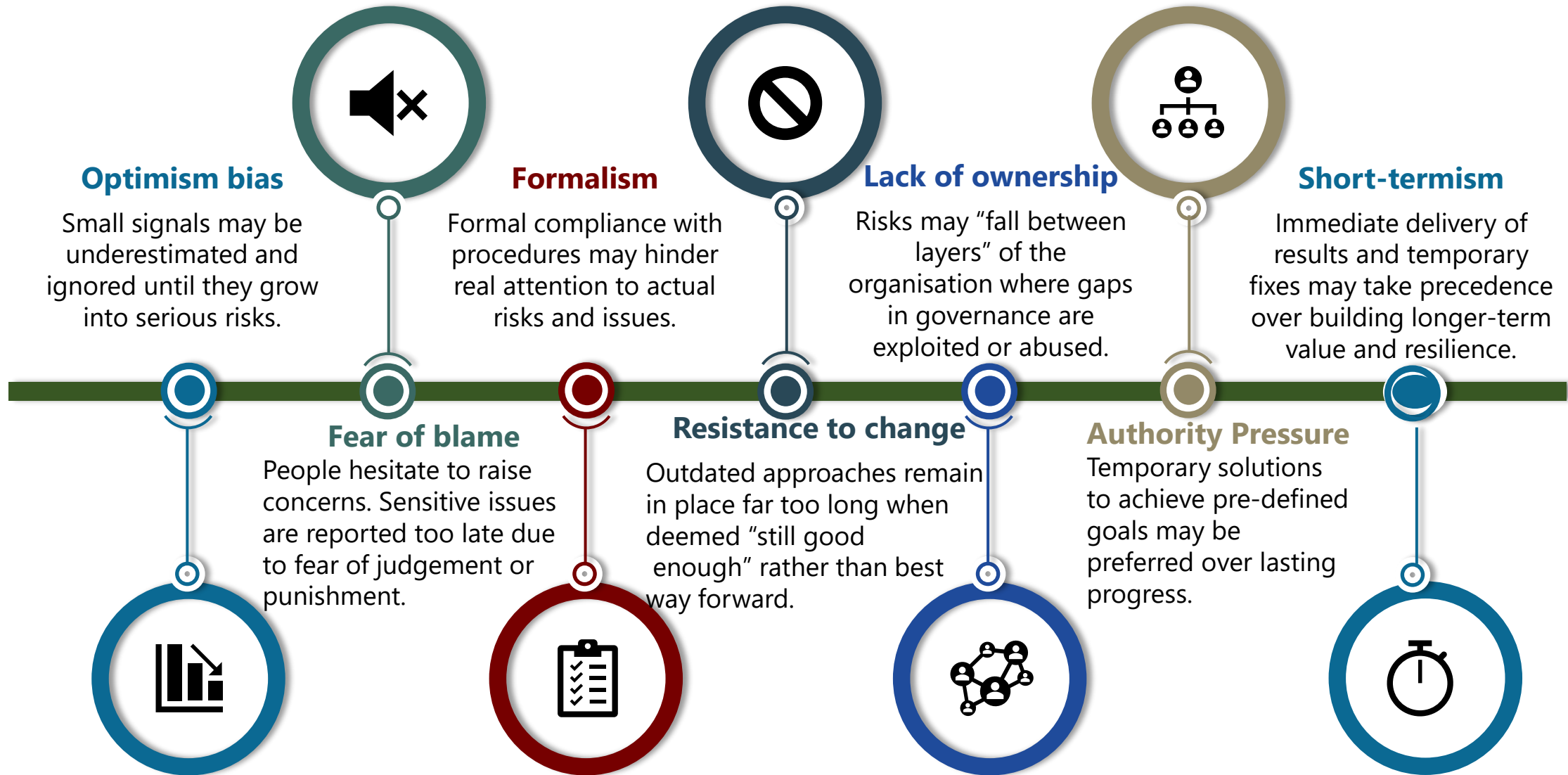
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