

Leading vs Lagging Selector

Choose indicators that help you anticipate, monitor
and learn from security performance.





Why the distinction matters

Leading and lagging indicators give you different types of information.
You usually need both to manage security performance effectively.

LEADING INDICATORS

Can indicate whether conditions, controls or behaviours are developing that may affect future outcomes.



Conditions



Behaviours



Control
performance

LAGGING INDICATORS

Tell you what has happened by measuring outcomes or events that have already occurred.



Security
incidents



Access
breaches



Audit
failures

BEFORE

Opportunity to identify issues and intervene

AFTER

Confirms what happened

For professional discussion and reflection • Illustrative, not prescriptive • Indicators should be interpreted in context and considered alongside security objectives, risk, controls, trends, evidence and professional judgement.



Start with the security objective

Effective indicators start with a clear objective, supported by an understanding of the risks and controls in place.





Understand lagging indicators

Lagging indicators measure outcomes or events that have already occurred.



LAGGING

- ✓ Show what has already happened
- ✓ Measure outcomes or events
- ✓ Useful for confirming performance
- ✓ Often used for reporting and analysis
- ✓ Important for learning and improving



Examples >

 Security incidents	 Unauthorised access events	 Prohibited articles found	 Audit failures	 Losses and theft	 Regulatory actions
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Understand leading indicators

Leading indicators measure activities, conditions, behaviours or control performance that may provide earlier insight into future outcomes.



LEADING

- ✓ Indicate what may happen next
- ✓ Measure conditions, behaviours, activities or controls
- ✓ Provide an opportunity to intervene
- ✓ Can show early warning signs
- ✓ Support proactive decision-making

Examples



Training completion rates



Overdue corrective actions



Planned maintenance compliance



Access-control test results



Security reporting activity



Staffing levels and resilience





Do not rely on the label alone

The same measure can be leading in one context and lagging in another. It depends on what you are trying to achieve and the outcome against which it is being assessed.

- ✓ Context matters
- ✓ The same indicator can be leading or lagging
- ✓ Look at the objective and what it is being compared to
- ✓ Avoid assuming all measures are fixed as leading or lagging



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Ask yourself:
**Leading or lagging
in relation to what
objective or
outcome?**

Examples >

 Access-control system failures		 Training completion rates		 Overdue maintenance		 Number of security reports	
LEADING for security risk	LAGGING for equipment reliability	LEADING for workforce readiness	LAGGING if used to judge effectiveness	LEADING for potential system failure	LAGGING for maintenance performance	LEADING for reporting culture	LAGGING if used to measure actual incidents



Ask what the indicator tells you

Use a series of simple questions to help decide whether an indicator is leading, lagging or both.





Use the time test

Look at when the indicator occurs in relation to the outcome you are trying to manage.





Use a balanced approach

A mix of leading and lagging indicators gives a more complete picture of security performance.

Benefits of leading indicators

- ✓ Provide early insight
- ✓ Help prevent problems
- ✓ Support proactive action
- ✓ Encourage a forward focus
- ✓ Identify emerging risks
- ✓ Show how controls are working



Benefits of lagging indicators

- ✓ Show what has happened
- ✓ Confirm performance
- ✓ Highlight trends over time
- ✓ Support accountability
- ✓ Help demonstrate impact
- ✓ Inform future planning

Practical tips



Use a mix of leading and lagging indicators



Link indicators to your objectives and risks



Review indicator data together, not in isolation



Consider the timing of each indicator



Use trends to identify improvement opportunities



Look for trends and patterns

A single data point may not be significant, but a trend or pattern can highlight emerging risks and opportunities for action.

How to analyse trends

- 1 Collect relevant data over time
- 2 Look for increases, decreases or changes
- 3 Identify repeating patterns
- 4 Consider seasonal or external factors
- 5 Assess what the trend means for your objectives
- 6 Decide if action is required

Examples



Increase in access control breaches over several months



More security incidents during peak travel periods



Repeating issues with the same vulnerability



Hotspots in specific locations or terminals



Increased disruption during adverse weather





Consider risk and context

The same indicator can mean different things depending on the context, threat, vulnerability and potential impact on your operation.





Turn indicators into action

Indicators are most valuable when they lead to informed decisions and practical actions.





Review and improve

Use indicator information to learn, make adjustments and strengthen future performance.





Key takeaways and next steps

Indicators help you understand, monitor and improve security performance over time.

